# IMPROVING THE QUALITY OF FRONTLINE NUTRITION SERVICES IN INDONESIA'S HEALTH SECTOR

## **DISCUSSION PAPER**

December 2021

Silvia Holschneider Ali Winoto Subandoro Elvina Karjadi Anne Marie Provo Ria Herkutanto Pratiwi Ayuningtyas Akim Dharmawan Minarto Noto Sudarjo





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# Health, Nutrition, and Population (HNP) Discussion Paper

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# HEALTH, NUTRITION, AND POPULATION (HNP) DISCUSSION PAPER

### Improving the Quality of Frontline Nutrition Services in Indonesia's Health Sector

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### Abstract:

In the past two decades, Indonesia significantly improved its economic growth, poverty, and maternal and child health outcomes. Despite these notable achievements, the country's rates of stunting and malnutrition are among the highest in the world and threaten early childhood development as the stepping-stone of human capital formation. Though government guidelines, standards, and training have helped improve nutrition services in the health sector, there continues to be considerable variation in service quality across districts, between urban and rural areas, and among public and private facilities, with many mothers and children being provided suboptimal services.

Malnutrition is a multisectoral issue that is not the "problem" of the health sector alone. However, many of the high-impact health interventions known to improve nutrition outcomes for children are not being implemented in Indonesia, calling for a higherquality health system to produce better nutrition outcomes.

This report analyzes the opportunities to improve the quality of frontline nutrition interventions in Indonesia's health sector as an element of achieving the National Strategy to Accelerate Stunting Prevention (2018–2021) (StraNas Stunting) goals. It uses a framework adapted from the Lancet Global Health Commission's report on High-Quality Health Systems in the Sustainable Development Goals Era, which explains that improving the quality of nutrition health care requires system-wide action. In specific, high-quality nutrition services necessitate both process and foundational reforms at the macro, meso, and micro levels.

The paper outlines the challenges and proposes recommendations to improve quality nutrition care and services in the country. These are related to strong leadership, harmonized guidelines and targets, and robust regulatory and quality improvement mechanisms; improved monitoring and evaluation and data use; predictable, adequate, and timely financing; platforms for care; competent health workers and a sound supportive supervision system; adequate supplies and functional equipment; and systems that respond to clients' health needs and expectations. Keywords: Quality, malnutrition, Indonesia, health services, stunting

**Disclaimer**: The findings, interpretations, and conclusions expressed in the paper are entirely those of the authors, and do not represent the views of the World Bank, its Executive Directors, or the countries they represent.

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The authors are grateful to the World Bank for publishing this report as an HNP Discussion Paper.

# List of Acronyms

ASDK	Aplikasi Satu Data Kesehatan (One Health Data Application)		
Bappeda	Regional Development Planning Agency		
Bappenas	National Development Planning Agency (Badan Perencanaan Pembangunan		
	Nasional)/Ministry of National Development Planning		
BPJS	Social Security Agency (Badan Penyelenggara Jaminan Sosial)		
CCT	Conditional Cash Transfer		
DHO	District Health Office		
ECED	Early Childhood Education and Development		
EIBF	Early Initiation of Breastfeeding		
e-PPGBM	Community-Based Nutrition Recording and Reporting System		
GOI	Government of Indonesia		
HDW	Human Development Worker		
HQSS	Lancet Global Health Commission's report on High-Quality Health Systems in th Sustainable Development Goals Era		
HMIS	Health Management and Information Systems		
IPCC	Interpersonal Communication and Counseling		
IFA	Iron and Folic Acid		
IYCF	Infant and Young Child Feeding		
JKN	National Insurance Program (Jaminan Kesehatan Nasional)		
JSI	John Snow International		
KAFKTP	Accreditation Commission for Primary Health Care Facilities (Komisi Akreditasi Fasilitas Kesehatan Tingkat Primer)		
LMIC	Low- and Middle-Income Countries		
MAM	Moderate Acute Malnutrition		
M&E	Monitoring and Evaluation		
MNCHN	Maternal, Neonatal, Child Health, and Nutrition		
MMD	Village Community Deliberation		
MoF	Ministry of Finance		
МоН	Ministry of Health		
MoHA	Ministry of Home Affairs		
MoPW	Ministry of Public Works		
MoSA	Ministry of Social Affairs		
MoV	Ministry of Villages, Disadvantaged Areas, and Transmigration		

MSS	Minimum Service Standards		
MUAC	Mid-Upper Arm Circumference		
NCAI	UNICEF Nutrition Capacity Assessment in Indonesia		
NS	Nusantara Sehat		
PIS-PK	Healthy Indonesia through the Family Approach Program (Program Indonesia Sehat Melalui Pendekatan Keluarga)		
РКН	Program Keluarga Harapan		
QSDS	Quantitative Service Delivery Survey		
RDS	Healthy Village Homes (Rumah Desa Sehat)		
RENSTRA	Ministerial Strategy		
RMNCAH-N	Reproductive, Maternal, Newborn, Child, and Adolescent Health and Nutrition		
RPJMN	National Medium-Term Development Plan		
SAM	Severe Acute Malnutrition		
SBCC	Social Behavior Change Communication		
SMD	Introspective Survey		
SOPs	Standard Operating Procedures		
SoVP	Secretariat of Vice President		
StraNas	National Strategy to Accelerate Stunting Prevention		
SUN	Scaling Up Nutrition		
SSGBI	Indonesian Under-Five Children Nutritional Status Survey (Survei Status Gizi Balita Indonesia)		
TP2AK	Team for the Accelerated Prevention of Stunting (Tim Percepatan Pencegahan Anak Kerdil [Stunting])		
TPG	Nutrition Implementation Worker		
UHC	Universal Health Coverage		
UNICEF	United Nations Children's Fund		
WASH	Water, Sanitation, and Hygiene		
WHO	World Health Organization		

# **EXECUTIVE SUMMARY**

In the past two decades, Indonesia significantly improved its economic growth, poverty, and maternal and child health outcomes. Despite these notable achievements, the country's rates of stunting and malnutrition are among the highest in the world and threaten early childhood development as the stepping-stone of human capital formation. Though government guidelines, standards, and training have helped improve nutrition services in the health sector, there continues to be considerable variation in service quality across districts, between urban and rural areas, and among public and private facilities, with many mothers and children being provided suboptimal services. Malnutrition is a multisectoral issue that is not the "problem" of the health sector alone. However, many of the high-impact health interventions known to improve nutrition outcomes for children are not being implemented in Indonesia, calling for a higher-quality health system to produce better nutrition outcomes.

This report analyzes the opportunities to improve the quality of frontline nutrition interventions in Indonesia's health sector as an element of achieving the National Strategy to Accelerate Stunting Prevention (2018–2021) (StraNas Stunting) goals. It uses a framework adapted from the Lancet Global Health Commission's report on High-Quality Health Systems in the Sustainable Development Goals Era, which explains that improving the quality of nutrition health care requires system-wide action. In specific, high-quality nutrition services necessitate processes and foundational reforms at the macro, meso, and micro levels, including strong leadership, harmonized guidelines and targets, and robust regulatory and quality improvement mechanisms; improved monitoring and evaluation and data use; predictable, adequate, and timely financing; improved platforms for care; competent health workers and a sound, supportive supervision system; adequate supplies and functional equipment; and systems that respond to clients' health needs and expectations (Kruk et al. 2018).

The assessment drew upon a desk review of published and grey literature and existing data sources. In addition, interviews were held with key stakeholders at the district and national levels and with partner organizations. An overview of the main challenges and recommendations is provided below.

**Governance:** At the highest levels of government, Indonesia is committed to reducing stunting and improving malnutrition in the country. Numerous national ministerial strategies, guidelines, and targets were recently developed that address stunting. These include the StraNas Stunting strategy and program, the National Medium-Term Development Plan (RPJMN) 2020–2024, the Ministry of Health Strategic Plan (2020–2024), and the Public Health Program Action Plan (2020–2024). Though stunting reduction is the main emphasis of the RPJMN, the challenge is aligning the national targets to provincial and district targets. In addition, Indonesia's many nutrition-related technical guidelines and their standard operating procedures (SOPs) are not always consistent with each other, updated, or available to frontline health workers. While the government of Indonesia (GOI) has dedicated a lot of resources in recent years to improve the quality of health services through accreditation, and accreditation of

Puskesmas<sup>1</sup> has risen sharply, the levels of accreditation are very variable among facilities. In addition, the use of accreditation standards for continuous improvement and learning from the results is not optimal.

Recommendations:

- Ensure cross-sectoral and cross-program harmonization of the existing nutritionrelated guidelines and SOPs. District/City Health Office should update SOPs to focus on reducing stunting, as well as the specific process flows, activities to be carried out, and work roles by different types of health care workers.
- Align RPJMN targets to provincial and district targets.
- Update the 2019 Minimum Service Standards (MSS) for health to ensure all essential nutrition interventions are included.
- Develop and disseminate new guidelines for management of specific nutritional interventions, including planning, budgeting, implementation, and monitoring (in line with the Convergence Action Plan at the district level); technical guidelines for handling integrated undernutrition treatment; and using the length mats as an educational tool for nutrition counseling.
- Update Puskesmas accreditation standards/instrument to ensure quality nutrition indicators are included in the assessment of managerial processes and primary health care (clinical care and community health), with particular emphasis on the improvement of promotive and preventive care for nutrition.
- Link Accreditation Information System to Aplikasi Satu Data Kesehatan (ASDK) (One Health Data Application) dashboard.
- Integrate accreditation and supportive supervision indicators to ensure that the quality and frequency of technical assistance by the District Health Office to Puskesmas is done on an ongoing basis and not just before the accreditation assessment occurs.

**Monitoring and evaluation (M&E) and data use for decision-making:** Indonesia has various methods to monitor and evaluate nutrition services at the national, district, and local levels using multiple data sources and a nonstandardized monitoring and surveillance system. Service quality, or patient satisfaction, is not always measured. Various Posyandu<sup>2</sup> and Puskesmas-based mobile information systems exist or are being developed, and the interoperability and linkages across programs and data systems need to be improved. The District Health Information ASDK Dashboard is a novel approach to consolidating and standardizing data at the district level so that it can be accessed by anyone, including across sectors. Issues such as its reach, data quality, adequacy of quality nutrition indicators need to be explored. Improving the quality of data and data use for decision-making at national and subnational levels and sharing the data through learning networks will be important to allow for strategic decision-making.

<sup>&</sup>lt;sup>1</sup> Community health center

<sup>&</sup>lt;sup>2</sup> Integrated health post

Recommendations:

- Conduct a comprehensive review of existing data systems, access to information (e.g., through mobile data sources), M&E of nutrition-specific and nutrition-sensitive interventions (including service quality indicators).
- Integrate indicators (including service quality indicators) with existing data and information platforms.
- Develop guidelines and measurement tools to measure patient satisfaction at the Puskesmas level.
- Expand on Annual Stunting Summits to commit to and share information and data about implementing quality nutrition services.
- Host peer-to-peer learning opportunities about the use of data for learning and improvement.

Financing: Financing for nutrition in Indonesia is complex and fragmented due to the multiple financing streams and many agencies involved in managing the funds. This duplication of functional responsibilities can be a major driver of inefficiency. Also, because of Indonesia's decentralized system of governance, provincial, district, and villages play a significant role in nutrition spending decisions. This can lead to challenges for delivering high-impact nutrition interventions at the local level, both in terms of fragmented financing and local-level capacity to implement interventions. Indonesia has substantially increased spending for nutrition at the district and village levels through intergovernmental fiscal transfers. These transfers, including the Village Funds, have not been optimally used to improve the quality of nutrition services at the community level. The country's move toward strategic purchasing of nutrition services will directly influence quality of care and improve the efficiency of existing spending toward nutrition results. However, challenges remain, including the need to update Minimum Service Standards for health, issues related to accreditation of health facilities, low capitation rates for primary health facilities, lack of performance standards for nutrition interventions delivered at the subdistrict level, incentives from capitation that are generally not linked to provider performance, and the fact that nutrition services are primarily delivered at the community level, where capitation payments do not really influence quality of care.

Recommendations:

- Develop guidance to leverage bottom-up and top-down financing sources to improve quality of nutrition services.
- Strengthen accountability measures for fiscal transfers to districts and villages, including performance-based mechanisms that link funding to quality improvement.
- Clearly define the nutrition services covered under capitation.
- Include provisions in provider payment mechanisms that incentivize improvements in the quality of nutrition care.

**Platforms of care**: Strengthening the various levels of care within the health system to deliver situation-specific nutrition interventions is crucial in Indonesia's fight against malnutrition. This includes improving access to and quality of care at both Puskesmas and Posyandus. In addition, it will be essential to improve the coordination and referrals between Posyandus and Puskesmas and the quality of nutrition services provided in these facilities.

Recommendations:

- Improve coordination among the numerous multisectoral groups that play different roles in providing activities and resources and improving the performance of Posyandus.
- Improve referrals between Posyandus and Puskesmas. This includes training Kaders<sup>3</sup> on identifying malnourished children, ensuring health workers follow referral criteria, and updating equipment to refer malnourished patients in Puskesmas.
- Explore integrating the *patient* referral software with the existing mobile health applications.

**Workforce:** About one-fourth of Puskesmas do not have nutritionists. Many health workers (HDWs and Kaders) carrying out nutrition services are not trained or may not have had optimal training. They are not part of the formal health system, making it challenging to give them the support they need to provide quality nutrition services. Many of them cannot deliver high-quality interpersonal communication and counseling due to a lack of training, outdated job aides, counseling messages, and materials. There are currently no mechanisms in place to provide incentives to HDWs and Kaders based on performance. Indonesia invests significant resources for supervision activities, but supervision is often not adequate or sustained. Many supervisors do not have the knowledge, skills, or tools to carry out their duties effectively.

Recommendations:

- Conduct reviews of workload analysis and job descriptions for all health care workers carrying out nutrition services, and address related gaps.
- Review and update in-service and preservice standard nutrition training packages.
- Build a standardized e-learning training platform for preservice and in-service training that can easily be accessed by all health workers, both online and off-line.
- Reassess the incentives for Posyandu Kaders and HDWs to ensure that they are systematic, sufficient, and the same across villages, rather than being at the discretion of the Village Fund Budget.
- Develop a checklist that measures the quality of nutrition service delivery at the Puskesmas and Posyandu levels.
- Use digital applications to streamline supervision tools (checklists) to be actionoriented and adapted to service delivery. Data from supervision visits can be analyzed and used to help track targets, implementation, and the performance of health workers providing nutrition services.
- Integrate checklists and supervision data into existing platforms—that is, Dashboard, mHealth, e-HDW, and the Puskesmas accreditation system.
- Link supportive supervision to performance incentives for Puskesmas.

<sup>&</sup>lt;sup>3</sup> Voluntary community health worker

**Tools:** There is a shortage of supplies and equipment to conduct quality nutrition services at Puskesmas and Posyandus, including infant weighing scales and technical guidelines for health care workers. Recently, job aids for nutrition counseling have been developed or are being proposed for health care workers.

Recommendations:

• Create standardized nutrition health kits for health workers carrying out nutrition services at Puskesmas and Posyandu levels. Measure their availability and completeness as indicators to assess quality.

**Population**: Communities in Indonesia can play an essential part in improving service delivery by holding sector line ministries and districts accountable for delivering nutrition interventions. The StraNas Village Convergence Scorecard will hold village and subdistrict heads accountable for frontline delivery of the priority nutrition-specific and nutrition-sensitive interventions; the Child Length Mats help Kaders and HDWs communicate with families about child growth and help them visualize growth; and the e-HDW mobile app helps HDWs identify and monitor 1,000-day households.<sup>4</sup> Involvement and participation in community groups (e.g., "Healthy Village Homes" or Rumah Desa Sehat) or the community introspective survey can help raise demand for quality and social accountability as well. Also, implementing the behavior change campaign (Strakom) at local levels will be instrumental in improving awareness and access to information among families about the link between nutrition and stunting and its impact on child growth and development.

Recommendations:

- Strengthen the capacity of community groups (e.g., Rumah Desa Sehat) to provide nutrition-related information, services, and referrals.
- Review variables in the Introspective Survey to ensure that they cover both process and coverage quality nutrition indicators, including care processes such as user experiences.
- Use data from the Village Scorecard, Length Mat, and e-HDW to improve community decision-making and accountability.
- Carry out orientations and training for planners/program managers at the district/city level to plan, implement, and monitor and evaluate Social Behavior Change Communication (SBCC) and Information, Education, and Communication (IEC).
- Ensure that nationally and locally developed communication materials related to Strakom, stunting, and the 1,000 days include the key messages of stunting prevention and have consistent messaging.

<sup>&</sup>lt;sup>4</sup> Priority household actions to address the underlying causes of poor nutrition among pregnant women and children under 2 years old.

# PART I – INTRODUCTION

In the past two decades, Indonesia significantly improved economic growth, poverty, and maternal and child health outcomes (World Bank 2018c; Countdown to 2030 2020; Tandon, Ajay; Pambudi, Eko Setyo; Harimurti, Pandu; Masaki, Emiko; Subandoro, Ali Winoto; Yasmin Chrysanti, Puti; Rajan, Vikram Sundara; Dorkin, Darren W.; Chandra, Amit; Boudreaux, Chantelle; Pei Lyn, Melissa Chew; Suharno 2016). In addition to strong economic growth (5.5 percent since 2000), poverty rates declined by more than half since 1999 to 9.8 percent in 2018. At the same time, the health of women and children has improved. The maternal mortality ratio decreased from 272 per 100,000 live births in 2000 to 117 in 2017. The under-five mortality rate decreased from 46 per 1,000 live births in 2002–2003 to 32 in 2017 (National Population and Family Planning Board (BKKBN), Statistics Indonesia (BPS), Ministry of Health (Kemenkes) 2017).

Despite these notable achievements, the country's stunting<sup>5</sup> and malnutrition rates are at crisis levels and threaten early childhood development as the stepping-stone of human capital formation. Although child malnutrition rates have improved over the last decade, they are still much higher than the 2024 targets set by the Ministry of Health (Ministry of Health of the Republic of Indonesia 2020b): 27.7 percent of Indonesian children under five years of age are stunted (around 8 million children), 7.4 percent are wasted (low weight-for-height), and 8 percent are either overweight or obese ("Laporan Nasional RISKEDAS 2018" 2018; Central Bureau of Statistics 2019). Stunting affects all regions and income groups, but the gap between rich and poor has widened (World Bank 2018c). Almost half of pregnant women are anemic, with rates having increased from 37.1 percent in 2013 to 48.9 percent in 2018. Significant gaps remain in improving nutrition-specific evidence-based services—only 48 percent of pregnant women take the required iron supplementation, 58 percent of newborns are being breastfed within one hour of birth, and 40 percent of children age 6-23 months are being fed a minimum acceptable diet (National Population and Family Planning Board (BKKBN), Statistics Indonesia (BPS), Ministry of Health (Kemenkes) 2017; "Laporan Nasional RISKEDAS 2018" 2018) (see Annex 1). Stunting has lifelong consequences, including negative impacts on health and cognitive and socio-emotional skills, educational attainment, and income, making children less likely to escape poverty as adults (WHO 2014; Shekar et al. 2016). Stunting and other forms of malnutrition can lead to a 3 percent loss of gross domestic product (GDP) in Indonesia each year (Ministry of Health Republic of Indonesia 2018). Interventions to prevent and reduce stunting are among the most cost-effective development actions (Shekar et al. 2016).

To accelerate stunting reduction, in 2017, the government of Indonesia (GOI) launched a high-profile National Strategy to Accelerate Stunting Prevention (2018– 2021) (StraNas Stunting) strategy and program that shows promising early results. However, many high-impact interventions known to improve nutrition outcomes

<sup>&</sup>lt;sup>5</sup> Stunting is the impaired growth and development that children experience from poor nutrition, repeated infection, and inadequate psychosocial stimulation. Children are defined as stunted if their height-for-age is more than two standard deviations below the WHO Child Growth Standards median.

for children are not being realized due to limited capacity and quality of program implementation. The purpose of the StraNas Stunting is to accelerate Indonesia's stunting reduction by strengthening the execution and quality of programs across five sectors<sup>6</sup> and driving the convergence of national, regional, and community programs. Given Indonesia's decentralized health care system, there is a considerable variation in service quality among public and private facilities, across districts, and urban and rural areas.

This report provides a conceptual framework and analysis to help improve the quality of frontline nutrition-specific health services in Indonesia as part of Reproductive, Maternal, Newborn, Child, and Adolescent Health and Nutrition (RMNCAH-N) services. The report focuses on the status and gaps in providing highquality nutrition services through a health systems lens to achieve the Sustainable Development Goals (SDGs) for malnutrition and Universal Health Coverage (UHC). Though the causes of malnutrition are multisectoral, and efforts to reduce malnutrition are not the concern of only the health sector, ensuring the quality of nutrition-specific interventions is essential if we want to continue seeing accelerated results in nutrition outcomes. According to the Lancet Global Health Commission's report on High-Quality Health Systems in the Sustainable Development Goals Era (HQSS), poor quality care is a more significant barrier to reducing adverse health outcomes than health care access and utilization. For example, 60 percent of health-related deaths in low- and middleincome countries (LMICs) are due to poor guality care, and the remainder are due to the nonutilization of the health system. Compounding this are the economic side effects for health systems of inadequate guality, including wasted resources and high public health expenditures (Kruk et al. 2018). The report's conceptual framework, adapted from the Lancet HQSS, highlights the health system foundations and processes of care that are critical for high-quality nutrition services and improved malnutrition outcomes (Kruk et al. 2018).

The assessment draws upon a desk review of the literature and existing data sources. In addition, interviews were held with nutritionists at the district/city health office; nutrition workers at Puskesmas;<sup>7</sup> as well as with the Directorate of Nutrition and the Directorate of Health Promotion at the Ministry of Health (MoH); the Human Resources Development Agency; the National Institute of Health Research and Development; the Data and Information Center in the MoH; and the Independent Commission for the Accreditation at First Level Health Facilities. For the recommendations, meetings were held with colleagues from the World Bank Indonesia office, the Global Financing Facility, the Directorate of Nutrition of the Ministry of Health, the Team for the Accelerated Prevention of Stunting (TP2AK) under the Secretariat of the Vice President (SoVP), and UNICEF.

**The report is organized as follows:** Part 2 provides an overview of the role of systemwide quality improvement to achieve optimum nutrition outcomes in the health sector.

<sup>&</sup>lt;sup>6</sup> These are health, water and sanitation, early childhood education, social protection, and food security.

<sup>&</sup>lt;sup>7</sup> Community health center

The section also presents an analytical framework for the paper, with its multipronged approach to improving the quality of nutrition-specific services in the country. Part 3 provides the current status, gaps, and challenges for high-quality nutrition services in Indonesia. Finally, Part 4 offers conclusions and recommendations resulting from this assessment.

# **PART II – WHY FOCUS ON IMPROVING QUALITY?**

Despite an abundance of guidelines, standards, and training of health providers in Indonesia, many high-impact interventions known to improve malnutrition are not always being practiced or implemented consistently. About one-fourth of Puskesmas did not have a nutritionist. Therefore, many nutrition services in the country are being carried out by midwives and health Kaders,<sup>8</sup> most of whom may not be trained in nutrition. While multiple in-service trainings exist for nutritionists, they are outdated and inconsistent (UNICEF 2018; Meilissa, forthcoming). A 2016 nationally representative survey of the Posyandu<sup>9</sup> service delivery system—the Quantitative Service Delivery Survey (QSDS)-found that the majority of Posyandus only weighed children but did not measure their height, and many did not have the equipment to do so. For example, while most had hanging scales, only 59 percent had infant scales, only half of which were calibrated correctly. Length boards for babies were only available in 30 percent of the Posyandus. In addition, many did not have feeding guidelines. Only 35 percent of Kaders reported doing home visits. Only a fourth used data for follow-up actions such as planning, decision-making, and generating community accountability. Moreover, there were large differences between service availability and readiness among urban versus rural facilities and geographic areas (World Bank 2018b, 2020a).

Over the years, efforts to improve quality in LMICs, like Indonesia, have generally centered on simply improving "inputs" (e.g., trained health workers, guidelines, accreditation, and certification). While these approaches are valuable and necessary, they are not sufficient to achieve quality health care. Instead, improving the quality of health and nutrition services requires combining these more traditional approaches with process improvement and measurement for impact to achieve improved and more reliable nutrition outcomes (USAID Global Health eLearning Center 2015).

To improve the quality of nutrition health service delivery in Indonesia, a package of system-wide actions are necessary, spanning areas from governance to finance; human resources for health, performance monitoring, and accountability; and access to care (World Bank 2018b). The HQSS defines a quality health system as "one that optimizes health care in a given context by consistently delivering care that improves or maintains health outcomes, by being valued and trusted by all people, and

<sup>&</sup>lt;sup>8</sup> Volunteer health workers.

<sup>&</sup>lt;sup>9</sup> Integrated community-based service post.

by responding to changing population needs" (Kruk et al. 2018). In other words, highquality service delivery results from a complementary set of inputs, processes, and outcomes, including an enabling policy and fiscal environment, organizational support to improve health worker performance, and enhanced community engagement to demand quality services, resulting in more competent care, positive user experiences, and quality outcomes (SPRING 2017; Kruk et al. 2018).

### **ANALYTICAL FRAMEWORK**

**Figure 1 shows the conceptual framework that guides this report to analyze and strengthen Indonesia's quality of nutrition services delivered through the health sector.** The framework is slightly adapted<sup>10</sup> from the Lancet HQSS framework. It illustrates that high-quality health systems comprise three domains: their quality impacts, their processes of care consisting of competent care and positive user experiences, and the foundational requirements for high-quality systems (Kruk et al. 2018). The domains are underpinned by four values: being for people, being equitable, resilient, and efficient. The Lancet HQSS framework is based on past thinking and frameworks on quality improvement, including Donabedian's framework, the World Health Organization (WHO) building blocks, and the WHO maternal and child quality of care frameworks (World Health Organization (WHO) 2016a, 2018b; Kruk et al. 2018). This report focuses mainly on the foundational elements and processes for nutrition-specific services that lead to quality impacts.

<sup>&</sup>lt;sup>10</sup> Our framework separately presents "financing" as a key foundational element of high-quality health systems, rather than embedding it into the "governance" category.



Figure 1. High-Quality Health System Framework for Nutrition

--- equitable ----- efficient -----

Source: Adapted from (Kruk et al. 2018)

*Notes:* M&E = Monitoring and evaluation.

**Quality impacts:** Improved health and its equitable distribution, people's improved confidence in their health system, and economic benefits.

**Processes of care**: Evidence-based effective care, capable systems, and positive user experiences.

### Foundations:

*Governance:* Quality nutrition services require strong governance with high-level political leadership and commitment. This includes the following:

- *National and local leadership and coordination* to support multisectoral nutrition and stunting reduction and nutrition service quality.
- *National ministerial strategies, guidelines, and targets for nutrition* that provide a vision of quality nutrition services.
- *Robust regulatory and quality improvement mechanisms.* Accreditation of hospitals and primary care facilities and mechanisms to regularly assess quality improvement.

*Monitoring & Evaluation (M&E) and data use for decision-making:* This includes the following:

- Convergent easy-to-use information systems that provide timely feedback for accountability and improvement.
- Quality data for learning and improvement. Information systems, with trustworthy data, accessible from national to local levels with nutrition indicators and measures of health system quality. Use of data for shared learning from community to national and global levels.

*Financing:* Predictable, adequate, and timely financing is important to support nutrition initiatives from the central to local levels. Strategic purchasing of nutrition services impacts the quality of nutrition care.

*Platforms of care:* High-performing health nutrition systems require sufficient assets, good care organization, and connective systems. This includes the following:

- Sufficient number and distribution of health facilities to provide clients access to care.
- *Health facilities and community-based services that are integrated* with quality community outreach, and functioning referral systems.

*Workforce*: Competent health workers are essential for carrying out quality nutrition service delivery and counseling. To provide quality services, they need to be supported through the following:

- Available and sufficient health workers carrying out nutrition services.
- *Preservice and in-service competency-based training* to build knowledge and skills, including capacity in interpersonal communication and counseling.
- Updated nutrition training curricula.
- Detailed and meaningful job descriptions to provide clear performance expectations.
- Supportive supervision to improve performance.
- Remuneration and incentives to increase performance.

*Tools:* To provide high-quality nutrition services, the following is required:

• Functional equipment, quality medicines, sufficient supplies and job aids, and reliable supply chains for all mother and child service delivery points (e.g., antenatal care [ANC], postnatal care [PNC], immunization).

*Population:* High-performing systems include the individuals, their families, and the communities in which they live, who are not only the beneficiaries of nutrition-related services but are also well-informed and engaged in their own care and demand accountability from their communities and health systems. Included are the following:

- Methods/metrics to hold communities accountable for nutrition-related services.
- *Involvement and participation of community structures* to improve knowledge and nutrition-related behaviors among mothers and children and create demand for improved nutrition-related services.
- Social behavior change and communication (SBCC) to improve awareness and access among individuals to nutrition-related information.

# PART III – CURRENT STATUS, GAPS, AND CHALLENGES FOR HIGH-QUALITY NUTRITION SERVICES' FOUNDATIONS AND PROCESSES OF CARE

### GOVERNANCE

**Summary**: At the highest levels of government, Indonesia is committed to reducing stunting and improving malnutrition in the country. Numerous national ministerial strategies, guidelines, and targets have recently been developed that address stunting. These include the StraNas Stunting strategy and program, the National Medium-Term Development Plan (RPJMN) 2020–2024, the Ministry of Health Strategic Plan (2020–2024), and the Public Health Program Action Plan (2020–2024). Though stunting reduction is the main emphasis of the RPJMN, the challenge is aligning the national targets to district and provincial targets. In addition, Indonesia's many nutrition-related technical guidelines and their standard operating procedures are not always consistent with each other, updated, or available to frontline health workers. While the GOI has dedicated a lot of resources in recent years to improving the quality of health services through accreditation, and accreditation of Puskesmas has risen sharply, the levels of accreditation standards for continuous improvement and learning is not optimal.

### National and local leadership and coordination

In the last decade, the government of Indonesia (GOI) has shown a growing commitment to reducing stunting. In 2011 Indonesia joined the global Scaling Up Nutrition (SUN) Movement. In 2013 the GOI developed the National Movement on Accelerating Nutrition Improvement, focusing on the first 1,000 days of life (Rokx, Subandoro, and Gallagher 2018). In 2017, the government launched the National Strategy to Accelerate Stunting Reduction—also known as the anti-stunting movement or StraNas Stunting. StraNas Stunting focuses on accelerating Indonesia's stunting reduction by addressing key constraints comprehensively and multisectorally. To date, StraNas has committed 23 ministers to increase the impact of \$14.6 billion of government spending over six years.

Indonesia's national nutrition program is backed by leadership from the highest levels of government and an implementing platform that is horizontal and vertical and spans the national to local levels. The SoVP is leading the multisectoral coordination body—the Team for the Accelerated Prevention of Stunting (TP2AK) and the 23 line ministries involved in the stunting reduction effort. While Indonesia's decentralized health system and StraNas Stunting provide a platform for strong local planning, implementation, and monitoring of nutrition services, the ability of District Health Offices (DHOs), Puskesmas, and Posyandus to manage and carry out these activities are crucial for providing quality nutrition services. Therefore, at the subnational level, District Office Stunting Task Forces were formed to oversee the implementation of StraNas and village-level working groups. One of the key factors that contribute to the functioning of the subnational (district and village) coordination and implementation platform is the strong buy-in and engagement of the Ministry of Home Affairs (MoHA) and Ministry of Villages, Disadvantaged Areas, and Transmigration (MoV) as the critical line ministries, respectively, to hold their district and village governments accountable.

For example, at the district level, the MoHA ensures that the Stunting Task Force is integrated into the regular subnational planning and implementation process.

### National ministerial strategies, guidelines, and targets

### StraNas Stunting Strategy

Improving the quality of nutrition-specific and nutrition-sensitive services is an integral part of the StraNas Stunting strategy. StraNas consists of five pillars that aim to raise public awareness of stunting; secure nationwide commitments to stunting reduction; and manage, implement, and converge the delivery of the priority nutrition interventions across three levels of government. Pillar 1 focuses on national leadership and commitment; Pillar 2 deals with behavior change communication to improve the demand for health services. It includes capacity development for program implementers, including Kaders and Human Development Workers (HDWs) and the role of the private sector in quality control. Pillar 3 improves quality through individual interventions and strengthens convergence between program activity, planning, and budgeting.<sup>11</sup> Pillar 4 focuses on nutritional food security. Finally, Pillar 5 highlights monitoring and evaluation to deliver high-quality services, increase accountability, and accelerate the learning process.

### Indonesia National Medium-Term Development Plan

The Indonesia National Medium-Term Development Plan (RPJMN) (2020–2024) includes nutrition targets; however, aligning the national targets to district and provincial targets is challenging. The RPJMN is developed by Bappenas—the National Development Planning Agency—and constitutes the basis for all ministries and government agencies for developing their individual strategic plans. By law, provinces and districts are obligated to create their own midterm development plans. However, there is a mismatch between national and subnational plans, and the nutrition targets in the RPJMN are not always included in the subnational-level development plans (UNICEF 2018).

### Ministry of Health Strategic Plan

The Ministry of Health Strategic Plan (2020–2024) emphasizes the need to increase service coverage and improve the quality of services and the problem of over- and under-nutrition in Indonesia. Improving maternal, child, and reproductive health, improving community nutrition, and strengthening the health system are three of the five strategies of the plan. The strategic plan includes nutrition indicators and supports the RPJMN nutrition targets for 2024, which still need to be met. To achieve these targets, the plan emphasizes improving health services toward UHC, strengthening primary care services, increasing promotive and preventive efforts, and supporting these through innovation and technology.

<sup>&</sup>lt;sup>11</sup> The MoH is tasked with improving the implementation of quality nutrition services; the Ministry of Social Affairs (MoSA), with the implementation of the conditional cash transfer (CCT) program; and the Ministry of Public Works (MoPW), with the implementation of the water, sanitation, and hygiene (WASH) program. The Regional Body for Planning and Development (Bappeda) will coordinate the process of convergence through eight convergence actions so that all target groups receive the necessary interventions.

The Public Health Program Action Plan (2020–2024) elaborates the community program and activity plans outlined in the MoH Strategic Plan to reduce maternal and infant mortality, stunting, and other national priority programs. The action plan includes performance indicators for community nutrition development activities, a framework for a multisectoral approach in public health programs linked to the five pillars in StraNas.

### The Minimum Service Standards (MSS) for Health

The Minimum Service Standards (MSS) for health provide oversight from the Ministry of Health to ensure the quality of health service delivery. The MSS for health is one of five other sectoral service standards. The standards in the MSS for health are currently being updated to ensure that all essential nutrition interventions from StraNas Stunting, the nutrition-specific interventions outlined in the Lancet and those summarized by the WHO as essential for addressing undernutrition are recognized and incorporated (Bhutta et al. 2013; World Health Organization (WHO) 2016b). Establishing consistency between these various documents, their nutrition interventions, and targets is critical to helping provincial and district authorities develop plans and implement quality nutrition services (UNICEF 2018). Quality gaps in the 2019 MSS, for example, include the following:

- The MoH definition for iron and folic acid (IFA) standards is "consumption of at least 90 tablets," while the WHO recommends women receive 180 tablets before delivery.
- The MoH defines antenatal care (ANC) as the provision of at least four comprehensive ANC visits. However, the WHO recommends a minimum of eight contacts.
- Growth monitoring at the Posyandu is focused on measuring, with much less emphasis on increasing awareness of child growth or improving feeding practices (i.e., the promotion part of the intervention).
- While scientific evidence and MoH guidelines recommend and support the use of high-quality locally available foods in complementary feeding, the emphasis and the indicators in government policy are directed toward the provision of industryprepared complementary foods for underweight and malnourished children, without adequately supporting appropriate complementary feeding of children age 6–24 months.
- Other essential components of moderate acute malnutrition (MAM) management, such as breastfeeding promotion and support, education, and nutrition counseling for families, are not necessarily provided,
- Children with severe acute malnutrition (SAM) are, in theory, sent to health facilities for treatment. Still, frequently there is no accessible facility offering adequate treatment, and community management of SAM is not yet incorporated into policy.

### Other National Guidelines

Along with StraNas, the MoH developed numerous other national guidelines to help reduce stunting in Indonesia—these are not always consistent with each other. For example, in terms of health services, the Directorate of Nutrition and the Directorate of Health Promotion both have nutrition-related guidelines. The TP2AK is working to coordinate all nutrition guidelines from the health and nonhealth sectors.

### Technical guidelines for health care providers and district managers

The Directorate of Nutrition within the MoH has developed approximately 20 comprehensive technical guidelines about specific services to improve nutrition (see Annex 4). They are not always consistent with each other, can cause confusion among health service providers, and need to be updated based on current priorities (UNICEF 2018). Currently, the MoH is reviewing and updating these technical guidelines. The MoH (together with UNICEF) is also developing standardized step-by-step modules on managing the eight essential nutrition-specific interventions at the district level. In addition, the MoH (together with the SoVP and World Bank) is developing a guideline on the management of nutrition-specific interventions at the Puskesmas level.

Operationally, nutritional guidelines should be accompanied by clear and consistent standard operating procedures (SOPs) to ensure that nutrition services are carried out in a standardized fashion. However, compliance with these guidelines is weak at both district and facility levels. Most remote areas do not have guidelines. Many Puskesmas that have not yet been accredited often do not have quidelines. The 2016 Quantitative Service Delivery Survey (QSDS) found that Puskesmas were more likely to have technical guidelines than private facilities. Among Posyandus, guidelines were not universally available as they ideally should be. For example, only 56 percent of Puskesmas and only 8 percent of private facilities reported having Infant and Young Child Feeding (IYCF) guidelines, though availability differed significantly by district (World Bank 2018b). Guidelines for Posyandu Kaders were also not widely available. About half (54 percent) reported having guidelines available for complementary feeding at the last Posyandu session (Rokx, Subandoro, and Gallagher 2018). Only 53 percent of Puskesmas had Integrated Toddler Management Guidelines, only 65 percent had Productivity Health Guidelines, 55 percent had Childcare Guidelines. 48 percent had Family Planning Guidelines, and 70 percent had Health Management Information Systems Guidelines (National Health Institute Research and Development 2019). Some of the guidelines in the field are outdated because the new ones have not yet been sent. Other reasons for the lack of guidelines include insufficient funding for printing and distribution at the district and Puskesmas levels and uneven distribution in areas with difficult access. Moreover, even if districts or facilities have the guidelines, they may not read or use them.

### **Regulatory mechanisms for quality assurance**

### Accreditation of hospitals and primary care facilities

The government of Indonesia has dedicated a lot of resources in recent years to improve the quality of health services through accreditation. Starting in 2014, accreditation was expanded from hospitals to primary care facilities, and in 2015, the MoH established the Accreditation Commission for Primary Health Care Facilities (Komisi Akreditasi Fasilitas Kesehatan Tingkat Primer [KAFKTP]). Accreditation involves a hands-on process of mentoring facilities to improve their managerial procedures and primary health care (clinical care and community health standards). It also provides follow-up support for facilities to address recommendations for continual quality improvement. While the accreditation of Puskesmas has risen sharply, from 1.0 percent in 2015 to 77.6 percent in 2019, the levels of accreditation are variable among facilities. Accredited Puskesmas are much lower in eastern provinces such as Papua, Maluku, and East Nusa Tenggara (NTT). Only 3 percent of private clinics have been accredited.

Among the four levels of accreditation that can be achieved, by 2019, only 3 percent of Puskesmas had achieved the gold standard "Paripurna" of accreditation (Hanum 2020). Challenges to accreditation of Puskesmas include (a) suboptimal support by the District Health Offices, which are supposed to conduct coaching and verification in fulfilling and increasing quality at the Puskesmas according to the standards, (b) inadequate number and quality of the surveyors; and (c) the costs these facilities must incur to fulfill human resources, infrastructure, and medical device standards.

### Accreditation does not lead to improved quality of care and clinical outcomes by

**itself.** However, as an integral part of а "package" of accreditation interventions. can improve primary health care performance, especially if the data gathered from accreditation become а and learning system are translated into action (Kruk et al. 2018). Currently, the use of accreditation standards for continuous improvement and learning from results is not optimal: many Puskesmas "quality" of upgrade their services in preparation for the actual accreditation survey, which is only conducted once every three years. To improve quality continuously, regular quality improvement mechanisms need to be integrated into health facilities at least once a year and/or accreditation checks may need to occur more frequently. The World Bank-financed

# Box 1. Components of the Puskesmas Assessment Standards Related to Nutrition

(1) Puskesmas leadership and management, including the planning, implementation, supervision, control, and performance assessment of the nutrition program.

(2) Public health services, including the planning (program integration, community empowerment), management of essential public health services and PIS-PK. The public health services include, among others: (a) nutrition education and counseling, (b) exclusive breastfeeding counseling and infant and young child feeding, (c) growth monitoring in Posyandu; (d) provision of vitamin A; (e) provision of iron supplements to pregnant and postpartum mothers, (f) education to prevent anemia, (g) provision of complementary foods and supplementary feeding, (h) community-based nutrition recovery, (i) nutrition survey, (j) nutrition development in institutions, etc.

(3) Individual health services, such as nutrition care, including home visits by Puskesmas, and referral system.

(4) National priority program, including stunting prevention and reduction, which involves cross-program and sectors.

Source: (Ministry of Health of the Republic of Indonesia 2020a)

*Note:* PISK-PK=Healthy Indonesia through the Family Approach Program

Supporting Primary Health Care Reform (I-SPHERE) Program (2018–2024) is currently designing a study on the impact of increasing the frequency of accreditation on health facility outcomes. The study also looks at whether the DHOs are indeed monitoring improvements in the quality of services at the Puskesmas level regularly, as outlined in the accreditation guidelines.

The 2020 Puskesmas accreditation standards are divided into five chapters and include the prevention and reduction of stunting. The five "chapters" that the accreditation instrument covers are (1) leadership of Puskesmas management; (2) implementation of community-based care; (3) implementation of individual and supporting health care; (4) national priority programs; and (5) improvement of Puskesmas quality. "Prevention and reduction of stunting" is one of the five standards of Chapter 4. The assessment elements for this standard include, among others: (a) measuring the establishment of targets and indicators of stunting prevention and

reduction program; (b) the planning, implementation, monitoring, and evaluation of the program; and (c) feedback to the program (Hanum 2020). Box 1 shows different assessment standards related to nutrition, which center on service provision but not the quality of services being provided. To improve the use of accreditation data, these could be integrated into the district-level performance dashboard (see section below). In addition, quality indicators could be added to the accreditation instruments (see Annex 2 for sample WHO quality indicators and the section below for information about the ASDK Dashboard).

### **M&E** AND DATA USE FOR DECISION-MAKING

**Summary:** Indonesia has various methods to monitor and evaluate national, district, and local nutrition services using multiple data sources and a nonstandardized monitoring and surveillance system. Service quality, including patient satisfaction, is not always measured. Various Posyandu and Puskesmas-based mobile information systems exist or are being developed, and the interoperability and linkages across programs and data systems need to be improved. The District Health Information ASDK Dashboard is a novel approach to consolidating and standardizing data at the district level so that it can be accessed by anyone, including across sectors. Issues such as its reach, data quality, adequacy of quality nutrition indicators need to be explored. Improving the quality of data and data use for decision-making at national and subnational levels and sharing the data through learning networks will be important to allow for strategic decision-making.

### National, district, and community-based information systems

Indonesia collects a large amount of nutrition-related data, and a major challenge is integrating all of this data, analyzing and using it (UNICEF 2018). National surveys that collect nutrition-related indicators include the RISKESDAS (National Basic Health Survey), SUSENAS (National Socio-Economic Survey), the Demographic and Health Surveys, and the more recent SSGBI (Indonesian Toddler Nutrition Status Survey) household surveys. RISKESDAS and Demographic Health Surveys are conducted every five years, whereas the SUSENAS and SSGBI are collected annually. The SSGBI was implemented in 2019 to assess the prevalence of children's nutritional status based on anthropometric measurements at the regency/city level. In addition, data are being collected through routine health information systems, which because of decentralization, are managed at the local level, resulting in multiple data sources and a nonstandardized monitoring and surveillance system (described in more detail below). The M&E Plan for StraNas uses several of these data sources (see Box 2). However, district authorities are not using these data effectively in planning, monitoring, and evaluating nutrition programs (UNICEF 2018).

### ASDK Dashboard

The MoH is working with the I-SPHERE Program to develop and publish districtlevel "performance dashboards" using data from an application called "Aplikasi Satu Data Kesehatan (ASDK)" to consolidate and standardize data at the district level so that anyone can access it, including across sectors. The performance dashboard pulls together 50 agreed-upon performance indicators from various monitoring systems within the MoH and are integrated in the District Health Information Software-2 (DHIS-2). The dashboard will help district-level performance by benchmarking performance across districts and making the results public. The application is managed by the Data and Information Centre (PUSDATIN) in the MoH. The dashboard's performance and implementation monitoring indicators are evolving and can be adjusted as government priorities change. Currently, several nutrition-related service delivery indicators are included, including stunting (see Table 1). To note, while there are indicators for the numbers of doctors, nurses, and midwives at each Puskesmas per district/city, there is no indicator for the number of nutritionists. Additionally, the dashboard does not include quality of care indicators to measure processes such as the provision of care and experience of care for nutrition and maternal and child health (see Annexes 2 and 3 for indicator examples from the WHO).

Maternal & Child Health	Antenatal care (4+ time visits)		
	Institutional birth delivery		
	Postnatal care (completed)		
	The coverage of active family planning participants according to the method of contraception		
	Under-five children weighing		
	Malnourished under-five children under treatment		
Nutrition	Malnourished under-five children		
NUTRITION	Stunting—height per age		
	Percentage of toddlers age 6–59 months receiving vitamin A		
	Percentage of toddler average weight per month		
	DPT/HB (3) for 0–11 months children		
Immunization	Measles among 0–11 months children		
	Completed basic immunization among 0–11 months children		
	Number of doctors at Puskesmas per district/city		
	Number of nurses at Puskesmas per district/city		
Human Resource	Number of midwives in Puskesmas per district/city		
	Doctors per 1,000 population		
	JKN beneficiary/doctor ratio at Puskesmas/clinic		
	Number of accredited Puskesmas by district		
Infrastructure	Number of Paripurna-accredited Puskesmas		
	Availability of essential equipment		

Table 1. Nutritio	n Service-Related	I Indicators Ind	cluded in the <i>l</i>	ASDK Dashboard
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Source: (Ministry of Health of the Republic of Indonesia 2019)

*Notes:* DPT-HB = Diphtheria, pertussis, and tetanus-Hepatitis B; JKN = Jaminan Kesehatan Nasional (National Health Insurance Scheme).

Local decision-makers are beginning to use the dashboard data. The data in the dashboard were used to develop materials for the Puskesmas routine workshops for discussing and planning programs to be implemented in their catchment area and for meetings with cross-sectors (i.e., the local government office) to obtain their support in implementing the programs.

### Local-level nutrition data systems

### SIGIZI and e-PPGBM

Various methods are being used to monitor and evaluate nutrition services at the local level to determine whether ongoing activities are being carried out according to agreed plans and procedures. For example, the SIGIZI dashboard, managed by the Directorate of Public Nutrition at the MoH, records and reports nutritional data (including stunting, wasting, and underweight) through the android e-PPGBM application for mobile phones. Generally, Kaders should report monthly to the village midwife or midwife coordinator on specific nutrition indicators, which is time-consuming and can produce errors. The e-PPGBM mobile application has advantages over traditional paper-based methods because it could be less time-consuming, have fewer errors, and can be linked to contextual data using geographic information systems. The e-PPGBM is considered the main source of nutrition indicators in the ASDK Dashboard at the local level. Current local-level challenges include infrastructure issues, such as some Puskesmas not having computers or internet connections, Kaders without mobile phones having to enter data manually using Excel files or on homemade registers, lack of skills and accuracy in inputting data, and data quality issues in general (Setiarini et al. 2017).

### mHealth for PIS-PK

Through the support of the I-SPHERE Program, the MoH has introduced a separate application—mHealth—to help strengthen the rollout of the Program Indonesia Sehat melalui Pendekatan Keluarga PIS-PK (Healthy Indonesia through the Family Approach Program). In 2016, the PIS-PK developed a healthy family index based on 12 indicators.<sup>12</sup> including a few nutrition-specific and nutrition-sensitive interventions. Two PIS-PK indicators (growth monitoring and exclusive breastfeeding) are taken from the e-PPGBM. The goals of mHealth are to (1) strengthen Puskesmas management through the family approach; (2) improve health services in health service facilities; (3) strengthen promotive and preventive services; (4) improve the quality of data and information related to health and information services; and (5) provide tools for data collection and monitoring health conditions in the work area. Information on each individual and family can be used by a doctor or a midwife to carry out promotive, preventive, and curative actions. The mHealth application has been designed and piloting has begun. It still needs to be rolled out and evaluated to assess whether health care workers use it in day-to-day operations and how to make it interoperable with other systems such as the e-PPGBM.

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

### Village Convergence Scorecard

Starting in 2018, through the World Bank–financed Investing in the Nutrition and Early Years (INEY) Project, the government began piloting the StraNas Village Convergence Scorecard to track frontline delivery and utilization of the priority StraNas nutrition-specific and nutrition-sensitive interventions in 160 stunting priority districts. It currently includes 19 nutrition-specific and nutrition-sensitive indicators, based on target groups, that will be monitored by HDWs (see Table 2). Delivery failures will be reported to village heads and subdistrict heads to increase accountability, learning, and action. The pilot also highlighted that information from the scorecard can be used to advocate for issues related to health and nutrition at the community level and for better understanding of access and usage of basic nutrition services among targeted groups.

Target	Intervention Package	Indicators
Pregnant women	Health	1. Every pregnant woman receives a minimum of 4 ANC visits (first ANC in the first trimester; second ANC in the second trimester, and third and fourth ANC in the third trimester)
		2. Every woman receives a minimum of 90 IFA tablets during pregnancy and postnatal care
		3. Every mother and newborn child receive PNC by a midwife or doctor a minimum of 3 times during the first 42 days after birth
	Nutrition	4. Every pregnant woman attends minimum 4 pregnancy classes
		5. Every pregnant woman from vulnerable households receives home visits with integrated counseling (ANC, nutrition during pregnancy, early initiation and breastfeeding, WASH) at least once a month
	WASH	6. Each household with a pregnant or lactating woman has access to safe drinking water
		7. Each household with a pregnant or lactating woman has a proper family latrine
	Social protection	8. Every household with a pregnant woman receives social health insurance program
Children 0–2 years	Health	1. Every child between 0–12 months receives full immunization according to the MoH standard package
		2. Every child under 2 receives routine growth monitoring weight check every month to ensure growth according to the growth chart
		3. Every child under 2 receives routine growth monitoring length/height check every 6 months to ensure growth according to the growth chart
	Nutrition	<ol> <li>Every parent/caregiver with a child 0–2 years old participates in nutrition counseling a minimum of once a month</li> </ol>
		5. Every mother with children 0–2 years from vulnerable households receives home visits with integrated counseling (early initiation, IYCF, WASH) at least once a month
	WASH	6. Each household with a child 0–2 years has access to safe

Table 2. Village Convergence Scorecard Ind	licators
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		drinking water
		7. Each household with children 0–2 years has a family latrine
	Social Protection	8. Every child 0–2 years old has a birth certificate
		<ol> <li>Every household child 0–2 years receives social health insurance program</li> </ol>
	ECED	10. Every parent/caregiver with a child 0–2 years participates in parenting classes as part of an ECED program at least once a month
Children 2-6 years	ECED	11. Every child 3–6 years old actively participates in a minimum of 80% of ECED services

Source: (Ministry of Villages Disadvantaged Areas and Transmigration 2018)

*Notes:* WASH = Water, sanitation, and hygiene; ECED = Early Childhood Education and Development; ANC = Antenatal care; IFA = Iron and folic acid; PNC = Postnatal care; MoH = Ministry of Health; IYCF = Infant and young child feeding; ECD = Early Childhood Development.

### e-HDW application

A digital monitoring and mapping tool—e-HDW—is being developed for HDWs, monitoring scorecard indicators, including health and nutrition. The app can help identify service gaps and improve the targeting of services. It also helps provide HDWs with a list of concrete actions to advocate for improved village spending. The plan is to have access to data from e-HDW granted across government levels, which will enhance accountability and local-level decision-making. Village heads will have access to the app to obtain insights on village conditions and drive investment decisions. Puskesmas can validate village data and track progress. e-HDW data are fed into district dashboards, where supervisors and multisector stakeholders can monitor HDW task completion and track progress. Provinces and the central government have access to a district dashboard that the e-HDW data feeds into to monitor national, provincial, district, subdistrict, and village convergence scores and services.

Given the various Posyandu and Puskesmas-based mobile information systems, discussions are underway with the MoH to integrate or link them and their indicators, particularly the e-PPGBM and e-HDW. Exactly how to do this and what the final product will look like is still being figured out. Improved interoperability and streamlining existing data systems are key challenges that need to be addressed to improve the quality of nutrition data and its collection, accuracy, and reporting.

### Patient satisfaction data

Currently, patient satisfaction surveys are mainly being conducted by the government's Social Insurance Organization (BPJS Kesehatan), which manages the Jaminan Kesehatan Nasional (JKN) or National Health Insurance. These surveys are being carried out on an annual basis. There is no specific guideline and/or regulation on the measurement tools and indicators of patient satisfaction at the Puskesmas level. Puskesmas are free to conduct their own patient satisfaction surveys, including collecting data through mobile phones or a suggestion box.

### Data for decision-making/Learning for improvement

As explained above, Indonesia has made many improvements in implementing innovative measurement and data collection tools. However, there is still limited use of data at the national and subnational levels to allow for strategic decision**making.** Learning and improvement for nutrition depend on timely data availability and quality and data sharing and exchange. Through the INEY project, Annual Stunting Summits are held at the village, district, and national levels to help secure government leaders' commitment across line ministries to implement multisectoral actions and discuss progress and obstacles to StraNas Stunting. These forums could be expanded upon to commit participants to share information and data about implementing quality nutrition services.

### Box 2. Monitoring StraNas outcomes

In 2020, the SoVP (StraNas Stunting Secretariat) developed the Evaluation Framework and M&E Plan for StraNas, which evaluates the achievement of outputs and impacts of the strategy and its contribution to accelerate stunting prevention and reduction. Several factors affect the availability of data for M&E and its quality and use for decision-making. StraNas M&E has leveraged and strengthened existing data collection systems. These include national surveys such as RISKESDAS, SUSENAS, and SSGBI, the village scorecard, along with sectoral ministries' routine reports on program coverage and budget allocations. Challenges with data availability and quality include a lack of systematic monitoring mechanisms in place in line ministries or subnational governments for certain indicators. In addition, there is some incomplete data due to the COVID-19 pandemic, limited understanding of the line ministries' staff related to StraNas M&E, and timeliness of data reporting.

In addition, to improve the quality of nutrition-specific services, it will be essential to ensure that the performance indicators of StraNas include indicators that measure quality and that these are used in decision-making. The WHO has developed quality indicators for MNCH in recent years that can serve as references, or be adapted, for ensuring quality nutrition-specific indicators to measure StraNas (see Annex 2) (World Health Organization (WHO) 2018a). In addition, recently, the "Effective Coverage Think Tank Group" convened by UNICEF and WHO provided recommendations on ensuring "effective coverage" rather than only "coverage" indicators to measure the quality of health services (Marsh et al. 2020).

Similarly, the research studies and their related evaluation questions that are part of the evaluation of StraNas provide a potential opportunity to propose other studies that could improve the quality of nutrition services. Proposed research studies are classified into formative, process, and summative questions corresponding to each pillar in StraNas. Several of the proposed research questions already address quality issues (e.g., whether the interpersonal communication training for Kaders is effective and how it can be improved).

Source: (Secretariat to Accelerate Stunting Prevention 2020; World Health Organization (WHO) 2018a)

*Notes:* MNCH = Maternal, Neonatal, Child Health.

### FINANCING

Financing for nutrition in Indonesia is complex and fragmented due to the Summary: multiple financing streams and many agencies involved in managing the funds. This duplication of functional responsibilities can be a major driver of inefficiency. Also, because of Indonesia's decentralized system of governance, provincial, district, and villages play a significant role in nutrition spending decisions. This can lead to challenges for delivering high-impact nutrition interventions at the local level, both in terms of fragmented financing and local-level capacity to implement interventions. Indonesia has substantially increased spending for nutrition at the district and village levels through intergovernmental fiscal transfers. These transfers, including the Village Funds, have not been optimally used to improve the quality of nutrition services at the community level. The country's move toward strategic purchasing of nutrition services will directly influence quality of care and improve the efficiency of existing spending toward nutrition results. However, challenges remain including the need to update Minimum Service Standards for health, issues related to accreditation of health facilities, low capitation rates for primary health facilities, lack of performance standards for nutrition interventions delivered at the subdistrict level, incentives from capitation that are generally not linked to provider performance, and the fact that nutrition services are primarily delivered at the community level, where capitation payments do not really influence quality of care.

### Fragmented financing

**Financing for nutrition in Indonesia is complex and fragmented due to the multiple financing streams and many agencies involved in managing the funds.** This duplication of functional responsibilities can be a major driver of inefficiency from the perspective of the entire system. Fragmentation in financing also creates challenges for health facilities to plan and coordinate the timing of different funding sources to ensure all necessary inputs are available to deliver quality nutrition services (Hafez, Pambudi, and Agustina 2020).

**Financing for nutrition comes from supply- and demand-side financing.** Nutritionspecific interventions in Indonesia have been mainly financed through government line budgets that fund a package of the Minimum Service Standards provided by government health care facilities. This supply-side government budget supports salaries for public sector health workers; government health infrastructure construction and maintenance; some of the operating costs for Puskesmas and government hospitals (utilities, drugs, supplies, fuel, in-service training, and administrative costs); health sector management; and preservice training for health workers. On the demand side, the National Health Insurance Scheme (Jaminan Kesehatan Nasional, JKN) has increasingly been an important source of financing. JKN covers services to improve the nutritional status of an individual/family in primary health care facilities and referral hospitals. As of 2018, around one-quarter of all government spending on health flowed through JKN (Indonesian National Health Authority 2018).

The decentralized system in Indonesia means that greater levels of financing responsibility are being placed at the provincial, district, and village levels.

**Financing, training, and supervision budgets do not flow down to that level in a regular fashion.** Even though the intergovernmental fiscal transfers menu is set on a top-down basis, whereby the central government directs the types of activities that the regions may choose, allocation to nutrition services is at the discretion of the subnational governments. The fiscal transfers to districts include conditional sector and subsector grants—Dana Alokasi Khusus (DAK)—that can be used to improve supply-side readiness and cover the cost of health facility staff to provide community outreach programs critical to nutrition services. Other intergovernmental transfers include transfers to villages (Dana Desa or Village Funds). Village Funds can be used for nutrition-related services, including operational costs for village health posts and incentives for community health workers.

### Weak strategic purchasing of nutrition services<sup>13</sup>

According to the Lancet HQSS framework, purchasing of nutrition services has the greatest direct influence on quality of care (Kruk et al. 2018). Strategic purchasing of nutrition services entails prioritizing nutrition in resource allocation and service delivery and creating incentives at the health facility level to strengthen access to and improve the quality of nutrition service. Given the substantial increased supply-side financing for nutrition at the district and village levels (through fiscal transfers) as well as demand-side financing (through JKN), careful implementation is needed to ensure the additional resources translate into better coverage and quality of services.

**Mechanisms are in place for strategic purchasing of nutrition services in the country, but challenges remain.** The government's Social Insurance Administration Organization (Badan Penyelenggara Jaminan Sosial, BPJS-K) was established to oversee the main health purchasing functions under JKN (i.e., managing quality, and controlling expenditure for services covered in the JKN). However, in practice, the MoH and its local health offices are responsible for the key purchasing functions including determining the benefit package, developing provider payment systems, and setting reimbursement rates This results in the BPJS-K being more of a "passive intermediary" that establishes a contractual relationship with health facilities based on accreditation standards and transfers payments to health providers (The World Bank 2020). The uneven distribution of health personnel and health facilities, capacities of health personnel, and insufficient infrastructure (especially in remote areas) provide challenges to ensure quality nutrition service. Furthermore, the central MoH is facing challenges in monitoring performance at the district and subdistrict levels to inform a timely course correction on purchasing decisions and regulations.

There are also challenges related to payments to health facilities to provide nutrition services. The current capitation payment system lacks a mechanism to monitor and hold providers accountable for quality. In 2016, the MoH and BPJS-K agreed to Capitation-Based Service Competence based on four self-reported

<sup>&</sup>lt;sup>13</sup> Strategic purchasing of nutrition services entails prioritizing nutrition in resource allocation and service delivery and creating incentives at the health facility level to strengthen access to and improve the quality of nutrition service. According to the Lancet HQSS framework, purchasing of nutrition services has the greatest direct influence on quality of care (Kruk et al. 2018).

performance indicators (contact rate, nonspecialistic referral rate, Chronic Disease Management Program attendees, and outreach services [home visits]). However, the last indicator ended up being excluded from the rating standards.<sup>14</sup>

On top of their regular salaries, health workers in Puskesmas also receive incentives from capitation, which are not generally linked with provider performance but are associated with staff qualifications (e.g., education, years of experience, position, etc.). This represents a lost opportunity to motivate improved quality and performance and implies that capitation payments may just be a "windfall" to many salaried health workers.

A key challenge is that nutrition services are primarily delivered at the community level, where capitation payments do not really influence quality of care. Capitation payments are only made to Puskesmas or higher levels of care (clinics, hospitals). Any service below the Puskesmas or clinic level is delivered by Kaders, which the Village Fund with limited standards usually finances. One option for JKN to influence quality of care at the village level is to contract village midwives to improve outreach for nutrition services (e.g., counseling as part of ANC/PNC and IYCF). However, there is a concern that this allocation depends on the discretion of the Village Authorities, who are not standardized across villages. In addition, increasing midwives' involvement in outreach services might take away time and resources from their already expanding responsibilities.

**Village Funds have not been optimally used to substantially improve the quality of nutrition services delivered at the community level.** Village Funds could be used to support logistics for community-based delivery platforms Posyandu, Poskesdes<sup>15</sup>, and Polindes<sup>16</sup> and increase salaries for village health workers. Villages receive significant financial resources for nutrition services. They have significant autonomy in deciding how to use funds. Still, many Village Authorities spent an inadequate proportion of Village Funds on health and nutrition even though the Ministry of Villages has emphasized stunting as a priority for Dana Desa funds (Hafez, Pambudi, and Agustina 2020). Furthermore, more can be done to prioritize activities that effectively contribute to improving the quality of frontline nutrition services, such as increased incentives for Kaders and enhanced behavioral change communication interventions, including home visits and tailored counseling.

<sup>&</sup>lt;sup>14</sup> Based on Peraturan Bersama Sekretaris Jenderal Kementerian Kesehatan Republik Indonesia No. HK.01.08/III/980/2017 dan Direktur Utama BPJS-K No. 2 tahun 2017.

<sup>&</sup>lt;sup>15</sup> Village health posts

<sup>&</sup>lt;sup>16</sup> Village delivery posts

### **PLATFORMS FOR CARE**

**Summary**: Strengthening the various levels of care within the health system to deliver situation-specific nutrition interventions is crucial in Indonesia's fight against malnutrition. This includes improving access to and quality of care at both Puskesmas and Posyandus. In addition, it will be essential to improve the coordination and referrals between Posyandus and Puskesmas and the quality of nutrition services provided in these facilities.

### Posyandu and village-level coordination of services

In Indonesia, most nutrition services are delivered through subnational delivery platforms at the community/village, subdistrict, and district levels. District hospitals provide basic inpatient and outpatient services. Puskesmas are the backbone of the public health system, providing preventive and basic primary health care. Though the number of Puskesmas, on average, has been increasing in relation to the increasing population, there are still large geographic differences in the amount of time needed to reach Puskesmas by urban vs. rural areas and by province (World Bank 2018b; "Laporan Nasional RISKEDAS 2018" 2018). In most provinces, Posyandus are the first health service contact for pregnant women and young children (World Bank 2018a). Posyandus are crucial in Indonesia's fight against malnutrition, but their overall quality is below minimum standards, and they need to be modernized to increase their impact on child nutrition outcomes (The Manoff Group 2019). Since their inception in the 1980s and 1990s, problems have been cited, including understaffing, inadequate training, low motivation, health worker dropout, low utilization rates, and resource constraints (World Bank 2018a).

Improving the quality of Posyandus involves a myriad of groups at district and village levels, providing management and implementation challenges. In terms of performance improvement, the District Posyandu Operational Working Group is responsible for improving these facilities' performance and training. The village-level Posyandu Working Group provides the supportive policy, equipment, and funds for Posyandus and training Kaders, among other activities. In addition, the numerous multisectoral institutions that play different roles in Posyandus will need to be coordinated to improve quality nutrition service delivery (see Box 3). Strengthening the quality of Posyandus will also involve improving the capacity and training of Kaders and their supervision (see "Workforce" section), and improving the collection, reliability, and use of nutrition data from Posyandus to trigger corrective actions related to quality (see "Posyandu and Puskesmas-based information systems" section).

### Box 3. Role of Community Groups Involved in Posyandus

**Family Welfare Education program agitator team:** (1) Active role in carrying out Posyandu activities; (2) mobilize community participation in Posyandu activities; (3) provide counseling, both in and outside Posyandu; (4) complete data in accordance with Posyandu Information System or Management Information System.

**Community Leaders/ District Health Care Forum (if already established):** (1) Exploring resources for the sustainability of Posyandu; (2) observing and assisting Posyandu activities; (3) mobilizing community to attend and play an active role in Posyandu activities.

**Community Organizations/NGOs:** (1) Providing public health services, counseling, mobilizing cadres according to the interests and mission of the organization; (2) providing support facilities and funds for the implementation of Posyandu activities.

**Private/Business:** (1) Providing support facilities and funds for the implementation of Posyandu activities; (2) having an active role as a volunteer in Posyandu activities.
*Source:* (Ministry of Health of the Republic of Indonesia 2011)

# **Referral systems**

The Guidelines for the Management of Malnutrition provide guidance and SOPs on referring children with nutritional problems. Being trained and implementing these guidelines is critical for referral success. Posyandus or other primary health facilities are responsible for identifying infants with growth retardation as early as possible through mass screenings in the community. Cases of malnutrition need to be immediately referred to health workers who will then refer them to health centers. However, according to the 2016 QSDS, only 43 percent of the Kaders interviewed had received training in identifying malnourished children through general management and referral (Rokx, Subandoro, and Gallagher 2018). Puskesmas staff should refer children under five with nutritional problems with complications and comorbidities to hospitals or Puskesmas with inpatient facilities. Posyandus and Puskesmas need to ensure that health workers follow the referral criteria in the guidelines to improve the quality of frontline nutrition services.

Equipment such as telephones, radios, and emergency transport vehicles are also critical for referring malnourished patients. According to the 2016 QSDS, less than half of the Puskesmas had landlines, with fewer rural areas (23 percent rural vs. 79 percent urban). Cell phone use was even less at the time of the survey, with only 28 percent of rural Puskesmas vs. 29 percent of urban ones used for communication purposes. While almost all (93 percent) Puskesmas had at least one functioning emergency transport vehicle, only one-third (33 percent) of private clinics did (World Bank 2018b).

The MoH is introducing an internet-based referral system (Sistem Rujukan Terintegrasi [SISRUTE]) used by hospitals to support a more effective referral between lower-service levels to a higher level of services, which provides an initial step toward building effective, integrated service delivery. The I-SPHERE Program is helping roll out and expand the use of this software to be based on patient medical needs and competence of health care facilities, including services, service capabilities, and availability of human resources. Unfortunately, this system has not been integrated with the existing e-PPGBM or the e-HDW systems.

# WORKFORCE

**Summary**: About one-fourth of Puskesmas do not have nutritionists. Many health workers carrying out nutrition services (HDWs and Kaders) are not trained or may not have had optimal training. They are not part of the formal health system, making it challenging to give them the support they need to provide quality nutrition services. Many of them cannot deliver high-quality interpersonal communication and counseling due to a lack of training, outdated job aids, counseling messages, and materials. There are currently no mechanisms in place to provide incentives to HDWs and Kaders based on performance. Indonesia invests significant resources for supervision activities, but supervision is often not adequate or sustained. Many supervisors do not have the knowledge, skills, or tools to carry out their duties effectively.

Availability of health workers carrying out nutrition services

Most nutrition and MNCHN services in Indonesia are delivered at the local level by midwives (including village midwives), nutrition staff, HDWs, and health Kaders.

Nutritionists ideally carry out nutrition services at the Puskesmas. However, if there is no nutritionist available, the Puskesmas will ask a Nutrition Implementation Worker (TPG). The TPG is a health worker (e.g., midwife or nurse) who has been trained in nutrition services. Health Kaders are voluntary workers chosen by the community and trained to deal with individual and community health problems in locations close to the community. Most Kaders are appointed by the village head, hamlet, PKK, or the Posyandu (Rokx, Subandoro, and Gallagher 2018). The main task of Kaders is to motivate and guide the community and to instruct, record, and report on health service activities, including nutritional conditions (see Table 3).

Frontline worker	Facility	Roles	Preservice requirements	In-service requirements
Nutritionist	Puskesmas	Provide nutrition services for individuals and communities; prevention and management of SAM, IYCF counseling, growth monitoring and promotion, etc.	Training not required; no standard package of preservice training	Training required, but no standard package of in-service training; training not being done consistently among health workers
Nurse or midwife (trained in nutrition)	Puskesmas	Provide nutrition services both for individuals and communities; prevention and management of SAM, IYCF counseling, growth monitoring and promotion, etc.; supervise Kader	Training required, but no standard package of preservice training	Training required, but no standard package of in-service training; training not being done consistently among health workers
Kader	Posyandu	Weighs and monitors child's growth, records growth, counsels mothers on child growth and IYCF	Most not trained before starting work	Training is not being done consistently among health workers. Training does not emphasize nutrition topics but rather management and administrative issues
HDW	Communities	Supports village governments in identifying, implementing, and monitoring priority nutrition interventions. Use length mat to measure children	Most trained	Preservice modules provided in accessible media so HDW can access when needed; village assistance provided in every subdistrict

 Table 3. Types of Frontline Workers Delivering Nutrition Services in Indonesia,

 Roles, and Training Requirements

*Source:* Adapted from information from (Rokx, Subandoro, and Gallagher 2018; NEDA and UNICEF Philippines 2018)

*Notes:* SAM = Severe acute malnutrition; IYCF = Infant and young child feeding; HDW = Human Development Worker.

There is a gap in the availability of workers carrying out nutrition services at many Puskesmas, leading to multitasking and task-shifting. According to the 2017 Human Resources for Health (HRH) survey, approximately 26 percent of Puskesmas do not have nutritionists. There is an uneven distribution of these health workers by region. Responding to the general shortage of qualified HRH, 96 percent of Puskesmas implemented multitasking jobs and 66 percent task-shifting ("The Consolidated Report on Indonesia Health Sector Review 2018" 2018). The problem with task-shifting is that nutrition generalists often carry out nutrition-related duties, and/or nutrition staff are often delegated administrative tasks (Meilissa, forthcoming).To address human resource

scarcity in remote areas in 2016, the MoH launched the Healthy Archipelago (Nusantara Sehat) program to deploy teams of health workers to fill Puskesmas workforce gaps in targeted locations and for priority programs. However, nutritionists are not always included in the program, and health workers are generally only assigned to Puskesmas for two years. Another program, the Penugasan Khusus Individu, is similar to the Nusantara Sehat program but employs individuals rather than teams to Puskesmas.

Starting in January 2018, the Ministry of Villages created an innovative community-based HDW pilot to target, deliver, and monitor services to prevent stunting across multiple sectors. The pilot builds on Indonesian experiences, is overseen by the SoVP, and is implemented by the Ministry of Villages (MoV), Disadvantaged Areas and Transmigration, in coordination with the MoH, the MoF, and Bappenas. The design establishes a community-based HDW model to support village governments in identifying, implementing, and monitoring priority nutrition interventions to 1,000-day households.

HDWs are being deployed to enhance the convergence of services at the community level. On the supply side, the HDWs identify service gaps across health, early childhood education, social protection, and water and sanitation sectors. They provide targets for service providers to address the gaps, monitor results, and implement key interventions at the facility and household levels. On the demand side, HDWs work with Indonesia's Program Keluarga Harapan (PKH) (i.e., conditional cash transfer program) to ensure that vulnerable households are provided the incentives to utilize essential nutrition and early childhood education services. Through the INEY project, the HDW program is being scaled up to all of Indonesia's 514 districts. It is estimated that there will be one HDW per village.

# Quality of health workers and their training

The quality of the nutrition-related training institutions and, in turn, their workforce is in dire need of improvement. Only 1.5 percent of midwifery institutions and 2.7 percent of nursing institutions received the highest-level accreditation, compared to 63.0 percent of medical institutions. Low accreditation contributes to low-quality health worker graduates ("The Consolidated Report on Indonesia Health Sector Review 2018" 2018). The lack of competency among health workers is one reason for their underperformance and is related to outcomes in the health sector (Meilissa, forthcoming).

There is no standard package of preservice and in-service training for nutritionists and midwives. The ones that exist are outdated and inconsistent at the district level. Curricula need to be updated to reflect the focus on the first 1,000 days of life, nutrition care standards, and the double burden of malnutrition (Rokx, Subandoro, and Gallagher 2018; UNICEF 2018). While numerous guidelines exist that nutrition workers are supposed to follow, the guidelines are not always integrated into the training. A standard package of preservice and in-service nutrition training courses, using updated guidelines, is needed to equip nutritionists and health workers to deliver nutrition-specific services.

**Training for health workers providing nutrition services in Puskesmas is uneven.** According to UNICEF, over 13 nutrition-related in-service training courses certified by the MoH were used for nutritionists and midwives in seven districts. These trainings were not being held consistently. While some nutritionists had received no nutrition training during the past year, others had received up to six trainings. Moreover, Provincial Health Training agencies often do not have the technical expertise to design and run the training (UNICEF 2018). Besides, given the high staff turnover at Puskesmas, nutrition training often must be rerun to train new staff, creating additional expenses. In addition, there is a need to improve the managerial skills of the heads of Puskesmas (Ministry of Health of the Republic of Indonesia 2020b).

According to the QSDS, the majority (83 percent) of Kaders are not trained by Puskesmas before starting work at their local Posyandu. While about half (51 percent) are trained once they start work, the training is not regularly conducted or updated. The QSDS found that only one-third (35 percent) of Kaders had been trained within the last year. Most of this training was centered around the management of the Posyandu rather than on a nutrition-specific topic. Generally, only the head Kader receives training and may not pass along the skills to other Kaders, thereby affecting the sustainability of training.

**Most HDWs are being trained.** A pocketbook for HDW operation has been developed outlining the tasks of the HDW; how to engage with villages and other stakeholders; how to do monitoring, evaluation, and coordination; and in the use of the Child Length Mat (see "Population demand" section for more information on the Child Length Mat). Almost all HDWs were trained last year through the Village Innovation Program. A training of trainers is underway for the innovative digital tool—e-HDW. Preliminary data show that hands-off training (where the HDW learns how to use the digital tool from the app) is a cost-effective option for most locations. HDWs are showing higher levels of task completion, the more they use the app.

**Training for Nusantara Sehat workers is provided as a debriefing but is not optimal.** The material focuses on Puskesmas management, management of healthy family approaches and applications, nutrition programs, health promotion, environmental health, and disease prevention and control. Ideally, more emphasis should be placed on stunting during the training of these workers, including both nutrition-specific and nutrition-sensitive interventions.

Because of a lack of training, outdated job aids and materials, many health workers, especially in Posyandus, are not ready to deliver high-quality nutrition services, including interpersonal communication and counseling (IPCC). According to the 2016 QSDS, almost 99 percent of Puskesmas provided counseling on breastfeeding and complementary feeding. Among Posyandus, while most counseled mothers on healthy diets and exclusive breastfeeding during ANC (90 percent and 93 percent, respectively), only 3 percent advised on early breastfeeding initiation. Only 53 percent provided counseling on exclusive breastfeeding during postnatal care visits. Few (39 percent) provided group counseling on nutrition for mothers of children under five (World Bank 2018b; Rokx, Subandoro, and Gallagher 2018). Difficulties in carrying out high-quality IPCC in Indonesia, like in many other LMICs, may be due to health workers not having time to counsel clients due to their high workloads, lack of training on how to conduct IPCC for nutrition, and the nature of counseling being too generic or not resonating with caregivers (World Bank 2020b).

# Job descriptions and service standards

Job descriptions or service standards for these frontline health workers involved in nutrition service delivery are broad. This makes it difficult for nutritionists, midwives, HDWs, and Kaders who are carrying out nutrition services to interpret their jobs or prioritize their responsibilities (World Bank 2018a; UNICEF 2018). Currently, the head of the District/City Health Office instructs the head of the Puskesmas to create job descriptions for nutrition workers in Puskesmas based on their competencies and authority related to nutrition services. Kaders receive their assignments or work instruction from the Posyandu Management Handbook. Basic job descriptions of health workers involved in nutrition service delivery are outlined in separate guidelines. Job descriptions for health workers carrying out nutrition services need to be more explicit, expressing what tasks are important and why. In addition, they need to emphasize prevention and treatment of malnutrition in communities and delivery of/referral to services.

# Supportive supervision

**Regular supervision of frontline health workers is critical for improving health worker performance and their quality of services.** Supportive supervision means not just checking if a health worker carried out nutrition-related activities and entered correct data. International evidence has shown that the critical functions of supervision are to set objectives, provide training and guidance, monitor, and evaluate performance, provide feedback, motivate staff, and provide support to solve problems. Supervision may be more effective and sustainable when health workers themselves, peers, and communities are involved in supervisory approaches (Applying Science to Strengthen and Improve Systems (ASSIST) Project 2014). According to a recent systematic review of provider performance, combining training with supportive supervision improves health worker performance more than training or supervision alone (Rowe et al. 2019).

**Indonesia invests significant resources for supervision activities, but supervision is often not adequate or sustained.** Many supervisors do not have the knowledge, skills, or tools to carry out their duties effectively. Though according to the 2016 QSDS the second-largest share of Puskesmas expenditures was for monitoring and supervision activities (24 percent), supervision of health care in the country often has been fragmented and hampered by a lack of human resources and supervision

standards (Rokx, Subandoro, and Gallagher 2018; World Bank In 2018b). Indonesia. the District Health Office conducts regular supervision and monitoring visits of Puskesmas. Midwives from

# Box 4. Challenges to High-Quality Supportive Supervision in LMICs

(1) Not framing supportive supervision as a continuation of in-service training; (2) supervisors not being adequately trained on how to conduct supervision, the quality of supervision provided to health workers is highly variable, and health workers are not provided the opportunity to give their feedback on the quality of these supervision visits; (3) supervision visits are sporadic, costly, and challenging due to availability of human resources and travel restrictions; (4) supervision tools/checklists are too lengthy, not action-oriented, not adapted to service delivery, and not supportive; and (5) data from supervisory visits is often not analyzed or used

Source: (John Snow Inc. 2020)

nearby Puskesmas generally supervise Kaders in Posyandus regularly. According to the QSDS, while almost all the Puskesmas monitored Posyandus monthly, these visits mainly focused on recording, reporting, and collecting coverage data rather than mentoring services providers. Also, not all Puskesmas provided consistent monthly

written feedback to Posyandus, which improves accountability (World Bank 2018b). Box 4 presents common challenges to high-quality supportive supervision in LMICs.

In 2014, UNICEF developed a planning and implementation guide for providing IYCF counseling and supportive supervision services at the community level in Indonesia, which the MoH has adopted to train frontline health workers in stunting reduction in priority districts (UNICEF 2017). According to the guide, different health workers will conduct supportive supervision and mentoring at various levels (see Table 4). Supportive supervision is supposed to occur within one month of IYCF counseling training, and after that, at least once every three months. A Facilitative Supervision Training Guide has been developed on how to conduct facilitative supervision, mentoring, and monitoring. Challenges exist in the guide's implementation, including during the COVID-19 pandemic, which slowed down training. Also, MoH databases have not recorded specific indicators for IYCF yet. For example, the number of participants who have been trained and the number of mothers who received IYCF counseling.

Level	Person supervised	Supervisor	Supervisory content
Puskesmas	Puskesmas facilitator (nutritionist, midwife coordinator)	District trainer	Provide supervisory support to the Puskesmas facilitator and health workers to ensure that they have the knowledge and skills to counsel and train others.
Village	Village midwife	Puskesmas facilitator	Assess the counseling capacity of village midwives and their ability to supervise Kaders.
Posyandu/subvillage	Community Kader	Village midwife (with supervision by Puskesmas facilitator)	Observe Kaders during IYCF counseling and compare their performance against the desired standard on a checklist. Discuss performance and provide supportive feedback immediately after the counseling session.
			Check the written records of the Kaders.

Table 4. Levels of Supportive Supervision	n for IYCF Counseling
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Source: (Ministry of Health of the Republic of Indonesia 2017)

*Note:* IYCF = Infant and young child feeding.

# Remuneration and incentives to increase performance

**Currently, there is no mechanism established for providing incentives to HDWs or Kaders based on performance.** The MoV has encouraged villages to give funds to HDWs using Local Government Budget (APBD) and Village Funds (Dana Desa). However, there is no regulation on how much they should pay, and payment is not linked to performance. According to the QSDS, more than half (62 percent) of Kaders receive incentive compensation regularly as an honorarium or reimbursement for transportation. Their payments are not linked to the quality of their performance. Also, the majority (61

percent) felt that the incentives were insufficient (Rokx, Subandoro, and Gallagher 2018).

For nutritionists, the MoH, in collaboration with the Association of Indonesian Nutritionists, is in the final stages of proposing amendments regarding the training and remuneration of nutritionists. The proposed changes include (1) requirement that nutritionists must graduate from a health polytechnic or university; (2) increased levels of remuneration related to a nutritionist's performance, based on the collected credits and renewal of the license, which will be assessed and verified by a special unit under the MoH; and (3) outlining of the type of training needed for each position level.

**Performance incentives are given to nutritionists and health centers based on nutrition program performance criteria.** Each district nominates its best performing health center and nutrition officer based on the guidelines for providing awards to exemplary health workers at Puskesmas (Minister of Health Regulation No. 23/2016); with each province doing the same, at the provincial level. The best performing health center and nutritionists are given monetary incentives, program development, and the opportunity to meet with the head of state. At the district level, districts that show good performance are given the opportunity to submit activity proposals as part of the regional incentive fund.

# TOOLS

**Summary:** There is a shortage of supplies and equipment to conduct quality nutrition services at Puskesmas and Posyandus, including infant weighing scales and technical guidelines for health care providers. Recently, job aids for nutrition counseling have been developed or are being proposed for health care workers.

# Equipment and supplies

The QSDS found frequent stock-outs of equipment and supplies at Puskesmas and Posyandus required to deliver nutrition-specific services. Most (92 percent) Posyandus have child weighing scales, but only 59 percent have functional infant (<1 year old) scales. Only half the Posyandus had ever calibrated their child scales. Length boards were only available at 30 percent of the Posyandus and height measurement tapes in 67 percent. Half (50 percent) of Posyandus reported having mid-upper arm circumference (MUAC) measuring tapes, with only 1 percent reporting that they were available during the last Posyandu session. In general, Posyandus expected health workers to bring their own equipment. Stock-outs are measured through Posyandu logbooks, which are sometimes not updated. Puskesmas support Posyandus for equipment, vitamins, and medical supplies (Rokx, Subandoro, and Gallagher 2018).

**Currently, there are incomplete and not standardized special kits for nutrition services at Puskesmas.** Equipment needed to conduct nutrition services such as scales, height measurements, and food models are in other program kits (e.g., body-length measurement tools are in the children's health kit). A nutrition health kit would be helpful for health workers carrying out nutrition services. The RIFASKES 2019 survey showed that in Maternal and Child Health polyclinics, although around 87.7 percent of Puskesmas have a baby scale, only 27.9 percent of Puskesmas have an Hb Sahli tool (National Health Institute Research and Development 2019). The availability and completeness of such a kit at Puskesmas and Posyandu levels could also be used as an indicator and standard to assess quality.

# Job aids

**Recently, nutrition-related job aids and counseling materials have been developed or are being proposed for health care workers.** The MoH has proposed six new nutrition-related SBCC materials for health workers. They are focused on IYCF, iron supplementation, encouraging mothers and children to come to pregnancy classes, encouraging mothers to visit Posyandus every month, proper handwashing techniques, and teaching villagers how to make latrines and use them properly. All existing and new SBCC materials should be carefully reviewed to ensure consistent messaging across the materials and with Strakom.

In addition, UNICEF has developed several IYCF counseling training materials to support IYCF counseling at the community level, which the MoH plans to roll out in the stunting priority districts. The materials began being rolled out in early 2019, but plans for 2020 were put on hold because of the COVID-19 pandemic. The materials include IYCF facilitators and participants guide, training cards to guide discussion during the training, IYCF message booklet, brochures for mothers and caregivers to remind them of important IYCF practices, a handheld flip chart to assist health workers and Kaders when they provide counseling to mothers and caregivers, and a supportive supervision guide. As explained previously, the MoH plans to implement supportive supervision of the counseling skills of Kaders and village midwives in high stunting provinces, which will help improve the quality of counseling at the village level.

#### **POPULATION DEMAND FOR HIGH-QUALITY CARE**

**Summary**: Communities in Indonesia can play an essential part in improving service delivery by holding sector line ministries, districts, and communities accountable for delivering nutrition interventions. The StraNas Village Convergence Scorecard will hold village and subdistrict heads accountable for frontline delivery of the priority nutrition-specific and nutrition-sensitive interventions; the Child Length Mats help Kaders and HDWs communicate with families about child growth and help them visualize growth; and the e-HDW mobile app helps HDWs identify and monitor 1,000-day households. Involvement and participation in community groups (e.g., "Healthy Village Homes" or Rumah Desa Sehat) or the Community Introspective Survey can help raise demand for quality and social accountability as well. Also, building capacity to implement the behavior change campaign (Strakom) at local levels will be instrumental in improving awareness and access to information among families about the link between nutrition and stunting and its impact on child growth and development.

# Processes to hold service providers and communities accountable for delivering nutrition interventions

According to the HQSS, an important foundation of a high-quality health system are the individuals, families, and communities served. Individuals are health care recipients and should be active partners in improving health outcomes and holding health systems accountable (Kruk et al. 2018). The StraNas Village Convergence Scorecard holds village and subdistrict heads accountable for frontline delivery of the priority nutrition-specific and nutrition-sensitive interventions. Delivery failures will be reported to village and subdistrict heads to increase accountability, learning, and action. The information from the scorecard can be used to advocate for issues related to health and nutrition at the community level and to better understand access and usage of basic nutrition services among targeted groups. The Child Length Mats help Kaders and HDWs communicate with families about child growth, help them visualize growth, and incentivize them to go to the health facility if their child is not growing properly. Involvement and participation in community groups (as explained below) can help raise demand for quality and social accountability as well.

# Involvement and participation of community groups

In 2018, the concept of Rumah Desa Sehat (RDS) was formed to actualize the convergence of health services in the village, especially stunting prevention. The MoV facilitates the formation and development of RDS, especially in villages that are the focus of stunting prevention convergence. In 2018 technical guidelines were developed for RDS to help villages and local district/city governments facilitate the formation and management of RDS. Current RDS activities include (a) community learning centers about health; (b) promotion of village literacy, including the formation of health sector libraries, seminars, and discussions about health; (c) centers for disseminating health information in the village regarding maternal and child health, nutrition services, clean water supply and sanitation, care for children age 0–2 years, and the policy of stunting prevention convergence; (d) health promotion for changing community behavior; (e) providing a forum to advocate for village development policies to improve access to health services in the village. Healthy village home activities could be enhanced through social accountability activities such as awareness building, budget literacy, and citizen monitoring of quality nutrition interventions.

The Community Introspective Survey (SMD) helps communities solve and be accountable for local health problems, including nutrition. The SMD is conducted once a year at the community level by Kaders, community leaders, PKK, and youth in the village for the communities in which they live. It is followed by Village Community Deliberation—a meeting of representatives in the village to discuss the results of the SMD and develop plans on how to solve health problems—and it thereby becomes a useful tool to discuss and solve local-level health problems. Nutrition indicators are included in the survey, especially when malnutrition is a problem in the village. It would be useful to review the indicators in the SMD to ensure that they cover both process and outcome quality nutrition indicators.

# Behavior change communication campaign at local levels

In 2018 the MoH developed the National Behavior Change Communication Strategy for Stunting Prevention (Strakom Stunting) as part of addressing StraNas Pillar 2 "National Campaign and Behavior Change." Strakom will be instrumental in improving IPCC quality at Puskesmas and Posyandus and improving awareness among families about the link between nutrition and stunting and its impact on child growth and development. Before Strakom, most communication campaigns in the country were sporadic. The messaging was not always consistent or explained stunting. There were missed opportunities to involve key influencers to help in behavior change. The 2016/2017 mass media campaign on stunting did not explain the concept of 1,000 days or stunting, resulting in many Indonesians not understanding the factors that can lead to stunting and how stunting impacts children's health and development (Rokx, Subandoro, and Gallagher 2018). As in the StraNas, leadership commitment among the 23 ministries/agencies is required to implement the SBCC strategy and encourage cross-sector cooperation.

The quality of Strakom Stunting implementation, monitoring, and evaluation will depend on local-level capacity and commitment. While the MoH and its Ministry of Communication provide overall guidance, technical assistance, training, and data management systems to strengthen the capacity of districts/cities in implementing SBCC, districts are responsible for the operationalization of the strategy. To implement Strakom, every district/city needs to develop its own action plan to operationalize its implementation based on local conditions. Given the heterogeneity of social norms, religious practices, and related institutions in Indonesia, the INEY project incentivizes and capacitates districts to deliver locally adapted IPCC activities through Disbursement Linked Indicators (DLIs). In addition, the Village Convergence Scorecard, by including interpersonal counseling through home visits, will generate village-level demand for IPC.

# **PART IV – CONCLUSIONS AND RECOMMENDATIONS**

The assessment highlighted several strengths and gaps related to the foundations and processes of care required for the consistent delivery of high-quality nutrition services in Indonesia. Below is a list of recommended interventions, many of which were developed in consultation with the MoH and UNICEF. These should ideally not be seen as individual interventions but rather as strategies implemented at national, subnational, facility, and community levels that are interconnected and aligned across all levels.

# GOVERNANCE

# Policies and guidance

Indonesia has many nutrition-related guidelines, but they are not always consistent with each other, updated, or disseminated sufficiently to frontline health workers. Also, there can be mismatches between the RPJMN and provincial and district plans.

The following is recommended to address these issues:

- Ensure cross-sectoral and cross-program harmonization of the existing nutritionrelated guidelines and SOPs. The District/City Health Office should update SOPs to focus on reducing stunting, the specific process flows, activities to be carried out, and work roles of different types of health care workers.
- Align RPJMN targets to provincial and district targets.
- Update the 2019 MSS for health to ensure all essential nutrition interventions are included.
- Develop and disseminate new guidelines for management of specific nutritional interventions, including planning, budgeting, implementation, and monitoring (in line with the Convergence Action Plan at the district level); technical guidelines for handling integrated undernutrition treatment; and the length mats as an educational tool for nutrition counseling.

# Accreditation

Accreditation is an excellent mechanism to monitor nutrition services in Puskesmas. The GOI is taking important steps to strengthen the accreditation process in the country. In addition to increasing the accreditation status of Puskesmas, primary clinics (private), independent physicians, and referral health services, additional action can be taken to

improve the quality of nutrition services through accreditation. The following would be important to undertake:

- Update Puskesmas accreditation standards/instrument to ensure quality nutrition indicators are included in the assessment of managerial processes and primary health care (clinical care and community health), with particular emphasis on the improvement of promotive and preventive care for nutrition and patient satisfaction.
- Link Accreditation Information System to ASDK Dashboard.
- Integrate accreditation and supportive supervision indicators to ensure that the quality and frequency of technical assistance by the District Health Office to Puskesmas is done on an ongoing basis and not just before the accreditation assessment occurs.

# **M&E** AND DATA USE FOR DECISION-MAKING

Given the multiple methods to monitor and evaluate nutrition services at the national, district, and local levels using multiple data sources and a nonstandardized monitoring and surveillance system, it will be important to do the following:

- Conduct a comprehensive review of existing data systems, access to information (e.g., through mobile data sources), M&E of nutrition-specific and nutrition-sensitive interventions (including service quality indicators), as well as the existing challenges and gaps in indicators measuring the quality of nutrition services.
- Invest in integrated information systems that allow the seamless exchange of information across levels of government (Hafez, Pambudi, and Agustina 2020). Integrate indicators (including service quality indicators) with existing data and information platforms/ASDK/e-PPGBM/PIS-PK.
- Develop guidelines and measurement tools to measure patient satisfaction at the Puskesmas level.

Using data for decision-making and exchanging learning and experiences in improving quality between and across health system levels to identify what works and what does not will be important to improve the quality of nutrition services.

- Expand on Annual Stunting Summits to commit to and share information and data about implementing quality nutrition services.
- Host peer-to-peer learning opportunities. Examples at the district level can include district review meetings, quarterly sharing meetings, district newsletters or bulletins, and other routine meeting opportunities.

Currently, the StraNas monitoring and evaluation framework guidelines are still quite broad, and ideally, indicators to measure quality should be included (see indicator examples in Annex 2). It would be useful to undertake the following:

• Review the StraNas framework and M&E Plan to ensure that all indicators that measure the quality of nutrition-specific and nutrition-sensitive services and processes involved in nutrition planning and programming (e.g., governance, coordination, capacity-development) are included as performance indicators.

# **FINANCING**

Despite top-down intergovernmental fiscal transfers, allocation to nutrition services is at the discretion of subnational governments, leading to challenges for delivering highquality nutrition interventions. The financing, training, and supervision budgets do not flow down to that level regularly and are at the discretion of village governments. There are multiple challenges to strategic purchasing of nutrition services.

Recommendations include the following:

- Develop guidance to leverage bottom-up and top-down financing sources to improve quality of nutrition services.
- Strengthen accountability measures for fiscal transfers to districts and villages, including performance-based mechanisms that link funding to quality improvement.
- Clearly define the nutrition services covered under capitation.
- Include provisions in provider payment mechanisms that incentivize improvements in the quality of nutrition care.

# **PLATFORMS FOR CARE**

Strengthening the various levels of care within the health system to deliver nutritionspecific interventions is crucial in Indonesia's fight against malnutrition. This includes the following:

- Improve coordination among the numerous multisectoral institutions that play different roles in providing activities and resources for Posyandus.
- Improve referrals between Posyandus and Puskesmas. This includes training Kaders on identifying malnourished children, ensuring health workers follow referral criteria, updating equipment to refer malnourished patients in Puskesmas.
- Explore integrating the SISRUTE referral software with the existing e-PPGBM and e-HDW systems.

# WORKFORCE

# Human resources for nutrition services

There is a gap in the availability of workers carrying out nutrition services. In addition, many of these do not have clear descriptions of their tasks regarding nutrition and the first 1,000 days—making it difficult for them to interpret their jobs or prioritize their responsibilities. Many health workers carrying out nutrition services receive preservice or in-service training. To address these issues, it would be useful to do the following:

- Conduct reviews of workload analysis and job descriptions for all health care workers carrying out nutrition services and address related gaps.
- Review and update in-service and preservice standard nutrition training packages and modules.
- Build a standardized e-learning training platform for preservice and in-service training that can easily be accessed by all health workers, both online and off-line.
- To address performance issues of health workers, the GOI, and particularly the MoV, could reassess the incentives for Posyandu Kaders and HDWs to ensure that they

are systematic, sufficient, and the same across villages, rather than being at the discretion of the Village Fund Budget.

An improved supportive supervision system from the DHO to Puskesmas and Puskesmas is critical for improving the quality of nutrition services. To do so, it is important to develop and/or adapt existing supervision guidelines and checklists to measure the quality of nutrition services at the district/city and Puskesmas levels. Activities that could be explored include the following:

- Develop a checklist that measures the quality of nutrition service delivery at the Puskesmas and Posyandu levels.
- Use digital applications to streamline supervision tools (checklists) to be actionoriented and adapted to service delivery. Data from supervision visits can be analyzed and used to help track targets, implementation, and the performance of health workers providing nutrition services.
- Integrate checklists and supervision data into existing platforms—that is, Dashboard, mHealth, e-HDW, the Puskesmas accreditation system.
- Link supportive supervision to performance incentives for Puskesmas.

#### TOOLS

# Equipment and supplies

There is a shortage of supplies and equipment to conduct quality nutrition services at Puskesmas and Posyandus, including technical guidelines and equipment such as infant weighing scales.

• Create standardized nutrition health kits for health workers carrying out nutrition services at Puskesmas and Posyandu levels. Measure their availability and completeness as indicators to assess quality.

# POPULATION DEMAND FOR HIGH-QUALITY CARE

Informed populations can demand accountability from their communities and health systems (Kruk et al. 2018). The following is recommended to strengthen community involvement and empowerment:

- Strengthen the capacity of community groups (e.g., Rumah Desa Sehat) to provide nutrition-related information, services, and referrals.
- Review variables in the Introspective Survey to ensure that they cover both process and coverage quality nutrition indicators, including care processes such as user experiences.
- Use data from the Village Scorecard, Length Mat, and e-HDW to improve community decision-making and accountability:
  - Provide tools and information so that HDWs can easily communicate nutrition trend information to the village committee, including engaging them in meaningful conversation, dialogue, and planning (The Manoff Group 2019).
  - Consider establishing community-led quality improvement teams using Village Scorecards to strengthen community-based data gathering and sharing.

To fully maximize the implementation of Strakom, it will be important that districts/cities develop their own implementation and monitoring and evaluation plans. To do so, the following actions are important:

- Carry out orientations and training for planners/program managers at the district/city level to plan, implement, monitor, and evaluate SBCC and IEC.
- Ensure that nationally and locally developed communication materials related to Strakom, stunting, and the 1,000 days include key messages of stunting prevention and have consistent messaging.

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# ANNEX 1: STATUS OF MATERNAL AND CHILD NUTRITION IN INDONESIA

Table 1A.1. Prevalence of Malnutrition in Children (<5) and Women of Reproductive Age (15–49), Indonesia

	%	Year/Data source
Children (<5)		
Under-five stunting	27.7	2019 (SSGBI)
Under-five wasting	7.4	2019 (SSGBI)
Overweight	8.0	2018 (RISKESDAS)
Low birthweight	6.2	2018 (RISKESDAS)
Women of reproductive age (women >18 yrs.)		
Thinness (BMI<18.5 kg/m²)	9.3	2018 (RISKESDAS)
Overweight (BMI kg/m²)	35.4	2018 (RISKESDAS)
Anemic (pregnant women)	48.9	2018 (RISKESDAS)

*Notes:* BMI = Body mass index; kg/ m<sup>2</sup> = Kilograms/square meters.

,,,		
Nutrition-specific interventions	%	Year/Data source
Maternal and child health indicators:		
Prenatal care visit (at least 4)	74.1	2018 (RISKESDAS)
Received 90+ iron tablets during pregnancy	51.0	2018 (RISKESDAS)
Took 90+ iron tablets during pregnancy	37.7	2018 (RISKESDAS)
Children receiving vitamin A supplements in previous 6 months	68.3	2017 (IDHS)
Vaccination—complete immunization (children 12–23 months)	57.9	2018 (RISKESDAS)
Diarrhea prevalence	14.0	2017 (IDHS)
Deworming tablet in the last 12 months (children 1–4 years old)	41.0	2017 (IDHS)
Nutrition, hygiene, and stimulation counseling		
Community growth promotion <sup>a</sup>	54.6	2018 (RISKESDAS)
Community growth promotion <sup>b</sup>	80.6	2018 (RISKESDAS)
Initiation of breastfeeding within 1 hour after birth	58.2	2018 (RISKESDAS)
Children receiving a prelacteal feed	43.9	2017 (IDHS)
Exclusive breastfeeding (under 6 months)	74.5	2018 (RISKESDAS)
% Infants age 6–23 months fed a minimum	40.3	2017 (IDHS)

# Table 1A.2. Nutrition-Specific Interventions, Indonesia

acceptable diet	

Notes:

<sup>a</sup> Children who were weighed in Posyandu at least eight times in the past year.

<sup>b</sup> Children who were weighed in Posyandu at least one time in the past year.

# ANNEX 2: ILLUSTRATIVE NUTRITION QUALITY IMPROVEMENT MEASURES<sup>17</sup>

Quality Statement 1.1b: Newborns receive routine care immediately after birth (Evidence-Based Care)

#### Input

The health facility has written, up-to-date, clinical protocols for essential newborn care that is consistent with WHO guidelines and available in the labor and childbirth areas of the maternity unit.

Health care staff in the labor and childbirth areas of the maternity unit receive in-service training or regular refresher sessions in essential newborn care and breastfeeding support at least once every 12 months.

Health care staff in the labor and childbirth areas receive at least monthly drills or simulation exercises and supportive supervision in essential newborn care and supporting breastfeeding.

#### **Output/Process**

The proportion of all newborns who were breastfed within 1 hour of birth

The proportion of all newborns who were kept in skin-to-skin contact (with body and head covered) with their mothers for at least 1 hour after birth.

#### Outcome

The proportion of all newborns who had a normal body temperature (36.5–37.5°C) at the first complete examination (60–120 minutes after birth).

**Quality Statement 4.1:** All women and their families receive information about the care and have effective interactions with staff (Effective Communication)

#### Input

Easily understood health education materials, in an accessible written or pictorial format, are available in the languages of the communities served by the health facility.

Health care staff in the maternity unit are oriented and receive in-service training at least once every 12 months to improve their interpersonal communication and counseling skills and cultural competence.

The health facility has a written, up-to-date policy that outlines clear goals, operational plans, and monitoring mechanisms to promote the interpersonal communication and counseling skills of health care staff.

<sup>&</sup>lt;sup>17</sup> These indicators are only illustrative. Please refer to the two references cited for additional quality indicators that measure processes of care (provisions and experiences of care).

Health care staff in the maternity unit receive supportive supervision in interpersonal communication, counseling, and cultural competence every three months.

#### Output/Process

The proportion of all women discharged from the labor and childbirth area of the facility who received written and verbal information and counseling on the following elements before discharge: nutrition and hygiene, birth spacing and family planning, exclusive breastfeeding and maintaining lactation, keeping their baby warm and clean, communication and play with the baby, danger signs for the mother and newborn, and where to go in case of complications.

The proportion of all women who gave birth in the health facility who reported they were given the opportunity to discuss their concerns and preferences.

The proportion of health care staff in the health facility who demonstrated the following skills: active listening, asking questions, responding to questions, verifying the understanding of women and their families, and supporting women in problem-solving.

#### Outcome

The proportion of all women who gave birth in the health facility who felt they were adequately informed by the care provider(s) about the examinations, actions, and decisions taken for their care.

The proportion of all women who gave birth in the health facility who reported that their needs and preferences were taken into account during labor, childbirth, and postnatal care.

The proportion of all women who gave birth in the health facility who expressed satisfaction with the health services.

The proportion of all women who gave birth in the health facility who reported that they were satisfied with the health education and information they received from care providers.

Source: WHO Standards for Improving Quality of Maternal and Newborn Care in Health Facilities, 2016.

**Quality Statement 1.6:** All infants and young children are assessed for growth, breastfeeding, and nutrition, and their carers receive appropriate support and counseling, according to WHO guidelines (Evidence-Based Care)

#### Input

The health facility has a written, up-to-date policy for exclusive breastfeeding and appropriate feeding, according to WHO guidelines.

The health facility maintains a baby-friendly status that supports breastfeeding according to WHO guidelines.

The health facility fully complies with the International Code of Marketing of Breastmilk Substitutes and has systems in place to monitor compliance with the code.

The health facility has the necessary supplies and materials to support breastfeeding and, when appropriate, alternative feeding (feeding cups and spoons, infant formula, nasogastric tubes, syringe drivers, IV fluids, and tubing).

The professional staff of the health facility who care for children receive training and regular refresher sessions in counseling on breastfeeding and optimal feeding and nutrition of infants and young children at least once every 12 months.

The health facility can regularly assess the competence of staff for supporting carers in sustaining

optimal infant and young child feeding and nutrition at least once every 12 months.

#### **Output/Process**

Proportion of all children age <6 months in the health facility who are exclusively breastfed or given only expressed breast milk.

Proportion of all children <5 years in the health facility who have been assessed for routine growth and delayed development, as documented on their child health card or booklet.

Proportion of children age 6–23 months in the health facility who receive appropriate complementary foods according to WHO guidelines.

Proportion of preterm or small sick infants who receive assisted feeding for whom a correctly prescribed feed volume appropriate for their weight and gestation age is documented.

Proportion of all newborn infants in the health facility who receive fully established breastfeeding at the time of discharge.

#### Outcome

Proportion of carers in the health facility who have received counseling on breastfeeding and nutrition to ensure continued, appropriate feeding of the children in their care.

Quality Statement 1.7: All children at risk for acute malnutrition and anemia are correctly assessed and classified and receive appropriate care according to WHO guidelines (Evidence-Based Care)

#### Input

The health facility has written up-to-date clinical protocols for assessment, identification, and management of children with acute malnutrition and anemia consistent with WHO guidelines.

The health facility has adequate, functioning equipment (e.g., weighing scales, length and height boards, mid-upper arm circumference tapes), and other supplies for assessing and managing acute malnutrition for the expected caseload without stock-outs.

The health facility has or is linked to an outpatient or community therapeutic feeding center that provides nutritional support and counseling.

The health facility that is managing children with complicated severe acute malnutrition has adequate medical and nutrition supplies (e.g., antibiotics, F75, F100, ReSoMal, and ready-to-use therapeutic food) available for the expected caseload without stocks-outs.

The health facility has a separate room for all children with complicated severe acute malnutrition, with facilities for keeping them warm (e.g., overhead heaters) and provisions for developmental stimulation.

The professional staff at the health facility who care for children receive training and regular refresher sessions in assessment, identification, appropriate management, and follow-up of children with acute malnutrition, at least once every 12 months.

The health facility has basic laboratory and diagnostic tests (e.g., blood glucose, full blood count, blood culture, urinalysis, serum electrolytes, chest X-ray) for appropriate investigation and management of children with complicated severe acute malnutrition.

# Output/Process

Proportion of all sick children age <5 years seen in the health facility whose nutritional and anemia status was assessed and classified according to the IMCI guidelines.

Proportion of all sick children seen in the health facility whose weight and height were assessed and checked against the recommended WHO growth standards.

Proportion of all children seen in the health facility with uncomplicated severe acute malnutrition who received correct, appropriate outpatient care according to WHO guidelines.

Proportion of all children admitted to the health facility with complicated severe acute malnutrition whose temperature was measured and recorded on admission.

Proportion of all children admitted to the health facility with complicated severe acute malnutrition, whose vital signs, feed intake, and weight were regularly and adequately monitored during hospitalization.

Proportion of all children admitted with complicated severe acute malnutrition who received appropriate feeding at a correct frequency both day and night according to WHO guidelines.

Proportion of all children with acute malnutrition whose carers have been counseled and informed about age-appropriate feeding.

Proportion of all children classified or diagnosed with anemia who are appropriately investigated and prescribed treatment correctly according to WHO guidelines.

#### Outcome

Case fatality rate from complicated severe acute malnutrition (monthly or every 3 months depending on the number of cases managed).

**Quality Statement 2.1:** Every child has a complete, accurate, standardized, up-to-date medical record, which is accessible throughout his/her care, on discharge and on follow-up (Actionable Information Systems)

#### Input

The health facility has standardized, age-appropriate childcare registers, clinical records, observation charts and patient cards in place at all times for recording and monitoring all care processes and outcomes.

The health facility has a system for creating unique identifiers for new patients and locating preexisting unique identifiers for returning patients.

The health facility staff receive training and refresher sessions at least once every 12 months on the use of standardized medical records, including birth and death registration, and classification of conditions and diseases in accordance with the ICD.

The health facility has sufficient supplies of the necessary registers, patient medical forms, charts and patient cards (e.g., immunization cards) in stock at all times.

#### **Output/Process**

Proportion of all children currently in the health facility who have a patient identifier and individual clinical medical record.

Proportion of medical records in which every entry is dated, timed (24-hour clock), legible, and signed by the person making the entry.

Proportion of all children discharged from the health facility within the past 24 hours who had an accurately completed discharge summary of the care provided, outcomes, and diagnoses (with ICD codes).

#### Outcome

Proportion of all medical records that include legible documentation of relevant demographic and clinical information on the child and the process and outcomes of the care provided.

**Quality Statement 2.2:** Every health facility has a functional mechanism for data collection, analysis, and use as part of its activities for monitoring performance and quality improvement **(Actionable Information Systems)** 

#### Input

The health facility has a system with standard operating procedures and protocols for data collection and for checking, validating, and analyzing relevant indicators to make timely reports and visual charts.

Managers, health professionals, and support staff in the health facility meet regularly (at least once a month) to review patient care and outcomes for decision-making and monitoring performance.

The health facility managers and community representatives meet regularly (at least every 3 months) to review the health facility statistics and performance and use the recommendations for decision-making.

Evidence that the health facility analyzes and produces monthly visual charts and reports for monitoring performance.

#### Output/Process

Number of meetings between health facility management and community representatives in the past 6 months.

Proportion of all pediatric deaths that occurred in the health facility in the past 3 months that were reviewed with standard death audit tools.

#### Outcome

Proportion of monthly reports from the health facility received by the next highest level of administration in the past 6 months.

Quality Statement 3.3: For every child referred or counterreferred within or among health facilities, there is appropriate information exchange and feedback to relevant health care staff (Functioning Referral System)

#### Input

The health facility has a standardized referral form to document relevant demographic and clinical information (summary of history, clinical findings, investigations, diagnosis, and treatment given) and the reason for referral.

The health facility has reliable methods of communication (mobile phone, landline, or radio) that are functioning at all times for facilitating referrals.

The health facility has formal agreements, communication arrangements, and a feedback system with the network referral facilities.

#### **Output/Process**

Proportion of all children referred by a health facility for whom written counterreferral feedback information was provided by the receiving facility.

Proportion of all children referred for whom there were documented prereferral communications

(verbal, written) with the receiving facility.

Outcome

Proportion of all children referred who had an appropriate referral note.

**Quality Statement 4.4:** All children and their carers receive appropriate counseling and health education, according to their capacity, about the current illness and promotion of the child's health and well-being (Effective Communication)

Input

The health facility has information materials for distribution to children and carers about common conditions, promoting and supporting appropriate feeding and nutrition and promoting disease prevention, including hygiene and sanitation practices.

The health facility provides a booklet for the health record of each child at birth or at the first visit to the health facility, which is kept by a parent or carer and used by health providers to document relevant information.

The health facility holds regular "well-being clinics" (e.g., well-child and immunization clinics, counseling services, growth and development monitoring clinics, adolescent clinics), which are used as opportunities for health promotion and preventive care.

The health facility has an effective system for implementing community-based activities to promote children's health and well-being.

#### Output/Process

Proportion of children or their parents or carers who attended at least one health education or promotion session at the health facility.

Proportion of children <2 years of age whose parents or carers were counseled and received information about breastfeeding, complementary foods, and feeding practices during the current illness.

#### Outcome

Proportion of children <5 years whose carers are advised to give them extra fluid and to continue feeding.

Proportion of children or carers who received targeted health information or counseling for the condition of their child, including malnutrition, obesity, mental health, or substance abuse.

Proportion of all children with diarrhea whose carers know how to prepare and administer ORS, give extra fluids, continue feeding, and recognize danger signs.

Quality Statement 5.5: All children have access to safe, adequate nutrition that is appropriate for both their age and their health condition during their care in a facility (Respect and Preservation of Dignity)

#### Input

The health facility has a food and nutrition policy and guidelines to meet children's nutritional needs, including special needs, consistent with dietary requirements.

The health facility has an up-to-date, written policy on breastfeeding that adheres to the International Code of Marketing of Breast Milk Substitutes and is routinely communicated to all health care staff.

The health facility has an adequately equipped, designated kitchen (area or room) with facilities for food preparation.

The health facility has a dedicated staff (or nutrition specialist) responsible for preparing children's menus.

The health facility provides regular, safe, nutritious, appetizing, high-quality meals of sufficient variety to meet the needs of pediatric patients.

#### **Process/Output**

Proportion of health facility staff who received training or orientation on child nutrition, including counseling on breastfeeding, at least once in the past 12 months.

Proportion of breastfeeding mothers who report that they were shown how to express breast milk or who were given written information about expressing breast milk.

Proportion of children and their carers in the health facility who are satisfied with the facility meal service in terms of choice, quantity, and number of servings per day.

#### Outcome

Proportion of children admitted to the health facility who were given food appropriate to their dietary requirements.

Proportion of young infants <6 months of age who are exclusively breastfed at discharge from the health facility.

**Quality Statement 7.2:** Health professionals and support staff have the appropriate skills to fulfil the health, psychological, developmental, communication, and cultural needs of children (**Competent Motivated Personnel**)

Input

The health facility has a program for continuing professional education and attitude and skills development for all child health care professionals and support staff.

The health facility periodically appraises all staff, has a mechanism for recognizing good performance, and has protocols for staff feedback.

The health facility has sufficient numbers of competent, licensed, motivated, regulated child health professionals, with an appropriate skills mix, working in multidisciplinary teams.

The health facility provides an enabling, supportive environment for professional staff development, with regular supervision and mentoring.

The health facility facilitates interprofessional collaborative practice, with clear roles and responsibilities for quality improvement according to the professional scope of practice and the needs for child health care.

#### Output/Process

Proportion of clinical and nonclinical health care staff at the health facility who received a written job description on deployment to the facility.

Evidence that the health facility has a mechanism in place for soliciting feedback from staff on issues that might affect or improve staff performance.

Proportion of health professionals who care for children who received in-service training and/or refresher sessions within the past 12 months.

Number of supervisory visits to the health facility to improve clinical competence and performance in the past 12 months.

Proportion of staff at the health facility who had a performance assessment with feedback at least once in the past 12 months.

Proportion of staff who had interactions with professional mentors to ensure clinical competence and improve performance in the past 3 months.

#### Outcome

Proportion of all staff at the health facility who could identify and report on at least one activity for improving clinical quality in which they were personally involved in the past 6 months.

Proportion of health professionals and support staff who care for children at the health facility whose preceding performance appraisal was satisfactory.

Proportion of all children and their carers at the health facility who were satisfied with the care and support they received from facility staff.

Proportion of all staff at the health facility who reported that they were "highly satisfied" with their job.

Number of improvement projects completed in the past 6 months.

*Source:* WHO Standards for improving the quality of care for children and young adolescents in health facilities, 2018

*Notes:* IV = Intravenous; F75 = Formula 75 (Therapeutic milk product); F100 = Formula 100 (Therapeutic milk product); IMCI = Integrated management of childhood illness; ICD = International Classification of Diseases; ReSoMal = Rehydration Solution for Malnutrition; ORS = Oral Rehydration Solutions.

# ANNEX 3: EXAMPLES OF QUALITY INDICATORS TO INCLUDE IN STRAKOM (BEHAVIORAL CHANGE COMMUNICATION STRATEGY)

Caregivers	<ul> <li>Proportion who received topic-specific IYCF counseling services</li> <li>Satisfaction with nutrition education and counseling services</li> <li>Knowledge related to child growth and feeding/caring practices</li> <li>Adherence to recommendations measured via assessment of core IYCF practices promoted by the program</li> </ul>
Health facility/community– based GMP	<ul> <li>Availability of counseling tools for health and community-based providers</li> <li>Quality of counseling tools' content and alignment of messages with existing guidelines</li> <li>Health care staff receive supportive supervision in interpersonal communication and counseling (IPCC) and cultural competence on a regular basis</li> <li>GMP coverage and participation rates; percentage of GMP sessions that include counseling</li> </ul>
Health workers	<ul> <li>Numbers who received in-service training at least once every 12 months, including training to improve IYCF-related interpersonal communication and counseling skills and cultural competence counseling</li> <li>Competency/quality of counseling in GMP/IYCF</li> <li>Appropriate actions are taken for children with growth faltering, including referrals</li> </ul>

*Source:* Adapted from World Bank 2020b and WHO 2016. Standards for Improving Quality of Maternal and Newborn Care in Health Facilities.

*Notes:* IYCF = Infant and young child feeding; GMP = Growth monitoring and promotion.

# ANNEX 4: TECHNICAL GUIDELINES ON SERVICES TO IMPROVE NUTRITION

Population group	Technical guidelines	
Women of reproductive age and pregnant women	<ul> <li>Pocketbook for basic maternal health services in primary health care (2013)</li> <li>Guidelines on management of pregnant mothers with CED (2015)</li> <li>Guidelines for supplementary feeding for pregnant mothers and children &lt;5 years with CED (2012)</li> <li>Pocketbook for supplementary feeding (in the form of biscuits) for pregnant mothers and children &lt;5 years with CED (2020)</li> <li>Technical guidelines for supplementary feeding for supplementary feeding for pregnant mothers and children &lt;5 years (2019)</li> <li>Technical guidelines for anemia control for adolescent and women of reproductive age (2018)</li> <li>Guidelines of IFA management (2015)</li> </ul>	
Infants and children	<ul> <li>Management of SAM (2011, 2013, 2020)</li> <li>Guidelines of Infant and Young Child Feeding (2020)</li> <li>Technical guidelines on essential newborn care services in primary health care (2018)</li> <li>Guidelines of management of vitamin A supplementation (2016)</li> <li>Technical guidelines on the use of maternal and child health book (2015)</li> <li>Technical guidelines for supplementary feeding for pregnant mothers and children &lt;5 years (2019)</li> <li>Management of diarrhea for children &lt;5 years (2011)</li> <li>Technical guideline for anthelmintic/deworming program (2012)</li> </ul>	
General population	<ul> <li>Guideline of Essential Micronutrient Needs (2020)</li> <li>Guideline of Nutrition care process at</li> </ul>	

Puskesmas (2018)
Technical guidelines for early detection of
NCD at health post Posbindu $^{18}$ (2012)
Technical guidelines on nutrition care at
Puskesmas (2017)
Technical guidelines on NCD surveillance
(2015)

Source: Adapted from (UNICEF 2018)

*Notes:* CED = Chronic energy deficiency ; IFA = Iron-folic acid; SAM = Severe acute malnutrition; NCD = Noncommunicable disease.

 $<sup>^{18}</sup>$  Integrated health post (for adults and elderly)

# ANNEX 5: SUMMARY OF CHALLENGES AND RECOMMENDATIONS

Challenge	Recommendation	
Governance		
Consistency across nutrition-related strategies, guidelines, and targets. Aligning National Medium-Term Development Plan (RPJMN) targets to district and provincial targets. Aligning Minimum Service Standards (MSS) for health with all essential nutrition interventions from StraNas.	<ul> <li>Ensure cross-sectoral and cross-program harmonization of the existing nutrition-related guidelines and SOPs. District/City Health Offices should update SOPs to focus on reducing stunting, the specific process flows, activities to be carried out, and work roles of different types of health care workers.</li> <li>Align RPJMN targets to provincial and district targets.</li> <li>Update 2019 Minimum Service Standards (MSS) for health to ensure all essential nutrition interventions are included.</li> <li>Develop and disseminate new guidelines for management of specific nutritional interventions, including planning, budgeting, implementation, and monitoring (in line with the Convergence Action Plan at the district level); technical guidelines for handling integrated undernutrition treatment; and the length mats as an educational tool for nutrition counseling.</li> </ul>	
Challenges to Puskesmas accreditation. Limited use of accreditation standards for continuous quality improvement and learning.	<ul> <li>Update Puskesmas accreditation standards/instrument to ensure quality nutrition indicators are included in the assessment of managerial processes and primary health care (clinical care and community health), with particular emphasis on the improvement of promotive and preventive care for nutrition and patient satisfaction.</li> <li>Link Accreditation Information System to ASDK Dashboard.</li> <li>Integrate accreditation and supportive supervision indicators to ensure that the quality and frequency of technical assistance by the District Health Office to Puskesmas is done on an ongoing basis and not just before the accreditation assessment occurs.</li> </ul>	
M&E and data use for decision-making		
Multiple data sources and systems for nutrition.	<ul> <li>Conduct a comprehensive review of existing data systems, access to information (e.g., through mobile data sources), M&amp;E of nutrition-specific and nutrition-sensitive interventions (including service quality indicators).</li> <li>Integrate indicators (including service quality indicators) with existing data and information platforms/ASDK/e-PPGBM/PIS-PK.</li> </ul>	
Patient satisfaction not being measured regularly at Puskesmas level.	<ul> <li>Develop guidelines and measurement tools to measure patient satisfaction at the Puskesmas level.</li> </ul>	
Use of data for learning and	• Expand on Annual Stunting Summits to commit to and share information and data about implementing quality nutrition	

improvement.	services.
	<ul> <li>Host peer-to-peer learning opportunities about the use of data for learning and improvement. Examples at the district level can include district review meetings, quarterly sharing meetings, district newsletters or bulletins, and other routine meeting opportunities.</li> </ul>
StraNas M&E framework guidelines still quite broad and not sufficiently focused on improving quality of services.	<ul> <li>Review the StraNas framework and M&amp;E plan to ensure that all indicators that measure the quality of nutrition-specific and nutrition-sensitive services and processes involved in nutrition planning and programming (e.g., governance, coordination, capacity-development) are included as performance indicators.</li> </ul>
Financing	
Financing is complex and fragmented due to the multiple financing streams and many agencies involved in managing the funds	<ul> <li>Develop guidance to leverage bottom-up and top-down financing sources to improve quality of nutrition services.</li> <li>Strengthen accountability measures for fiscal transfers to</li> </ul>
Allocation to nutrition services is at	districts and villages, including performance-based mechanisms that link funding to quality improvement.
the discretion of subnational governments.	• Clearly define the nutrition services covered under capitation.
The financing, training, and supervision budgets do not flow down to the subnational level regularly and are at the discretion of village governments.	<ul> <li>Include provisions in provider payment mechanisms that incentivize improvements in the quality of nutrition care.</li> </ul>
There are multiple challenges to strategic purchasing of nutrition services.	
Platforms for care	
Quality of Posyandus is below minimum standards.	<ul> <li>Improve coordination among the numerous multisectoral institutions that play different roles in providing activities and resources for Posyandus.</li> <li>Improve referrals between Posyandus and Puskesmas. This</li> </ul>
Poorly functioning referral systems within the platforms of care.	<ul> <li>includes training Kaders on identifying malnourished children, ensuring health workers follow referral criteria, updating equipment to refer malnourished patients in Puskesmas.</li> <li>Explore integrating the SISRUTE referral software with the existing e-PPGBM and e-HDW systems.</li> </ul>
Workforce	
Overworked health workers carrying out nutrition services at many Puskesmas.	<ul> <li>Conduct reviews of workload analysis and job descriptions for all health care workers carrying out nutrition services, and address related gaps.</li> </ul>
Broad job descriptions for health workers carrying out nutrition services.	

Preservice and in-service nutrition training not standardized. Training for health workers providing nutrition services in Puskesmas is uneven.	<ul> <li>Review and update in-service and preservice standard nutrition training packages.</li> <li>Build a standardized e-learning training platform for preservice and in-service training that can easily be accessed by all health workers both online and off-line.</li> </ul>
Low performance of Posyandu Kaders—Lack of incentives; incentives not tied to results.	<ul> <li>Reassess the incentives for Posyandu Kaders and HDWs to ensure that they are systematic, sufficient, and the same across villages, rather than being at the discretion of the Village Fund Budget.</li> </ul>
Performance management and supportive supervision does not focus on the quality of implementation.	<ul> <li>Develop a checklist that measures the quality of nutrition service delivery at the Puskesmas and Posyandu levels.</li> <li>Use digital applications to streamline supervision tools (checklists) so they are action-oriented and adapted to service delivery, and data from supervision visits can be analyzed and used to help track targets, implementation, and the performance of health workers providing nutrition services.</li> <li>Integrate checklists and supervision data into existing platforms—i.e., Dashboard, mHealth, e-HDW, the Puskesmas accreditation system.</li> <li>Link supportive supervision to performance incentives for Puskesmas.</li> </ul>
Tools	
Frequent stock-outs of equipment and supplies at Puskesmas and Posyandus.	<ul> <li>Create standardized nutrition health kits for health workers carrying out nutrition services at Puskesmas and Posyandu levels. Measure their availability and completeness as indicators to assess quality.</li> </ul>
Lack of a standardized nutrition toolkit that would include supplies and tools.	
Population demand for high-quality	care
Community accountability for nutrition can be enhanced.	• Strengthen the capacity of community groups (e.g., Rumah Desa Sehat) to provide nutrition-related information, services, and referrals.
	• Review variables in the Introspective Survey to ensure they cover both process and coverage quality nutrition indicators, including processes of care such as user experiences.
	<ul> <li>Use data from the Village Scorecard, Length Mat, and e- HDW to improve community decision-making and accountability.</li> </ul>

<ul> <li>Carry out orientations and training for planners/program managers at the district/city level to plan, implement, moni and evaluate SBCC and IEC.</li> <li>Ensure that nationally and locally developed communication materials related to Strakom, stunting, and the 1,000 days include the key messages of stunting prevention and have consistent messaging.</li> </ul>	າitor, ion s e
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Source: Authors

*Notes:* SOPs = Standard operating procedures; RPJMN = National Medium-Term Development Plan; M&E = Monitoring and evaluating; e-PPGBM/PIS-PK = Community-Based Nutrition Recording and Reporting System/Healthy Indonesia through the Family Approach Program; HDW = Human Development Worker; SBCC = Social Behavior Change Communication; IEC = Information, Education, and Communication.
In the past two decades, Indonesia significantly improved its economic growth, poverty, and maternal and child health outcomes. Despite these notable achievements, the country's rates of stunting and malnutrition are among the highest in the world and threaten early childhood development as the stepping-stone of human capital formation. Though government guidelines, standards, and training have helped improve nutrition services in the health sector, there continues to be considerable variation in service quality across districts, between urban and rural areas, and among public and private facilities, with many mothers and children being provided suboptimal services. Malnutrition is a multisectoral issue that is not the "problem" of the health sector alone. However, many of the high-impact health interventions known to improve nutrition outcomes for children are not being implemented in Indonesia, calling for a higher-quality health system to produce better nutrition outcomes.

This report analyzes the opportunities to improve the quality of frontline nutrition interventions in Indonesia's health sector as an element of achieving the National Strategy to Accelerate Stunting Prevention (2018–2021) (StraNas Stunting) goals. It uses a framework adapted from the Lancet Global Health Commission's report on High-Quality Health Systems in the Sustainable Development Goals Era, which explains that improving the quality of nutrition health care requires system-wide action. In specific, high-quality nutrition services necessitate both process and foundational reforms at the macro, meso, and micro levels.

The paper outlines the challenges and proposes recommendations to improve quality nutrition care and services in the country. These are related to strong leadership, harmonized guidelines and targets, and robust regulatory and quality improvement mechanisms; improved monitoring and evaluation and data use; predictable, adequate, and timely financing; platforms for care; competent health workers and a sound supportive supervision system; adequate supplies and functional equipment; and systems that respond to clients' health needs and expectations.

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