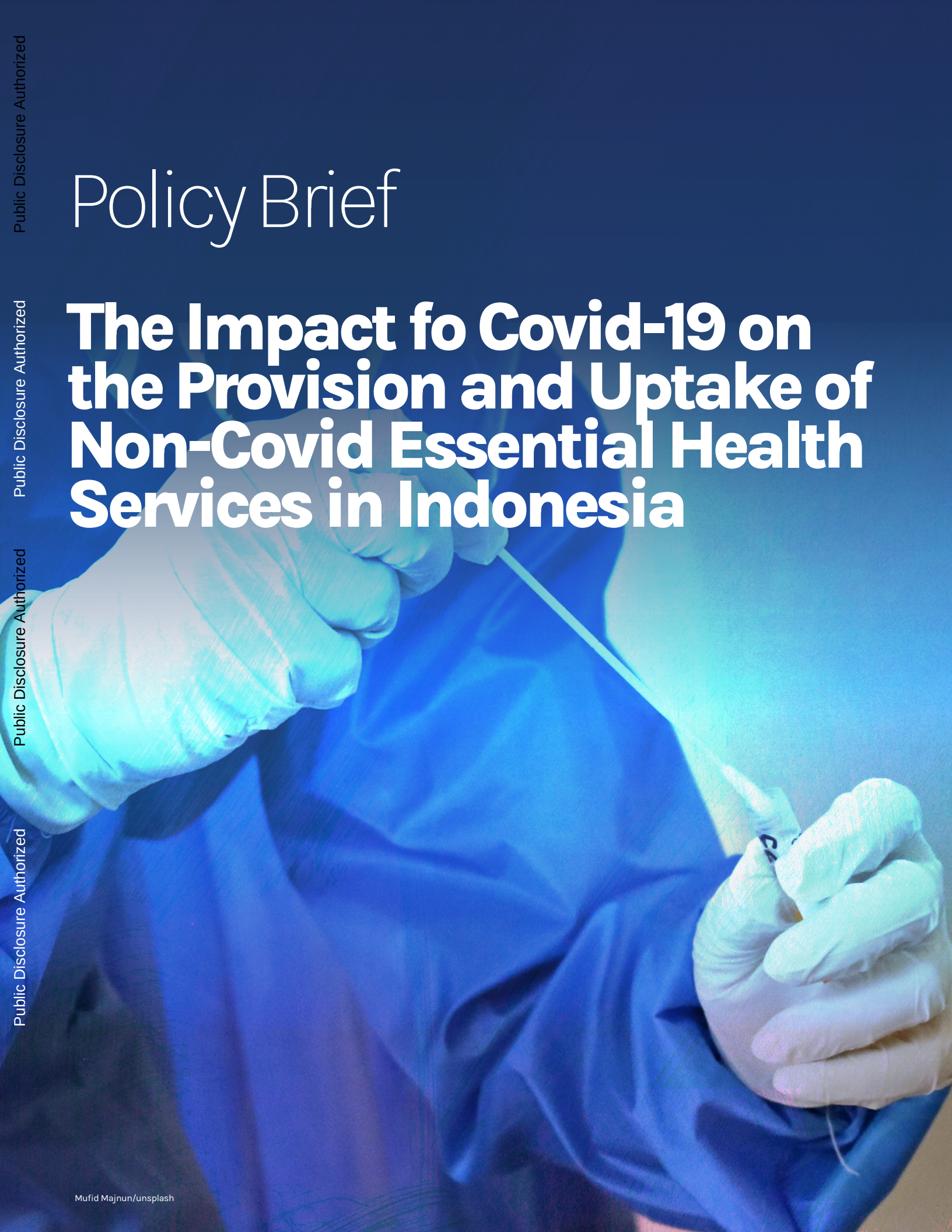
Policy Brief

The Impact fo Covid-19 on the Provision and Uptake of Non-Covid Essential Health Services in Indonesia



Mufid Majnun/unsplash

KEY MESSAGES

The impact of the COVID-19 pandemic on the delivery of essential health services in Indonesia was profound–reshaping the way health care was delivered and highlighting both strengths and vulnerabilities within the country's health system. Initial disruption of essential health services following the onset of COVID-19 ranged from 10-30 percent with more sustained decreases for childhood immunization and tuberculosis (TB). Utilization of mental health services also surpassed pre-pandemic levels. There were variations in the coverage of essential services between the public and private sectors while community-based activities in the urban provinces appeared to have been more negatively affected than rural provinces. A key facilitator of utilization of essential health services appeared to be effective community advocacy and local support to improve access to care.

Various innovations were key to maintaining the demand for, and supply of, essential health services. These included service delivery adjustments, health worker recruitment and task-shifting, drug/supply delivery and reallocation, enhanced public-private collaboration, outreach services, and effective health promotion efforts. Digitization, including telemedicine, maintained some essential services but exacerbated existing inequities and lacked quality control. Policies and adjusted guidance on essential health service delivery may have enabled flexibility at subnational levels to adjust to the local context. Adjustment strategies could, however, have been enacted faster, strategies better coordinated, and the needs of varied populations further considered. A more robust and adaptive communication strategy may have better protected essential services utilization.

The study's recommendations are aimed at protecting the effective supply, as well as feasible and safe utilization, of essential services in the case of future pandemics or other health emergencies: (i) develop emergency adaptation plans for essential services in the case of a health emergency; (ii) increase collaboration between the public and private sectors on resourcing and data sharing; (iii) allocate funds to an emergency health care response pot; (iv) evaluate and adopt human resource task-sharing and task-shifting strategies; (v) enable investments in digital health infrastructure–giving particular attention to promoting equity in digital literacy; (vi) prioritize the strengthening of primary health care facilities to ensure equitable access to essential services and reduce unmet needs; and (vii) encourage effective cross-sectoral collaborations with different stakeholder groups and representatives/leaders within communities.

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During the core pandemic response phase, country health systems surged to respond to the rising COVID-19 case burden by shifting and reorganizing staff and services, ensuring availability of necessary supplies and equipment, and enabling effective testing, tracing, and isolation of COVID-19 cases. As countries prioritized responding to the pandemic, much of the already limited health resources were diverted away from essential health services– thereby compromising efforts to protect their provision and quality.[1,2] When health systems are overwhelmed and people fail to access needed care during the outbreak of a pandemic, morbidity and mortality rates rise, however, if essential health services are not protected, indirect rates of illness and deaths can also increase dramatically.

Health officials across most countries in the world reported disruption in essential health services delivery owing to the COVID-19 pandemic. This effect has been more acute in low- and middle-income countries than high-income countries–owing to existing shortages in health care workers and medical supplies and variability in the resilience of the health system.

A country's ability to maintain the delivery of non-COVID essential health services seemed to depend on:

- pressure on the health system from the evolving shape and intensity of local COVID-19 transmission;
- existing resilience and surge capacity of the health system;
- scope of mobility restrictions introduced to reduce COVID-19 transmission;
- baseline equity in access to health services;
- existing local health profiles and burden of disease;
- strategies and resources available to maintain essential services;
- political commitment and leadership to prioritize essential services within the overall pandemic response; and
- effectiveness of public health promotion efforts in maintaining trust in safe and effective health service delivery, both for the outbreak response and essential health services.

Martin Sanchez/unsplash

Indonesian Context

Located in the East Asia Pacific (Figure 1) with a population of 273.8 million people,[3] Indonesia is the fourth most populous country in the world. Indonesia had a considerably high COVID-19 case load with 6.7 million COVID-19 cases and 160,000 deaths by the end of 2022 . Indonesia made solid strides in curtailing what could have been a catastrophic disruption to essential health services (Table 1) through the core COVID-19 response phase, however, the impact of the pandemic on the effective delivery of essential health services revealed both strengths and structural weaknesses in its health system.

Figure 1: Map of Indonesia

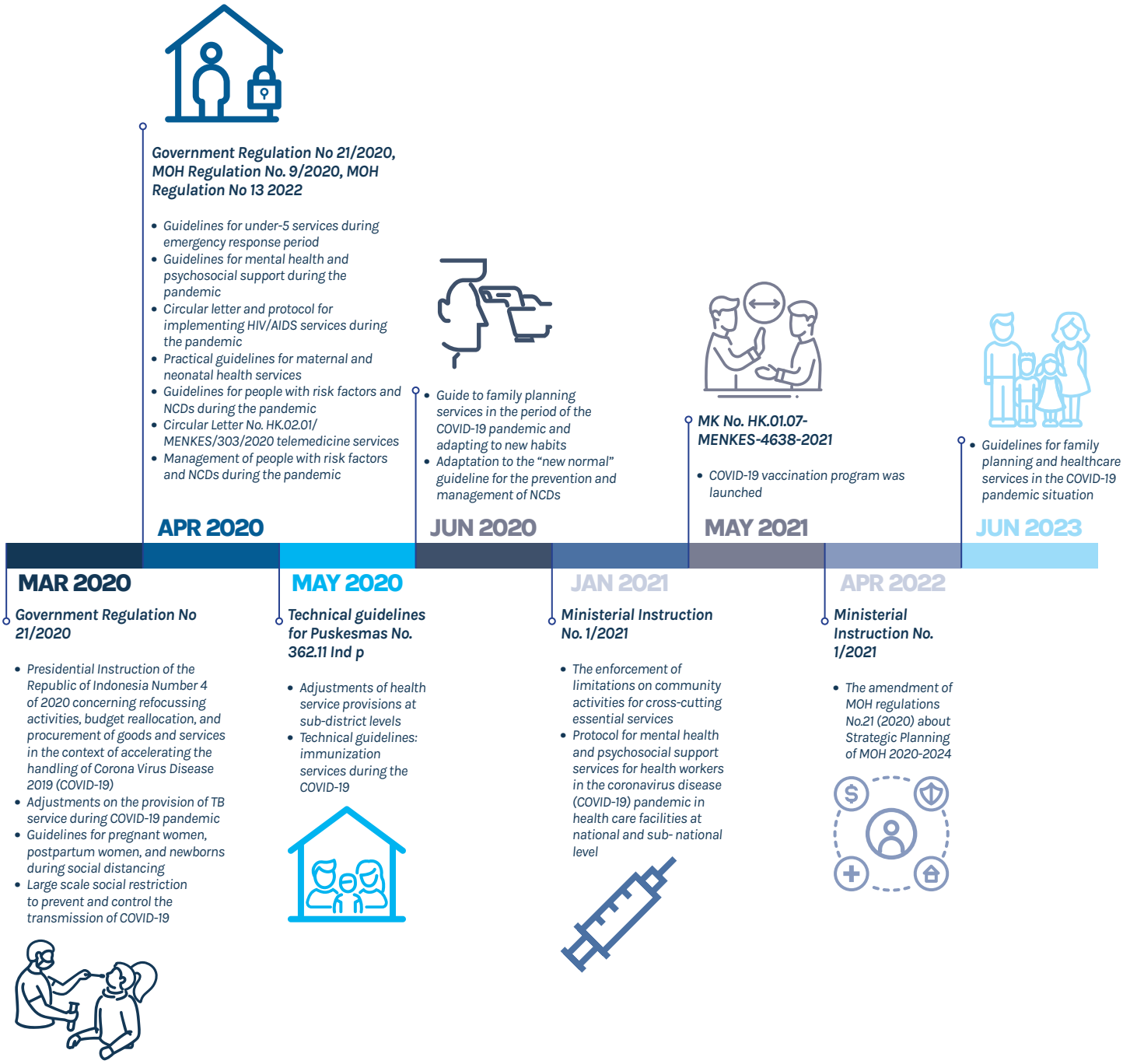
What are essential health services?

Essential health services refer to the spectrum of routine health services delivered on an ongoing basis through the health system with the aim of preventing and managing communicable and noncommunicable disease (NCDs) and promoting general health and wellbeing. Each country defines essential services according to their own epidemiological profile, health system capacity, organisational delivery of services, and available resources. Indonesia's essential health services are considered to include the following:[5]

NON-COVID ESSENTIAL SERVICE AREA	TRACER SERVICES
Maternal and child health services	1. Health services for pregnant women. 2. Health services for birth/delivery. 3. Neonatal health. 4. Health services for children under five years of age. 5. Health services for children of school age (definition includes health screening for school-aged children. This is usually done through puskesmas and school health unit collaboration).
Family planning	1. Modern methods of family planning.
Non-communicable diseases	1. Screening for NCD and communicable disease risk factors. 2. Hypertension. 3. Diabetes mellitus.
Mental health	1. Health services for people with severe mental disorders.
Infectious diseases	1. Tuberculosis (TB). 2. HIV.

After reporting its first case in March 2020, Government Regulation No. 21/2020 imposed large-scale social restrictions, including partial lockdowns, to control the spread of the virus. Opening hours at health facilities were restricted, community-based integrated health posts (*Pos Pelayanan Terpadu: Posyandu*) were closed, and other public services and activities were interrupted. The government instigated policies to guide the reallocation of funds and capacity to boost the pandemic response, and global disruptions in the supply chain for medicines and other essential medical products affected supplies availability. Patients' access to non-COVID essential services was limited considerably.[4] The government moved quickly to adjust policies and guidelines relating to essential health services with the aim of maintaining and protecting service delivery, while enabling some flexibility to provinces and health facilities to adjust services according to local context and needs (Figure 2). Health promotion efforts were orientated around reducing COVID-19 transmission and, therefore, discouraged people from attending health facilities unless there were acute and high needs.

Figure 2: Timeline of Key Policy Changes Relevant to Essential Health Services in Indonesia Through the Core COVID-19 Response



Key Insights

KEY INSIGHT 1: Essential health service provision and uptake was impacted. In the initial period following the onset of COVID-19, disruption of essential services ranged from 10-30 percent, dependent on supply-side requirements and patient interaction needed for the service to be delivered, guidance provided for service-specific pandemic-related adjustments and the extent to which guidance was followed, and demand-side factors (Figure 3). More sustained decreases occurred for childhood immunization and TB, which had the highest pre-pandemic 'unmet needs'. Utilization of TB services reduced by 30 percent, with little recovery throughout the pandemic and child immunization declined to less than 25 percent of the pre-pandemic level with little recovery following the acute phase of the pandemic. Utilization of other services, such as HIV and AIDS care and maternal health services, appeared to be more resilient. While mental health service coverage declined initially, it later increased to higher than pre-pandemic levels–which may relate to build-up of stress during the pandemic (Figure 4). Data also suggests that essential services utilization rebounded following the introduction of the COVID-vaccination program, particularly in the initial stages when health workers were targeted for vaccination.

Figure 3: Number of Outpatient Visits at Primary Health Facilities (by Types of Service) (2018-22)

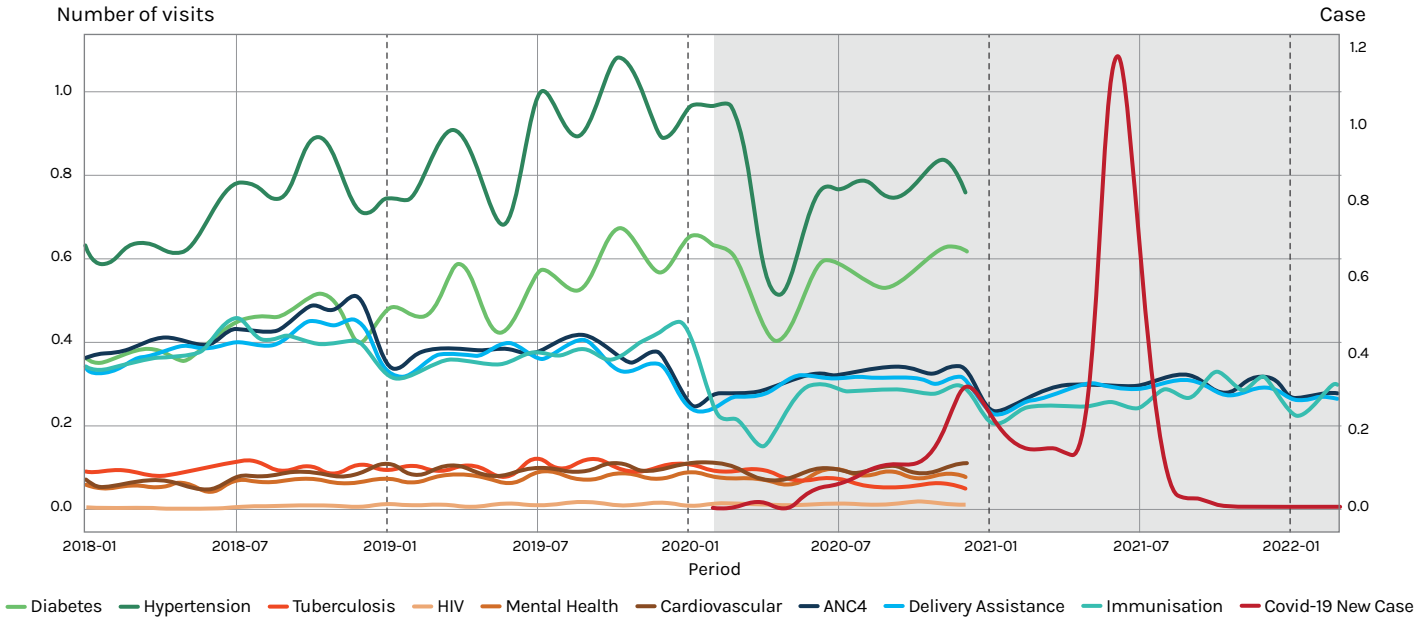
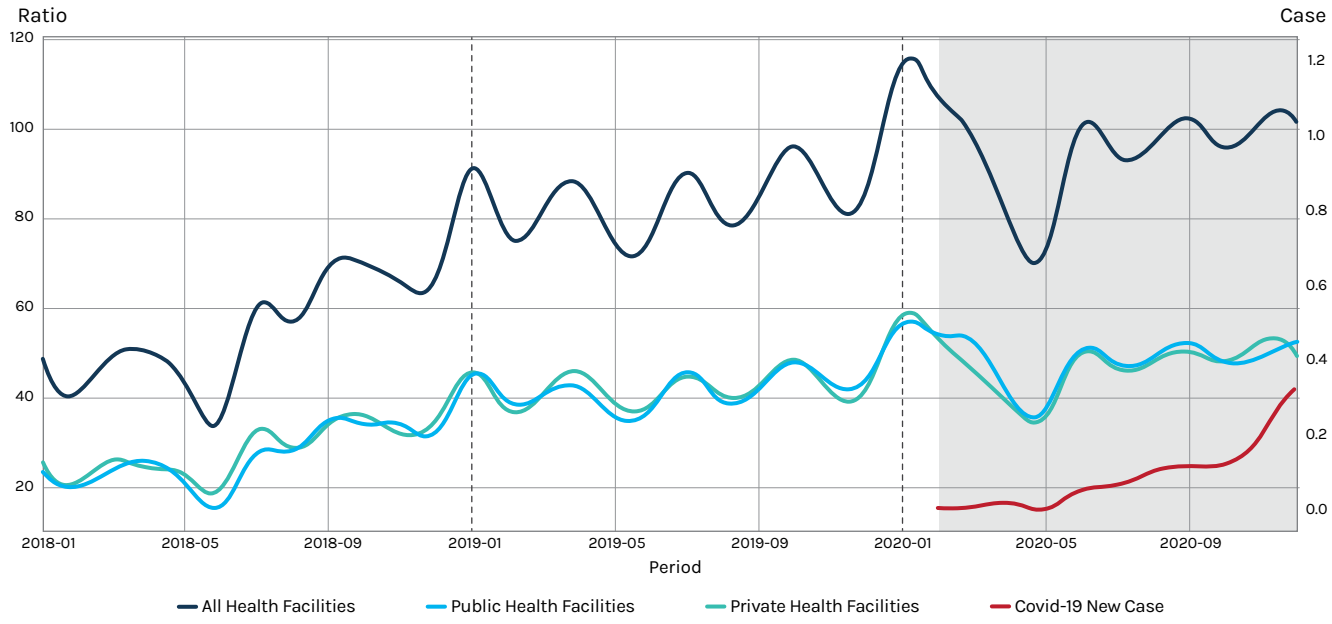
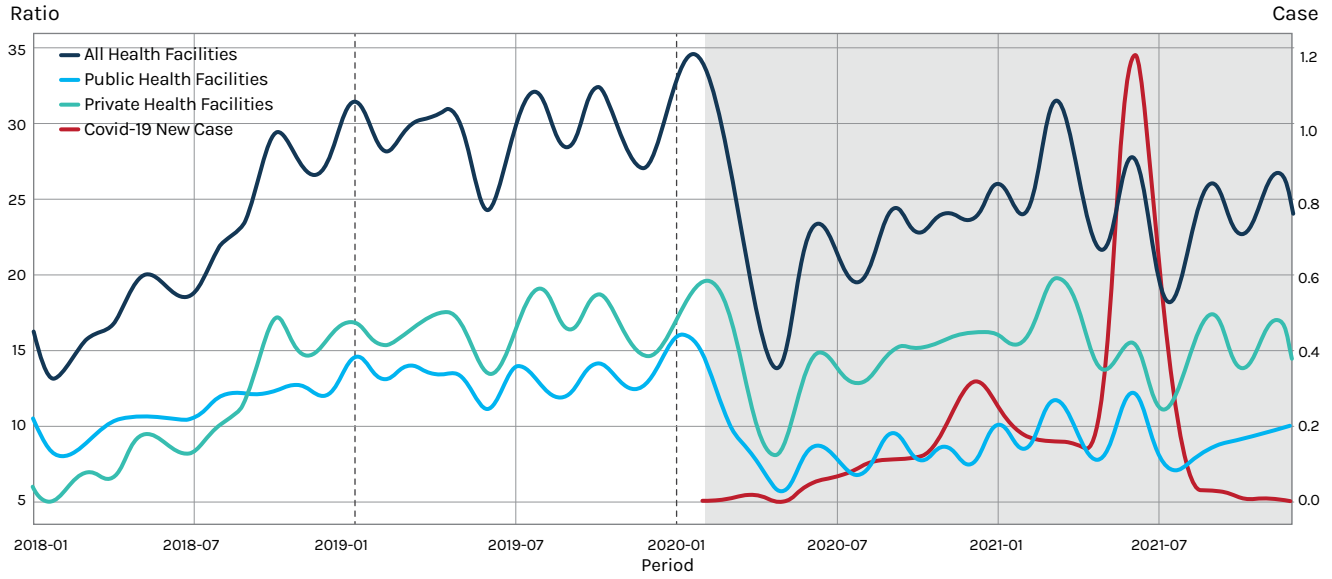


Figure 4: Utilization Ratio of Outpatient Visits at Primary Care Level for Mental Health Diagnoses (per 10,000 JKN Members) (National Level)



KEY INSIGHT 2: There were variations in the coverage of essential services between public and private sectors. After an initial dip in health facility utilization across both sectors at the onset of the pandemic, private hospital outpatient visits tended to recover faster than at public health facilities (Figure 5). There were key reasons behind this, including the perception of a higher risk of COVID-19 transmission at public hospitals and the limited availability of special delivery rooms in puskesmas (primary care facilities) for COVID-19 positive mothers. The actual quality of care of essential health services in the private sector as compared with the public sector through the COVID-19 response is unclear. Coordination between the public and private sector was relatively informal and organic but, in many ways, effective in boosting overall utilization of essential services by enabling some choices in the time of crisis–at least among those who could afford it.

Figure 5: Utilization Ratio of Hospital Outpatient Visits (per 10,000 JKN[6] Members) for Hypertension and Diabetes (Public and Private Sectors)



KEY INSIGHT 3: Essential services in the urban provinces appeared to have been more negatively affected by the pandemic compared with rural provinces. The decline in the coverage of community-based activities, such as posyandu for MCH services and posbindu (community-based activities) for NCDs screening, was more notable in urban areas owing to higher social mobility restrictions. Rural communities tended to have lower COVID-19 risk perception due to the lower numbers of COVID-19 cases in these areas. Community Health Workers (CHWs) also tended to have better access to households and hold more of a 'significant role' in rural areas than in urban areas.

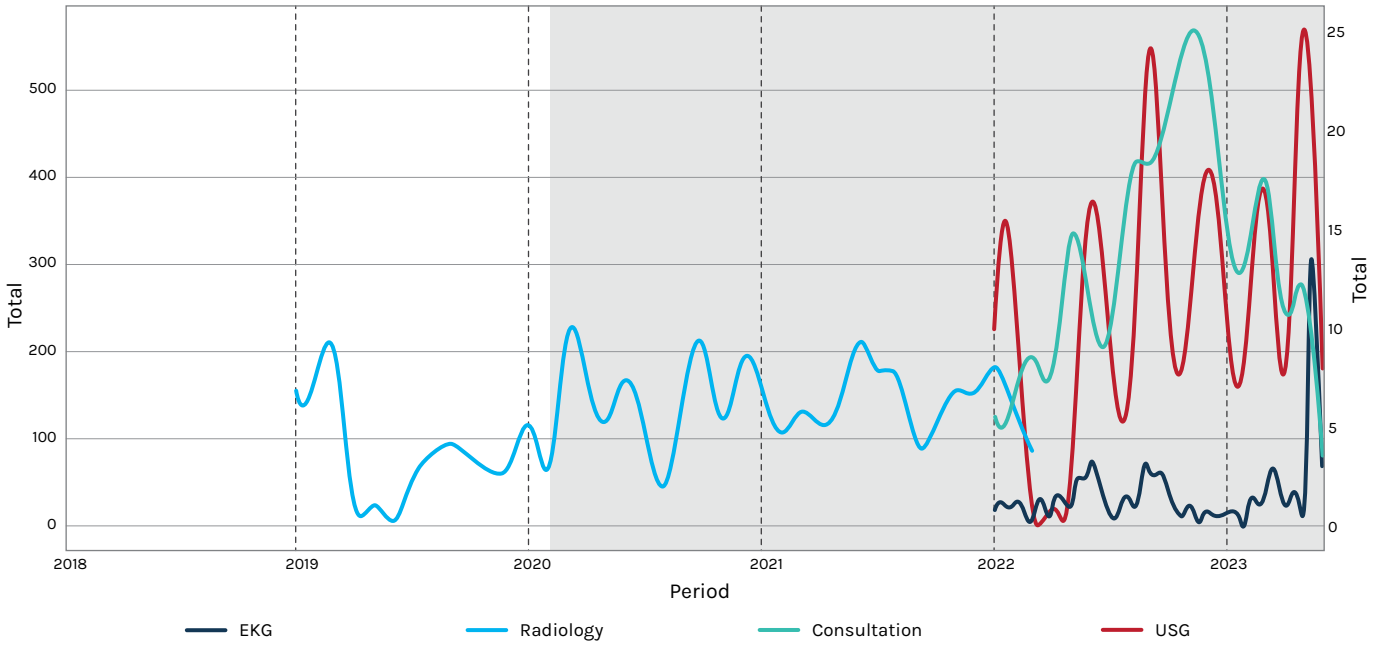
KEY INSIGHT 4: Lack of specificity and cohesion of guidance provided may have led to variability in the scope, mechanisms, and possibly the quality of services provided. The potential and actual impact of COVID-19 on the quality of care across essential services necessitated both proactive and reactive adaptations and adjustments to service delivery. Many of these proactive adjustments, which included operational level adjustments, integration of services, and relocation or addition of service delivery sites, for example, (Table 2), were stipulated through a range of policy and adaptation guides across different essential service areas. Some of this lacked detail and cohesion, however, possibly leading to variability in the scope and mechanisms–which may have affected the quality of services provided. The significant need for effective coordination at the central level on the planning of adjustments across essential health services posed a challenge, as did the need to follow up by reviewing operationalization of adjusted guidelines. Nevertheless, the lack of specificity in some of the guidance enabled flexibility to be reactive in accordance with local capacity, context, and needs and several effective strategies were also introduced at service delivery points.

Table 2: Strategies, Adaptations, and Innovations to Protect Essential Services Through the Core COVID-response Phase in Indonesia

STRATEGY/ADAPTATION/INNOVATION	DEMAND/ SUPPLY FOCUS	PROACTIVE/ REACTIVE	GEOGRAPHIC APPLICATION
Adjustment/development and dissemination/ socialization of guidelines spanning essential service areas.	Supply	Proactive	Countrywide
Adjustments to operational delivery of essential services including: (i) changes to service opening and closing hours; (ii) shifts in triage and referral processes; (iii) health worker departmental allocation, (iv) establishment of non-COVID and COVID wards; and (v) patient flow reorganization.	Supply and demand	Proactive and reactive	Countrywide – with variability across districts
Additional/relocation of temporary facilities for essential service delivery–for example, by using puskesmas meeting rooms/buildings or schools for provision of essential services.	Supply	Reactive	Countrywide – with variability across districts
Integration of services–that is, enhanced promotion of mental health services and referral of mental health patients and integration of posyandu and posbindu activities in COVID-19 vaccination activities.	Supply and demand	Proactive and reactive	Countrywide with some subnational variations
Development of health resources including health worker competencies, online training.	Supply	Proactive	Countrywide
Additional health workers recruited/allocated, with enabling supportive processes such as expediting practice permits for medical interns.	Supply	Proactive	Countrywide
Health worker task shifting–both within facilities and from facilities to CHWs.	Supply	Proactive and reactive	Countrywide with some subnational level variations
Localized redistribution of supplies and medication.	Supply	Reactive	Variation across districts
Targeted introduction and expansion of telehealth services across essential services–spanning patient consultation, monitoring, registration, and treatment management (formal and informal).	Supply and demand	Proactive and reactive	Countrywide with some subnational level variations
Enhanced collaboration between the public and private sectors–including to deliver health promotion activities and patient education and expanding surge capacity.	Supply	Reactive	Countrywide with some subnational level variations
Adjustment to health insurance scheme (BPJS-Kesehatan)[7] allowing for longer supply for take-home medication for NCDs with less intensity.	Supply and demand	Proactive	Countrywide
Outreach service provision and extension of CHWs role in delivering essential services, with priority given to vulnerable groups.	Supply and demand	Proactive	Countrywide, with prioritization of remote and rural areas
Health promotion efforts involving local leaders and networks.	Demand	Reactive	Countrywide, with prioritization of remote and rural areas
Intensified, COVID-specific health promotion efforts at private clinics.	Demand	Reactive	Countrywide, with prioritization of remote and rural areas
Cross-sectoral coordination at the community level–such as support from the police and military force to coordinate patient outreach.	Demand	Proactive and reactive	Countrywide, with prioritization of remote and rural areas

KEY INSIGHT 5: Digitization maintained some essential services but exacerbated existing inequities and lacked quality control. The adoption of WhatsApp as a telecommunication tool was widespread (although access was unequal across geographic areas and essential service types) and used for communicating health risks, promoting health education among patient groups and the wider community and facilitating teleconsultations and patient monitoring and follow-up in both the public and private sectors. The national telemedicine program (TEMENIN)[8] was introduced in 2017, and while the services only became available in 2019, its roll-out and use were accelerated through the pandemic (Figure 6). The emphasis on a digital approach, however, has raised questions about impact on quality of care provided and there are concerns that the use of digital technology exacerbates inequities given the general correlations between existing vulnerabilities, lower access to digital technology and online communications, and low digital literacy levels. There was also a lack of clear guidance on the implementation and quality control for teleconsultation services and on enabling equitable access to care across population groups.

Figure 6: Number of Telemedicine Utilizations Based on TEMENIN Program Data (2019-23)



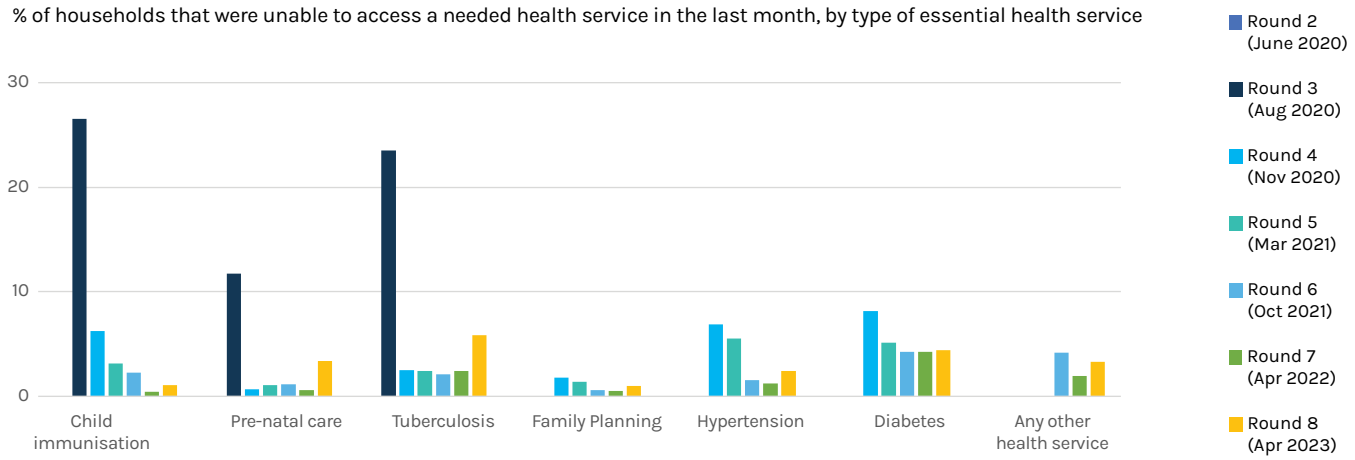
KEY INSIGHT 6: Utilization of essential services through facility-based primary care appeared more stable than through community-based services during the core COVID-19 response phase. Primary care appeared to have been quite reliable in maintaining routine outpatient services for many of the essential health services–in large part this was likely due to a perception of lower risk at the primary care level where there were fewer COVID-19-related deaths compared with hospitals. Routine community visits for hypertension, diabetes management, and cardiovascular disorders in particular were highly impacted, at least initially, although the expanded roles of CHWs and the extension of puskesmas services into the community somewhat offset this reduction in community utilization of services.

KEY INSIGHT 7: Demand-side obstacles were also key in reducing access to essential services through COVID-19. These included:

- fear of being exposed to, contracting, or testing positive for COVID-19, particularly at public sector hospitals;
- fear of being required to quarantine resulting from an interaction with the health system, affecting personal freedom but also the ability to work and provide for families;
- the influence of misinformation, fuelled by a proliferation of unreliable sources and a lack of clear, accessible information;
- health promotion campaigns to reduce COVID-19 transmission inadvertently discouraging health care attendance for essential services, beyond what was important and considered feasible to be safely and effectively managed;
- variable access to digital technology to enable engagement with telemedicine; and
- other economic and logistical barriers.

Demand and access also varied considerably by essential service area–with TB and child immunization services particularly negatively impacted (Figure 7).

Figure 7: Service Disruptions Based on Household Survey (Demand-side)



KEY INSIGHT 8: A key facilitator of utilization of essential health services appeared to be effective community advocacy and local support to improve access to care. Notably, military support, provided by personnel known as '*Babinsa*' stationed in villages, proved highly effective and continued to be in demand even after the core COVID-19 response phase. Support from community leaders such as religious leaders and village heads was also valuable in health promotion efforts.

Recommendations

A series of recommendations are proposed which aim at protecting the effective supply, as well as feasible and safe utilization, of essential services in the case of future pandemics or other health emergencies. These relate to the resilience-building and preparedness phase, and the response phase.

GOVERNANCE AND LEADERSHIP: Based on a well-coordinated effort, there is a need to develop emergency adaptation plans for essential services in the case of a health emergency. These should provide clear directives and clarity on the scope of adaptations required, alongside the scope of variability given to subnational levels or service delivery points to decide on further adaptations based on local resources and needs. All guidelines on adjusted practice should be disseminated and socialized with health workers–including clarity on updates from previous instructions.

PUBLIC-PRIVATE PARTNERSHIP: The role of the private sector should be recognized upfront and collaboration mechanisms established to enable engagement on ongoing resourcing needs to effectively protect essential service delivery across population groups. Mechanisms for timely data sharing and coordination of response should be strengthened. Collaboration between relevant health and nonhealth sectors, and across government departments and health system levels should be encouraged and supported as required to strengthen the delivery and protection of essential health services.

HEALTH FINANCING: Funds should be allocated to an emergency health care response pot to enable a fast and effective response to an emerging health crisis but also to support the protection and maintenance of essential health services. Innovative financing mechanisms could be explored to ensure sustained funding for health services–such as public-private partnerships and health insurance reforms. The use of subsidies to support access to essential care during health emergencies could also be explored.

HUMAN RESOURCES: Task-sharing and task-shifting strategies adopted through COVID-19 should be specifically evaluated to inform on quality of care and equity implications. CHWs should be formalized into the health workforce–including establishing their renumeration, formalizing supervisory arrangements, and establishing and a career pathway. Collaboration with other sectors to explore and boost surge capacity through the commitment of more human resources in the time of a health emergency should be prioritized.

INNOVATION: Enable investments in digital health infrastructure–giving particular attention to promoting equity in digital literacy. Specific strategies and innovations introduced through COVID-19 should be evaluated to inform on health outcomes, equities in access and quality of care. Quality control mechanisms should be developed and reviewed for any digital health and telemedicine program.

HEALTH SERVICE DELIVERY: The strengthening of primary health care facilities to strengthen ongoing and equitable access to essential services and reduce unmet needs should be prioritized. Strategic stockpiles of essential medicines and supplies should be maintained and systems established to enable readiness of a flexible redistribution system to prevent and address stock-outs during health emergencies. Data quality, validity, timeliness, and data analytical capacity across the health system should be strengthened. Effective feedback loops should be established and supported to boost local data-based decision making.

COMMUNITY ENGAGEMENT AND COMMUNICATIONS: Future health promotion efforts about essential health services during health crises should be reflective of a careful and informed effort to reorganize services–especially across primary and community levels. Efforts should be made to ensure health care access is not discouraged unnecessarily. Effective cross-sectoral collaborations with different stakeholder groups and representatives/leaders within communities should be encouraged. CHWs should be empowered to play a crucial role in effectively and appropriately delivering essential health services during a health crisis. Communities should be engaged in pandemic response efforts through clear and culturally sensitive communication and misinformation should be addressed quickly and with clarity.

Endnotes

1 Gadsden, T., L.E. Downey, V.D.R. Vilas, D. Peiris, and S. Jan. 2022. "The Impact of COVID-19 on Essential Health Service Provision for Noncommunicable Diseases in the South-East Asia Region: A Systematic Review." The Lancet Regional Health-Southeast Asia.
2 Downey, L.E., T. Gadsden, V.D.R. Vilas, D. Peiris, and S. Jan. 2022. "The Impact of COVID-19 on Essential Health Service Provision for Endemic Infectious Diseases in the South-East Asia Region: A Systematic Review." The Lancet Regional Health-Southeast Asia.
3 World Bank. 2023. Open Data: Indonesia, World Bank Open Data, https://data.worldbank.org, accessed 7 September 2023
4 Dewi, Y.A., A.D. Permana, and D.A. Oktrivianto. 2021. "The Impact of COVID-19 Pandemic to Head and Neck Cancer Care in Hasan Sadikin Hospital Bandung, Indonesia." International Journal of Pharmacy and Pharmaceutical Sciences 63–66.
5 Ministry of Health. 2019. Standar Pelayanan Minimal (SPM) (Minimum Service Standards).
6 Jaminan Kesehatan Nasional (National Health Insurance).
7 Badan Penyelenggara Jaminan Sosial Kesehatan (parastatal institution that administers the social health insurance program).
8 The Ministry of Health through the Directorate of Health Services has developed the Telemedicine Indonesia (TEMENIN) application since 2019 and has been implemented in several remote areas in Indonesia. This application was developed to accommodate tele-EKG, tele-Radiology, tele-USG and tele-consultation services. As the variable for telemedicine utilization was derived from the TEMENIN database, it only captures telemedicine services covered under JKN which, as of end of 2021, mostly only covered the public sector and only between provider-to-provider services.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