ERIA Research Project Report FY2024, No. 14

Strengthening the Health System for Older Persons

Edited by

Lilis Heri Mis Cicih

Takuma Kato

Asuka Nagatani

Nanda Sucitra Putri

BAPPENAS
Kementerian Perencanaan Pembangunan Nasional/
Badan Perencanaan Pembangunan Nasional

Universitas Indonesia
Fakultas Ekonomi dan Bisnis

Lembaga Demografi

ERIA
Economic Research Institute for ASEAN and East Asia

Strengthening the Health System for Older Persons

Economic Research Institute for ASEAN and East Asia (ERIA)

Sentral Senayan II 6th Floor

Jalan Asia Afrika No. 8, Gelora Bung Karno

Senayan, Jakarta Pusat 10270

Indonesia

ERIA Research Project Report FY2024 No. 14

Published in September 2024

Acknowledgements

This report could not have been published without the support of the Economic Research Institute for ASEAN and East Asia (ERIA), and especially its President, Tetsuya Watanabe. We thank him for his support in conducting the study and ensuring its high quality. Thanks also go to Dr Takuma Kato, Asuka Nagatani, Nanda Sucitra Putri of ERIA, who provided valuable technical assistance in conducting this study. We thank Dr Pungkas Bahjuri Ali, Renova Glorya Montesori Siahaan, Iftita Rakhma Ikrima, Budiyono Al Patiy, Bahagiati Maghfiroh, and the staff of the National Development Planning Agency (Badan Perencanaan Pembangunan Nasional [BAPPENAS]), who reviewed the Bahasa reporting. We are grateful to the Demographic Institute team (Nugroho Abikusno, Abdillah Ahsan, Nadira Amalia, Karishma Maharani Raijayi, Maulida Gadis Utami, Arthur Huda Brahmantyo, Muhammad Reyhan Ermirel Ardh, Asmanedi, Merry Widyanti, Alit Kurniasari, Eva Mardiani Suherman, Yulianti, Muhamad Yusuf) who assisted in quantitative and qualitative data collection and analysis and in reporting.

Thanks to the Government of Japan, which funded the project. Without its assistance, we would have been unable to create a profile of the older persons' health system in Indonesia.

Many thanks go to the ERIA colleague who reviewed the draft of this report and provided highly useful technical and substantive input to improve its quality. Our gratitude also goes to Ms Asuka Nagatani Asuka, who conducted the final review and edit of the report.

Finally, we thank Indonesia's Ministry of Health and other ministries for providing technical support for data collection. We are grateful to them for disseminating this report to help the national and local governments develop precise and timely policy action to boost older persons' well-being, especially their health, and to empower communities and families to support older persons' health. Responsibility for errors and omissions rest entirely with us, while comments and criticism are welcome.

Lilis Heri Mis Cicih

Faculty of Economics, University of Indonesia
Jakarta, Indonesia

Table of Contents

List of Figures

List of Tables

List of Abbreviations

ADL	activities of daily living
ASEAN	Association of Southeast Asian Nations
BAPPENAS	Badan Perencanaan Pembangunan Nasional (National Development Planning Agency)
BKKBN	Badan Koordinasi Keluarga Berencana Nasional (National Population and Family Planning Agency)
BKL	Bina Keluarga Lanjut Usia (Older Persons' Family Guidance)
BPJS	Badan Penyelenggara Jaminan Sosial (Social Security Administrator)
BPS	Badan Pusat Statistik (Central Bureau of Statistics)
COVID-19	coronavirus disease of 2019
CSR	corporate social responsibility
FGD	focus group discussion
GDP	Gross Domestic Product
HIS	Health Insurance Society
IFLS	Indonesian Family Life Survey
IHME	Institute for Health Metrics and Evaluation
JHIA	Japan Health Insurance Association
JICA	Japan International Cooperation Agency
NGO	non-government organisation
LKS	Lembaga Kesejahteraan Sosial (Social Welfare Institute)
LTC	long-term care
LTCI	long-term care insurance
MoH	Ministry of Health
MoSA	Ministry of Social Affairs
NSES	National Socio-Economic Survey (Survei Sosial Ekonomi Nasional)
NHI	National Health Insurance
NHSO	National Health Security Office
NCD	non-communicable disease
PUSAKA	Pusat Santunan Keluarga (Family Compassion Centre)
NAP	National Action Plan
RPJMN	Rencana Pembangunan Jangka Menengah Nasional (National Medium-Term Development Plan)
UCS	Universal Coverage Scheme
UN	United Nations
UNFPA	United Nations Population Fund
VNCA	Viet Nam National Committee on Aging
VSS	Viet Nam Social Security
WHO	World Health Organization

Executive Summary

Indonesia's population is ageing. Older people (60 years and above) made up 10.8% of the population in 2022 based on 2022 Central Bureau of Statistics (Badan Pusat Statistik [BPS], 2022). Its objectives are to provide input to the preparation of the Background Study of the National Medium-Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional) 2025–2029. The study will recommend directions for Indonesia's healthy ageing policy.

The study used quantitative and qualitative methods. The quantitative method consisted of collection of secondary data from official government sources. The qualitative method comprised primary data collection in five provinces, five districts, and five cities through focus group discussions and in-depth interviews. An analysis compared Indonesia with Japan, Viet Nam, and Thailand to observe ageing conditions, specifically health and policies, laws, and regulations.

The study aimed to (i) analyse older persons' health and future trends, (ii) map the preparedness of older persons' health services, (iii) identify policy instruments to strengthen older persons' health services, and (iv) recommend ways to design the older persons' health service system. The study's results and recommendations are as follows:

The proportion of older persons has grown rapidly because of increasing life expectancy, which has steadily risen annually for males and females. However, the healthy life expectancy gap was still 4.6 years in 2019 (World Health Organisation [WHO], 2019a).

As older persons' physical and functional capacities decrease, disability is projected to become more prevalent. Disability-free life expectancy is projected to increase in 2010–2050 (from 11.91 to 8.5 years for males, and 12.95 to 7.3 years for females). Older persons numbered about 446,000 in 2020 and are projected to number 665,000 in 2030, which may have an impact on demand for long-term care (LTC) and health costs.

Most older persons have low levels of educations, are in the 40% lowest-expenditure households, have no pension security, and work in the informal sector with no social security (health and employment). Many older persons work more than normal working hours per week and have low incomes.

The gender-disaggregated data show that older females outnumber older males (52% vs 48%). However, older females are more vulnerable socially, economically, and in health, especially if they are widows and/or live alone. Older females have less access to information and communication technology than other social sectors, a fact that must receive attention as older persons generally suffer from more than one degenerative disease.

The percentage of non-communicable diseases is steadily increasing and peaks amongst persons aged 55–59 years. Stroke is the most prevalent, followed by heart disease and diabetes. If these degenerative diseases are not well managed, they may become more severe and force older persons to depend more on LTC. The need for LTC in Indonesia has steadily increased annually.

Managing older persons' health is a challenge and will continue to be so. Services, financing, facilities, human resources, aggregated data, institutions, regulations, and community involvement are extremely important in meeting the needs of older persons' health services. National and regional older persons' health services consist of disease prevention, health promotion, treatment, and rehabilitation. Disease prevention and health promotion must be intensified in communities, as is done in Thailand.

The quality of services requires attention. Even though health centres are near the homes of older persons, but they do not necessarily visit them. Secondary data showed and key informants in the five districts and five cities stated that the reasons are related to lack of assistance, transport obstacles, being bedridden, long patient queues, and preference for herbals (*jamu*) or over-the-counter drugs from local convenience stores.

LTC is provided to households and/or institutions (older persons' homes, residences, nursing homes) but is not supported by standards, laws, or regulations. Families and communities that provide LTC find it difficult to increase their capacities and skills. To maintain the quality of older persons' health services, all health cadres or informal caregivers need to be certified. By 2030, 222,000 nurses or caregivers are projected to be needed, posing a challenge to the government. Thailand, Japan, and Viet Nam emphasise community-based programs for older persons' care, finance them, and enforce them.

Regulations are necessary to improve older persons' health, especially in the regions. Laws and regulations cover financing, facilities, human resources, services, institutions, and governance, but several must be updated in line with present and future conditions. Laws that need amending include Law 13 (1998) on older persons' welfare; minister of health regulations on health centres, which require age-friendly standards; and Social Security Administrator for Health (Badan Penyelenggara Jaminan Sosial [BPJS]) Health, which should include LTC premiums.

Based on lessons learned from Japan, Viet Nam, and Thailand, several aspects need to be considered in health systems for older persons. One is the availability of health service providers supported by national and local governments and the private sector. Only Japan has an older persons' National Health Insurance (NHI) scheme. It is financed by premiums, taxes, tier-based co-payments, and a cross-subsidy scheme. Japan, Thailand, and Viet Nam have community-based services, which, especially in Japan and Thailand, are supported by budgets and regulations.

Older persons' health services in the three countries are reinforced by laws and regulations, NHI, older persons' welfare and health services, LTC, national government authorities, pension funds, and regional governments managing related programmes. Japan established the Ageing Society Policy Council to design and coordinate cross-sector ageing policies and monitor their implementation.

Several issues in Indonesia need attention: health facilities, health services for older persons, health human resources, health financing, family and community participation, community-based older persons' institutions, and integrated data on older persons.

Health facilities. Their number and quality must be improved. Health facilities are not available in all regions, especially in the eastern part of the country. Only 67.6% of

primary health facilities such as health centres provide age-friendly services and only 9.6% of hospitals have integrated geriatric clinics. Health facilities, especially health centres, must reduce waiting time and increase the safety of older persons. Age-friendly services must not only include special service rooms but also be equipped with wide doors and hallways; stairs that are not too high or steep, with railings; non-slip floors; waiting rooms with comfortable seating; adequate signage; and toilet seats.

Health services for older persons. Older persons' health services are still not integrated with other sectors, especially community-based development. No LTC system or financing has been developed. Human resources and funding are lacking. Health services are inaccessible, especially for the bedridden or those who need LTC. The home-care programme cannot be implemented in all regions, and some health centres do not have ambulances.

Health human resources. Older persons' health service providers are inadequate in quantity, quality, and distribution. The number of health workers is limited (especially in the regions) and turnover is high, with no transfer of knowledge to new employees, affecting the sustainability of programmes. Health workers' and caregivers' capacity and knowledge related to geriatrics need to be improved. No scheme exists to recruit, finance, and increase the capacities of cadres and caregivers, especially informal ones.

Health financing. The challenges faced are related to the effectiveness of health financing; synchronisation of the health budget (national expenditure, regional transfers, general allocation fund, and original local government revenue); and lack of innovative financing sources. Financing of older persons' health is not a government priority. Special budget posts for older persons' health programmes do not exist and LTC is not covered by BPJS Health. Financing is mostly through contribution assistance to BPJS Health. Budgetary needs must be anticipated to increase the quality of and community trust in insurance practices. A financing scheme through partnerships with the private sector is important.

Family and community participation. Mobilisation and integration of human and financial resources face obstacles. Families and communities have limited knowledge of and skills in caring for older persons. Modernisation and changes in family structure from extended to nuclear remain a challenge, especially for older persons requiring LTC. Assistants or caregivers are generally daughters, but many females are entering the labour force. Cadres are needed to make home visits, but they lack incentives and time. Community-based older persons' institutions. Institutions that help improve older persons' health services need to be revitalised but are not well coordinated between the national and regional government levels, and between government and non-government organisations (NGOs), including private business. Not all institutions are supported by accreditation, including caregiver certification and standardisation. Institutions must be strengthened to promote synergy and collaboration between programmes and sectors and to ensure that older persons' programmes become priorities. Institutions are developed and strengthened by collaboration between government and non-government stakeholders.

Regulation. Implementing regulations remains a challenge. Improving them requires raising age-friendly health-centre standards and criteria, providing alternative sources of financing, and boosting programme budget management, including for LTC. Integrated data on older persons. Policies and programmes are based on data but a

single database on the older population does not exist. Data are separated by sector. The Ministry of Social Affairs uses Integrated Social Welfare Data (Data Terpadu Kesejahteraan Sosial), classified by name and address. The National Population and Family Planning Agency (Badan Koordinasi Keluarga Berencana Nasional [BKKBN]) uses Older Persons' Family Guidance (Bina Keluarga Lansia [BKL]). The Ministry of Health uses data from health centres. Uncoordinated data collection poses a challenge for cadres and data-collecting officers. No longitudinal national data on older persons exist.

The following recommendations are based on the study's findings and on strategic issues related to integrating the older persons' health system to provide optimal services. Integration is urgently needed to reduce overlapping benefits; make programmes more effective and efficient; and simplify control, monitoring, and evaluation.

The proposed recommendations are the following: increase the number and quality of health facilities for older persons; increase the number, quality, and equitable distribution of health human resources; increase financing for older persons' health services; increase family and community participation; revitalise and strengthen old persons' institutions, especially age-friendly service providers; strengthen health regulations; and improve dissemination of health information at all tiers of services.

Strengthening the health system aims to increase life expectancy by improving health status and the quality of health services. The study proposes policy directions and strategies for improving the health of older persons. It recommends including them in the National Medium-Term Development 2025–2029 to increase coverage, access, and quality of older persons' health services; increase health insurance coverage and health financing for older persons' health services; institutionally strengthen integrated older persons' services; and align laws and regulations related to older persons' health services.

Increase coverage, access, and quality of older persons' health services. The proposed strategies aim to meet the needs of age-friendly health facilities; meet the needs of integrated primary, secondary, and tertiary services for older persons, especially for health prevention and promotion; provide human resources for older persons' health services and adequate health workers at primary health facilities and follow-up referral health facilities (integrated geriatric clinics); and increase family and community participation in older persons' health services. Interventions are needed to meet the health service needs of older persons, provide adequate screening tools and access to health facilities, provide geriatric information for health providers, and develop an LTC system. Informal caregivers with knowledge of and skills in older persons' care, including technology-based health services, must be engaged.

Increase health insurance coverage and health financing for older persons' health services. NHI benefit packages for LTC must be developed, financing for cadres' incentives met, and financing for health screening tools provided in a complete and sustainable manner.

Institutionally strengthen integrated older persons' services. This strategy must be implemented through government and non-government (private and community) coordination and cooperation. Key The knterventions are developing and enhancing partnerships across programs, networks, professional organisations, educational and

research institutions, NGOs, mass media, and other parties related to older persons' health.

Align laws and regulations related to older persons' health services. Laws and regulations on older persons' health must be improved. The key intervention proposed is the revision of Minister of Health Regulation Number 67 of 2015 concerning the implementation of health services for the elderly in community health centres (with detailed criteria).

Chapter 1

Introduction

1.1 Background

The rapid growth of the older population has become a global phenomenon. The proportion of people 65 years and above increased from 6.0% in 1990 to 9.3% in 2020 and is projected to reach 16.0% in 2050. This means that one in six people will age in the next 3 decades. A country has an ageing population if 10% of more of its people are 60 years and above (United Nations Department of Economic and Social Affairs [UNDESA]), 2022).

A population ages as its health status increases, lowering the mortality rate and increasing life expectancy, and as the birth rate decreases (Miladinov, 2021). Indonesia's population is ageing. Law 13 (1998) on older persons' welfare states that a person is older if aged 60 years or above. As in the rest of the world, the proportion of older persons in Indonesia has increased rapidly. In 1970, it was about 4.5% and rose to 10.5% in 2022; it is projected at 20% in 2045 (Badan Pusat Statistik [BPS], 2022).

An ageing population poses challenges to welfare efforts. The socio-economic conditions and quality of life of older persons need attention as do efforts to support the health of older persons and their families and communities.

Preparing for an Ageing Population

The proportion of older persons in Indonesia is increasing rapidly. In 2045, they will make up 20% of the total population. Good health services are needed in anticipation of the impact of rapid ageing on various aspects of life, including health financing.

About 43.2% of older persons were in the 40% lowest-expenditure households in 2017 (Badan Pusat Statistik [BPS], 2017), decreasing to 41.11% in 2022 (Badan Pusat Statistik [BPS], 2022). Only about 5.2% have a pension and, although 52.6% still work, 86.2% do so in the informal sector, without social security (either health or employment). The 2022 National Socio-Economic Survey (NSES) or Survei Sosial Ekonomi Nasional (SUSENAS) found that 20.4% of older persons reported working more than the legally regulated number of hours (Badan Pusat Statistik [BPS], 2022), which increases the risk of ischemic heart disease, both fatal and non-fatal (Li et al., 2020), and stroke (Descatha et al., 2020).

Conditions worsened during the coronavirus disease (COVID-19) pandemic starting in March 2020. A national study in 2022 showed that the economic, physical, mental, and social welfare of older persons had deteriorated. More than 60% of working older persons worked fewer hours and earned less income. The proportion of older persons unable to meet their livelihood needs increased from 46.3% to 51.4%. More older

persons said they were not healthy (based on self-rated perception) during the pandemic (Saito, and Cicih, 2022).

The 2022 NSES found that 4 out of 10 older persons had health complaints, and 2 were ill (having health complaints that disrupted their daily activities). The level of disability (measured by the Washington Group Short Set of questions on disability) increased. The proportion of older persons with one out of six difficulties increased from 26.0% in 2010 to 56.2% in 2022. The Population Census of 2010 showed that the proportion of older persons with one severe difficulty was 4.8%. The figure increased to 13.9% in 2022, according to a national study on the impact of the COVID-19 pandemic on older persons, including those with disability (Saito, and Cicih, 2022). The condition of older persons with disability may impact the need for Long-Term Care (LTC) and for caregivers.

Reaching the goals of the United Nation's Decade of Healthy Ageing (2021–2030) remains a challenge. The decade will address four areas: an age-friendly environment, prevention of ageism, LTC, and integrated health services for older persons (World Health Organization [WHO], 2019b).

The government has initiated healthy-ageing policies even though implementation is difficult. Social Affairs Ministry Regulation 4 (2017) on developing age-friendly regions (Kawasan Ramah Lanjut Usia) is based on the World Health Organization's guide. The most recent policy is in Presidential Regulation 88 (2021) on the National Strategy on Ageing (Strategi Nasional Kelanjutusiaan). Studies on age-friendly regions were conducted in 14 cities: Jakarta, Balikpapan, Surabaya, Bandung, Malang, Denpasar, Depok, Surakarta, Makassar, Payakumbuh, Yogyakarta, Mataram, Semarang, and Medan. The results showed that Jakarta most closely met the age-friendly criteria (Suriastini et al., 2019).

Indonesia still has problems with ageism, a negative view of older persons that should be put to rest. Older persons are considered less productive than or dependent on younger persons, vulnerable to health problems, and in need of physical assistance (Bloom et al., 2011). To prevent ageism, the National Population and Family Planning Agency (Badan Koordinasi Keluarga Berencana Nasional [BKKBN]) has compiled a guide for family and cadres.

In 2019, the Ministry of Health (MoH) or Kementerian Kesehatan developed an LTC guide in coordination with the network of health centres. MoH and National Population and Family Planning Agency (Badan Koordinasi Keluarga Berencana Nasional [BAPPENAS]) piloted the programme in three areas, using the Older Person Information System (Sistem Infomasi Lanjut Usia [SILANI]). BAPPENAS developed the Integrated Older Persons' Services (Layanan Lanjut Usia Terpadu [LLT]) for health centres in Yogyakarta and Bali. LTC and LLT are components of healthy ageing as stated in the National Strategy on Ageing. However, developing the LLT is a challenge and requires further support from decision makers.

Healthy ageing requires health providers, age-friendly health facilities, caregivers, and LTC funding. Older persons have access to National Health Insurance, operationalised by the Social Security Administrator for Health (Badan Penyelenggara Jaminan Sosial [BPJS]), which does not cover LTC.

Caregivers are generally family members (children or grandchildren), but women joining the workforce will decrease the number of informal caregivers. The shortage can be remedied by cadres conducting home visits, especially to older persons of low socio-economic status.

Progressive policies are needed to support implementation of design, an ecosystem of regulations, and adequate infrastructure. A wide-ranging approach to respecting the human rights of older persons is needed so that no one is left behind. A strategy to support the health, social well-being, and livelihoods of older persons is needed to build a healthy-ageing ecosystem.

Formulating policy must holistically consider not only older persons' needs but also the availability of services. A health system consists of human resources, service mechanisms, facilities, and funding, amongst others. Community participation is key.

Other countries' experiences offer lessons in developing older persons' health systems. Japan, Viet Nam, and Thailand, for example, now have older populations. Japan has the highest proportion of older persons (65 years or above) in the world at 28.4%, which is projected to grow to 38.4% in 2065 (National Institute of Population and Social Security Research, 2017). Japan has a regulatory ecosystem to manage the older population, including community based LTC and a guide on ageing. Thailand and Viet Nam have the second- and third-highest proportions of older populations in Southeast Asia after Singapore. Both have a national comprehensive policy on healthy ageing.

A thematic study – Strengthening the Health System for the Elderly – to support Developing Ageing Policies in Indonesia. The study can provide targets and indicators to the Background Study of the National Medium-Term Development Planning (Rencana Pembangunan Jangka Menengah Nasional [RPJMN]) 2025–2029. The study analyses the ageing policy gaps in Indonesia and recommends directions for healthy ageing policy. The policy gap analysis is the study's innovation.

1.2 Objectives

The study has the following objectives:

(1) Analyse current older persons' health conditions and future trends.
(2) Map the preparedness of older persons' health services.
(3) Identify policy instruments to strengthen older persons' health services.

(4) Recommend ways to design older persons' health services, including service mechanisms, types of services, human resources, payment schemes, and roles of the community and private sector.

1.3 Research Questions

(1) What are the current older persons' health conditions and future trends in Indonesia?
(2) How prepared are older persons' health services and in what condition are they?
(3) What are the policy instruments available for older persons' health services in Indonesia?
(4) How do older persons' health services (including LTC) compare with those of other countries? What lessons can be learned from other countries?
(5) What policies can be recommended to reinforce the older persons' health system?

1.4 Output

(1) Final report, in Bahasa Indonesia and English. It will consist of an introduction and chapters on older persons' health conditions in Indonesia, preparedness of older persons' health services, policies and regulations related to ageing in Indonesia, a comparison of the older persons' health system in Indonesia with that in other countries, and strategic issues and policy recommendations for older persons' health.
(2) Policy brief, synthesising the final report as advocacy material for policymakers.

1.5 Scope

Data and information in the study consist of current demographics, social economics, and older persons' health status, as well as future trends. Aspects of the older persons' health system are demand for and supply of health services (types and number of health facilities, health service mechanisms, human resources, payment schemes, and the role of community health services. The study covers laws, regulations, and ageing policies in Indonesia that support the older persons' health system. Data sources were desk reviews, and field visits to five provinces.

1.6 Methodology

The study was conducted on five provinces and on three countries that have an ageing population (Japan, Thailand, and Viet Nam). Provinces were selected based on the proportion of older persons and represent the western, central, and eastern regions. One district and one city were selected in each province:

(i) Western region: Yogyakarta (Yogyakarta city and Bantul district) and West Java (Bekasi city and Ciamis district)

(ii) Central region: Bali (Denpasar city and Gianyar district)

(iii) East region: Central Sulawesi (Palu city and Sigi district) and Papua (Jayapura city and Meraoke district)

The sources of primary and secondary data determined the use of mixed-method (quantitative and qualitative) approaches. Data were collected after the researchers received ethical clearance from Atma Jaya University Jakarta.

The quantitative approach used secondary data from a desk review of official data sources and an analysis of raw data. Data were collected from reports or official documents (laws and regulations) from various ministries and institutions in Indonesia and related to Japan, Thailand, and Viet Nam.

For Indonesia, the study used the following data sources: (i) NSES; (ii) Older Person Statistics for 2017–2022 (BPS, 2017–2022), (iii) National Labour Force Survey (NLFS) or Survey Angkatan Kerja Nasional (SAKERNAS); (iv) NLFS, August 2017–2022 (BPS 2017–2022); (v) Basic Health Research (Riset Kesehatan Dasar [RISKESDAS]), 2018; (vi) National Health Insurance Statistics (Statistik Jaminan Kesehatan Nasional [JKN]), 2014–2021; (vii) Indonesian Family Life Survey (IFLS); (viii) 2015 Inter-Census Population Survey (Survei Penduduk Antar Sensus [SUPAS]); (ix) BPJS Health Report, 2017–2020; and (x) 2020 Long Form Population Census.

The qualitative data were from primary and secondary sources. Qualitative data were collected through focus group discussions (FGDs), in-depth interviews, and field observations to gather information on aspects of older persons' health.

For Indonesia, qualitative data were collected online (nationally from ministries, institutions, and other groups, and in Papua through FGDs in two districts and cities) and through direct visits in four provinces (through FGDs in each district and city). A total of 12 FGDs were organised.

Key national informants in FGDs consisted of the following:

(i) ministries and institutions: BAPPENAS; Coordinating Ministry for Human Development and Culture (*Kementerian Koordinator Bidang Pembangunan Manusia dan Kebudayaan* [Kemenko PMK]); Ministry of Health (MoH); Ministry of Social Affairs (MOSA); Ministry of Home Affairs; and Ministry of Village Development; BKKBN; BPJS Health; BPJS Employment; and
(ii) non-government organisations (older persons' organisations, community social organisations, professional organisations, ageing activists, and academia).

District and city key informants consisted of regional organisations related to ageing (regional planning, health, social, family planning, population, regional services, BPJS Health, and BPJS Employment).

Qualitative data were also collected through in-depth interviews in the five districts and five cities. Each interview was done with 12 key informants or a total of 120 persons. Key informants were chosen for their knowledge of older persons' conditions and their ability to communicate. They represented regional commissions and or the Older Persons' Organisation (Lembaga Lanjut Usia Indonesia [LLI]), health centres, academia, cadres of older persons, staff and older persons in older persons' homes, also older persons and pre-older persons living at home.

FGDs with key informants were organised online to collect information related to management and policies on ageing in each country: Japan (Economic Research Institute for ASEAN and East Asia); Thailand (Faculty of Medicine, Siriraj Hospital Mahidol University); and Viet Nam (Institute of Population, Health, and Development).

To validate and verify data and information collected, the research team conducted field observations while visiting four districts and four cities in four provinces. The team visited health facilities, health posts, and homes for the aged owned by the government or private sector. The team collected information through a meeting with the Thai Health Promotion Foundation (attended by Older Persons' Care and Rehabilitation Centre, Bueng Yitho Day Care and Day Service Centre, Older Persons' Development Centre, and Bueng Yitho Training Centre). The team received information on older persons' health from the Division of Public Health and Environment, Bueng Yitho municipality, Department of Community Health, Faculty of Medicine, Ramathibodi Hospital, the mayor of Bueng Yitho Municipality, and Faculty of Social Science Thammasat University.

The data were analysed descriptively using univariate, bivariate, and simple projections in tables and figures for qualitative and quantitative data. The gap and comparative analyses of laws and regulations compared Indonesia to Japan, Viet Nam, and Thailand and drew up an overview of conditions related to ageing, specifically health policies and regulations.

1.7 Theoretical Framework of Study

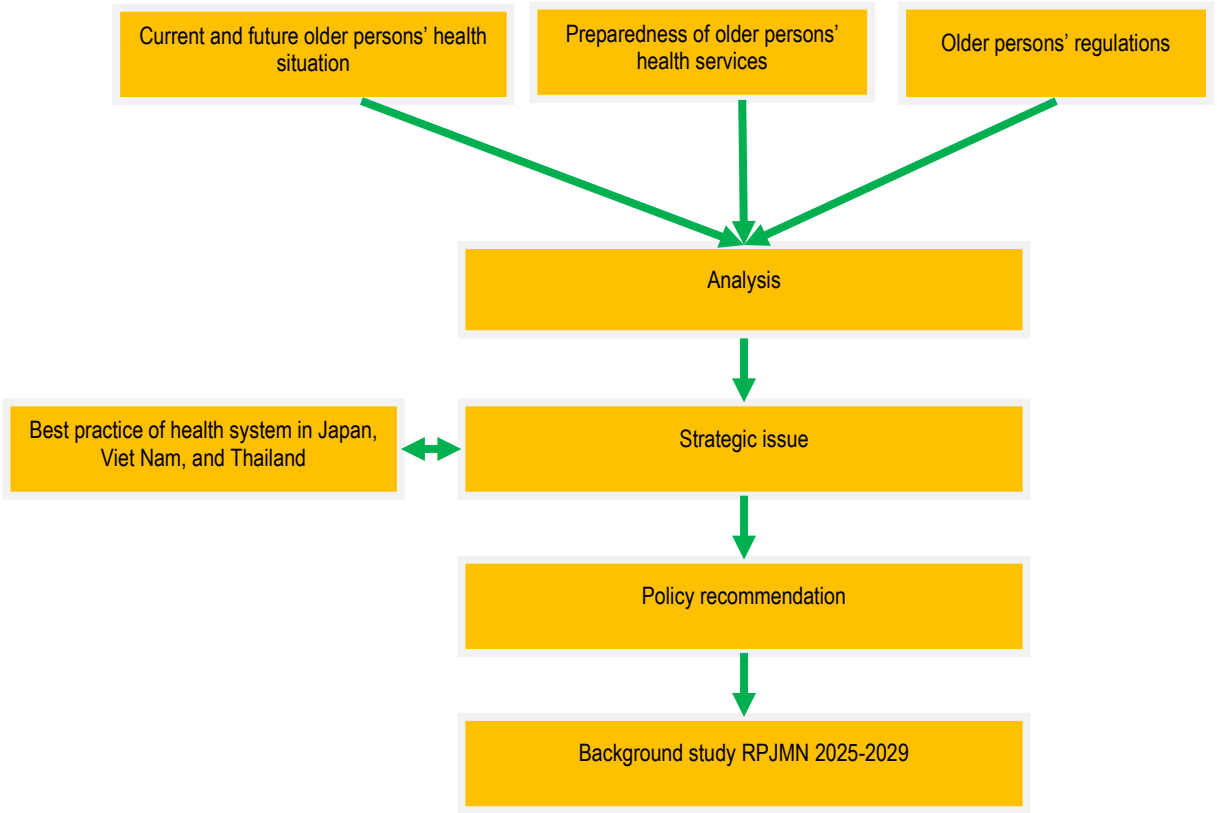
The study focuses on aspects of older persons' health as inputs to RPJMN 2023–2029. The following is the theoretical framework (Figure 1):

1) Analysis of demographics, socio-economic conditions, and health of older persons in Indonesia, including burden of diseases, and magnitude of future problems and aspects of older persons' health services in Indonesia.

2) Review of preparedness of health services for older persons, consisting of mapping need and provision, institutional analysis, and resource need (human and health funding).
3) Review of policies related to ageing and the gap analysis of policies.

To define challenges and directions for health policy development in Indonesia, we analysed and evaluated all the information, including current health conditions. The study presents strategic issues and policy recommendations for older persons' health services, considering lessons learned from the best practices in Japan, Viet Nam, and Thailand.

Figure 1 Theoretical Framework of the Study



RPJMN = *Rencana Pembangunan Jangka Menengah Nasional* (National Medium-Term Development Plan)
Source: Author (2022).

Chapter 2

Older Persons' Health in Indonesia

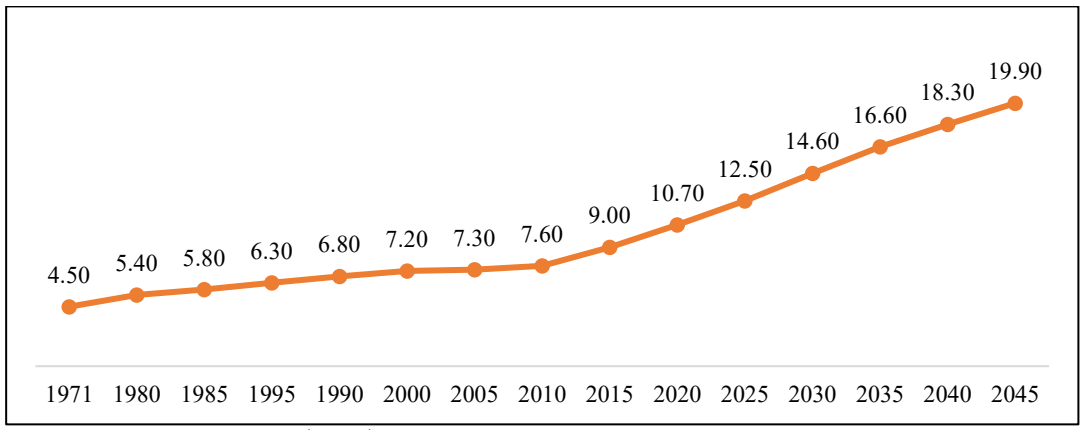
The policy to reinforce the older persons' health system is based on available data. In this section, the secondary data present current and future older persons' health, demographic, social, and economic conditions.

2.1. Current Demographic, Social, Economic, and Health Conditions

2.1.1. Demographic Conditions

The proportion of older persons was 4.5% in 1971 and will be almost five times that in 2045. In 2020, **Indonesia became an ageing country**, with older persons making up 10% of the population. Eight provinces have an ageing population: Yogyakarta, East Java, Central Java, North Sulawesi, Bali, South Sulawesi, Lampung, and West Java. Papua has the lowest proportion of old persons at 5.4% (Badan Pusat Statistik [BPS], 2021).

Figure 2.1 Percentage of Older Persons, Indonesia, 1971–2045

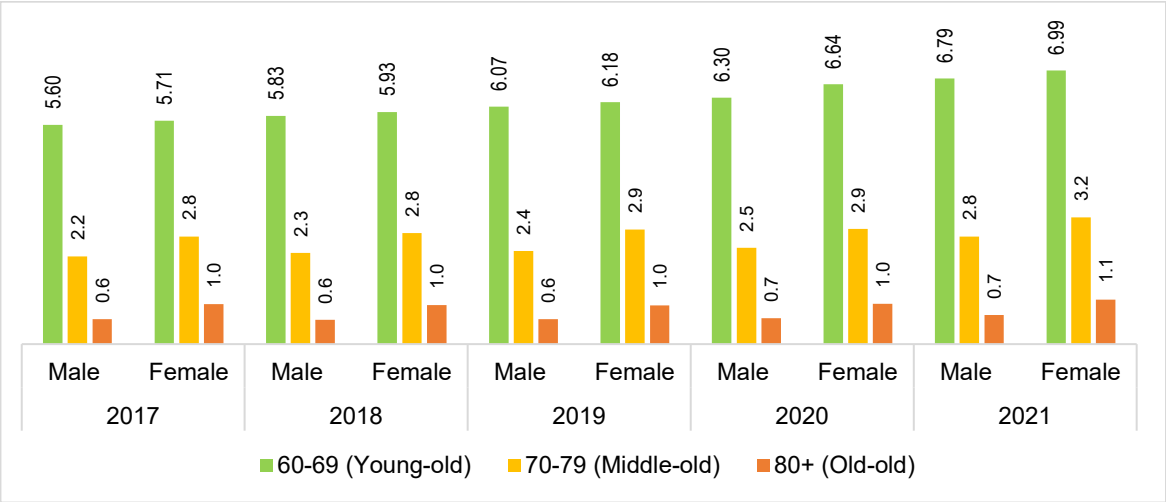


Source: Badan Pusat Statistik (2021), based on 2021 National Socio-Economic Survey data.

Based on published data from BPS, older persons numbered about 29.3 million in 2021, making up 10.8% of the population (females, 52.0%; males, 48.0%). The proportion of older persons in the total population rose in 1971–2021 (Badan Pusat Statistik [BPS], 2021) (Figure 2.2). The percentage of those aged 60–69 years (young-old) group is higher than those 70–79 years (middle-old) and 80 years and above (old-old).

Data in 2022 show that the percentage of older persons decreased to 10.5%. **The percentage of female older persons is greater than that of males** (52.0% compared to 48.0%). Older persons in **urban areas** are more numerous than in rural areas (56.0% compared to 44.0%). As many as 66% of the older persons are **60–69 years,** 27.0% are 70–79 years, and 8.0% are 80 years and above (Badan Pusat Statistik [BPS], 2022).

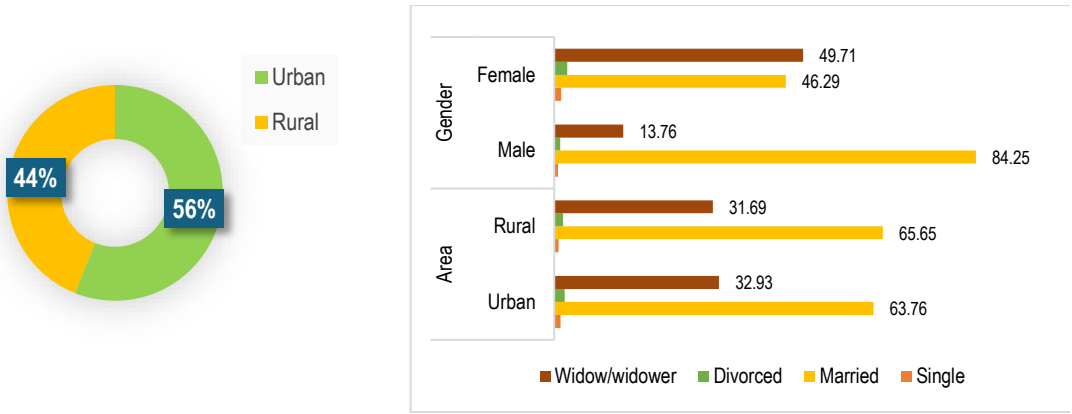
Figure 2.2 Percentage of Older Persons by Age Group and Gender, Indonesia, 2017–2021



Source: Badan Pusat Statistik (2017, 2018, 2019, 2020a, 2021), based on National Socio-Economic Survey data.

Older persons in rural areas outnumber those in urban areas (56.0% vs. 44.0%). They are mostly married and older males. However, **more than one-half of older females are widows** (Figure 2.3).

Figure 2.3 Percentage of Older Persons by Area, Gender, and Marital Status, Indonesia, 2022

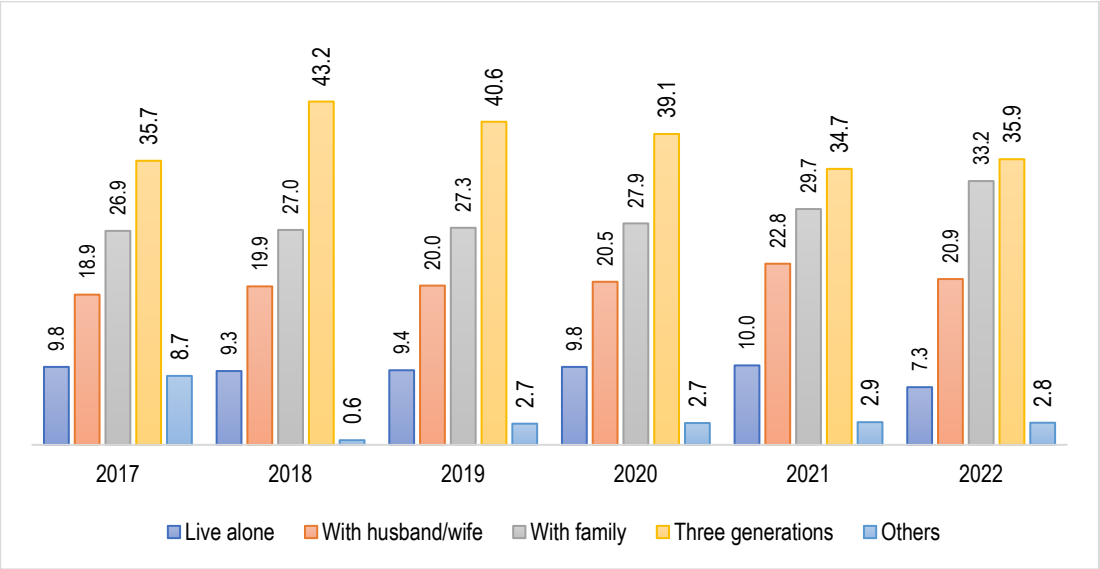


Source: Badan Pusat Statistik (2022), based on 2022 National Socio-Economic Survey data.

Whether older persons live with family is important to consider, especially intergenerational relations, and whether they have informal caregivers. Males generally have a better quality of life than females because of support from spouses and family (Yuniati, and Kamso, 2021). Attention should be paid to **older widows'** socio-economic conditions and whether they live alone or with family. If they **live alone, have poor socio-economic conditions, and are disabled, they need attention from the government.**

Older persons living with three family generations make up the highest percentage, but the trend decreased in 2018–2021 and increased in 2022. The trend of older persons living alone rose, especially in 2018–2021, and decreased in 2022 (Figure 2.4).

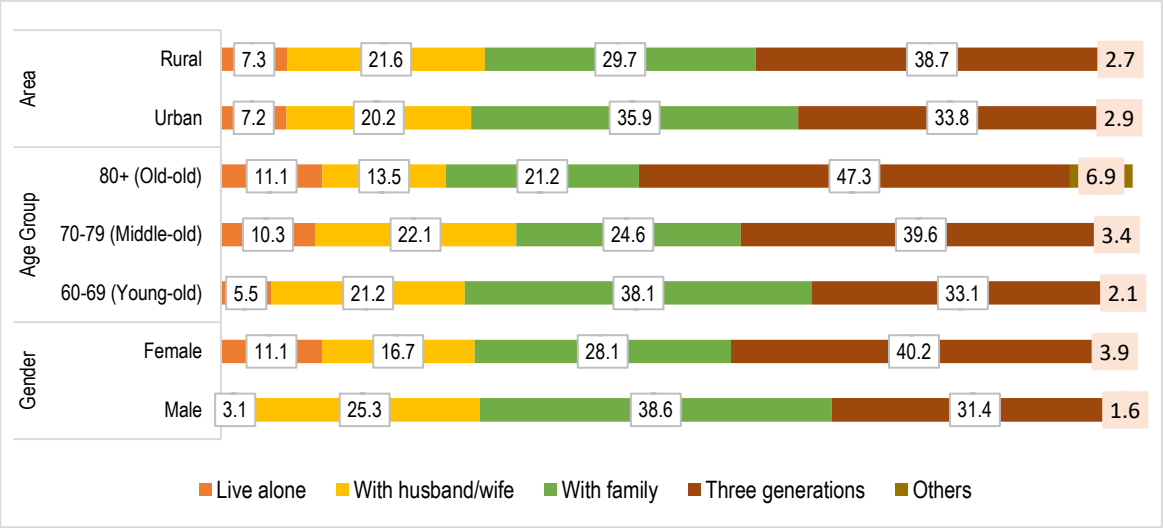
Figure 2.4 Percentage of Older Persons by Living Arrangements, Indonesia, 2017–2022



Source: Badan Pusat Statistik (2017, 2018, 2019, 2020a, 2021), based on NSES National Socio-Economic Survey data.

Persons living alone are mostly 80 years and above, living in rural areas, and female (Figure 2.5). The trend will increase demand for healthcare as various studies showed that older persons living alone are more vulnerable to disease (Liu et al., 2013).

Figure 2.5 Percentage of Older Persons by Living Arrangement and Various Characteristics, Indonesia, 2022

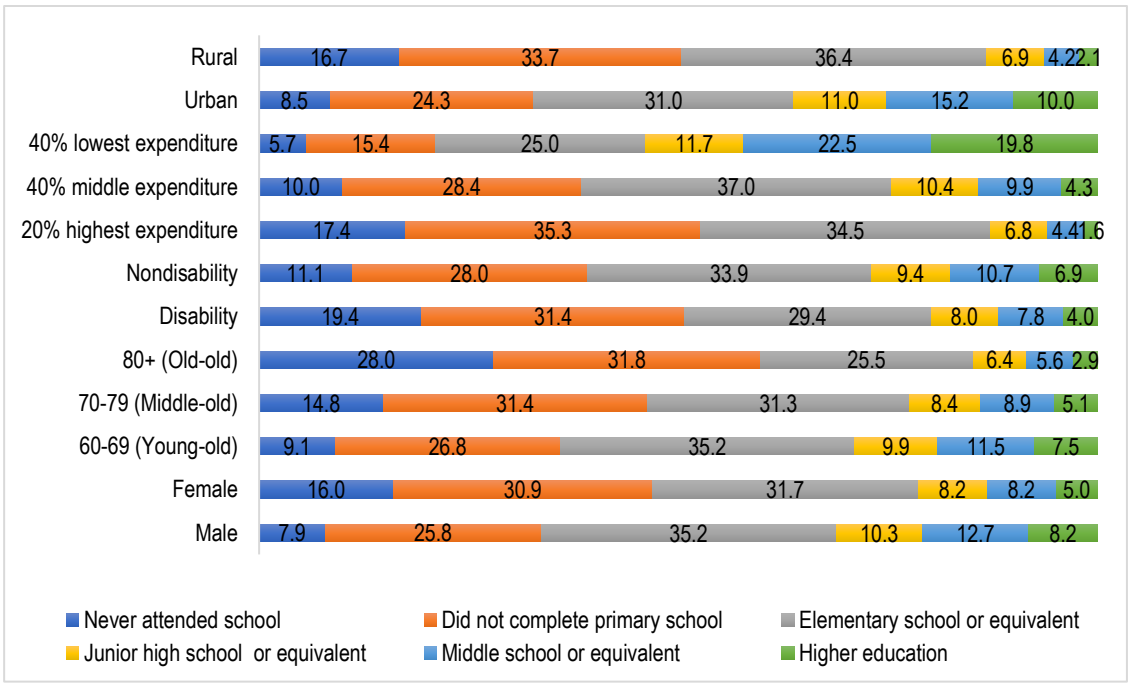


Source: Badan Pusat Statistik (2022), based on 2022 National Socio-Economic Survey data.

2.1.2. Socio-economic Conditions

On average, most older persons have had no schooling except primary school. **Most older persons with low education live in rural areas, belong to the 40% lowest-expenditure households, are disabled, and are female** (Figure 2.6). Older persons' education levels are expected to be higher in the future as trends steadily improved in 2017–2022. The proportion of older persons with low levels of education is decreasing and that of older persons with intermediate education is increasing each year.

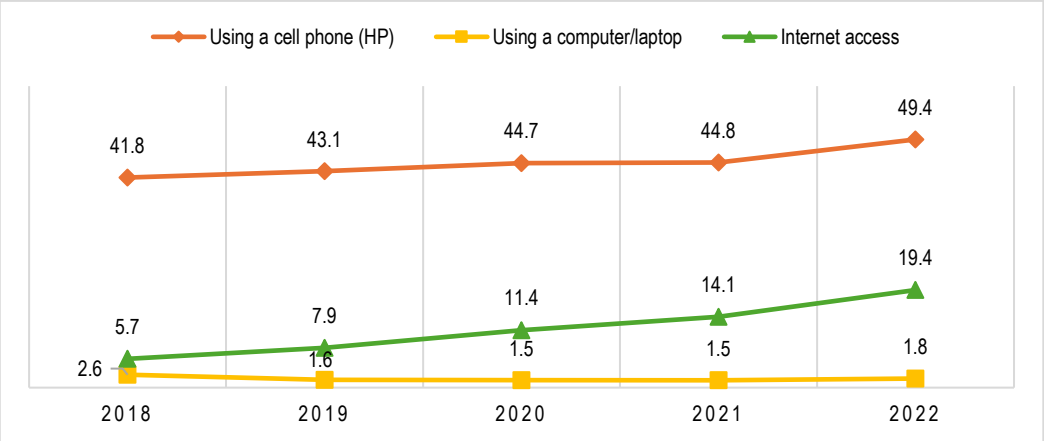
Figure 2.6 Percentage of Older Persons Education Level by Various Characteristics, Indonesia, 2022



Source: Badan Pusat Statistik (2022), based on 2022 National Socio-Economic Survey data.

More than half of older persons used cellular phones in 2022. The use of computers by older persons has been relatively stable since 2018, at less than 2% (Figure 2.7). As older persons increasingly use cellular phones and the internet, internet services must be improved. However, the World Bank (2020) reports that the quality of internet services in Indonesia lags that of other Association of Southeast Asian Nations (ASEAN) countries.

Figure 2.7 Percentage of Older Persons Using Information and Communications Technology (ICT), Indonesia, 2018–2022

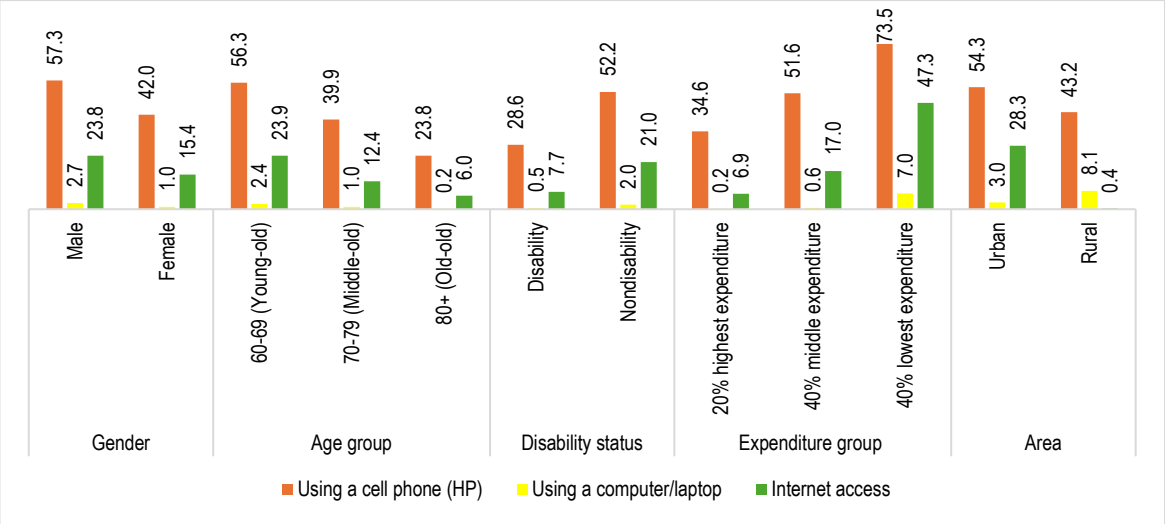


Note: HP = Hand Phone

Source: Badan Pusat Statistik (2022), based on National Socio-Economic Survey data.

Older persons' access to information and communication technology (ICT) – cell phones, computers and laptops, and the internet – **is greater in urban than rural areas**. Older persons with more **access to ICT are older males, 60–69 years, and in the 20% highest-expenditure group**. People with disabilities and special needs are more vulnerable if they do not have access to ICT (Figure 2.8).

Figure 2.8 Percentage of Older Persons Using Information and Communications Technology by Various Characteristics, Indonesia, 2022



Note: HP = Hand Phone

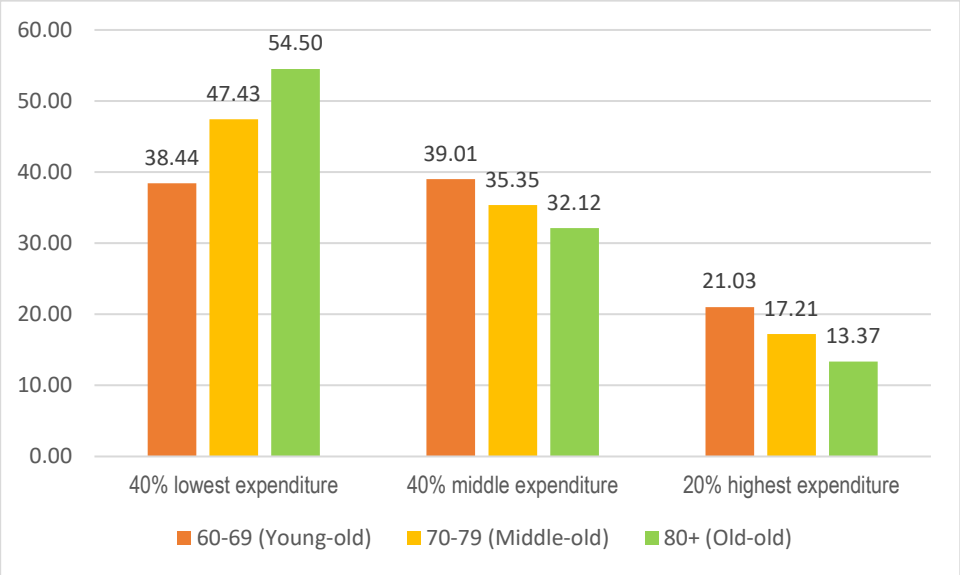
Source: Badan Pusat Statistik (2022) based on 2022 National Socio-Economic Survey data.

Economic Conditions

Older persons' economic conditions consist of per capita household expenditure, the largest source of household financing, the main types of activities, and ownership of habitable housing. Per capita expenditure is all household members' monthly consumption expenditure divided by the number of family members and adjusted to parity in buying capacity (Badan Pusat Statistik [BPS], 2022).

Most older persons (41.1%) are in the 40% lowest-expenditure group and mostly 80 years and above. About 37.0% of older persons in the 40% middle-expenditure group are mostly 60–69 years, whilst those in the 20% highest-expenditure group make up only about 21.7% and are mostly 60–69 years (Figure 2.9). In 2018–2022, per capita expenditure of the 40% lowest-expenditure group steadily decreased, and that of the 20% highest-expenditure group steadily increased.

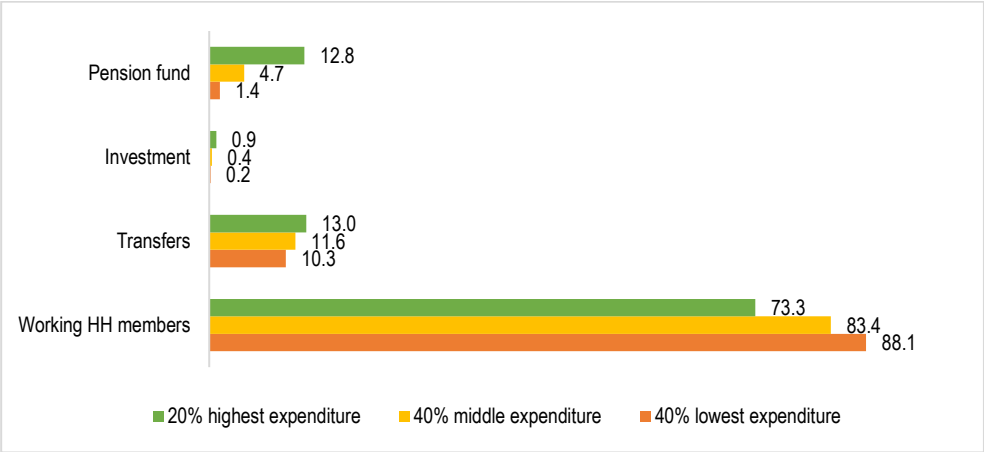
Figure 2.9 Percentage of Older Persons by Per Capita Household Expenditure and Age Group, Indonesia, 2022



Source: Badan Pusat Statistik (2022), based on 2022 National Socio-Economic Survey data.

Household financing is from working household members. In the 40% lowest-expenditure group, household financing is mostly from money and in-kind transfers and pensions. Most older persons are not prepared for retirement and are financially dependent on other household members. The sandwich generation – productive-age members burdened by parents and young children – has been growing. They themselves will have no savings for their own retirement, creating a cycle of dependency on the next generation and giving rise to ageism, including negative perceptions of older persons as burdens on the younger generation.

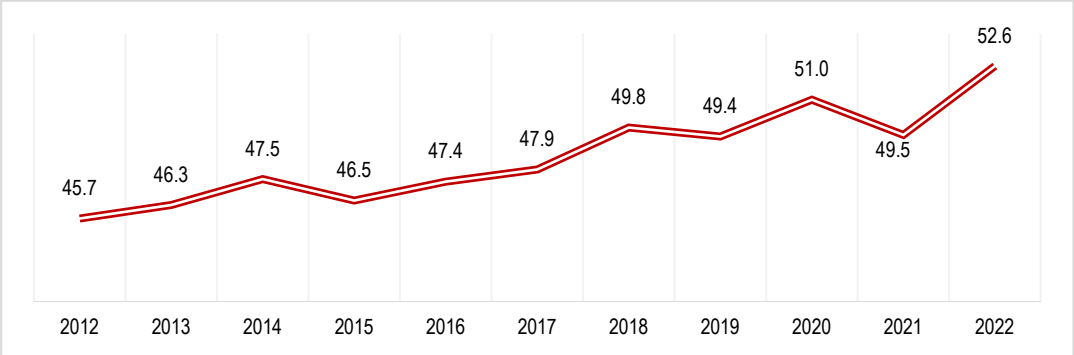
Figure 2.10 Percentage of Older Persons Household by Highest Expenditure Sources, Indonesia, 2022



HH = household
Source: Badan Pusat Statistik (2022), based on 2022 National Socio-Economic Survey data.

Based on NLFS data, **many older persons are still working**. The trend increased in 2012–2022 (Figure 2.11). In 2022, 52.6% of older persons were working and more than half were 60–69 years (Figure 2.12) and mostly in **the informal sector** (86.19%).

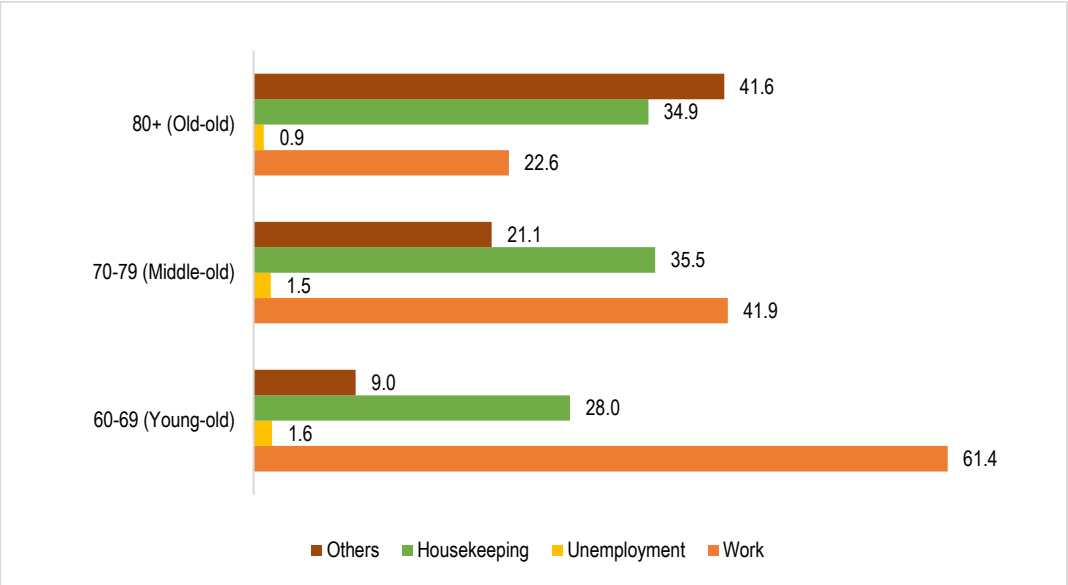
Figure 2.11 Percentage of Working Older Persons, Indonesia, 2012–2022



Source: Badan Pusat Statistik (2021), based on 2012–2022 National Labour Force Survey data.

By main type of activity in the last week (Figure 2.12), besides working, older persons also keep house. However, no data are available on types of housekeeping tasks. **Housekeeping hours are longer than formal work hours but are not considered work**. One household activity is caring for grandchildren.

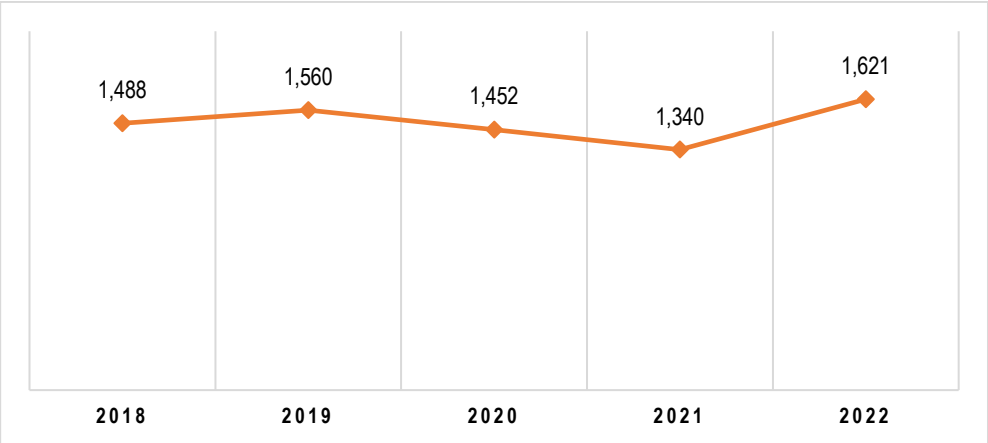
Figure 2.12 Percentage of Older Persons by Type of Main Activity in the Last Week, Indonesia, 2022



Source: Badan Pusat Statistik (2022), based on 2022 National Labour Force Survey data publication.

Even though many older persons are still working, on average **their income is low**. Before the coronavirus disease (COVID-19) pandemic, on average older persons' income increased in 2018–2019. After the pandemic, on average older persons' income decreased to Rp1.3 million (slightly below US$100) and increased again in 2022 to Rp1.6 million (about US$100) (Figure 2.13).

Figure 2.13 Average of Older Persons' Income (in thousands of rupiah), Indonesia, 2016–2022



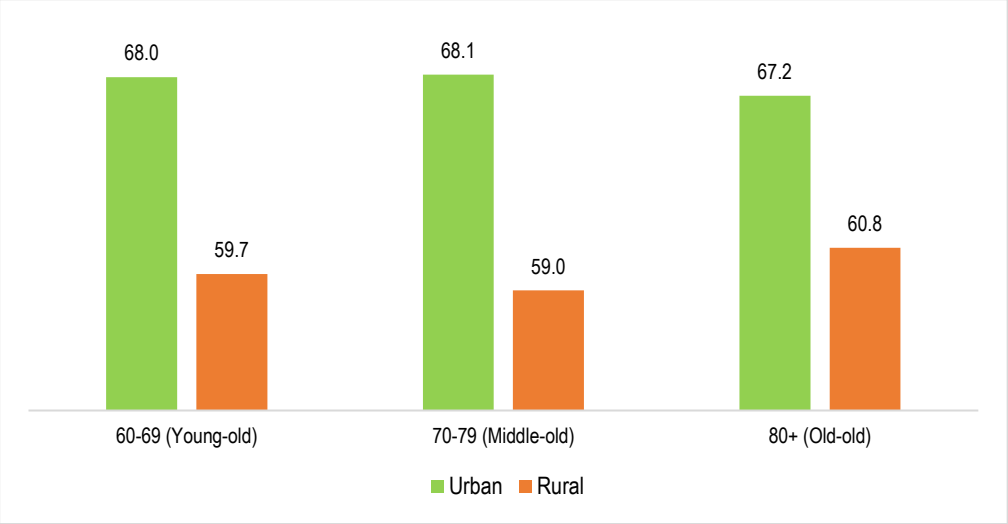
Source: (Badan Pusat Statistik [BPS], 2022) based on 2022 National Socio Economic Survey (NSES) data publication.

Based on 2022 NLFS data, that working older persons were **mostly self-employed** (32.4%), and **30.1% assisted by temporary or unpaid workers**. More than 50% work mainly in **agriculture**, and 32.9% of older persons work in services (Badan Pusat Statistik [BPS], 2022).

The economic conditions of older persons can be seen not only from their employment but also from their housing conditions. Housing is important for older persons. They mostly stay at home and need comfortable, safe, and healthy housing. They are at risk of falls at home. Available data are only on habitable homes fulfilling four criteria based on 2019 BPS criteria:

1) sufficient living space (minimum of 7.2 square metres per capita);
2) having access to clean drinking water;
3) having access to sanitation; and
4) durable housing with roofs of concrete, tile, terrazzo, tin, or wood shingle; walls of bamboo, wire, wood, plank, and wood block; and floors of marble, granite, ceramic, parquet, vinyl, carpet, tile, wood, plank, cement, or red brick.

Figure 2.14 Percentage of Older Persons Living in Habitable Home by Area and Age Group, Indonesia, 2022



Source: (Badan Pusat Statistik [BPS], 2022) based on 2022 NSES data publication.

More than half of older persons live in habitable housing, especially in urban areas (Figure 2.14). Amongst those 80 years and above, some still live in non-habitable housing. Attention must be paid to older persons who live alone, are physically dependent, and have low socio-economic status.

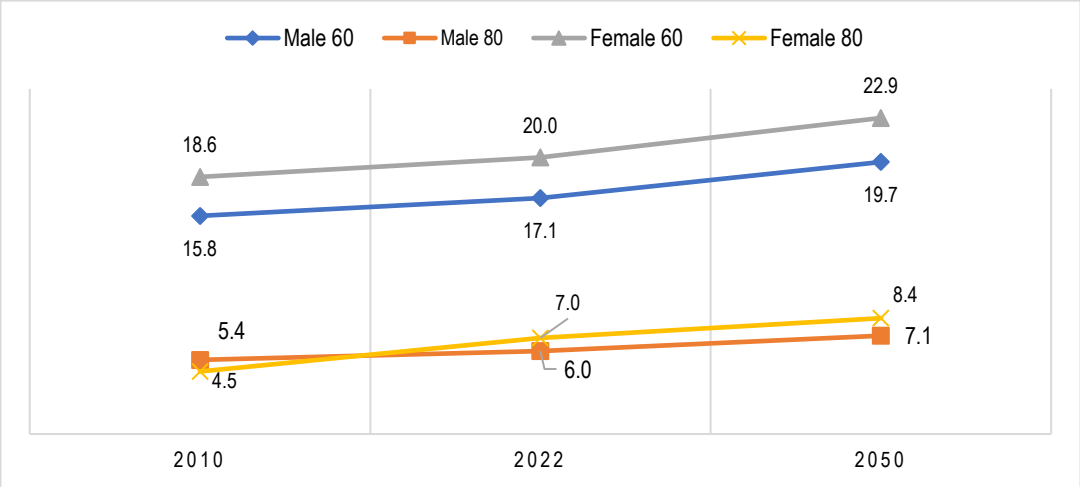
2.1.3. Health Conditions

Good health is physical, mental, spiritual, and social, enabling an individual to be socially and economically productive (Law 36 [2009]). Based on the 2020 Long Form of Population Census, the highest mortality rate occurs in the older persons group: 26.1%.

Among 1,000 older persons, 26–27 people aged 60 years and above die, 10 times that of the 15–59-year age group (2.64) (Badan Pusat Statistik [BPS], 2020b).

Although the life expectancy of older persons has increased, their health needs attention. Females generally have a **higher life expectancy than males**. Females 60 years or above are projected to live 22.89 years longer by 2050. Life expectancy is lower for those 80 years and above; females in this age group will live 8.39 years longer by 2050.

Figure 2.15 Life Expectancy of Aged 60 and 80 (Years) by Gender, Indonesia, 2010, 2022, and 2050



Source: (Saito, and Cicih, 2022).

The gap between life expectancy and healthy life expectancy of older persons in 2019 was about 4.6 years (World Health Organization [WHO], 2019a). The gap for older females was about 5.1 years and for older males about 4.1 year, showing that **older females may live longer but are unhealthy longer than older males**.

Disability-free life expectancy (DFLE) is commonly used to measure population health (Saito, Robine, and Crimmins, 2014). In the National Study on year 2022, Saito used a 2019 United Nations life table to calculate DFLE by gender and age group (Table 2.1). In 2010, DFLE of those in the 60 years group was estimated at 11.9 years (males) and 13.0 years (females). DFLE is projected to be lower in 2050 than in 2010 for males and females aged 60 or 80 years and above (Saito and Cicih, 2022).

Table 2.1 Life Expectancy and Disability-free Life Expectancy (Years), Aged 60 and 80 Years by Gender, Indonesia, Years 2010, 2022, and 2050

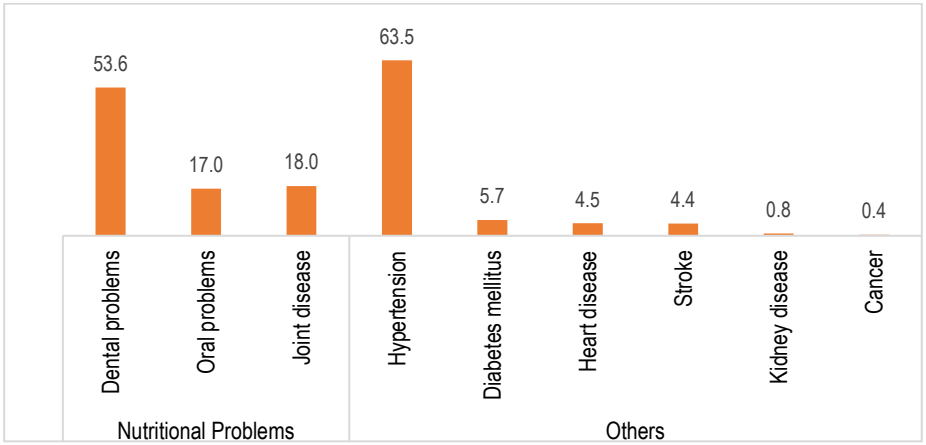
Gender	Year	Age	Life Expectancy	Disability-free Life Expectancy	Life Expectancy with Functional Difficulty		% Disability-free Life Expectancy
					At Least 1 Difficulty	At Least 1 Severe Difficulty	
Male	2010	60	15.8	11.9	3.2	0.7	75.4
		80	5.4	2.8	1.9	0.7	52.5
	2022	60	17.1	7.7	7.0	2.4	44.9
		80	6.0	1.3	2.8	2.0	21.0
	2050	60	19.7	8.5	8.2	3.1	42.9
		80	7.1	1.4	3.4	2.3	19.6
Female	2010	60	18.6	13.0	4.5	1.1	69.6
		80	4.5	3.0	2.4	1.0	46.7
	2022	60	20.0	6.7	6.7	4.1	33.5
		80	7.0	0.8	0.8	2.7	11.9
	2050	60	22.9	7.3	7.3	5.2	31.8
		80	8.4	1.0	1.0	3.6	12.1

Source: Saito and Cicih (2022).

In general, older persons experience physical and mental decline. They suffer diseases that are multi-pathological, chronic with severe dependency, and require long-term care (LTC). Older persons' health deteriorated during the COVID-19 pandemic. The COVID-19 national study on older persons found that their self-perception of their health status was lower than before COVID-19. Low health status was found in older persons who have low education, are unmarried, and live in the districts (Saito and Cicih, 2022).

Based on 2018 Basic Health Research (Riset Kesehatan Dasar [RISKESDAS]) data from Kementerian Kesehatan (Ministry of Health), diseases of older persons are generally **non-communicable and degenerative, such as heart disease, diabetes mellitus, stroke, rheumatism, and trauma** (Figure 2.16) (Kementerian Kesehatan, 2018). The results of Indonesian Family Life Surveys (IFLS) 3, 4, and 5 showed that older persons suffer the highest rates of hypertension (Kristanti, and Prihartono, 2019); one-half of older persons have it (Kementerian Kesehatan, 2018). Hypertension history was related to the decrease in cognitive capacity (Pengpid et al., 2019). Nutritional problems and oral disease are not properly managed, impacting older persons' nutrition status.

Figure 2.16 Percentage of Older Persons by Non-communicable Diseases, Indonesia, 2018



Source: Kementerian Kesehatan (2018), based on 2018 Basic Health Research data.

Older persons in Yogyakarta, West Java, and Bali have a high prevalence of non-communicable diseases (NCDs). Papua, with the lowest proportion of older population in Indonesia, has a lower prevalence of NCDs than the other four provinces but the highest of joint disease (Table 2.2).

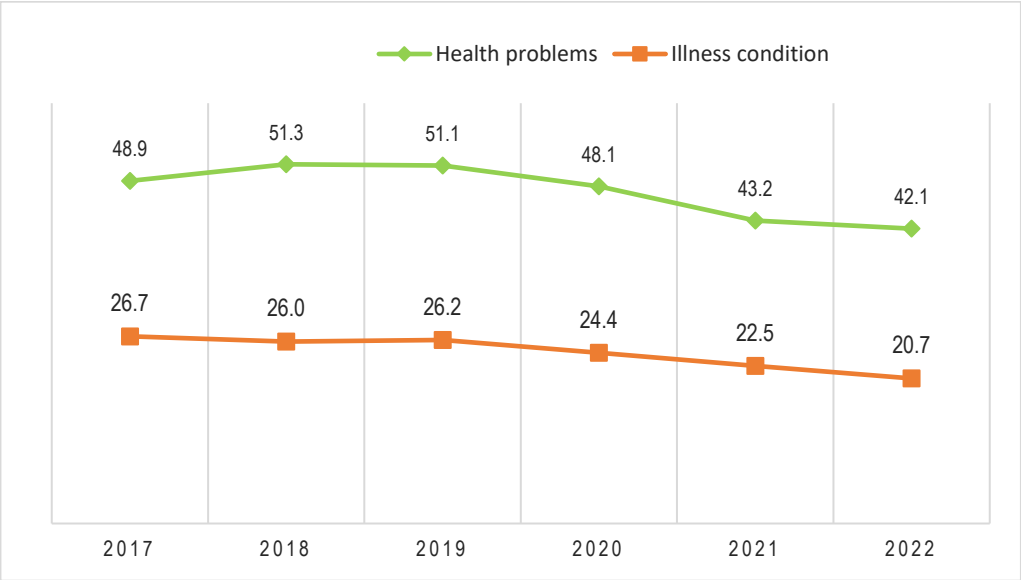
Table 2.2 Prevalence of Non-communicable Diseases Based on Physicians' Diagnoses in Selected Provinces, Indonesia, Year 2018

Province	Cancer	Stroke	Chronic Kidney Disease	Joint Disease	Heart disease	Diabetes Mellitus	Hypertension
West Java*	1.4	11.4	0.5	8.9	1.6	1.3	9.7
Yogyakarta*	4.9	14.6	0.4	5.9	2.0	2.4	10.7
Bali*	2.3	10.7	0.4	10.5	1.3	1.3	9.6
Central Sulawesi	2.2	10.4	0.5	7.7	1.9	1.5	8.7
Papua	1.6	4.1	0.4	10.4	0.9	0.8	4.4
Indonesia	**1.8**	**10.9**	**0.4**	**7.3**	**1.5**	**1.5**	**8.4**

*Proportion older persons >10%. Prevalence in %.
Source: Kementerian Kesehatan (2018), based on 2018 Basic Health Research data.

The physiological and cognitive functions of older persons generally decline, making them highly vulnerable to various health problems (Yong., Saito, and Chan, 2010). Based on 2017–2022 NSES data, older persons' health complaints increased in 2017–2018, then decreased in 2022 (42.1%) (Badan Pusat Statistik [BPS], 2017, 2018, 2019, 2020a, 2021, 2022). A similar pattern occurred in morbidity (health complaints by older persons that affect daily activities as defined by BPS in 2016). The morbidity rate in 2022 was 20.7% (Figure 2.17).

Figure 2.17 Percentage of Older Persons by Health Complaints and Morbidity Rate, Indonesia, Years 2017–2022

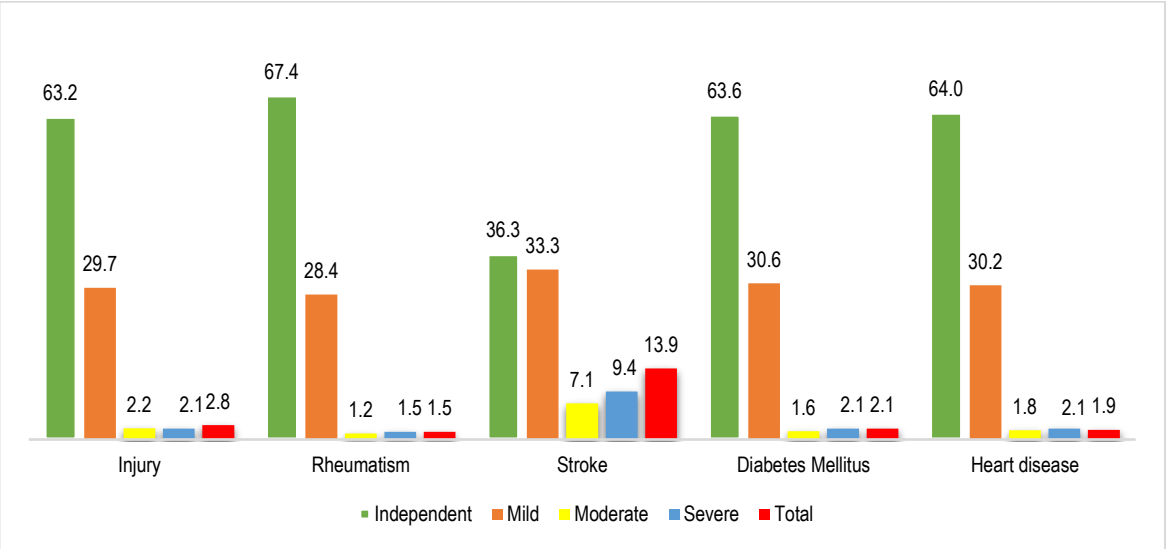


Source: (Badan Pusat Statistik [BPS], 2017, 2018, 2019, 2020a, 2021, 2022) based on National Socio Economic Survey (NSES) data.

The percentage of **older persons with health complaints in the last month occurred more in rural areas** (45.8%) than in urban areas (39.2%) in 2022. Health complaints were more common amongst older persons with a **disability** (52.9%), who were **80 years and above** (44.7%), and who were **female** (42.82%) (Badan Pusat Statistik [BPS], 2022). IFLS data analysis showed that **disease symptoms were more severe in older females, widows, and those with no or only a primary education, and a low income** (Yiengprugsawan et al., 2020).

Based on Basic Health Research data, older persons' dependency levels were total (1.6%), severe (1.0%), moderate (1.1%), light (22.0%), and independent (74.3%). Although older persons with total and severe dependency make up a small share of the total, they need attention because they require caregivers and care financing (Kementerian Kesehatan, 2018). Although older persons with total and severe dependency make up a small share of the total, they need attention because they require caregivers and care financing. Of all older persons, 13.9% are totally dependent because they had had a stroke (Figure 2.18).

Figure 2.18 Percentage of Older Persons by Dependency Level and Diseases, Indonesia, 2018

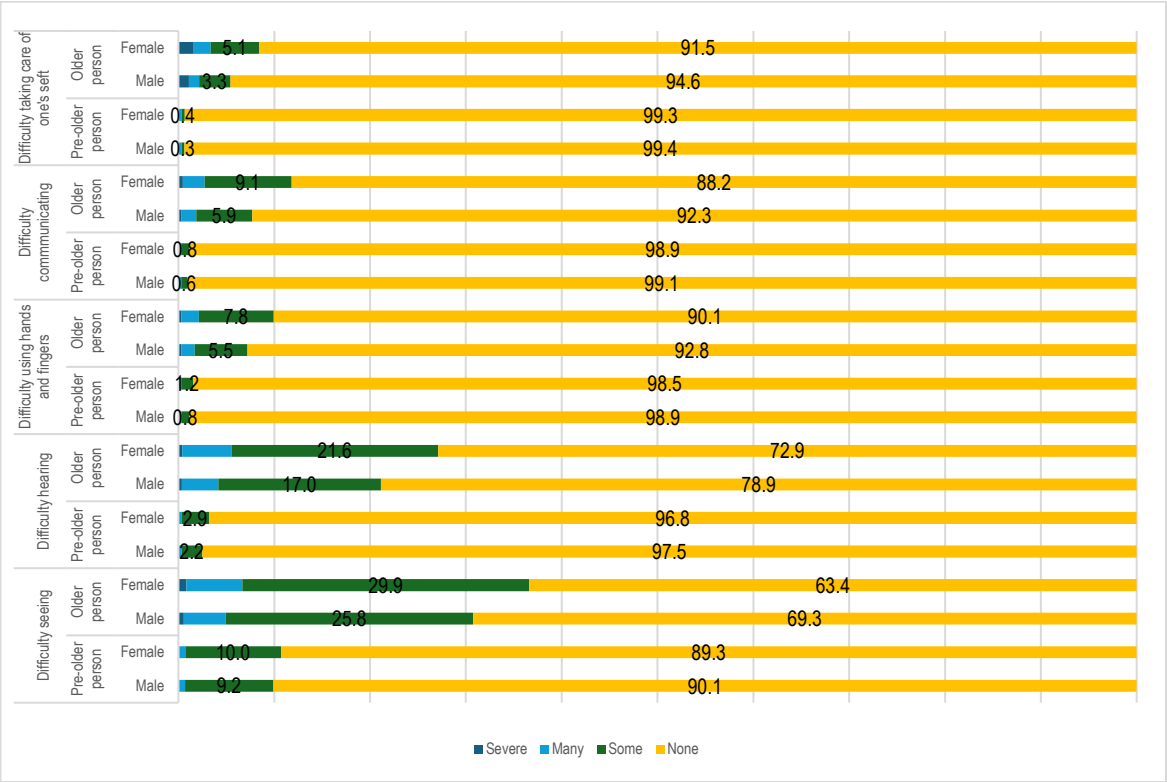


Source: (Kementerian Kesehatan, 2018) based on 2018 Basic Health Research data

BPS Indonesia adopted the Convention on the Rights of Persons with Disabilities in 2007 in New York, United States. Persons with disabilities are those who have long-term physical, mental, intellectual, or sensory limitations, and who, in interacting with the environment, can encounter obstacles that make it difficult to participate in society fully and effectively. Disability data available are on functional disorders as determined by a set of questions from the Washington Group.

Based on the 2020 Long Form Indonesian Population Census data, **older persons are an age group with high prevalence of disability, namely 6.3% of the total population age 5 years and above** (Badan Pusat Statistik [BPS], 2020b). The 2022 NSES data show that older persons with disabilities make up 12% of the total 60+ population, with the highest prevalence in the 80+ group (Badan Pusat Statistik [BPS], 2022). The 2015 Inter-Census Population Survey (Survei Penduduk Antar Sensus [SUPAS]) data show that the percentage of female older persons with vision and hearing difficulties is greater than that of males. The percentage of vision difficulty (severe, many, and some) was 36.6% for females and 30.7% for males. For hearing difficulties (severe, many, and some), the percentage for females was 27.1%, and for males 21.1% (Figure 2.19).

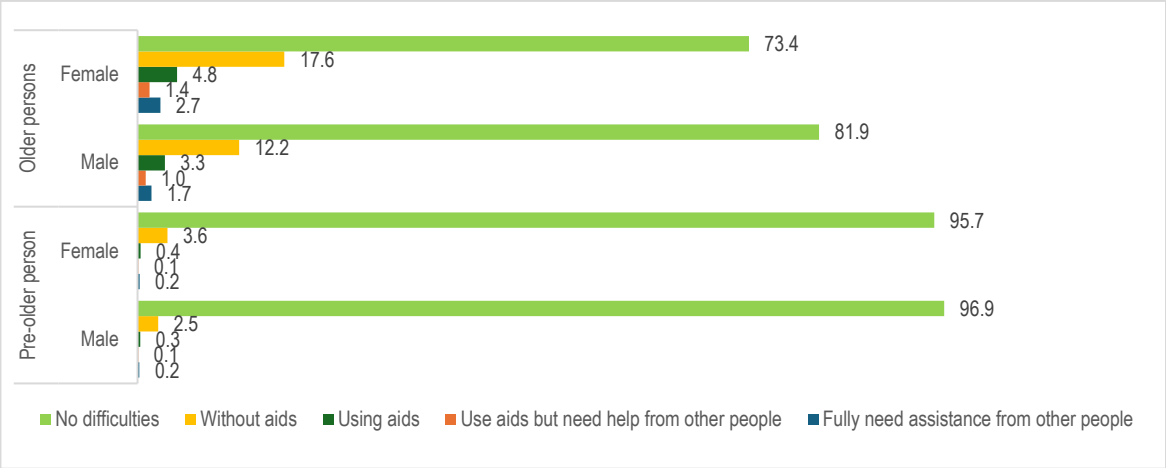
Figure 2.19 Percentage of Pre-Older Persons and Older Persons by Functional Disorder and Gender, Indonesia, 2015



Source: Badan Pusat Statistik [BPS] (2015a), based on the 2015 Inter-Census Population Survey.

Vision and hearing impairment of older persons will impact their need for assistive instruments (eyeglasses and hearing aids). Assistive instruments are also needed by older persons having difficulty walking and climbing stairs or unable to perform self-care. More older females use assistive instruments and/or help from other people than older males (Figure 2.20). Amongst pre-older persons, more females than males use assistive instruments and receive assistance from other persons. Pre-older and older persons needing assistance require attention because they are dependent on caregivers.

Figure 2.20 Percentage of Pre-older Persons and Older Persons by Difficulty Level in Walking or Stair Climbing and Gender, Indonesia, 2015

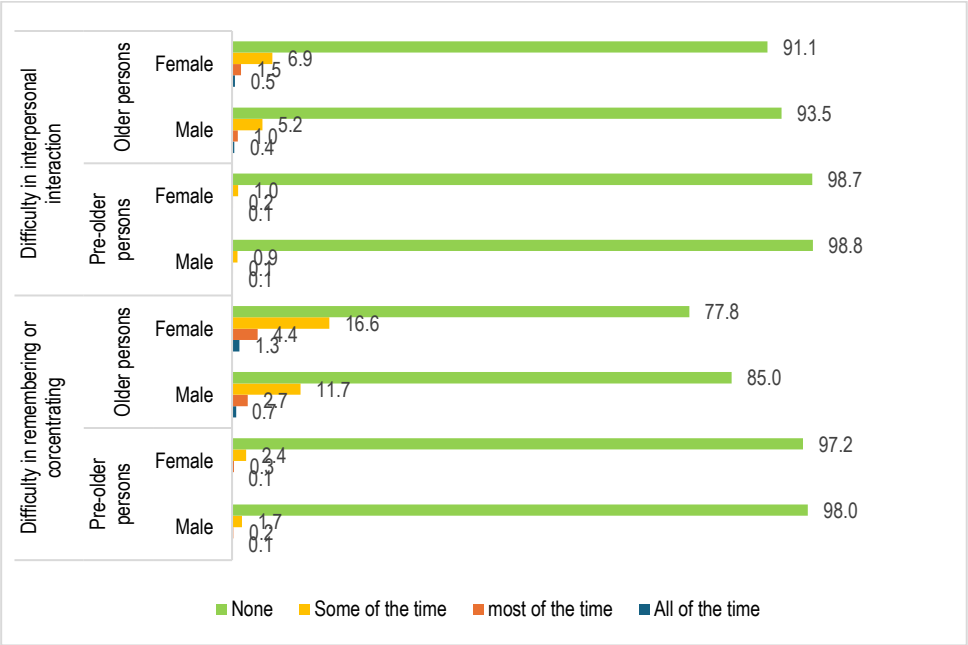


Source: (Badan Pusat Statistik [BPS], 2015) based on 2015 Inter-Census Population Survey

Difficulty remembering is a condition where an individual has trouble recalling recent things and/or events. Difficulty concentrating is a situation where an individual has trouble focusing on executing tasks (Badan Pusat Statistik [BPS], 2015). The 2015 Inter-Census Population Survey found that **pre-older persons and older females have more difficulty than males remembering and concentrating**. Of those who have difficulty remembering and concentrating or do not remember at all, 22.3% are older persons and 2.9% pre-older persons. More females (pre-older and older) (8.8%) than males (6.5%) face other problems related to behaviour and emotion (Figure 2.21).

Based on 2018 Basic Health Research (Riset Kesehatan Dasar [RISKESDAS]), of older persons, 12.8% **experience mental emotional disorders** (WHO Self-reporting Questionnaire–20), and 7.7% **depression** (Mini International Neuropsychiatric Interview) (Kementerian Kesehatan, 2018). National survey results show that **the prevalence of depression in older females is slightly higher** (7.2%) than that of males (6.7%). The answers to Geriatric Depression Scale version 14 questions show that the older the age group, the higher the prevalence rate of depression. Amongst those aged 80 years and above, the prevalence rate is 17.7% (Saito, and Cicih, 2022).

Figure 2.21 Percentage of Pre-older and Older Persons by Psychosocial Disorder and Gender, Indonesia, 2015



Source: Badan Pusat Statistik (2015), based on the 2015 Inter-Census Population Survey.

Health Behaviour

Older persons' health conditions are related to healthy lifestyle behaviours across lifespans (Peltzer and Pengpid, 2019) observed that smoking and an unhealthy diet (inadequate fruit and vegetable consumption and fast-food consumption, as well as frequent soft-drink consumption) are related to health complaints. The 2007 and 2014 IFLS data showed a positive relationship between body mass index and hypertension (Mahiroh et al., 2019). Results from 10 districts and cities in five provinces found that older persons suffered mainly from hypertension.

Population nutrition status in five selected provinces included obesity (Table 2.3). More than 30% of respondents in West Java and Central Sulawesi smoked. Smoking and obesity are risk factors for hypertension (Hanafi, and Prihartono, 2018).

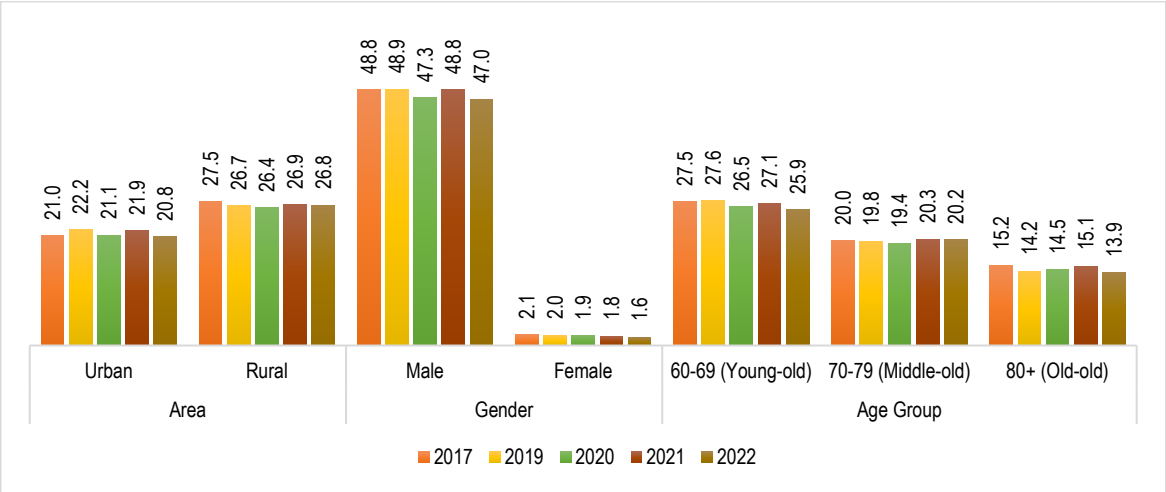
Table 2.3 Prevalence of Smoking and Obesity in Five Selected Provinces, Indonesia, 2018

Province	Smoking	Central Obesity
West Java*	32.0	32.0
Yogyakarta*	23.9	32.0
Bali*	23.5	36.9
Central Sulawesi	31.3	32.9
Papua	25.5	31.7
Indonesia	28.9	31.0

* Older population >10%. Prevalence in %
Source: Kementerian Kesehatan (2018), based on 2018 Basic Health Research data.

Figure 2.22 shows that older persons still smoke, mostly in rural areas, and that they are male and aged 60–69 years, based on 2017- 2022 data; 2018 data are not available. Older persons' tobacco consumption was greater in 2022 than in 2021 by living arrangement, gender, and age group. Even though the percentage of older female smokers is smaller than that of males, attention must be paid to non-smokers' exposure to smoke. The proportion of passive smokers was calculated using NSES 2021 data. The survey found that **48.84% of older females were passive smokers, assuming their living arrangement and exposure to smoke from active smokers in the household.**

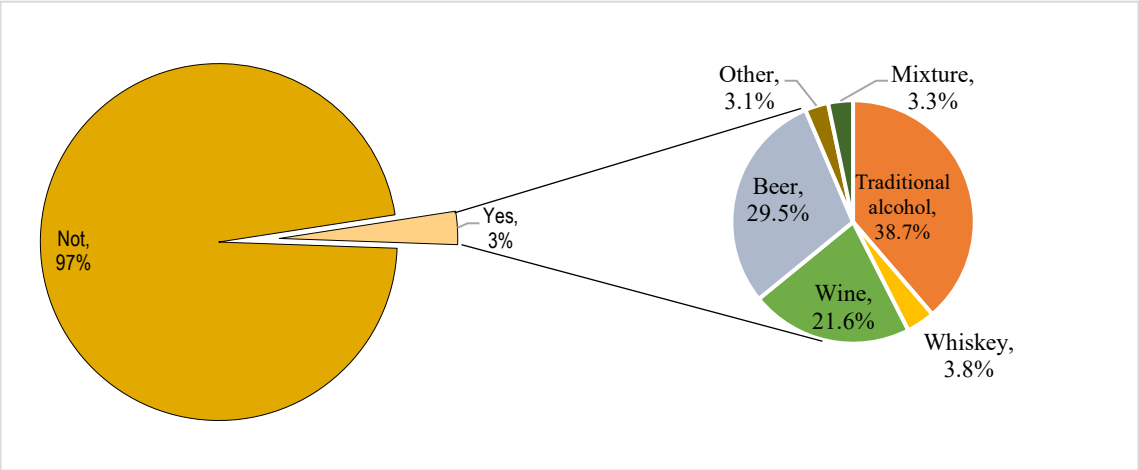
Figure 2.22 Percentage of Older-Person Smokers by Area, Gender, and Age Group, Indonesia, 2017–2022



Source: Badan Pusat Statistik (BPS) (2022), based on 2022 National Socio Economic Survey (NSES) data.

Alcohol consumption also impairs health; it was prevalent amongst 3% of older persons based on 2018 data from Prevention and Control of Non-Communicable Diseases [Pencegahan dan Pengendalian Penyakit Tidak Menular], Ministry of Health (P2PTM Kemenkes RI, 2018). While low, the proportion still requires attention prevalence is underreported. The prevalence of alcohol consumption is high in Central Sulawesi (16%), East Nusa Tenggara (15.6%), Bali (14%), Gorontalo (11.3%), and Maluku (11.1%) based on the 2018 Basic Health Research [Riset Kesehatan Dasar] (Kementerian Kesehatan, 2018).

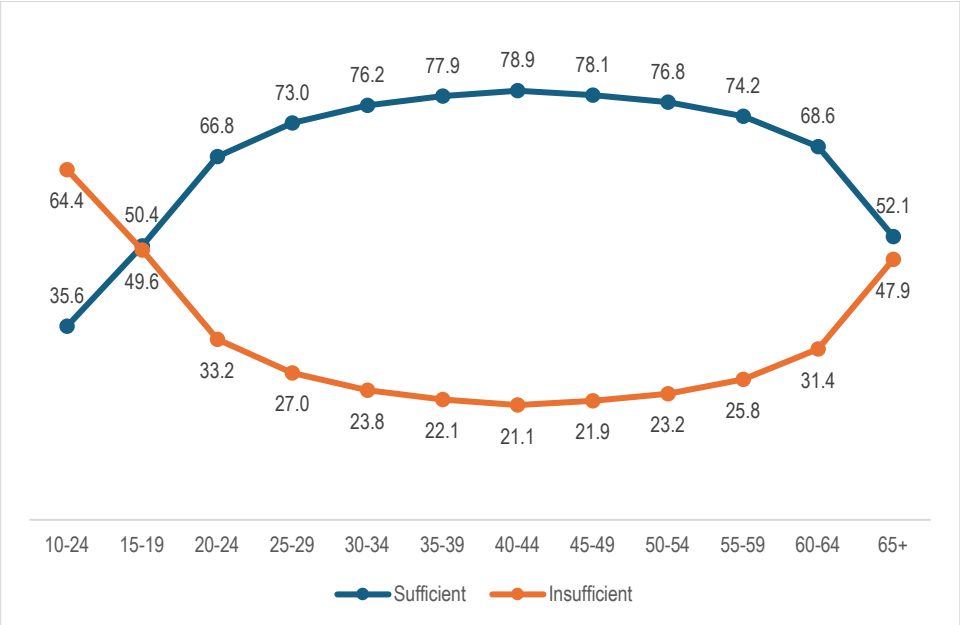
Figure 2.23 Percentage of Population 10 Years and Above by Type of Alcohol Consumption, Indonesia, 2018



Source: Kementerian Kesehatan (2018), based on 2018 Basic Health Research data.

Physical activity requires attention because the lack of it is related to obesity (Isaura et al., 2018). As people age, their general physical activity decreases. Pre-older persons (45 years) start lessening moderate[1] and vigorous[2] activity (Figure 2.24) but older persons start doing more light physical activity. Those who **engage in light physical activity are mostly female, with junior high school education, work in agriculture, and live in rural areas.**

Figure 2.24 Percentage of Physical Activity by Age Group, Indonesia, Year 2018



Source: Kementerian Kesehatan (2018), based on 2018 Basic Health Research data.

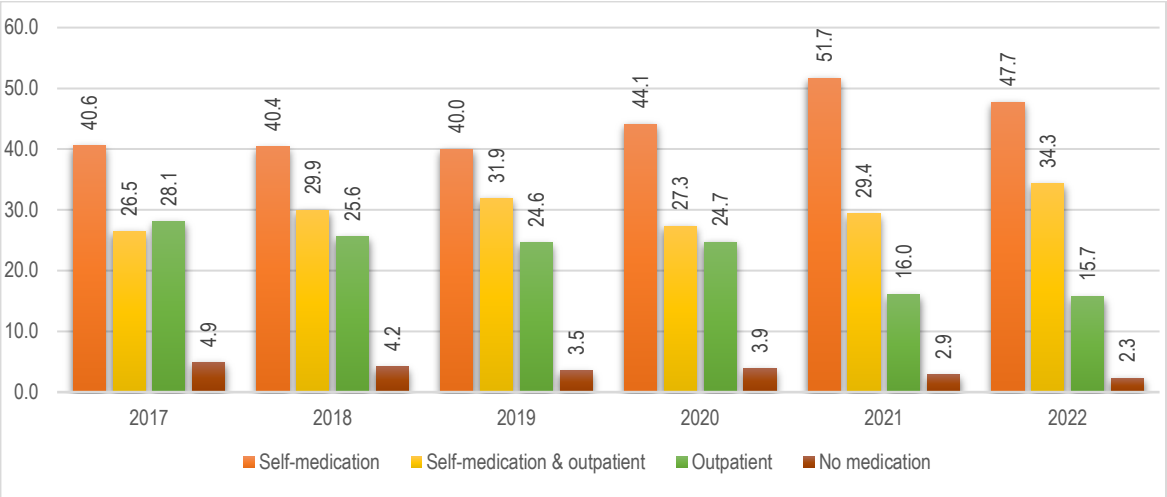
[1] Moderate physical activity is that carried out for > 5 days a week with an average duration of > 150 minutes a week (or > 30 minutes per day).

[2] Vigorous physical activity is that carried out for > 3 days per week and > 1,500 metabolic equivalent task (MET) minutes per week (MET/minute value of vigorous physical activity = 8).

Health Seeking

In 2017–2021, the number of **older persons who only self-medicated increased, and out-patient care decreased, especially in 2020–2021** (Figure 2.25). The reason is that older persons are vulnerable, with comorbidities, and exposure to COVID-19 could be fatal. In isolation during the pandemic, they were not, therefore, able to seek medical care in health facilities. In 2021–2022, the proportion of older persons who only self-medicated decreased. But there has been an increase in older persons who combine self-medication and outpatient treatment.

Figure 2.25 Percentage of Older Persons by Seeking Health Services in the Last Month, Indonesia, 2017–2022

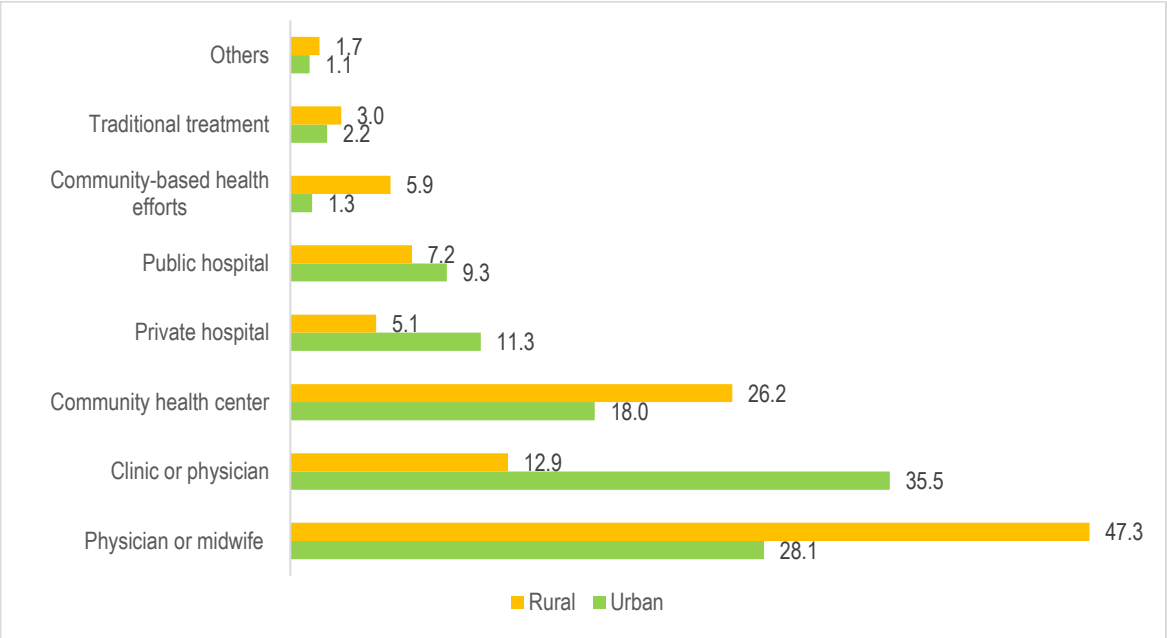


Source: Badan Pusat Statistik (BPS) (2017, 2018, 2019, 2020a, 2021, 2022), based on National Socio Economic Survey(NSES) data.

Outpatient and Inpatient Care

Older persons seeking inpatient care mainly visit clinics and physicians (in urban areas) and physicians and midwives (in rural areas). In rural areas, health centres make up a smaller portion of health services than physician and midwife practice, generally because they do not live up to older persons' expectations. Community-based health efforts (*upaya kesehatan berbasis masyarakat* are used more by older persons in villages than in urban areas because they are easier to access.

Figure 2.26 Percentage of Older Persons' Outpatient by Health Facilities and Area, Indonesia, 2021

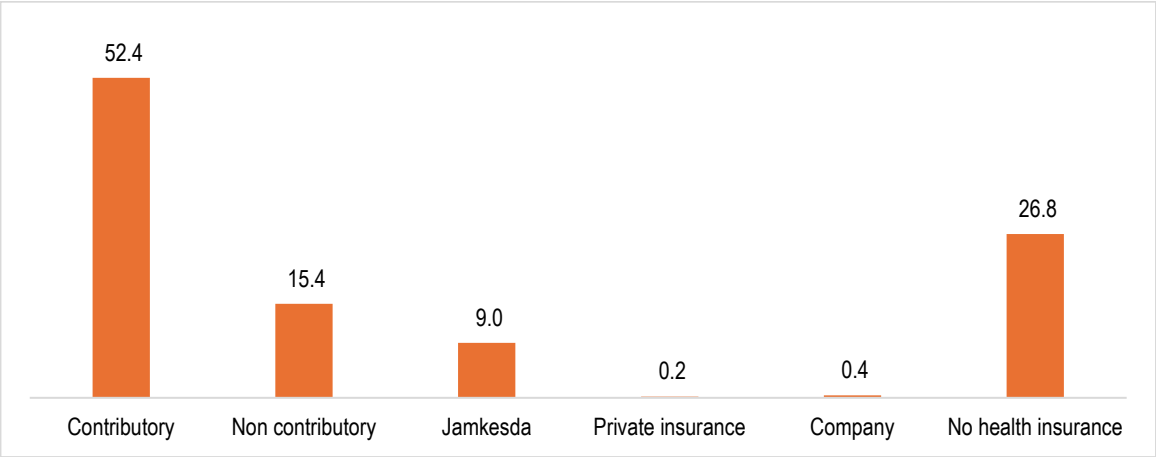


Source: Badan Pusat Statistik (BPS) (2021), based on 2021 National Socio Economic Survey (NSES) data.

Of older persons seeking outpatient care from clinics or joint physician practice, 30.0% are from the 20% highest-expenditure households. Older persons from the 40% middle- and 40% lowest-expenditure households generally seek outpatient care from physicians and midwives.

The 2021 NSES was analysed to determine the percentage of older persons self-medicating and not seeking medication based on health insurance ownership. Amongst older persons with health insurance, those who self-medicate and do not seek medication mostly use contribution assistance (*penerima bantuan luran*); 26.8% of older persons still do not have health insurance. Attention should be paid to older persons using contribution assistance of the Social Security Administrator for Health [Badan Penyelenggara Jaminan Sosial]) (BPJS Health) programme but not using these health facilities (Figure 2.27).

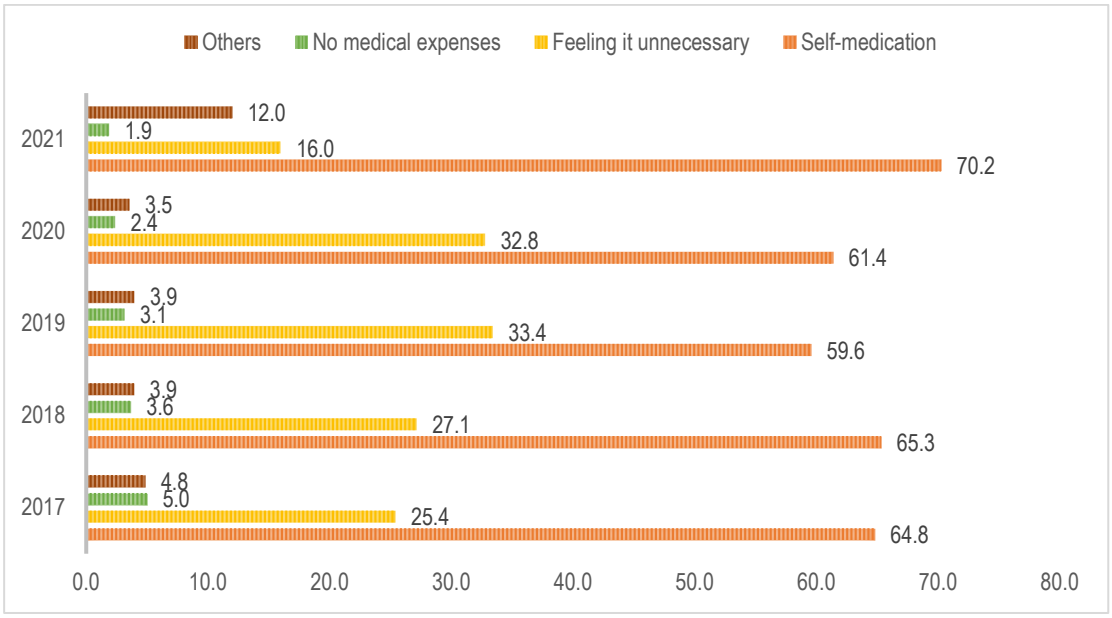
Figure 2.27 Percentage of Older Persons Self-medicating and not Visiting Health Facilities by Health Insurance Ownership, Indonesia, 2021



Note: Jamkesda = *jaminan kesehatan daerah* (regional health insurance).
Source: Author, based on 2021 National Socio Economic Survey (NSES) raw data.

Older persons do not use health facilities for outpatient care because they self-medicate, do not require medical assistance, or have budget constraints. The trend of older persons self-medicating increased in 2019–2022 (Figure 2.28). Budget constraints decreased in 2017–2022, probably because BPJS Health insurance is available.

Figure 2.28 Percentage of Older Persons by Main Reason for not Using Outpatient Services, Indonesia, 2017–2022

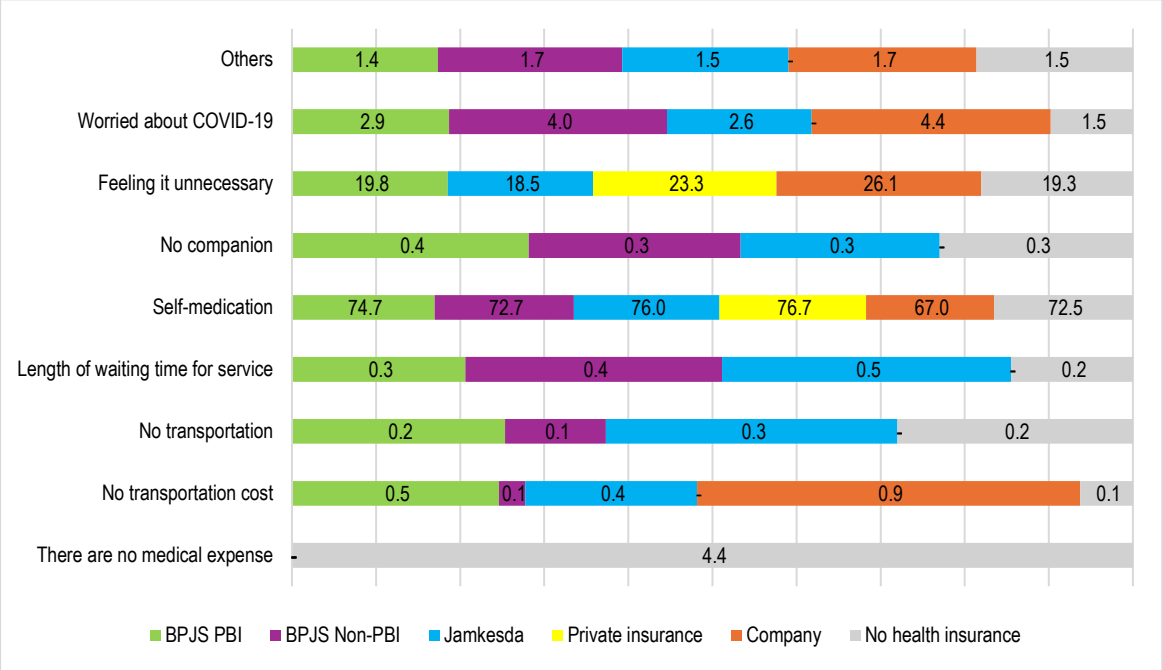


Source: Badan Pusat Statistik (BPS) (2017, 2018, 2019, 2020a, 2021, 2022), based on National Socio Economic Survey (NSES) data.

Factors related to outpatient care of older persons encompass health insurance ownership, economic status, region, health self-perception, and chronic conditions (Madyaningrum et al., 2018). Chronic conditions, related to decreasing body function, are the main predictors of use of health services by older persons.

Health insurance ownership can help older persons access outpatient care. Only older persons who do not have health insurance have difficulty affording outpatient healthcare (Figure 2.29). However, the main factors for older persons not using health facilities are that they self-medicate or argue that they do not need treatment or medication.

Figure 2.29 Percentage of Older Persons by Main Reasons for not Using Outpatient Services, and Health Insurance Ownership, Indonesia, 2022



BPJS PBI = Badan Penyelenggara Jaminan Sosial Penerima Bantuan Iuran (Social Health Insurance Administration Body for Contribution Assistance Recipients, Jamkesda = *jaminan kesehatan daerah* (regional health insurance).
Source: Author, based on 2022 National Socio Economic Survey (NSES) raw data.

The percentage of older persons seeking outpatient care is lowest in Central Sulawesi even though health complaints and morbidity are higher there than in the four other provinces (Badan Pusat Statistik [BPS], 2021). Field data collection found that older persons do not seek medication at health facilities because of limited access (distance, transport) or because they are not willing to do so. They go to health facilities if they are forced to or need surgery.

Table 2.4 Percentage of Older Persons' Health Complaints and Morbidity Rate in Five Selected Provinces, Indonesia, 2021

Province	Having Health Problems	Having Illness	Older Persons	Sought Outpatient Treatment
West Java*	46.3	23.4	10.2	44.3
Yogyakarta*	42.7	18.4	15.6	51.4
Bali*	32.8	20.3	12.7	66.8
Central Sulawesi	48.3	27.3	9.0	39.8
Papua	27.4	16.6	5.4	49.5
Indonesia	43.2	22.5	10.8	45.4

* Older population >10%.
Source: Badan Pusat Statistik (BPS) (2021), based on 2021 National Socio Economic Survey (NSES) data.

Older persons self-medicate minor health complaints by consuming traditional or herbal medication or over-the-counter drugs. The reason could be that they see some illnesses as needing medication in a health facility or and some as common 'diseases of the older persons' that can be self-medicated or generally do not require treatment.

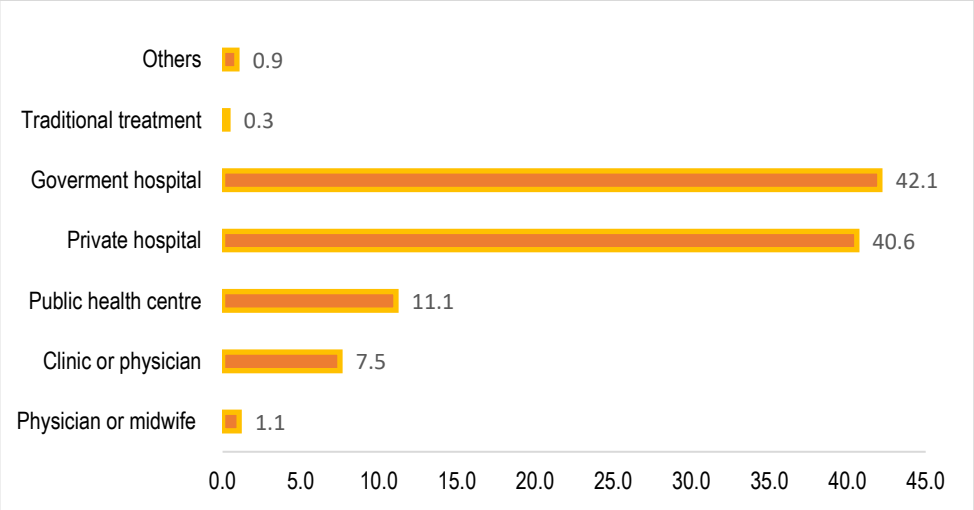
In West Java, where complaints and morbidity rates are higher than in Yogyakarta, the percentage of older persons seeking outpatient care is lower. Older persons in Central Sulawesi do not seek medication because of their limited budget. Key informants in Bekasi city said they must wait to collect money from the sale of chickens or ducks because they wish to visit private clinics or physicians and not health centres, which they find unsatisfactory. A key informant in Yogyakarta said some older persons have no one to accompany them to health centres.

A key informant in Denpasar city stated that they did not go to the health centres and only bought medication at the dispensary, especially during the COVID-19 pandemic. Informants in Gianyar district stated that they did not want to check their health because they were afraid of the results. They also said that older persons must accept their condition, surrender to God, and wait to die. Some older persons do not go to health facilities because they are bedridden or have difficulty moving.

Older persons with chronic conditions tend to be hospitalised in government or private facilities. Older beneficiaries of BPJS Health are generally hospitalised based on

referrals from BPJS Health partners. **Referrals by primary healthcare facilities sometimes result in inpatient quota problems at type C[3] and D[4] health facilities.**

Figure 2.30 Percentage of Older-Person Inpatients Last Year by Health Facilities, Indonesia, 2022



Source: Badan Pusat Statistik (BPS) (2022), based on 2022 National Socio Economic Survey (NSES) data.

2.1.4. Social Protection

Having health insurance such as BPJS Health can significantly impact the use of health services (Madyaningrum et al., 2018). Health insurance ownership generally increases as people age (Astari, and Kismiantini, 2019).

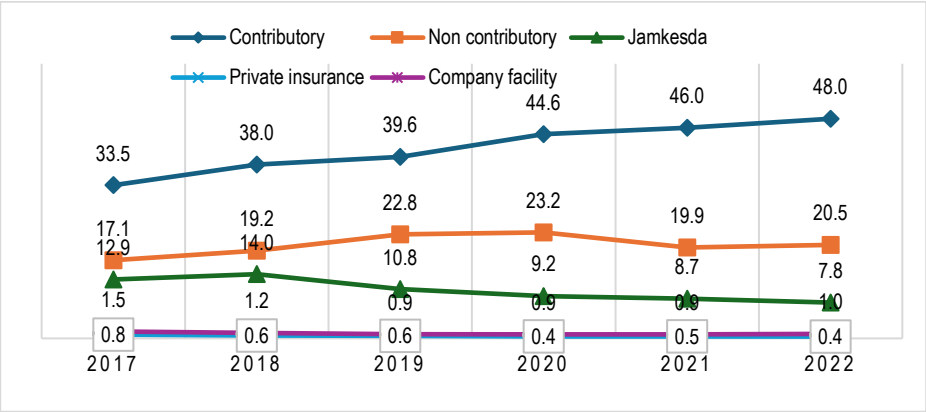
Health Insurance

Most older persons **receive contribution assistance** and their percentage increased in 2017–2022. However, the number of older persons who do not receive contribution assistance decreased in 2021 and the use of regional health insurance *(jaminan kesehatan daerah)* has decreased since 2019 (Figure 2.31). These declines, especially amongst older persons of low socio-economic status, need attention.

[3] Type C hospitals are those able to provide limited subspecialty medical services. The hospitals are found in cities or districts as level-2 health facilities that accommodate referrals to level-1 health facilities.

[4] Type D general hospitals are those that have facilities and medical service capabilities for at least two basic specialists.

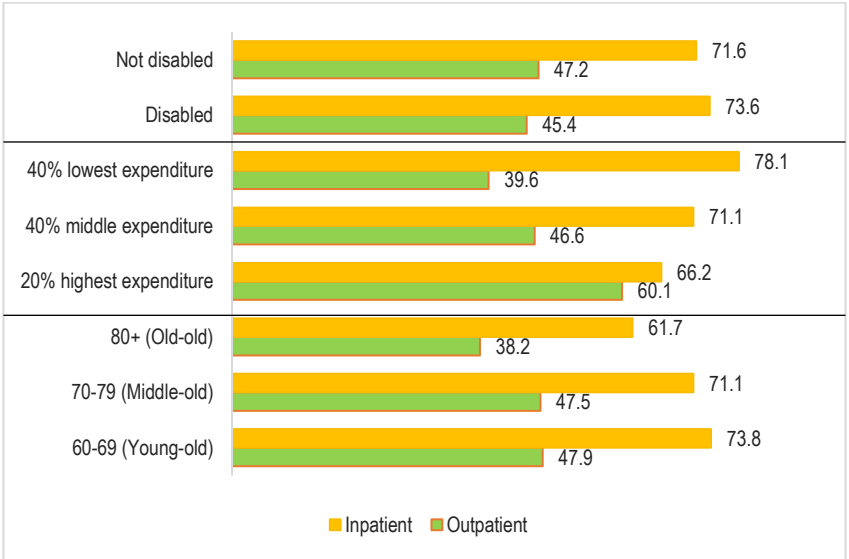
Figure 2.31 Percentage of Older Persons by Type of Health Insurance, Indonesia, 2017–2022



Jamkesda = *jaminan kesehatan daerah* (regional health insurance).
Source: Badan Pusat Statistik (BPS) (2017, 2018, 2019, 2020a, 2021, 2022), based on National Socio Economic Survey (NSES) data.

The study showed that the National Health Insurance (NHI) programme has increased the number of individuals able to receive outpatient and inpatient care, and that the programme's impact is greater on inpatient than outpatient care (Erlangga and Ali, 2019). Inpatient care is mostly used by males, the disabled, those in the 40% lowest-expenditure households, and older persons. The same pattern holds for use by older persons of outpatient care, but mostly by the young-old (Figure 2.32).

Figure 2.32 Percentage of Older Persons' Health Insurance by Disability Status, Expenditure, and Age Group, Indonesia, 2022

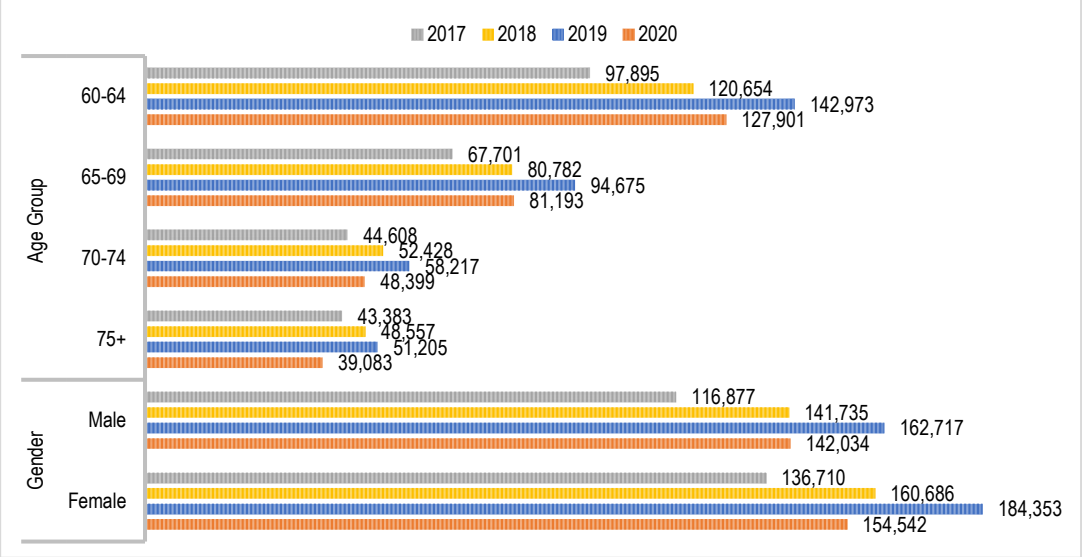


Source: Badan Pusat Statistik (BPS) (2022), based on 2022 National Socio Economic Survey (NSES) data.

Using IFLS 5 (2014) data, the study showed that health insurance[5] for the poor (Asuransi Kesehatan untuk Rakyat Miskin [Askeskin]) is the solution for households below the poverty line (Astari and Kismiantini, 2019). Another study shows that expanding Askeskin coverage for the poor can alleviate poverty (Aji et al., 2017).

BPJS Health data showed that older persons' visits to primary health facilities *(fasilitas kesehatan tingkat pertama)* decreased in 2019–2020 (Figure 2.33). Visitors to the facilities are mainly 60–64 years old.

Figure 2.33 Number of Older-Person Outpatients at Primary Healthcare Facilities by Age Group and Gender, Indonesia, 2017-2020

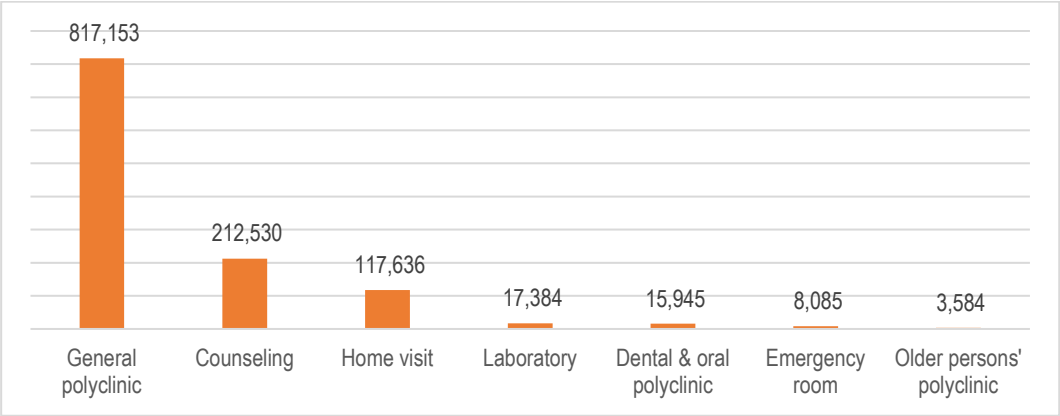


Source: Computed from raw data of the Social Security Administrator for Health (*Badan Penyelenggara Jaminan Sosial Kesehatan*), 2017–2020.

Health facilities most visited by older persons are general clinics. Older persons' clinics are still limited in number so all health facilities must have clinics specifically for older persons (Figure 2.34).

[5] Askeskin has been merged into BPJS Health (Republic of Indonesia Law 24 [2011] concerning social security administration bodies).

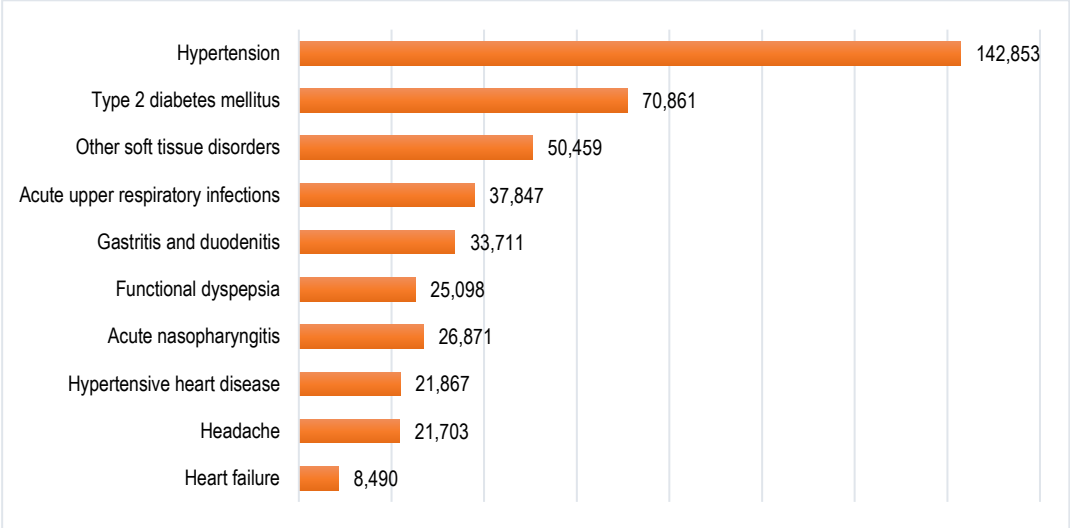
Figure 2.34 Cumulative Number of Older Persons' Outpatient Services at Primary Healthcare Facilities, Indonesia, 2017–2020



Source: Computed from raw data of the Social Security Administrator for Health (*Badan Penyelenggara Jaminan Sosial Kesehatan*), 2017–2020.

BPJS Health data for 2017–2020 show that 10 types of older persons' diseases were most diagnosed at the primary healthcare facilities. The top 2 are **hypertension and diabetes** and number 10 is heart failure disease (Figure 2.35).

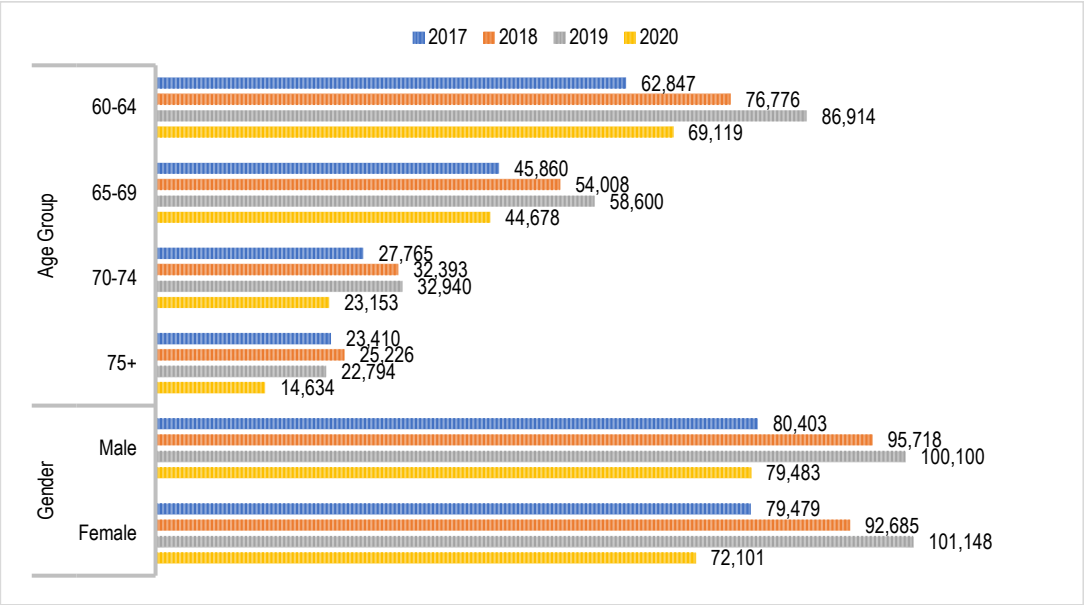
Figure 2.35 Cumulative Number of Older Persons by the 10 Most Diagnosed Diseases at Primary Healthcare Facilities, Indonesia, 2017–2020



Source: Computed from raw data of the Social Security Administrator for Health (*Badan Penyelenggara Jaminan Sosial Kesehatan*), 2017–2020.

Older persons going for follow-up visits to referral health facilities decreased in 2019–2020. The 60–64 age group mostly use BPJS Health at follow-up referral health facilities. More older males than older females used BPJS Health at the facilities, except in 2019 (Figure 2.36).

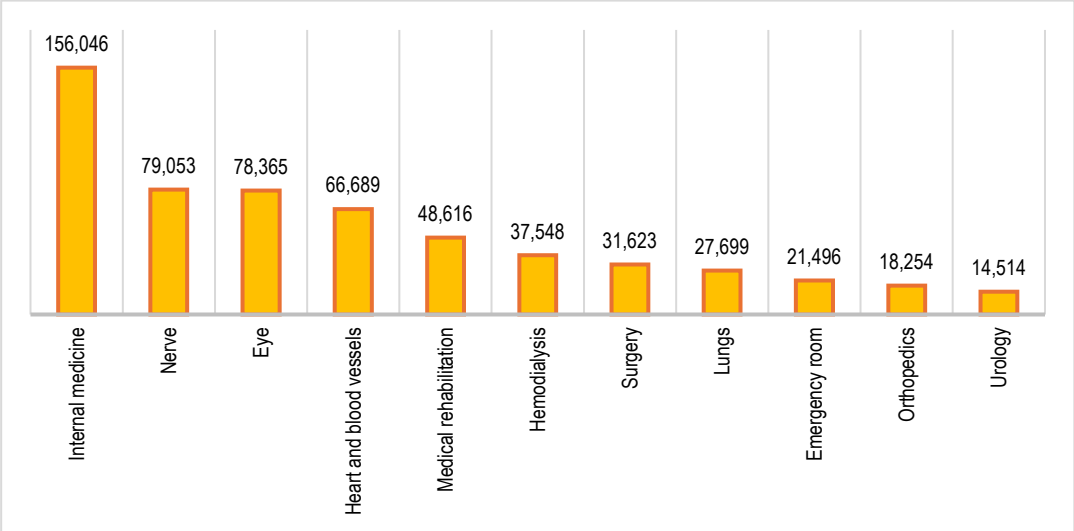
Figure 2.36 Number of Older Persons Visiting Follow-up Referral Health Facilities by Age Group and Gender, Indonesia, 2017–2020



Source: Computed from raw data of the Social Security Administrator for Health (Badan Penyelenggara Jaminan Sosial Kesehatan), 2017–2020.

The referral health facilities visited by older persons were mainly internal medicine clinics (156,046 visits in 2017–2020). Consultations were mostly related to neurology, ophthalmology, heart, and vascular diseases (Figure 2.37).

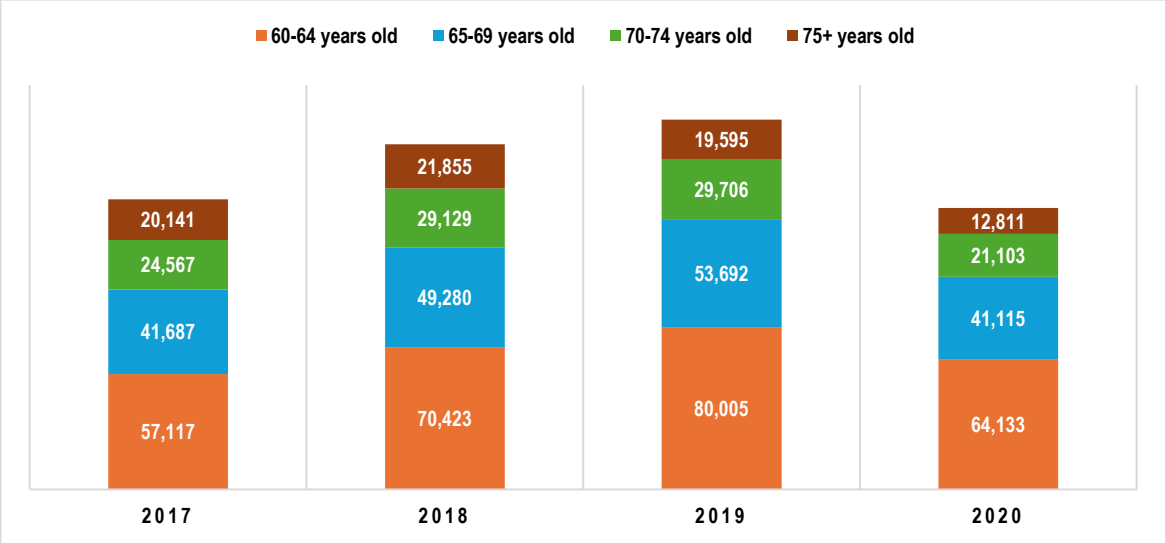
Figure 2.37 Cumulative Number of Older Persons by Most Visits to Follow-up Referral Health Facilities, Indonesia, 2017–2020



Source: Computed from raw data of the Social Security Administrator for Health (*Badan Penyelenggara Jaminan Sosial Kesehatan*), 2017–2020.

Visits to follow-up outpatient services were mainly by those 60–65 years old in 2017–2020. The number of follow-up outpatients increased until 2019 but decreased in 2020 (Figure 2.38). The decline poses a challenge to improving older persons' health services, including the technology base. Older persons need to increase their digital literacy and only some have access to the technology. Older persons greatly need assistance in accessing health services.

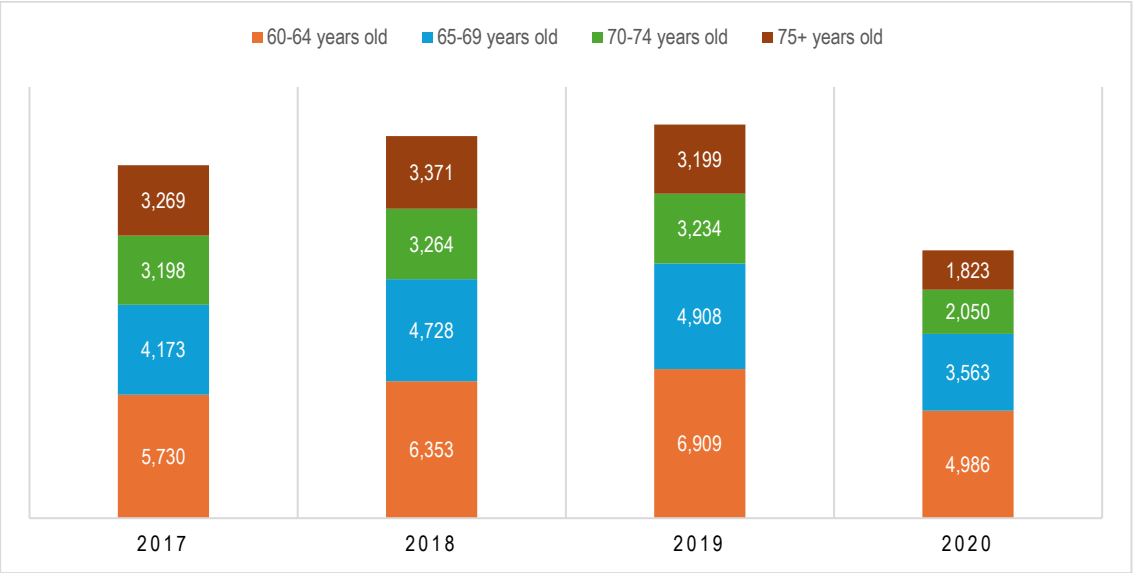
Figure 2.38 Older Persons' Rate of Access to Follow-up Outpatient Services by Age Group, Indonesia, 2017–2020



Source: Computed from raw data of the Social Security Administrator for Health (*Badan Penyelenggara Jaminan Sosial Kesehatan*), 2017–2020.

Older persons' visits to follow-up referral health facilities are related to access. Data on follow-up inpatient services show that visitors were mainly **60–64 years old** in 2017–2020. However, visits decreased in 2019–2020 (Figure 2.39), not because older persons had less need for the services but because their physical condition did not allow them to do so and because of poor infrastructure, bureaucracy, and quality of health providers.

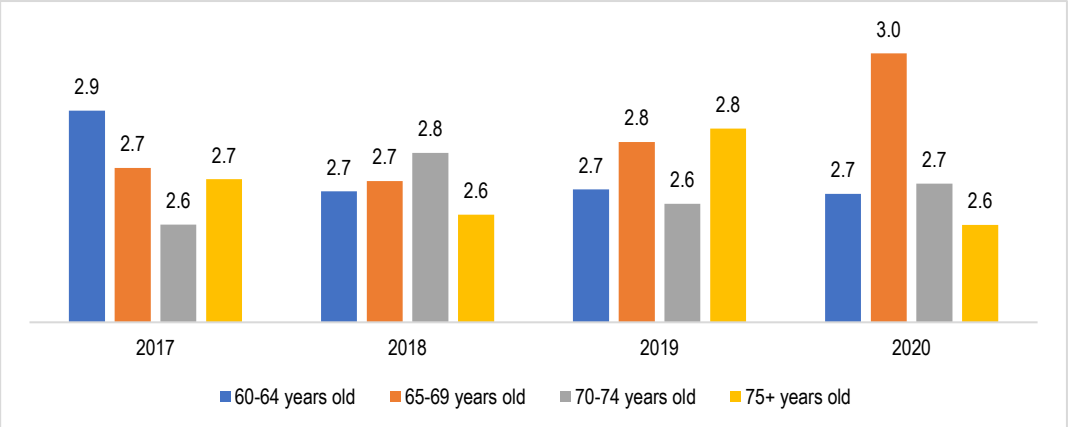
Figure 2.39 Older Persons' Rate of Access to Follow-up Inpatient Services by Age Group, Indonesia, 2017– 2020



Source: Computed from raw data of the Social Security Administrator for Health (*Badan Penyelenggara Jaminan Sosial Kesehatan*), 2017–2020.

The **longest average stay of older persons at primary healthcare facilities was 3.0 days**, in 2020, mainly those 65–69 years old. Generally, however, no clear pattern emerges because the age group with the highest average length of stay in each year was different. In 2017, it the 60–64-year group; in 2018, 70–74; and in 2019, 75 and above. **Inpatients were mainly 65–69 years in 2018–2020** (Figure 2.40).

Figure 2.40 Average Length of Older Persons' Stay (days) as Inpatients in Primary Healthcare Facilities, Indonesia, 2017–2020

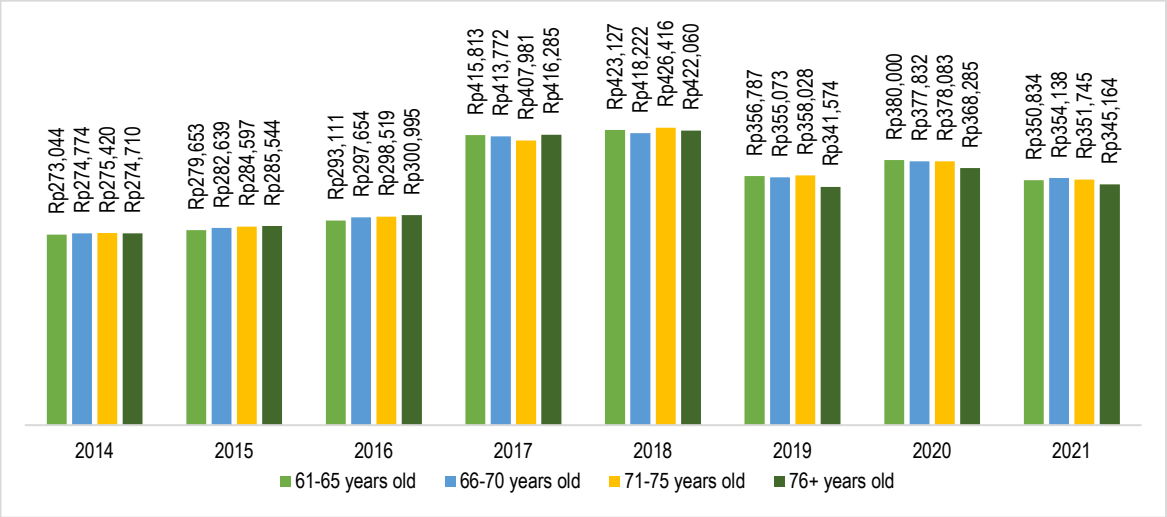


Source: Computed from raw data of the Social Security Administrator for Health (*Badan Penyelenggara Jaminan Sosial Kesehatan*), 2017–2020.

At the follow-up referral health facilities, the longest stay of older inpatients was **4.8 days in 2017** and amongst those 75 years and above. The average length of stay in 2017–2020 varied by age group: those 60–64 years, 4.6 days in 2017 and 3.9 days in 2020; and those 75 years and over, 4.2 days in 2020.

BPJS Health funded the health facilities based on claim submissions. The distribution of the average unit cost per claim per admission for primary care inpatients is shown in Figure 2.41. **The average claim increased in 2014–2018 and was quite high in 2018**. Then the average claim decreased in 2021.

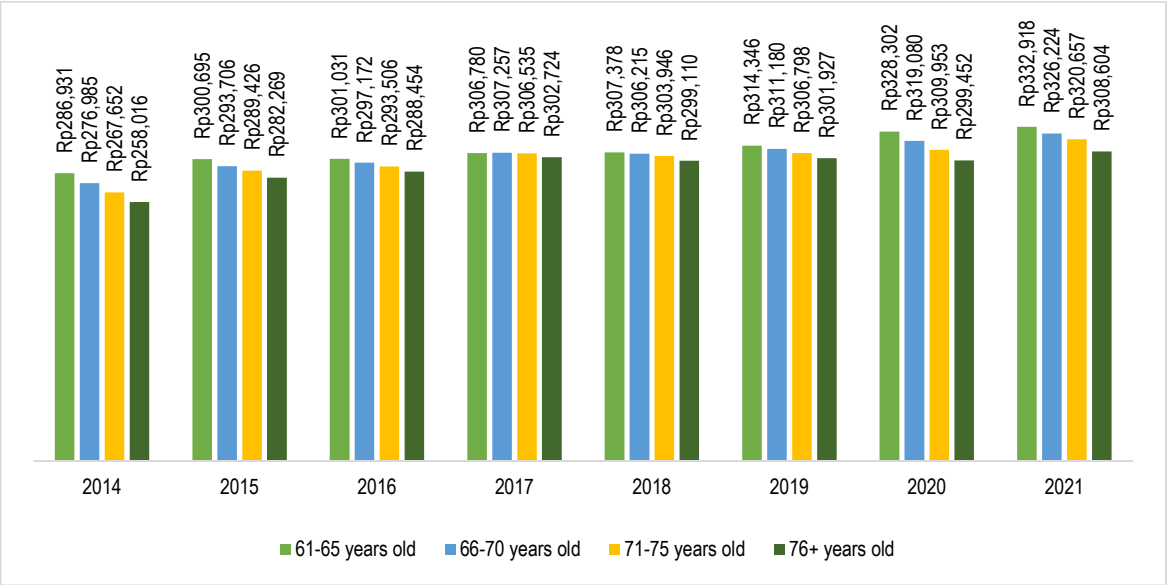
Figure 2.41 Average Cost of a Claim per Primary Care Inpatient Admission by Age Group, Indonesia, 2014–2021



Rp = Indonesian Rupiah
Source: Dewan Jaminan Sosial Nasional (DJSN) and Badan Penyelenggara Jaminan Sosial (BPJS Kesehatan) (2022); Dewan Jaminan Sosial Nasional and BPJS Kesehatan (2020), based on National Health Insurance Statistics data.

The cost per claim of older persons who were follow-up outpatients increased in 2014–2021. They were mainly 61–65 years old (Figure 2.42).

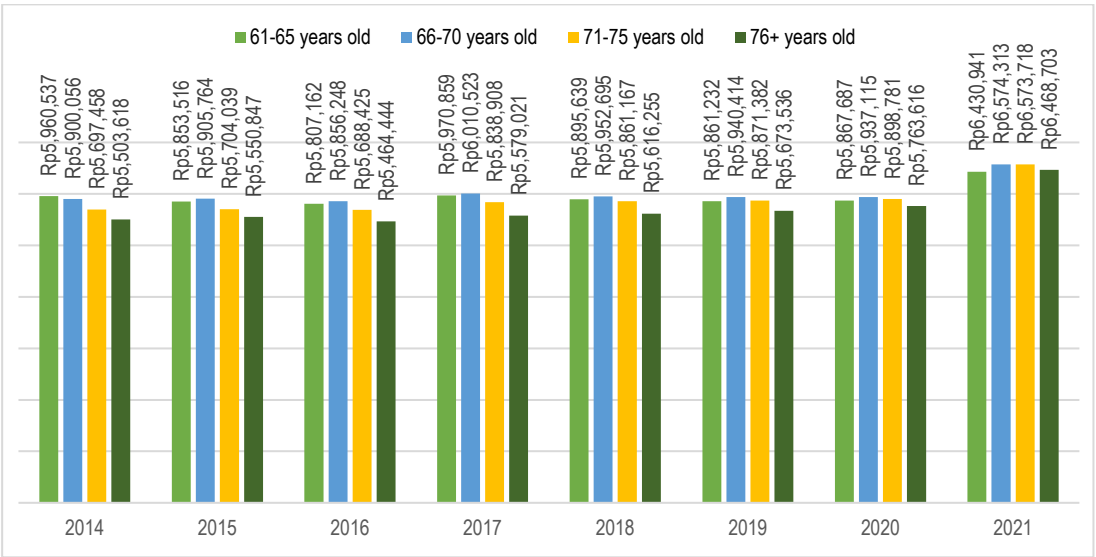
Figure 2.42 Average Cost of a Claim per Follow-up Outpatient by Age Group, Indonesia, 2014–2021



Source: Dewan Jaminan Sosial Nasional [DJSN] and Badan Penyelenggara Jaminan Sosial (BPJS Kesehatan) (2020, 2022), based on National Health Insurance Statistics data.

Amongst older follow-up inpatients, the average cost of a claim per visit was above Rp5 million (US$333.33). In 2016–2021, the average claim cost for those 75 years and above increased.

Figure 2.43 Average Cost of a Claim per Follow-up Inpatient by Age Group, Indonesia, 2014–2021

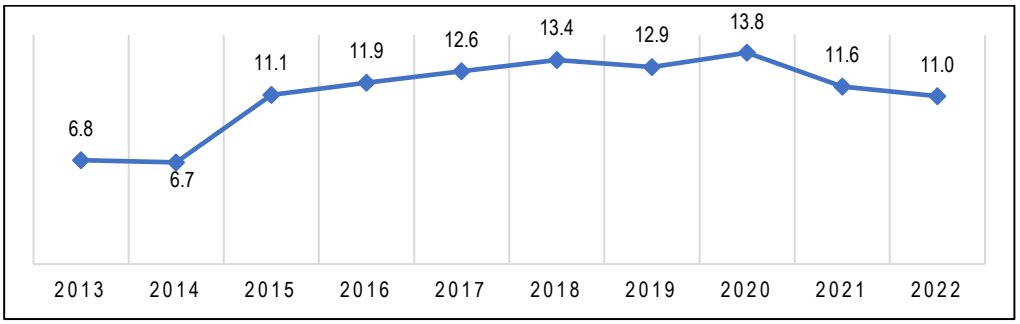


Source: Dewan Jaminan Sosial Nasional (DJSN) and Badan Penyelenggara Jaminan Sosia (BPJS Kesehatan) (2020, 2022), on National Health Insurance Statistics data.

Social Security

Social security does not cover the informal workforce. In 2013–2020, the number of older-person households with at least one type of social security increased. However, the number of older-person households with social security in decreased in 2020–2022 from 13.8% to 11.0%.

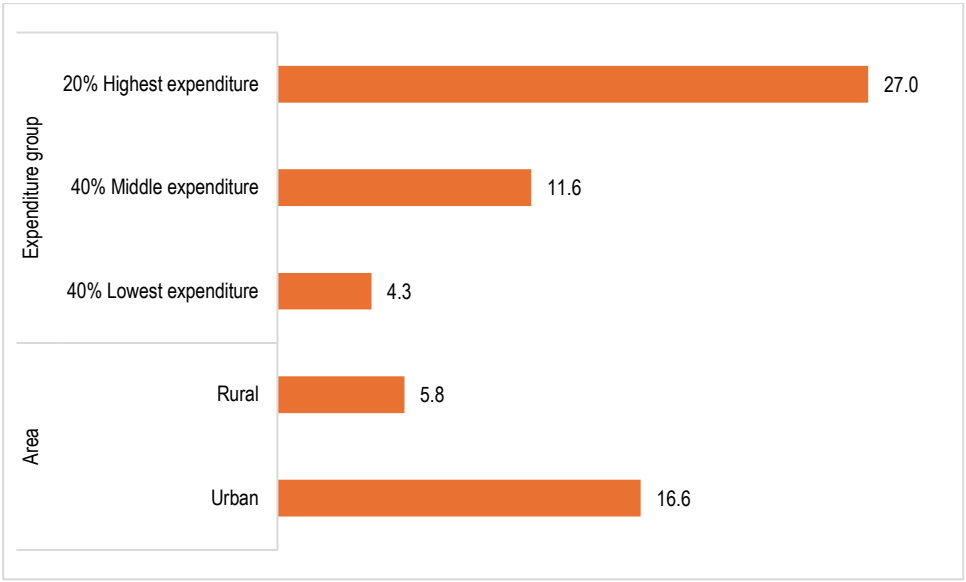
Figure 2.44 Percentage of Older-Person Households with Social Security, Indonesia, Years 2013–2022



Source: Badan Pusat Statistik (BPS) (2021, 2022), based on National Socio-Economic Survey (NSES) data.

Older-person households with social security were **mostly in the 20% highest-expenditure group (27.0%)**. Only 4.3% of older-person households in the 40% lowest-expenditure had social security. Generally, **most older-person households with social security live in urban areas** (Figure 2.45).

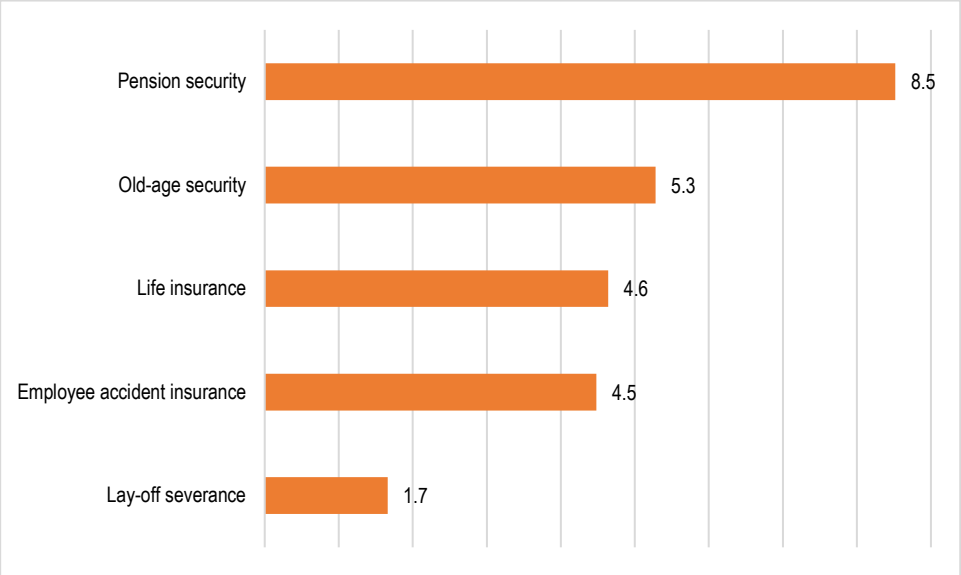
Figure 2.45 Percentage of Older-Person Households with Social Security by Expenditure Group and Area, Indonesia, 2021



Source: Badan Pusat Statistik (BPS) (2021), based on 2021 National Socio-Economic Survey (NSES) data.

Older-person households with employment security generally have pensions (5.3%) and death insurance (4.7%). Those with severance pay make up less than 2% of older-person households. In certain regions, death insurance, including burial costs, is important because limited space drives up costs, which burdens older persons of low economic status. Of older-person households, only 8.5% have pensions, 5.3% old age security, 4.5% work accident security, 4.7% death security, and 1.7% job release funds (Badan Pusat Statistik [BPS], 2022).

Figure 2.46 Percentage of Older-Person Households by Type of Use of Badan Penyelenggara Jaminan Sosial Health, Indonesia, 2022



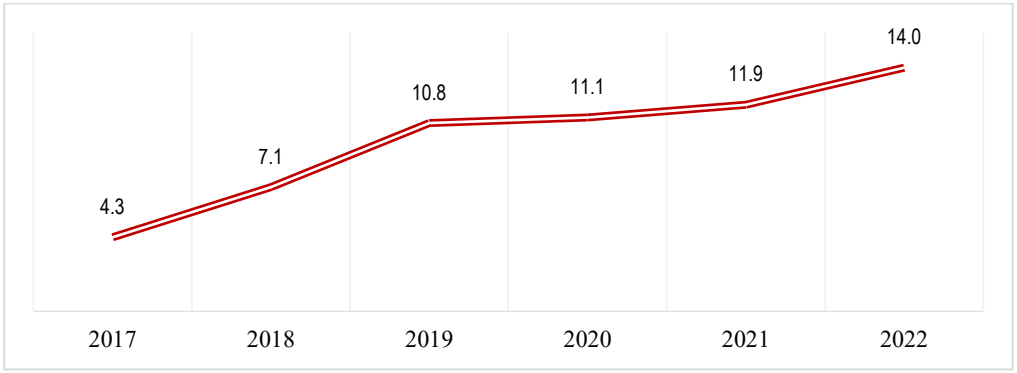
Source: Badan Pusat Statistik (BPS) (2022), based on 2022 National Socio-Economic Survey (NSES) data.

Social Assistance

The Ministry of Social Affairs provides social assistance through the Family Hope Programme (Program Keluarga Harapan). **The number of older-person household recipients increased** in 2017–2022 (Figure 2.47). During the pandemic, the programme greatly supported many family members who had been laid off or were socially isolated and whose outside income-generating activities were limited.

The ERIA study found that older persons reported worsened economic conditions during the COVID-19 pandemic (Komazawa et al., 2021). Even though more than half of older persons worked, their reported work hours and income decreased (Saito, and Cicih, 2022). Older persons are economically vulnerable and needed social assistance during the crisis, highlighting the importance of identifying vulnerable older persons to prepare for future crises.

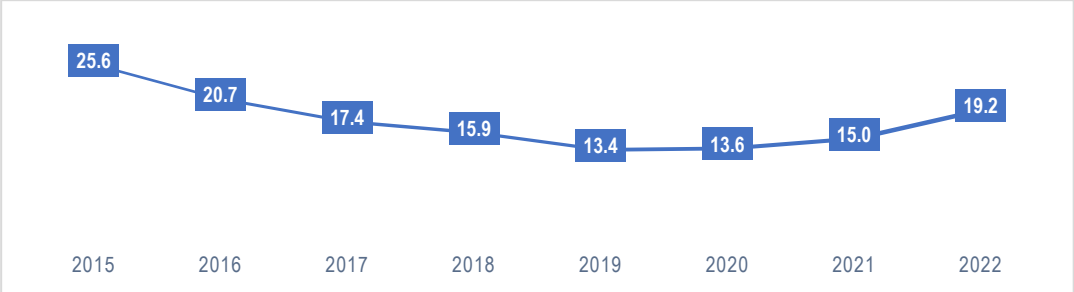
Figure 2.47 Percentage of Older-Person Households Benefitting from Family Hope Programme, Indonesia, 2017–2022



Source: Badan Pusat Statistik (BPS) (2017, 2018, 2019, 2020a, 2021, 2022), based on National Socio-Economic Survey (NSES) data.

Another benefit, especially for older persons in the 40% lowest-expenditure group, is the Social Welfare Card (Kartu Kesejahteraan Sosial [KKS]), which replaced the Social Protection Card (Kartu Perlindungan Sosial [KPS]). In 2015–2019, **the percentage of older persons owning a KPS and/or KKS decreased then rose in 2020** during the pandemic to help them meet their daily needs.

Figure 2.48 Percentage of Older Person Households by Social Protection or Social Welfare Card, Indonesia, 2015–2022



Source: Badan Pusat Statistik (BPS) (2015b, 2016, 2017, 2018, 2019, 2020a, 2021, 2022), based on National Socio-Economic Survey (NSES) data.

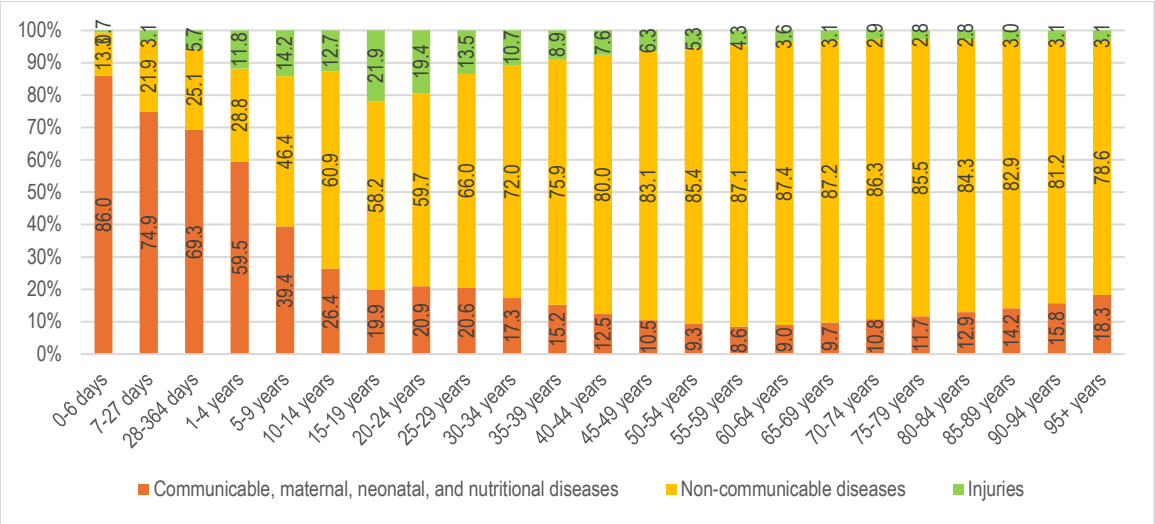
2.2. Disease Burden and Magnitude of Health Problems in the Future

2.2.1. Disease Burden

Disease burden in general is measured by disability-adjusted life years (DALYs) or the number of healthy years lost as result of premature death (years of life) and disability or diseases (years of life lost due to disability) (World Health Organization [WHO], 2013). Figure 2.49 presents the proportion of DALYs of NCDs, communicable diseases,

nutrition and maternal and child health, and trauma by age group in 2019. **The incidence of NCDs rises as people age, peaking in the 60–64-year age group but decreasing after**. The trend must be vigilantly observed, especially amongst those 55–59 years old or pre-older persons.

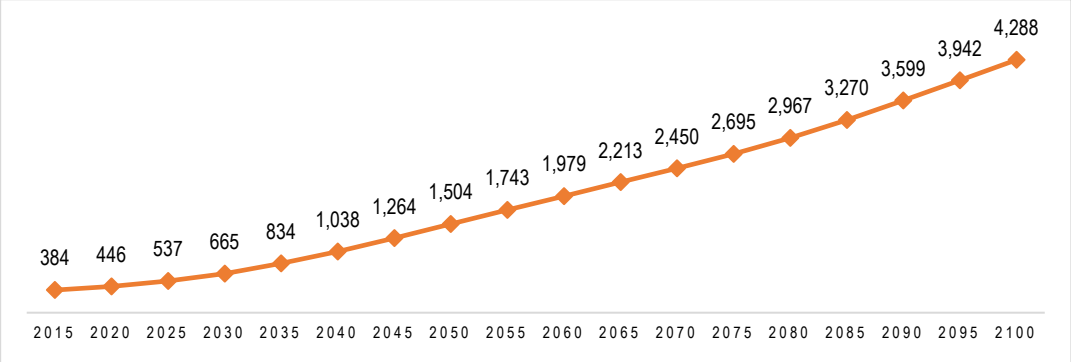
Figure 2.49 Percentage of Disability-adjusted Life Years by Disease and Age Group, Indonesia, 2019



CD = communicable disease, NCD = non-communicable disease, MCN = maternal child health.
Source: Computed from 2019 Institute for Health Metrics and Evaluation data.

NCDs must be treated properly because they could worsen and even require LTC. Based on Economic Research Institute for ASEAN and East Asia (ERIA) (2019), the need for LTC (referred to as 'care need rate') is projected to increase (Figure 2.50). Older persons generally require more health services, which has an impact on financing (Madyaningrum et al., 2018).

Figure 2.50 Estimates Number of Care Need in Indonesia (in 1,000 Older Persons), 2015–2100



Source: Economic Research Institute for ASEAN and East Asia (ERIA) (2019).

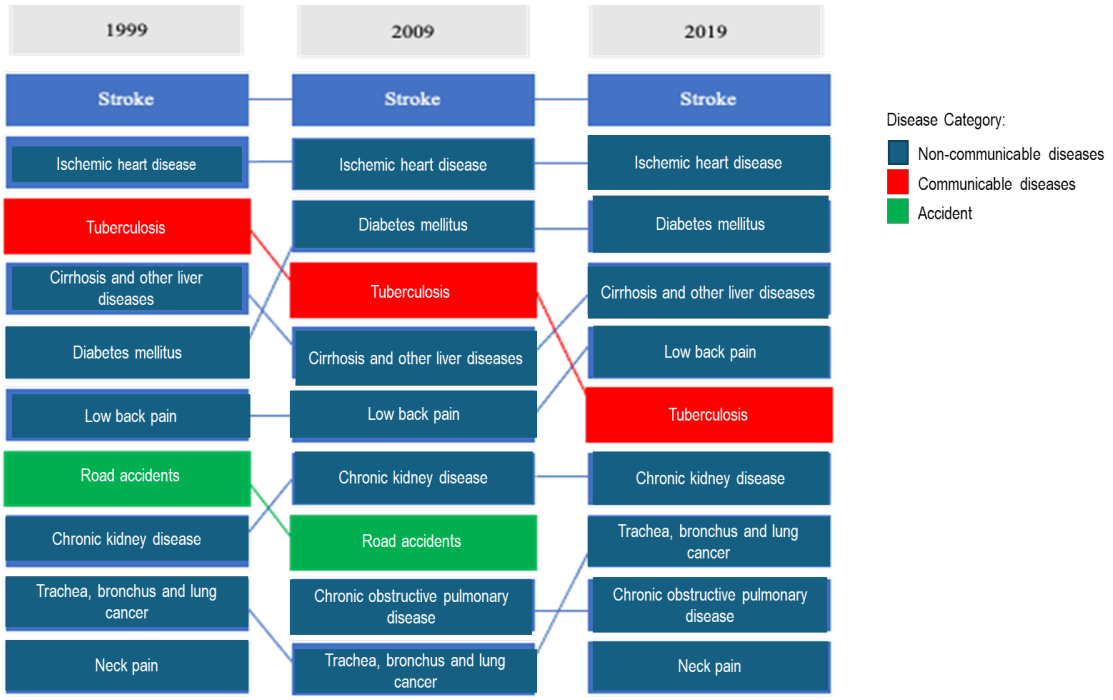
To determine the disease burden amongst pre-older (45–59 years) and older persons, we examined disease trends amongst pre-older persons in 1999, 2009, and 2019 (Figures 2.51 and 2.52). Based on Global Burden of Diseases by the Institute for Health Metrics and Evaluation (IHME), pre-older persons in Indonesia have 10 main disease burdens. In 1999–2019, stroke and heart disease ranked first and second. Since 2009, diabetes has risen to rank third from fifth in 1999.

For older persons, **other NCDs** (such as hereditary diseases, urinary tract disease in males, gynaecological disease, hemoglobinopathies, and haemolytic anaemia; endocrine disorders; blood, metabolic, and immunological diseases) were ranked highest in 1999–2019. Next-ranked diseases are related to vision and hearing and oral diseases. Tuberculosis increased in 2009–2019 as did neurological disease. At IHME level 2, older persons' diseases that ranked highest in 2019 were **cardiovascular diseases**, musculoskeletal diseases, followed by disease of the sensory organs.

Changes in types of disease amongst older persons will impact their need for health services. Those with vision and hearing diseases require assistive instruments to execute their daily activities.

Alzheimer Indonesia estimates that 1.2 million persons had dementia in 2016 and that the number will increase to 2 million in 2030 and 4 million in 2050. Even though Alzheimer's prevalence is low, older persons with the disease must not be overlooked as they require caregiver assistance to carry out their daily activities.

Figure 2.51 Top-10 Diseases of Pre-Older Persons, Indonesia, 1999, 2009, and 2019



Source: Institute for Health Metrics and Evaluation (IHME) (2019).

Figure 2.52 Top-10 Diseases of Older Persons, Indonesia, 1990, 2009, and 2019

Source: Institute for Health Metrics and Evaluation (IHME) (2019).

The rank of disease burden differs between pre-older and older persons. In general, older persons have lowered physical and functional conditions. Therefore, diseases related to functional and sensory capacities rank high amongst older persons. The condition can be worsened if older persons suffer from degenerative diseases such as cardiovascular disease.

Pre-older persons mainly have NCDs, which are projected to continuously increase. As pre-older persons become older, their condition may become worse because they generally experience functional disorders.

2.2.2. Magnitude of Health Problems in the Future

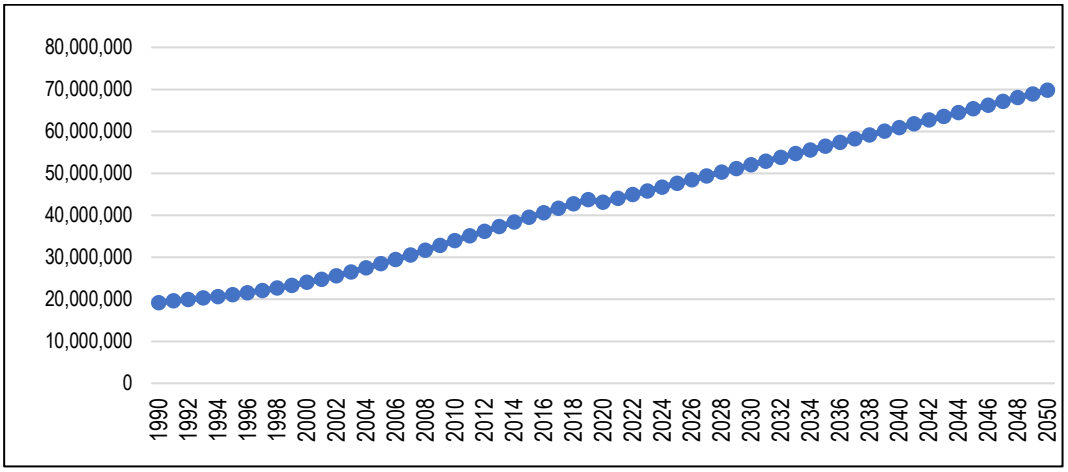
A simple calculation was done to estimate future trends of pre-older persons' health status. Five diseases were selected from the 10 highest ranked in 2019: stroke, ischemic heart disease, diabetes mellitus, cirrhosis, and other chronic liver diseases, as well as tuberculosis. If pre-older persons become sick as they age and if their illnesses are not managed well, their health will be impacted in the future.

Based on 2022 National Socio-economic Survey data, pre-older persons make up about 18.0% of the total population (17.7% males, 18.1% females). Slightly fewer live in rural (17.5%) than in urban areas (18.2%). As future older persons, they must be vigilant about their health. Diabetes mellitus is rising steadily. It is a disease that many older persons suffer in the five districts and five cities in the five provinces studied and is related to lifestyle. A healthy lifestyle is the main asset for those of working age to be productive now and when they age (Yuniati, and Kamso, 2021). The results of IFLS-4 and IFLS-5 show that past health behaviour and risk factors could cause diabetes in the future (Ho et al., 2021).

In general, when people get older, their health becomes poorer, and their working capacity decreases. Ageing is often associated with a decline in health and in full participation in economically productive activities, which directly affects the economic well-being of older persons (Vu et al., 2020).

Those with health complaints 7 years ago are more likely to have functional disorders in the future (Yiengprugsawan et al., 2020), presenting a huge challenge in preventing multi-morbidity, especially NCDs. Based on the **NCD burden** projection, prevalence was estimated to **increase amongst pre-older persons** (45–59 years) in 2022–2050.

Figure 2.53 Projection of Non-communicable Diseases amongst Pre-Older Persons, Indonesia, 1990–2050



Source: Author, based on Institute for Health Metrics and Evaluation Global Burden Diseases data (2019)

2.3. Need for Older Persons' Health Services

Current older persons' health conditions and future trends are a challenge to fulfilling health service needs. Various aspects must be considered related to services, financing, facilities, and health resources.

Health services for older persons must consider their increasingly deteriorating physical condition. **An integrated health service system must consist of disease prevention, health promotion, treatment, and rehabilitation**. Health services include early detection, prevention, and treatment focused on pre-older and older persons (Yiengprugsawan et al., 2020). Types, frequency, and intensity of use of older persons' health services must be considered (Chen, and Baithesda, 2020).

1) Health services must be provided according to **older persons' data** disaggregated by gender, age group, functional capacity, and socio-economics status to ease prioritising services.

2) Health services must be **preventive and promotive** to anticipate the occurrence of various diseases. Health is promoted through the life-cycle approach, from an early age.

3) **Integrated health services must start from the national and regional levels and descend to families and communities**. The services should be supported by dissemination of health and care knowledge.

4) **Technology-based health services** such as telehealth and telemedicine should be easily accessible by older persons, especially during conditions such as the COVID-19 pandemic, when older persons' unmet needs[6] for health services rose steadily: 7.8 % in 2019, 8.3% in 2020, and 8.6% in 2021 (Badan Pusat Statistik [BPS], 2021). About 15.5% of older persons who needed medication during the pandemic had trouble acquiring it (Saito, and Cicih, 2022).

5) **LTC** should be covered by BPJS Health. LTC services need informal caregivers from the family and community.

6) To support health services the following elements must be improved:

   a) **management of health services**, including a service approach to older persons, which is related to their preferences in using health facilities.

   b) availability of **age-friendly health facilities** and **comprehensive geriatric clinics;**

   c) **availability of medicine,** especially at health centres or primary health facilities.

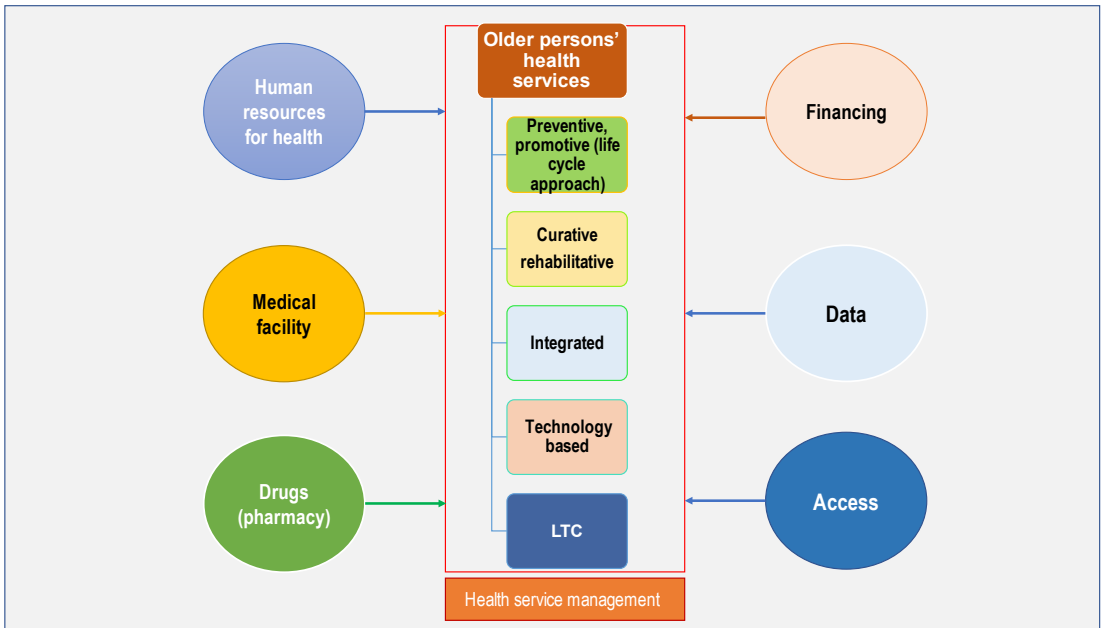
   d) **availability of human resources** with knowledge of geriatrics and older persons' common health conditions, including physicians, midwives, midwives, and nurses, who in certain areas are often chosen by older persons to obtain primary health services (Chen, and Bethesda, 2020);

   a) **availability of health financing** and encouragement of independent participation in BPJS Health; and

   b) **support accessibility** (free transport, public routes, and social assistance) to help older persons use primary health facilities and follow-up referral health facilities.

[6] Unmet need is the ratio of the number of people who have health complaints that disrupt their activities but do not seek outpatient treatment to the total population (BPS, 2022).

Figure 2.54 Need for Older Persons Health Services



LTC = long-term care.
Source: Author (2023).

CHAPTER 3

A Review of the Readiness of Health Services for Older Persons in Indonesia

The study describes the preparedness of older persons' health services. The data are presented based on Ministry of Health (MoH) publications and data collected in the five districts and five cities covered by the study.

3.1. Aspects of Healthcare Providers

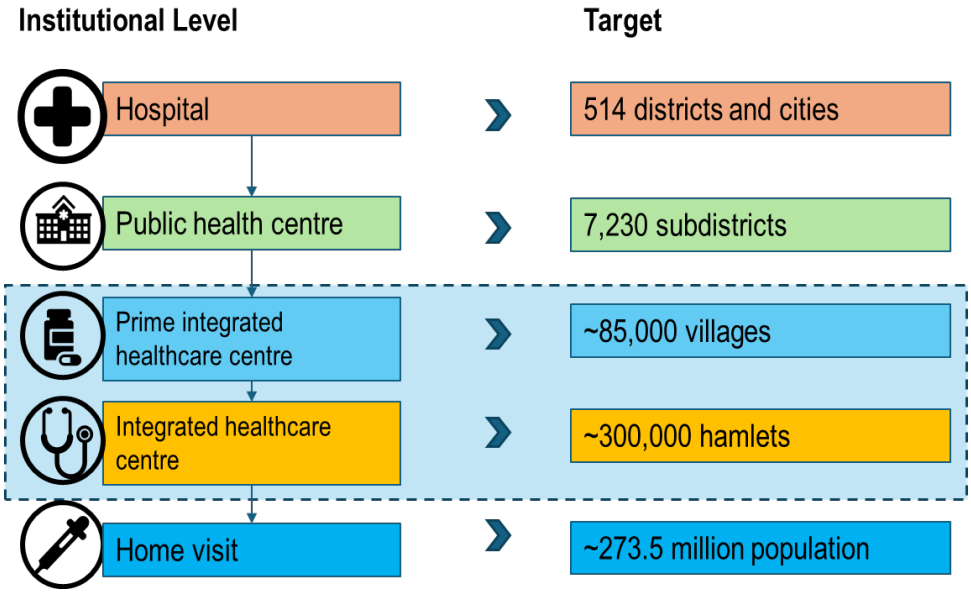
The availability of health services is defined by the types and number of health facilities, human resources, and financing schemes, and the role of communities in older persons' health services, including long-term care (LTC). These elements are most important in disease prevention, health promotion, treatment, and rehabilitation.

3.1.1. Types and Number of Health Facilities

Law 36 (2009), on health, provides that a health service facility is an instrument to organise health services, consisting of disease prevention, health promotion, treatment, and rehabilitation, provided by national and local governments and/or communities. Health service facilities consist of primary health facilities (health centre, private clinic, independent health provider practice); laboratories; blood transfusion units; follow-up referral health facilities (general and specialised hospitals); and pharmaceutical and medical device facilities.

The reform of primary care will ensure that everyone has access to it (Figure 3.1). The figure shows health services at various institutional levels and the coverage targets expected to be achieved.

Figure 3.1 Revitalisation of Primary Healthcare Structure and Network



Source: Hendarwan (2022).

The 2019 Health Facility Research (Riset Fasilitas Kesehatan [RISFASKES]) data show that district and city health services (totalling 514) include 9,909 health centres, 144 referral hospitals, 388 hospitals, 400 independent laboratory clinics, 419 pharmacies, 417 clinics, 411 independent physician practices, and 402 independent midwife practices. Older persons need all types of health facilities, specialised, and not mixed with general patient services. The following describes the conditions of health facilities.

Hospitals

Based on MoH data, the number of hospitals in Indonesia increased by 11.3% from 2,813 in 2018 to 3,132 in 2023 (Kementerian Kesehatan, 2023). This shows that in 2018–2023 there was an increase of 319 hospitals in Indonesia.

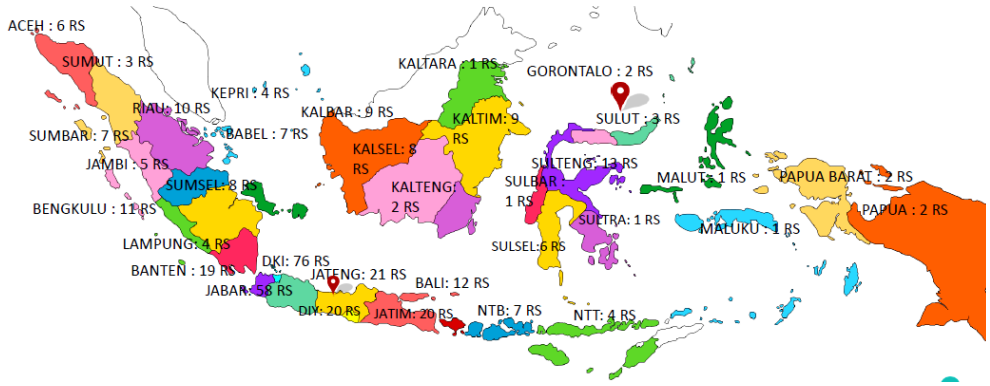
Since 1990, large hospitals have housed older persons' nursing service units in comprehensive geriatric clinics. Geriatrics is the study of older persons' health and medicine, including health services, and analyses health promotion, disease prevention, diagnosis, treatment, and rehabilitation (Regulation of the Minister of Health 79 [2014]).

Hospital Geriatric Clinics

About 11.0% of hospitals are required to provide health services through integrated geriatric service teams but are constrained by the inadequate number of health workers and insufficient funding support.

Only a few hospitals have comprehensive geriatric services. Amongst them are Cipto Mangunkusumo Central General Hospital (Rumah Sakit Umum Pusat) in Jakarta, and Sarjito in Yogyakarta. Data from the 2018–2023 show that 88 out of a total of 2,813 hospitals had geriatric services with integrated teams in 2018. In 2023, 345 (11.0%) out of a total of 3,132 hospitals had geriatric services and comprehensive teams Kementerian Kesehatan, 2023). The distribution of hospitals with comprehensive geriatric services is shown in Figure 3.2. However, the number of geriatricians is still insufficient. Based on focus group discussion information, 68 geriatricians practice in Indonesia. More are needed as older persons make up more than 10% of the population, but providing specialists remains a challenge.

Figure 3.2 Distribution of Hospitals with Integrated Geriatric Services in Indonesia, 2023



Source: Kementerian Kesehatan (2023).

The geriatric service programme was evaluated in Jakarta in 2018. The results showed that the hospitals could conduct only simple geriatric services in terms of infrastructure, human resources, and supporting regulations and policies. The role of the health office as the main organisation of health centres and regional general hospitals throughout Jakarta must be strengthened. Governor regulations must provide for comprehensive geriatric services; development of a geriatric service networking system in cooperation with integrated service posts, health centres, hospital referral systems, and homecare systems, and in collaboration with multiple sectors; and increased human resource capacity.

Awareness of the importance of geriatric clinics in various hospitals must be raised,[7] in anticipation of the older population's rapid growth. Geriatric clinics are most important for dealing with older persons' multiple pathologies. A benefit of geriatric

[7] A geriatric clinic provides services to older patients with multiple pathologies resulting from decreased organ function and psychological, social, and economic problems that need a holistic, multidisciplinary, and interdisciplinary approach.

clinics is lower cost of services provided by multi-disciplinary teams, which use an integrated approach and limit polypharmacy or the use of multiple medications. The team heads are internal medicine specialists and manage medical and non-medical members. However, teams and facilities are not always available.

Geriatric health services not only take an organ approach but holistically review all aspects of older persons' health and multiple pathologies. The holistic approach includes management as well as a comprehensive team approach in the form of health promotion, disease prevention, diagnosis, treatment, and rehabilitation.

All cities are expected to have referral hospitals to handle various diseases, including catastrophic ones suffered by older persons, such as heart disease and stroke. However, hospitals are not yet equally distributed. Only 40 can provide heart catheterisation and only 10 can provide open-heart surgery. The queues to the limited number of service centres are long. At Rumah Sakit Jantung dan Pembuluh Darah Harapan Kita Hospital, for example, the waiting list of adult vascular cases is about 12 months and of surgery cases about 50 patients. In Dr Sardjito Hospital Yogyakarta, the waiting list for heart services is about 12 months and 300 patients.

Only a few hospitals provide services for stroke, which causes death or disability. Based on data from the National Brain Hospital, seven hospitals provide stroke services in Sumatra; six in Java; one each in Bali, West Nusa Tenggara, and Papua; and two in Sulawesi. Kalimantan has no brain hospitals at all.

Considering how deadly heart and stroke are and how expensive their treatment, hospitals must provide services to handle them. However, setting up the hospitals requires cooperation and funding. Strong commitment and collaboration amongst national and local governments and partnerships with various decision-makers are needed to manage catastrophic diseases.

MoH distributes referral services by optimising the national hospital network and targets 50% coverage of districts and cities to deal with four high-mortality diseases – heart disease, stroke, cancer, and kidney disease – by 2025 and 100% coverage by 2027: 34 provinces have at least one central or primary hospital, and 507 districts and cities (with a regional general hospital) have at least one mid-level hospital. Table 3.1 shows the availability of regional general hospitals in the study's five districts and five cities.

Table 3.1 Number of Regional Hospitals in the Study's 5 Districts and 5 Cities, 2022

	Province	District or City	Hospital
1.	West Java	Ciamis district	2
		Bekasi city	5
2.	Yogyakarta	Gunung Kidul district	2
		Yogyakarta city	1
3.	Bali	Gianyar district	1
		Denpasar city	2
4.	Central Sulawesi	Sigi district	1
		Palu city	3
5.	Papua	Merauke district	1
		Jayapura city	2

Source: Results of field data collection (2022).

Community Health Centres

As of December 2022, health centres numbered 10,374 (4,302 with and 6,072 without inpatient facilities), an increase from 10,292 in 2021 (4,201 with and 6,091 without inpatient facilities) (Kementerian Kesehatan, 2022).

Auxiliary health centres numbered 8,312 and 1,958 were not in operation (RISFASKES, 2019). Those no longer operating closed because the buildings were longer suitable for habitation (54.8%), health providers were lacking (43.8%), and locations were prone to disasters or security disturbances and remote (8.1%).

Efforts to provide primary health services have increased the number of health centres. In 2021, the national ratio of health centres to sub-districts was 1.4 but efforts must still focus on bringing health centres to all sub-districts. West Papua has the lowest ratio (less than 1), indicating that not all sub-districts in the province have a health centre. Communities, including older persons, still have difficulty reaching the nearest primary health facility. Geographical conditions are difficult, and people's socio-economic status is low. The low level of health literacy of older persons is closely related to their uptake of health services. They tend to be passive in seeking healthcare and face cognitive barriers to deciding to use health services. Older persons do not necessarily use the health centres even if they are close by.

Health centres that minister to older persons should have quality service and be age friendly. In accordance with Minister of Health Regulation 67 (2015) concerning the implementation of older persons' health services at community health centres, age-friendly health centres are those that serve pre-older and older persons and take an approach of health promotion, disease prevention, treatment, and rehabilitation, while being proactive and polite and providing easy access and support.

The regulation provides no specific criteria to define age friendliness. However, it is understood that age-friendly services and facilities provide comfort and safety; have special service rooms; and are equipped with wheel-chair ramps, wide doorways and hallways, stairs that are not too high or steep and with railing, non-slip floors,

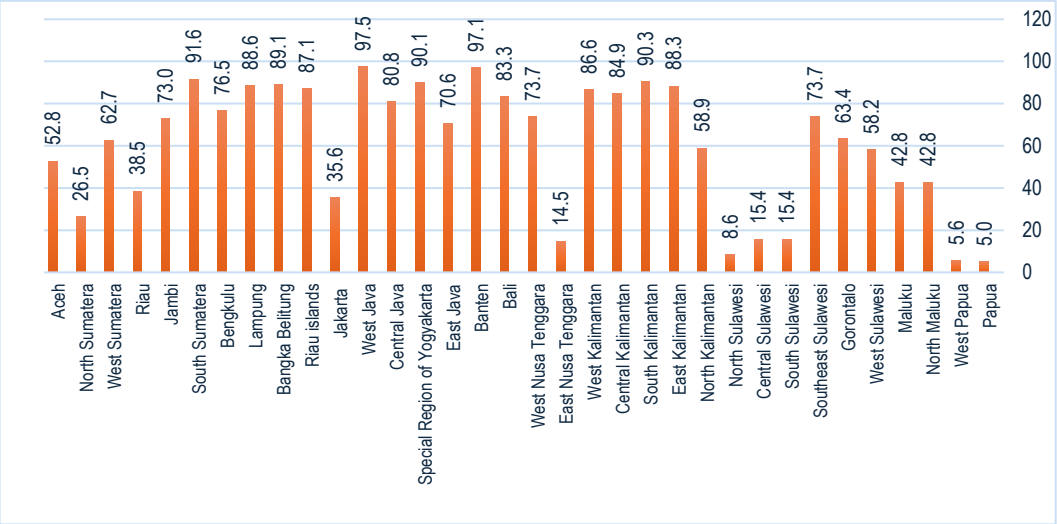
comfortable waiting rooms, adequate signage, and toilet seats with handicap access.

Age-friendly health centres numbered only 6,398 (62.7%) in 2020 (Kementerian Kesehatan, 2022). The results of Community Health Data Communication (Komunikasi Data [Komdat] Kesehatan Masyarakat) showed that age-friendly health centres numbered 7,071 (68.7%) in 2022. Their distribution by province is presented in Figure 3.3. West Java has the highest share (97.5%) (Kementerian Kesehatan, 2023).

Age-Friendly Health Centres

Age-friendly health centres made up only about 68.7% of all health centres in 2022, and are listed in the Ministry of Health regulations. However, the criteria for age-friendly health centres are not yet completely available or easy to understand.

Figure 3.3 Distribution of Age Friendly Health Centres by Province, Indonesia, 2022



Source: Kementerian Kesehatan (2023).

Because of the limited data available, the distribution of the number of age-friendly health centres cannot be presented by district and city throughout Indonesia but Table 3.2 shows the information collected from key informants in the study's five districts and five cities. The research team observed the health centres' conditions to determine if they were age friendly.

Table 3.2 Number of Age Friendly Health Centres in the Study's 5 Districts and 5 Cities, 2022

	Province	District or City	Age-friendly Health Centre	Percentage
1.	West Java	Ciamis district	37 of 37	100.0
		Bekasi city	31 of 48	64.6
2.	Yogyakarta	Gunung Kidul district	18 of 30	60.0
		Yogyakarta city	18 of 18	100.0
3.	Bali	Gianyar district	11 of 13	84.5
		Denpasar city	11 of 11	100.0
4.	Central Sulawesi	Sigi district	17 of 48*	35.4
		Palu city	7 of 14	50.0
5.	Papua	Merauke district	3 of 25**	12.0
		Jayapura city	2 of 13**	15.4

*Includes auxiliary health centres
**Estimated from Ministry of Health data
Source: Results of field data collection (2022).

The results of observations related to age-friendly health centres in the study's five districts and five cities are presented in Table 3.3. Not all health centres visited were age friendly. Even though denoted as age friendly, the health centres did not provide special queues for older persons.

Table 3.3 Observation Results Related to Age friendly Health Centres in the Study's 5 Districts and 5 Cities, 2022

	Province	District or City	Observations
1.	West Java	Ciamis district	Provided special writing seats for older persons, who had to queue together with all patients (Imbanagara health centre) Older persons do not need to queue when checking or receiving medicine (Cipaku health centre)
		Bekasi city	Has a special registration counter, a special clinic, and a waiting room for older persons (Karangkitri health centre)
2.	Yogyakarta	Gunung Kidul district	Not age friendly
		Yogyakarta city	Had older peoples' railings, special counters, special waiting rooms, special examination rooms, special physicians, and nurses. Had an emergency bell in the bathroom. Had a special wheelchair ramp (Mergangsan health centre)

	Province	District or City	Observations
3.	Bali	Gianyar district	Had wheelchair facilities, special queues, special older persons' counters, railings, older persons' kits (Payangan health centre)
		Denpasar city	Had older persons' railings, special counters, special waiting rooms, special examination rooms, special physicians and nurses for older persons. Had an emergency bell in the bathroom (Service Technical Implementation Unit or Unit Pelaksana Teknis Dinas [UPTD] 4 South Denpasar health centre)
	Central Sulawesi	Sigi district	Had a special screening room for older persons, which did not function during the COVID-19 pandemic until December 2022. It was planned to function again in 2023 (Marawola-Sigi health centre)
		Palu city	Not yet age friendly but had a wheelchair ramp, a special toilet, and family folders and cards (Nosarara health centre)
5.	Papua	Merauke district	Not observed (online)
		Jayapura city	Not observed (online)

Source: Results of field data collection (2022).

Older persons do not necessarily use health centres' services (Chapter 2). Based on information from the study's five districts and five cities, the main reasons are that older persons have no assistants or escorts, they live far from the health facilities, public transport is unaffordable, queues are long, they prefer to take herbal medicine or concoctions or over-the-counter drugs, and they feel healthy because they can still conduct daily activities. Other reasons cited by informants are presented in Table 3.4.

Table 3.4 Older Persons' Reasons for not Using Health Centres in the Study's 5 Districts and 5 Cities, 2022

	Province	District or City	Reasons for not Using Health Centres
1.	West Java	Bekasi city	Services are inadequate, health workers are few and inexperienced, medicine smells and tastes bad. Older persons prefer to go to private clinics and wait for the proceeds from poultry sales to pay for treatment.
		Ciamis district	Pre-older and older persons prefer private clinics because the physicians are more friendly and caring. Although older and pre-older persons have a Healthy Indonesia Card (Kartu Indonesia Sehat), they are still more comfortable seeking treatment from a health centre worker close to their home.

	Province	District or City	Reasons for not Using Health Centres
2.	Yogyakarta	Yogyakarta city	No health screening (checking blood sugar, cholesterol, and blood pressure) was available. Older persons seek treatment at a health facility if their illness is not cured by self-treatment.
		Gunung Kidul district	Older persons think that if they are frequently screened and receive abnormal results, they will worry and feel sick.
3.	Bali	Denpasar city	Pre-older persons are constrained by costs because they could not contribute to BPJS Health during the pandemic. Older persons prefer to seek treatment at a hospital.
		Gianyar district	Older persons prefer to stay at home, feel old, and are used to getting sick. Most older persons seem to have given up and have no motivation.
4.	Central Sulawesi	Palu city	Older persons feel that their illness is part of being old. If they need a referral, it is only for surgery. Older persons do not want to seek medical treatment because they are afraid of the results. Some older persons prefer to receive health services at home because they have relatives there or at the regional general hospitals.
		Sigi district	Pre-older and older persons still work, including in agriculture, and feel no need to use health facilities unless they are in serious pain.
5	Papua	Jayapura city	Pre-older and older persons often choose not to seek treatment at health facilities because the health centres have not reached out to the community. Pre-older and older persons who use the health centres are generally only those who are active in integrated service posts or other community activities.

BPJS = Badan Penyelenggara Jaminan Sosial (Social Security Administrator for Health).
Source: Results of field data collection (2022).

To improve service quality, Minister of Health Regulation 43 (2019) concerning health centres, article 57 requires health centres to be accredited at least once every 3 years. Data for 2021 showed that 9,153 (89.7%) out of 10,205 health centres were accredited. The number was unchanged from 2020 because accreditation did not take place during the pandemic, based on Circular Letter HK.02.01/MENKES/455/ (2020) concerning licensing and accreditation of health service facilities, and assignment of educational hospitals during the COVID-19 pandemic.

Essential drugs must be available in health centres. Data from 2021 show that health centres with 100% availability of essential drugs were in Bali, Yogyakarta, Gorontalo,

South Kalimantan, West Sulawesi, and West Sumatera. Availability was under 90% in Aceh, North Sumatera, Lampung, Central Java, Banten, Central Kalimantan, North Sulawesi, Maluku, North Maluku, and West Papua.

Health centres are needed to implement individual and community health efforts. Health centres provide three types of services: those inside the building, outside the building, and during home visits. Services inside health centres are treatment and rehabilitation and target individuals.

For example, individual health efforts inside health centres are laboratory tests by physicians and treatment. Patients need to visit the health centre and queue after receiving a number. In age-friendly health centres, older persons have special queue numbers and special waiting rooms. When older persons require advanced treatment, the physician refers them to referral health facilities.

Services outside health centres provide programmes to promote health and prevent disease, which involve communities, including integrated service posts and non-communicable disease integrated service posts. Community-based health efforts involve village officials, cadres of community social workers, health-post cadres, and village midwives. Activities outside the health centres vary, including (i) routine health screening at least once a year (blood sugar, blood pressure, cholesterol, uric acid, waist circumference, body weight, height, and others) for early detection of diseases and risk factors; (ii) health promotion; (iii) group exercises; (iv) supplementary feeding and nutrition; and (v) routine provision of drugs and supplements. Out-of-building services at integrated services posts (*pos pelayanan terpadu [posyandu]*) are provided to assist older persons in each village or subdistrict.

Home visits are made to vulnerable older persons (under LTC) unable to visit health centres or integrated service posts and to bedridden older persons by health centre providers or midwives, whom family-member caregivers help administer routine drugs. If a patient needs to be referred to follow-up referral health facilities, then a health centre physician provides the referral. Unfortunately, health service providers do not make home visits to all areas.

Based on the findings in study's five districts and five cities, health centres coordinate and cooperate with private hospitals as part of corporate social responsibility and collect data on the number of older persons who need health services. Several health centres disseminate information about nutrition for older persons and cooperate with Social Security Administrator for Health (Badan Penyelenggara Jaminan Sosial [BPJS]) Health to provide services under the Chronic Disease Management Programme. In Yogyakarta city, health centre activities are integrated with community-based health efforts to empower older persons.

Long-term Care Facilities

As demand for LTC increases, the need for institutional base services will rise amongst older persons living alone (Meijer et al., 2011; Economic Research Institute for ASEAN and East Asia [ERIA], 2019) and people with disabilities. However, the government has not organised special facilities to provide LTC well. For example, private institutions provide nursing home service but are not yet supported by laws and regulations.

LTC is provided by various facilities, households, and institutions (private and government). The government must support older persons' health service facilities requiring LTC, including through financing, and the availability of caregivers.

Long-term Care System for Older Persons

Indonesia does not yet have a long-term care (LTC) system for older persons, although some institutions, such as nursing homes, provide LTC to older persons, as do families at home.

The Asian Development Bank found that LTC is provided in six types of location (Asian Development Bank, 2021):

1. Home, where the following are provided:
    a) Services to assist with daily living activities of older persons in the form of basic needs and care, such as personal assistance, housework, financial assistance, and other support. The services are provided mostly by family members (spouses or adult children, especially girls) and domestic assistants. Based on approximations, these services can cover all older adults.
    b) Professional home-care services, including nursing care, personal care, home visits, and assistance. The services are provided by nurses, trained caregivers, and volunteers, and cover up to 10,000 older persons.
    c) Provision of food, religious activities, health screening, and physical activity. The services are provided by older persons' institutions – Social Welfare Institute (Lembaga Kesejahteraan Sosial), homes for the aged *(lansia)*, or the Family Compassion Centre (Pusat Santunan Keluarga) – and trained staff under the Ministry of Social Affairs (MoSA) programme.
2. Community
    a) Health education, physical exercise, nutritional status assessment, and simple physical and laboratory examinations for screening of degenerative diseases. The services are provided by older persons' health posts and cadres. The service covers an estimated 2.5 million older persons (including those at risk) who require assistance with activities of daily living *(*ADL) and instrumental ADL activities of daily living limitations.

b) Support for ADL, physical activity, cognition, dissemination time, crafts, and recreation. The service is provided for a fee at a care centre and covers an estimated 1,000–2,000 older persons.

3. Older persons' residential care (*panti, graha lansia*). The service includes housing; food; material support; social, religious, physical, and recreational activities; and health screening for early detection of degenerative diseases and simple medication. The services are provided by staff members and social workers. Most senior residences are under government management, although some are privately owned, covering an estimated 3,620 seniors living in 279 homes with a total capacity of 18,100 beds.

4. Comprehensive geriatric centre. Services include integrated therapy (disease prevention, treatment, and rehabilitation); recreation; cognitive support; therapeutic activities; and life review therapy (an examination of one's life with the benefit of hindsight). Indonesia has 88 geriatric clinics and 10 integrated geriatric clinics.

5. Age-friendly health centre. Services include health examinations, treatment of disease without complications, and home care provided by physicians. The programme was developed as part of the National Medium-Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional) 2015–2019 mandate and is under the responsibility of MoH. Age-friendly health centres number 4,835 (48.4%) out of the total of 9,993 health centres.

6. Nursing home. Services include nursing care as a follow-up after hospitalisation, day-care services, and home care by private nurses. Some nursing homes provide 24-hour care.

Table 3.5 shows LTC services based on information from the study's five districts and five cities.

Table 3.5 Long-term Care Services in the Study's 5 Districts and 5 Cities, 2022

	Province	District or City	LTC Services
1.	West Java	Bekasi city	One of the older persons' residences has a special room large enough for five persons. Staff assist older persons (bedridden or mentally challenged) in ADLs, whilst a dedicated nurse is available for clinical issues. The physician visits the residence once a week, but a nurse is on call every day to monitor older persons' health.
2.	Yogyakarta	Yogyakarta city	A guesthouse has a separate building for older persons who need LTC. Two persons occupy each room, which has special beds. A special nurse handles older persons who need LTC; different nurses attend to healthy older persons. An

	Province	District or City	LTC Services
			informant from the health centre stated that LTC (home visits) is provided by the health centre team, consisting of physicians, nurses, and the person in charge of the area.
3.	Bali	Denpasar city	LTC is available for older persons at home but it is not carried out routinely or continuously because healthcare providers are insufficient. LTC is carried out by physicians and nurses. According to academic information, 30% of older persons require regular medication and care, including the 5% who need LTC (suffering from heart disease, diabetes mellitus, gout, rheumatism, fractures, and inability to move). Every month, health centre staff visit home for the aged. Four nurses help a total of 15 older persons who need LTC at the home for the aged in carrying out ADLs; two residential staff accompany the nurses. Older persons can get referrals from the health centre to visit the hospital. In another private home for the aged, four older persons share a room that has 'crank' beds. The home for the aged is supported by donors with funds or equipment.
4.	Central Sulawesi	Palu city	Bedridden older persons who need LTC are cared for by family members, health workers from the health centre, and nursing students.

Source: Results of field data collection (2022).

3.1.2. Human Resources

Ideally, human resources are presented as they relate to specialised health services for older persons, but the data are not available. Health providers in all hospitals number 657,451 and health support workers 343,661 (Kementerian Kesehatan, 2022). Nurses make up most health providers (50.8%), followed by medical providers (16.3%). In 2021, specialists in all hospitals numbered 43,558, less than in 2020 (44,158). The most numerous are basic specialists (40.4%) and the fewest are dental specialists (6.5%). Most specialists are internists (12.0%).

Data from the Health Human Resource Information System (Sistem Informasi Sumber Daya Manusia Kesehatan) Ministry of Health show that only 48.9% of health centres have (i) a physician or primary physician, (ii) a dentist, (iii) a nurse, (iv) a midwife, (v) a public health provider, (vi) sanitation worker, (vii) a medical laboratory technologist, (viii) a nutritionist, and (ix) a pharmacist. Health centre personnel are considered adequate if all positions are filled by at least one person.

In 2021, health workers at health centres numbered 453,529, the highest proportion

of whom were midwives at 41.7% (188,963) and the lowest physical therapists at 0.18% (851). Health centres have a total of 142,659 nurses, 25,330 medical personnel, 18,395 pharmaceutical personnel, 16,149 nutrition personnel, and 13,435 environmental health personnel (Kementerian Kesehatan, 2022).

The number and types of health providers at health centres are calculated based on a workload analysis by considering the number of services, the population and its distribution, characteristics of work and location area, the availability of other primary health service facilities, and division of work hours. Nationally, 9.6% of health centres had a low number of physicians in 2021. The percentage decreased from 2020 (12.5%). About 35.5% of health centres had physicians of adequate standard and 54.9% had physicians above the minimum standard (Kementerian Kesehatan, 2022). The standard of adequacy of dentists in health centres is at least one person in inpatient and non-inpatient health centres, in urban and rural areas, and in remote and marginalised areas. Health centres with a shortage of dentists made up 32.4% of the total, with adequate numbers 56.0%, and with excess numbers 11.6%.

The minimal standard is for a health centre to have not just a physician but also least five non-inpatient and eight inpatient nurses. Nationally, 89.4% of health centres have the minimum number of nurses. Nurses must be adequately trained, especially in LTC for older persons. Nurses can help physicians train cadres on basic healthcare and management of older persons in the family or community.

Health Human Resources

Health providers at health centres must meet established standards, but not all do. Health providers (physicians and nurses) must have geriatric knowledge. All health providers need to be certified cadres and/or caregivers for older persons.

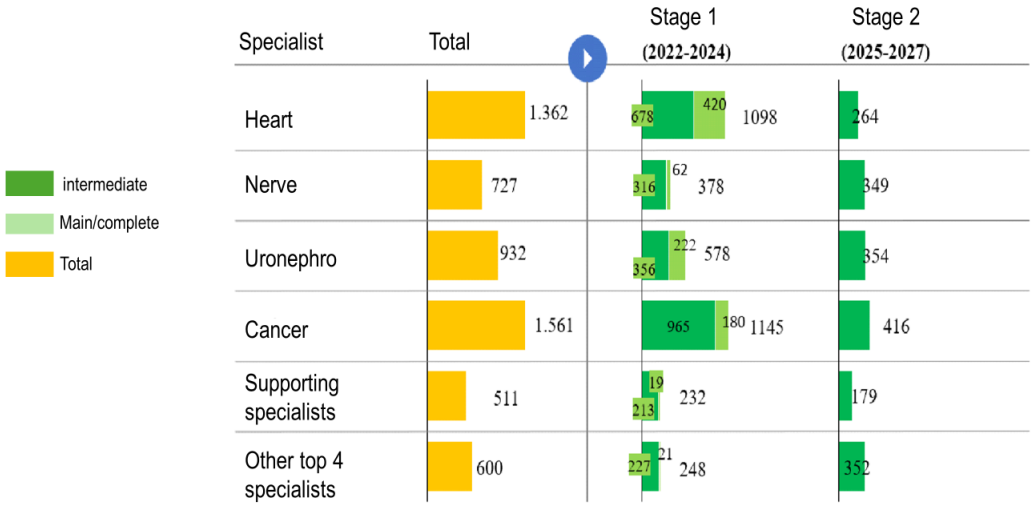
Jakarta ranks highest (105.4%) in adequacy of health providers at health centres, followed by Yogyakarta (89.3%) and Bangka Belitung (84.4%). Papua (8.6%), West Papua (12.4%), and Maluku (13.4%) have the lowest percentage of health providers in health centres. Although eastern Indonesia still has a low proportion of older persons, measures should be undertaken in anticipation of the population's ageing.

Data on the distribution of health providers, specifically physicians, are not yet available for all health centres. Data from the Health Human Resource Information System of the Ministry of Health show that 5.0% of health centres are without physicians. Since 2015, MoH has conducted the Healthy Nusantara (Nusantara Sehat) programme for teams and individuals to distribute health providers equally. The provinces with the highest percentage of health centres without physicians are Papua (42.6%), Maluku (23.0%), and West Papua (20.4%). All health centres in Bali, Yogyakarta, West Nusa Tenggara, Jakarta, and Bangka Belitung have physicians (Kementerian Kesehatan, 2021).

Health providers required at primary healthcare facilities to manage older persons consist of physicians, dentists, nurses, and psychologists. They must have knowledge and competency in geriatric services.

Health providers must be adequate not only in number but also in quality. Law 36 (2014) on health providers, article 44 states that every health provider is mandated to have a registration certificate valid for 5 years and can re-register. As of 31 December 2021, actively registered health providers numbered 223,254, less than in 2020 (233,064). Physicians made up the most registered (141,946) and dental specialists the least (4,483). Figure 3.4 illustrates the need for additional specialists in central and mid-level.

Figure 3.4 Need for Additional Specialists in Hospitals, Indonesia



Source: (Hendarwan, 2022).

Human resources providing older persons' health services are not only health providers but also cadres and caregivers. No data are available on formal and informal caregivers but the need for them is increasing as the population ages. Caregiver assistance is especially needed for severely physically and mentally dependent older persons. Formal caregiver costs are generally extremely high so families step in or hire cadres as informal caregivers.

Caregivers

Community-based resource support is needed to provide older persons' health services by strengthening cadres or informal caregivers. Cadre or caregiver recruitment schemes, honoraria, and capacity building are important. Health centres provide ongoing assistance to sustain older persons' health programmes and update health-related information.

Caregivers shoulder a heavy burden. They not only provide physical, mental, spiritual, and social aid but also manage emergencies. Caregivers therefore require training related to basic health services.

Caregivers must have knowledge on the physical and cognitive decline of older persons to understand how to deal with it. Older persons and their caregivers not infrequently face violence or neglect.

Field observation in the study's five districts and five cities found various human resource issues in health centres, including the number and capacity of health providers. Health providers that are lacking are nutritionists (Ciamis district), dentists (Sigi district), psychologists (Gunungkidul district and Denpasar city), and geriatricians. A regional policy on human resources at health centres is needed.

Field observation found that not all health centres have caregiver training programmes. Several health centres in Sigi have just begun to tackle caregiving issues. Yogyakarta city and Gianyar district have a pilot project, Integrated Older Persons Services (Layanan Lanjut Usia Terpadu [LLT]), which has trained caregivers. However, the programme's sustainability is uncertain, especially related to officers and financing. This report does not evaluate LLT.

Table 3.6 Number of Health Centres Providing Caregivers in the Study's 5 Districts and 5 Cities, 2022

	Province	District or City	Deployment of Caregivers
1.	West Java	Ciamis district	Not yet
		Bekasi city	Not yet
2.	Yogyakarta	Gunung Kidul district	Not yet
		Yogyakarta city	Yes (related to LLT programme)
3.	Bali	Gianyar district	Yes (related to LLT programme)
		Denpasar city	Not yet
4.	Central Sulawesi	Sigi district	Yes
		Palu city	Not yet
5.	Papua	Merauke district	Not yet
		Jayapura city	Not yet

LLT = Layanan Lanjut Usia Terintegrasi (Integrated Older Persons' Services).
Source: Results of field data collection (2022).

3.1.3. Types of Health Services

Older persons' health services include activities to increase older persons' capacity to care for themselves and lead a healthy lifestyle and to strengthen family support to minimise diseases and disabilities. Older persons' health services include the following:

1. prevention and support services;

2. additional services;
3. segmented or part-time service (day care and day programmes at hospitals and hospice care), and hospice care for terminally ill patients, who need not be treated by a physician;
4. comprehensive and sustainable services;
5. home care by the family; and
6. community-based service centres.

Primary services should give complete access to primary healthcare such as immunisation, general practitioner consultation, health screening, and community education on healthy lifestyles. Table 3.7 shows several screening examinations of older persons. Screening activities at health posts burden health cadres, who find the screening guides too numerous and difficult to understand and who seldom receive related training.

Table 3.7 Type of Health Services at Health Centres, Primary Clinics, and Health Posts

Target Health Problem	Delivery Unit		
	Health Post (hamlet)	Primary Clinic* (village or ward)	Health Centre (sub-district)
Productive-age and older persons	1. NCD screening (hypertension, diabetes mellitus) 2. COPD screening 3. Obesity screening 4. TB screening 5. Screening for mental problems	1. NCD screening (hypertension, diabetes mellitus) 2. COPD screening 3. Obesity screening 4. TB screening 5. Screening for mental problems 6. Cancer screening	1. NCD screening (hypertension, diabetes mellitus) 2. COPD screening 3. Obesity screening 4. TB screening 5. Screening for mental problems 6. Cancer screening 7. Heart screening 8. Geriatric examination
Other services		1. General treatment 2. Pharmacy	1. General treatment 2. Oral health services 3. Laboratory 4. Pharmacy 5. Emergency room 6. Hospitalisation

COPD = chronic obstructive pulmonary disease, NCD = non-communicable disease, TB = tuberculosis.
* A primary clinic integrates primary healthcare
Source: Hendarwan (2022).

A package of comprehensive services is needed for older persons to prevent or delay physical and mental decline. The services must be affordable and coordinated by health and social service providers and be in line with World Health Organization concepts of healthy ageing and integrated care.

The study observed that activities of Integrated Older Persons' Services (Layanan

Lanjut Usia Terintegrasi) in pilot locations (Yogyakarta city, Denpasar city, and Gianyar district) are still limited to older persons' data collection and health promotion. Home visits in Yogyakarta are still limited because of the shortage of physicians and nurses at health centres.

Primary health services (health centres and clinics) and hospital referrals (secondary and tertiary) include prevention, promotion, treatment, and rehabilitation services. Community health services can be provided at integrated service posts, NCD integrated posts, and other community-based health services such as the Social Welfare Institute (Lembaga Kesejahteraan Sosial) or Family Compassion Centre (Pusat Santunan Keluarga). Community health services focus on disease prevention and health promotion.

Community activities include counselling, supplementary feeding, and exercise. Health services are provided in collaboration with health centres, physicians, or nurses, and are limited to health screening, including measuring blood pressure, body weight, blood sugar levels, and waist circumference, and providing drugs and supplements. If the screening results are abnormal, patients are referred to health centres. However, not all health centres have physicians in the building or complete laboratory facilities.

Services for older persons are differentiated based on their health conditions. Healthy older persons receive coaching and health screening at least once a year, and practice yoga or exercise once a week. Ill older persons are visited at home once a month if they are severely dependent or bedridden because of stroke, diabetes complications, or other diseases.

Health Services

Health services include disease prevention, health promotion, treatment, and rehabilitation, with a focus on disease prevention and health promotion. Community health services (integrated services posts, non-communicable disease integrated posts) focus on prevention and promotion through health screening. Older persons who need long-term care receive the services through home care programmes

Hospital services are still general and do not include geriatric services and home care. Type A hospitals must have comprehensive services but not necessarily geriatrics. Although hospital consultants are available, services are still not optimal. Type C and type D hospitals have heavy service loads and provide limited medications, so all services are only routine.

Academician consultants at Professor Ngurah Hospital, Denpasar city said that hospitals require geriatric consultants in accordance with Minister of Health Regulation 79 (2014) concerning the implementation of geriatric services in hospitals.

Hospitals should provide day care, respite care, home care, psycho-geriatric care, and acute care, which are not yet available even in type A hospitals.

Older persons' health services are hindered by patient quotas. In Palu city, not all BPJS Health participants may receive health services at referral hospitals because of quotas. Denpasar city has a policy not to impose quotas, but older patients can benefit from referrals to only one hospital clinic in the same day.

Social Security Administrator for Health (Badan Penyelenggara Jaminan Sosial [BPJS])

Health services at referral hospitals are still subject to patient quotas. Patients may use BPJS Health for one disease per visit. If an older person complains of two diseases, then the examination is carried out during different visits.

3.1.4. Role of Community Health Services

Older persons show limited interest in older persons' health integrated service post programmes (Christiani et al., 2016). They tend to be passive in health screening and have difficulty rationally deciding to use preventive care because of cognitive decline (Mulyanto et al., 2019). Low health literacy impacts older persons' use of preventive services and LTC (Mulyanto et al., 2019).

MoH Regulation 8 (2019) concerning community empowerment in the health sector aims to increase the knowledge, awareness, and competency of individuals, families, and communities by teaching them to solve problems using educative and participative approaches while considering their needs, potential, and culture. Capacity building, however, has not yet reached community tiers.

Community-based health efforts are guided by health centres, sectors, and institutions, and aim to achieve a healthy and independent community (Law 36 [2009]). The community is not only an object of development but also a subject. The community can decide to adopt health innovations.

Community-based health efforts include integrated service posts to empower communities in providing basic social services and working with other services with regional support. In 2021, 31 districts and cities (6.0%) in 15 provinces had at least 80% active integrated service posts (Kementerian Kesehatan, 2022). Such posts must meet the following criteria:

1. provide routine health post services at least eight times a year,
2. have at least five cadres, and
3. have a total of three out of four services fulfil at least 50% of the target for 8 months in 1 year.

Based on the study's findings in five districts and five cities, community health

services for older persons are organised in cooperation with the village government and hamlets). Community health services are organised in integrated service posts and NCD integrated posts guided by health centres. Implementing activities at the integrated service posts for older persons and NCD integrated posts greatly depends on the presence of cadres. The cadres collect data and assist ill older persons. Older cadres at health posts or NCD integrated posts lead health providers (nurses and physicians) at health centres in preventing disease and promoting health.

Personnel of older persons' integrated service posts or NCD integrated posts visit homes. However, health services at older persons' integrated service posts and NCD integrated posts, and home visits perform only basic health screening. If disease symptoms are detected, further basic, secondary, or tertiary referral is needed.

Communities' Role

Communities help ensure that older persons' cadres or informal caregivers are available. They support disease prevention and health promotion efforts amongst older persons. Financing, training, and mentoring must always be available.

The COVID-19 pandemic resulted in the stagnation of health services at NCD integrated posts or older persons' integrated service posts. Even older persons' exercise and health screening were temporarily on hold. Data collection at integrated service posts has resumed. Information on community-based older persons' health services in several of the study's districts and cities is presented in Table 3.8.

Table 3.8 Implementation of Community Older Persons' Health Services in 3 Provinces of the Study, 2022

	Province	District or City	Community Health Services
1.	West Java	Ciamis district	In addition to health posts or NCD integrated posts, an older person's development centre partners with community health centres to reach out to older persons to monitor and prevent any deterioration of their health.
		Bekasi city	Integrated service posts or NCD integrated posts face financing obstacles, so the community helps as much as it can or looks for donors. The funding is used to replace screening tools or feed older persons.
2.	Yogyakarta	Gunung Kidul district	A cholesterol check costs Rp20,000 per stick per person, discouraging older persons from visiting integrated service posts or NCD integrated posts. Older persons do not visit integrated service posts because activities are conducted during working hours, the integrated service posts are far away, and they are not interested.

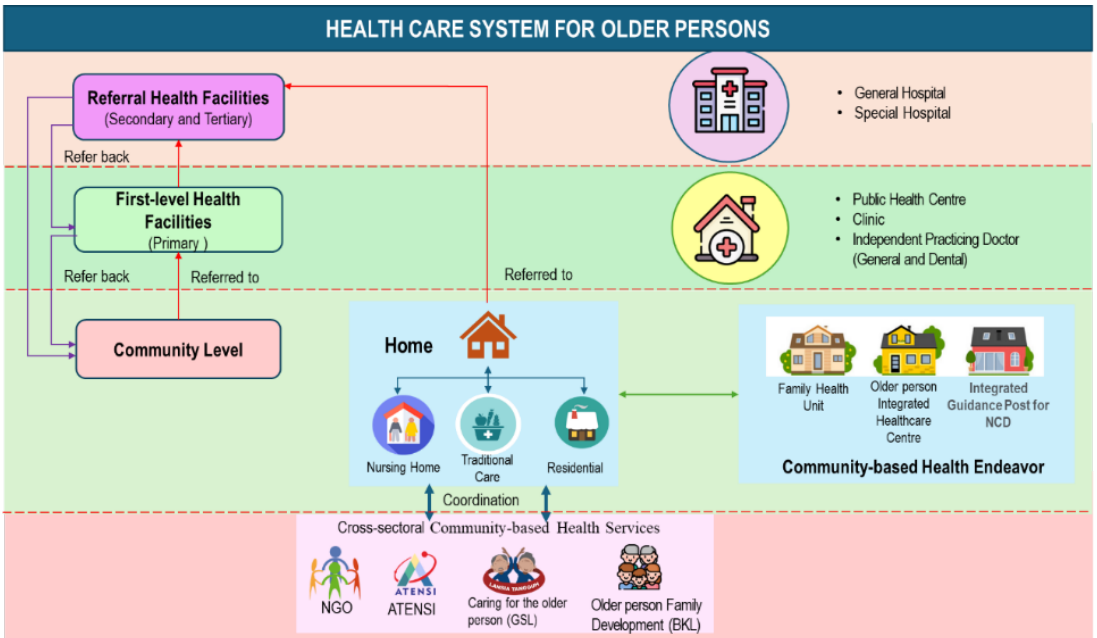
	Province	District or City	Community Health Services
		Yogyakarta city	The cadre training budget is usually covered by the local health office. However, some cadres do not receive honorariums at all or, if they do, the amount is tiny. For example, cadres receive Rp25,000 for transport from the health centres. Honorariums are given once every few months depending on the budget.
3.	Bali	Denpasar city	Older persons' activities are managed with the coordinating body of social welfare activities of the district or city. Every year, activities target villages that have not conducted programmes for older persons, such as seniors' exercises. Older persons' activities at the integrated service posts or NCD integrated posts include exercise, yoga, health screening, recreation, and dancing.

Source: Results of field data collection (2022).

3.1.5. Service Mechanisms

Older persons' health service mechanisms can be seen in Figure 3.5. Health services follow older persons' health system algorithms, starting from community-based health efforts, primary health facilities (health centres or clinics), and follow-up referral health facilities (general or specialty hospitals). If older persons require a referral, they can be sent to hospitals (including those with geriatric clinics). At follow-up referral health facilities, they may receive a referral to primary health facilities. Primary health facilities provide services consist of assessment, medication, consultation, rehabilitation, laboratory screening, pharmacies, and disease prevention and health promotion activities, all inside the building. Services outside the building consist of home care, LTC, community-based health efforts, nursing home guidance, community empowerment, and services in crisis situations.

Figure 3.5 Mechanism of Older Persons Health Services



Note: NGO=Non-Governmental Organisation; ATENSI= Asistensi Rehabilitasi Sosial (Social Rehabilitation Assistance); GSL= Gerakan Sayangi Lansia (Love to older persons); BKL= Bina keluarga Lansia (Older Persons' Family Guidance); NCD=Non-Communicable Disease.

Source: Author (2023).

Older persons' health service mechanisms vary between regions. In certain areas, some health facilities such as health centres provide age-friendly services. Service mechanisms for older BPJS Health beneficiaries are implemented as follows:

1. All older active BPJS Health participants are under a tier-based referral system and have the same rights as all participants.
2. Older persons routinely seek medication based on tier-based referrals. They will be referred to a clinic that handles the main disease.
3. Referrals depend on medical indications. The primary health facility will refer to a hospital that can handle the medical condition. If a type C hospital cannot handle it, then the patient can be referred to a type B or A hospital. The goal is for patients not to remain too long at one health facility.
4. At each hospital, BPJS employees ensure that BPJS patient management is based on regulations.

The level of implementation was observed in the study's five districts and five cities. Using BPJS Health sometimes makes older persons feel uncomfortable, especially if they need to follow certain procedures. For example, in an outpatient visit, older persons must queue several times before being served by a specialist or receiving medication.

Social Security Administrator for Health (Badan Penyelenggara Jaminan Sosial [BPJS]) Service Mechanism

The BPJS queuing system for older persons still requires improvement.

In general, older persons must queue repeatedly at type C and D hospitals. Another inconvenience is the limited duration of patient care, which forces patients to go through the process again based BPJS Health regulations.

The study found that older persons go an integrated service post for both disease prevention and health promotion care. If they require medical care, the health centre is their first choice. They go to hospitals for further care after receiving a referral from health centre.

Table 3.9 Health Centre Services in the Study's 5 Districts and 5 Cities, 2022

	Province	District or City	Health Centre Services
1.	West Java	Ciamis district	One health centre has a special tuberculosis (TB) room reached directly from the registration room so that TB patients are separate from general patients. Older patients are prioritised, from registration to health services. The health centre conducts home visits to older persons who cannot go to the health centre.
		Bekasi city	The health centre has separate registration counters, health clinics, and waiting rooms for general and older patients.
2.	Yogyakarta	Yogyakarta city	The health centre has an older persons' room. From registration, older persons are screened for the risk of falling, then given a yellow sticker so they can be seen by other health providers. (Before the pandemic, they wore a fall-risk necklace.) The health centre offers physical, anamnesis, laboratory (as needed), pharmacy, dental, and nutrition services.
3.	Bali	Denpasar city	The health centre first conducts core health screening for coronavirus disease (COVID-19) symptoms. Then older persons are served according to the screening results. The health centre has special counters, waiting rooms, and health services for older persons.
4.	Central Sulawesi	Sigi district	One health centre has a special counter and room for older persons, but it has not operated since the outbreak of the COVID-19 pandemic. The service mechanism is the same as for general patients.

Source: Results of field data collection (2022).

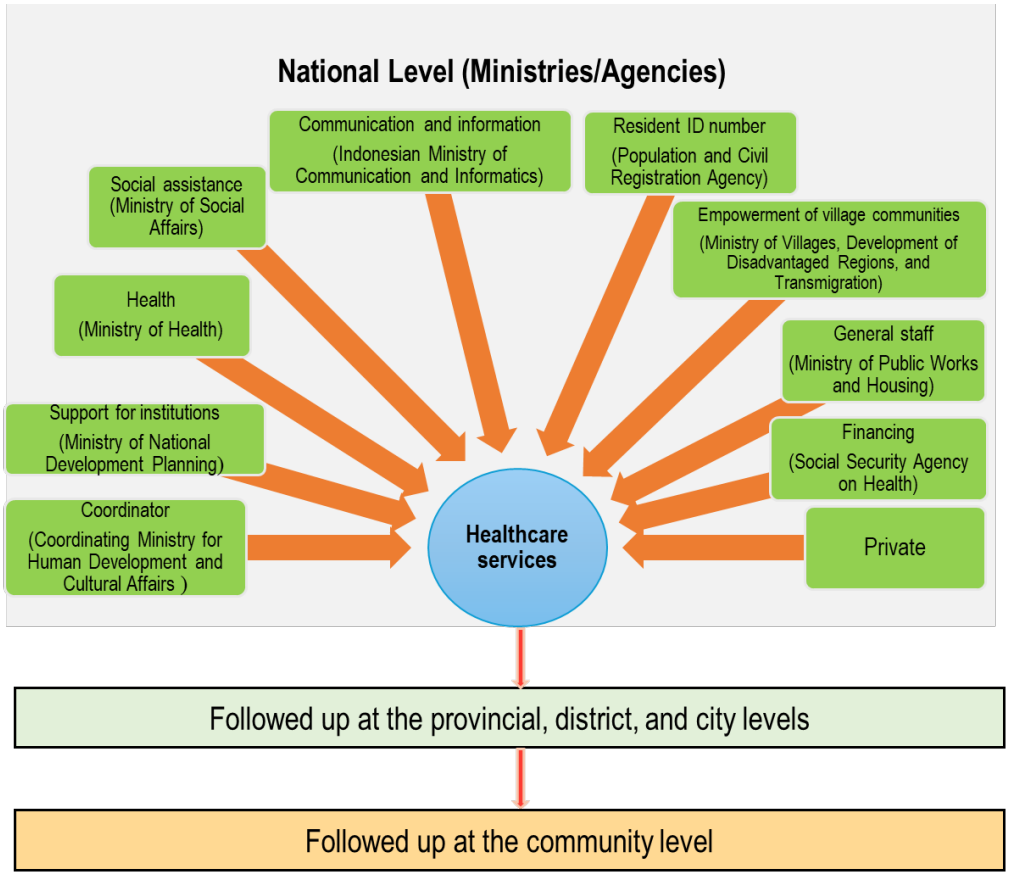
3.2. Institutional Analysis and the Role of Government and Non-government Institutions

The National Strategy on Ageing strengthens ageing programmes by developing standards and improving the quality of old persons' institutions; strengthening the accreditation system for old persons' institutions; and developing an education, training, and certification system for older persons' service providers.

Strengthening national and regional old persons' institutions involves government and non-government organisations, including the private sector and communities, and may motivate them to coordinate with each other.

MoH is mainly responsible for older persons' health services and may cooperate with other sectors in providing them. BPJS Health and BPJS Employment play a role in health financing. The roles of other sectors are illustrated in Figure 3.6. Stakeholders cooperate, collaborate, and coordinate not only at the national level but also at the regional and community levels.

Figure 3.6. Older Persons' Health Services at the National, Regional, and Community Levels



Source: Author (2023).

Table 3.1 describes the related institutions. If each institution carries out its role well, it will help support integrated older persons' health services at all levels.

Table 3.10 Roles of Institutions Related to Older Persons' Health Services

No	Institutions	Roles
1.	Coordinating Ministry for Human Development and Cultural Affairs	Coordinates ministry and agency policies and ageing programmes (including an integrated healthcare system)
2.	Ministry of National Development Planning	Supports (i) programme planning and budgeting; (ii) coordination and collaboration across ministries and agencies to implement old persons' programmes, especially integrated health service systems; and (iii) establishment of an older persons' data system
3.	Ministry of Health	Directly provides older persons' health services, including LTC, to (i) increase collaboration, synergy, and cooperation between national and regional stakeholders to improve access to and the quality of health services, including LTC; and (ii) develop the readiness and preparedness of the older persons' health system
4.	Ministry of Social Affairs	Helps (i) increase collaboration, synergy, and cooperation between national and regional stakeholders to improve access to and the quality of health services for older persons; (ii) with MoH, develop the readiness and preparedness of the older persons' health system; and (iii) strengthen LTC institutions.
5.	Ministry of Communication and Informatics	(i) Increase support to MoH and MoSA to make available communication facilities and infrastructure and reliable information materials to ready and prepare the older persons' health service system, and (ii) help develop age-friendly information systems.
6.	Ministry of Home Affairs	(i) Increase support, especially to MoH and MoSA, in implementing older persons' health services and easing access to the population registry; (ii) encourage local governments to support older persons' health programme policies and budgets; (iii) help establish an integrated older persons' data system
7.	Ministry of Villages, Development of Disadvantaged Regions, and Transmigration	(i) Help implement older persons' programmes by allocating village funds to them, and (ii) help empower village communities to support older persons' health
8.	Ministry of Public Works and Housing	Support the development of age-friendly facilities and infrastructure, especially in health facilities
9.	Social Health Insurance Administration Body and Social Security Administrator for Employment	(i) Manage older persons' health financing, (ii) develop LTC financing schemes, and (iii) develop older persons' health service procedures
10.	Private sector	(i) Support the financing of older persons' health services, and (ii) improve the implementation of older persons' health services
11.	Local governments (provincial, district, city)	(i) Increase cooperation and synergy with the national government in implementing older persons' health service programmes; (ii) increase collaboration, synergy, and cooperation between stakeholders in implementing older persons' health programmes; and (iii) support availability of budget for infrastructure, health facilities, and human resources for older persons' health service

Source: Results of field data collection (2022).

The National Commission (Komisi Nasional) for Older Persons was formed by Presidential Decree of the Republic of Indonesia 52 (2004). The commission was a non-structural and independent coordination forum between government and society. The commission's task was to assist the president in coordinating the improvement of older persons' social welfare, and to suggest policies to improve older persons' social welfare. The commission collaborated with national and regional government agencies, community organisations, experts, international organisations, and other parties. In 2014, however, the commission was suspended and, in 2020, officially disbanded by Presidential Regulation 112 (2020).

National organisations are the Indonesian Older Persons' Institute (Lembaga Lanjut Usia Indonesia) and the Social Welfare Institute (Lembaga Kesejahteraan Lanjut Usia, which changed its name to the Family Compassion Centre (Pusat Santunan Keluarga). Both are under the guidance of MoSA. The Indonesian Older Persons' Institute is attempting to become independent to widen its range of activities. It has branches in 21 provinces and partnerships with government retirees, veterans, armed forces retirees, amongst others.

The Indonesian Older Persons' Institute is most active in Bekasi city amongst the study's areas. The institute's activities are as follows:

- uniting older persons' groups (*paguyuban*) in Bekasi city;
- coordinating with the city's health and social offices, and Family Welfare Empowerment (Pemberdayaan Kesejahteraan Keluarga [PKK]);
- motivating older persons to become involved in institute activities: exercise, health screening, free cataract operations, and COVID-19 vaccination;
- organising health screening in cooperation with hospitals;
- assisting older persons who need medication at hospitals and the use of institute ambulances;
- reporting on older persons requiring assistance such as wheelchairs to access social services;
- visiting institute branches to monitor their activities;
- empowering older persons' productivity, depending on branch capacities, including catfish farming and planting water spinach in a barrel containing catfish, which, however, were limited during the COVID-19 pandemic;
- holding a regional discussion meeting to elect a new organisation structure; and
- helping formulate Regional Regulation 3 (2022) on older persons' welfare.

No hierarchy or structural relationship existed between the National Commission and regional commissions on older persons. The regional commissions still operate,

covered by Regulation of the Minister of Home Affairs 60 (2008). Yogyakarta, East Nusa Tenggara, West Java, and East Java have active regional commissions. The regional commission of Palu city, however, is inactive because the chairperson (vice mayor) is not interested in programmes on ageing. The regional commission of Denpasar city is 'dead'. The regional commission in Gianyar district was formed in 2008 and disbanded in 2016.

Most regions in eastern Indonesia – including Merauke district and Jayapura city, for example – have not formed regional commissions. The local social affairs office said it has recommended to the governor forming a regional commission and a branch of the Indonesian Older Persons' Institute but has received no clear response. Sigi district has formed a regional commission, which was officially declared on 21 December 2022.

Regional commissions and branches of the Indonesian Older Persons' Institute are important to coordinate and support programme management and to foster cooperation between stakeholders. As non-structural institutions, they provide inputs to policies for local governments and regional apparatus organisations. Regional commissions formulate programmes with local governments to motivate communities. In Ciamis district, West Java, for example, the regional commission monitors the implementation of ageing programmes by local governments and recommends the establishment of age-friendly facilities.

The regional commissions in Yogyakarta city and Gunung Kidul district are limited to providing inputs to local government policies. Regional commissions face challenges such as limited budgets and dependence on local government officers. Several regions have no laws – such as governor, regent, or mayor regulations – supporting ageing programmes. This is the case in Jayapura city and Merauke district, where neither a regional commission nor a branch of the Indonesian Older Persons Institute has been established.

Not all provinces, districts, or cities are committed to establishing regional commissions or branches of the Indonesian Older Persons Institute. Palu city and Sigi district are strongly committed to optimising the regional commission's role, as are Denpasar city and Gianyar district, because their leaders have been proactively supporting the institutions. Bali has regional laws and regulations on ageing and its districts and cities are still discussing the establishment of regional commissions. Where regional commissions exist, more activities are conducted for older persons, including village visits and regular social gatherings.

Opinions differ on regional commissions. Some key informants stated that the regional commissions have no legal basis as Minister Home Affairs Regulation 60 (2008) on government internal control systems is no longer valid. Another key informant stated that regional commissions are still relevant because the National Commission has been disbanded.

Not all provinces, districts, or cities coordinate with local governments on implementing older persons' programmes. Target beneficiaries are determined based on need. The function of the provincial development planning agency (*badan perencanaan pembangunan daerah*) as development coordinator not been maximised in synchronising activities and old persons' programmes. All older persons' programmes are implemented by other institutions and related services, resulting in overlap with older persons' programmes and inefficiency. One reason is the unavailability of older person data integrated for determining the target of the programme.

In Jayapura city, non-government organisations and churches actively encourage communities to utilise services at health facilities or older persons' integrated service posts, and older persons to join social activities.

In Ciamis district, the local government and the community cooperate on managing old persons' programmes. In Palu city, even though the chairperson did not support the regional commission, it coordinates with the regional commission in Central Sulawesi province. The Palu city regional commission develops older persons' community activities, conducts workshops with the regional commission in Central Sulawesi province, and encourages districts and cities to establish regional committees.

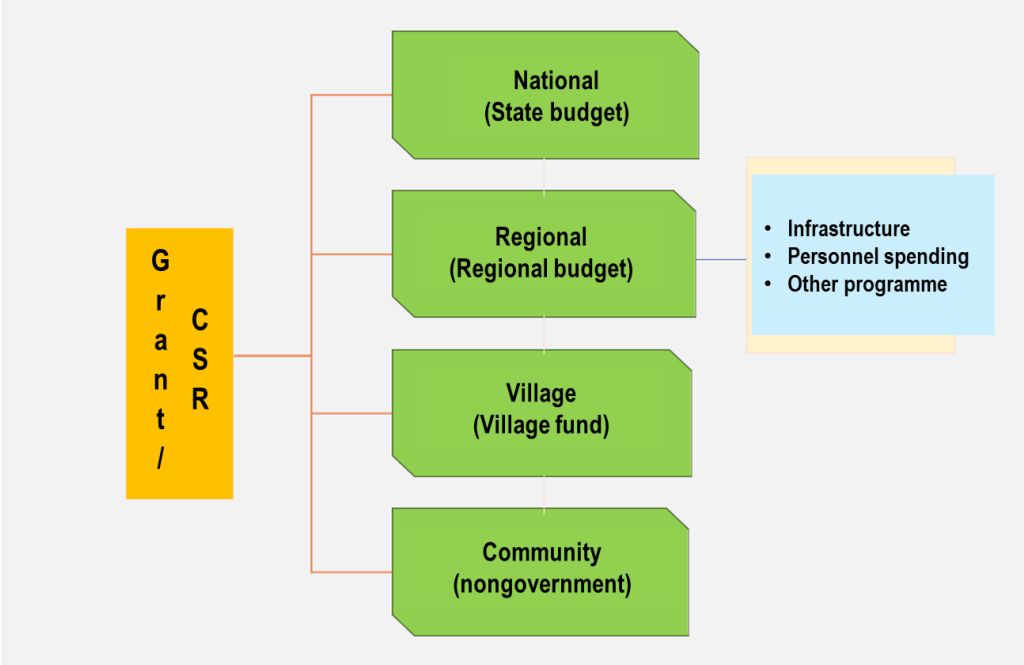
Institutions must be strengthened, especially in terms of coordination of older persons' programmes. Independent institutions must coordinate not only with the government but also with the non-government sector nationally and regionally.

3.3. Analysis of Health Financing and Gap

Financing older persons' health services is still a challenge as they are not prioritised in regional budgets. Financing is available through BPJS Health, and most older persons are contribution assistance (*penerima bantuan luran*) members. This means that their health financing is covered by the government. A future challenge will be the increase in number and proportion of older persons. Regional and national governments and policymakers must increase independent BPJS participation.

The financing scheme for older persons' health services follows that for health programmes in general (Figure 3.7). Budget posts for older persons' programmes, specifically in the regions, are not yet available. Only Gianyar and Gunung Kidul districts have a budget for health services, including for older persons. Financing for older persons' health services in rural areas could be obtained from village funds. However, these funds are prioritised for stunting management programmes.

Figure 3.7 Financing Scheme for Older Persons' Health Services



CSR = corporate social responsibility.
Source: Various official sources.

Table 3.11 describes service financing in the study's five districts and five cities. Several regions including Gianyar and Gunung Kidul districts, provide special funds to increase health service coverage, including of older persons.

Table 3.11 Older Persons' Health Financing in the Study's 5 Districts and 5 Cities, 2022

	Province	District or City	Older Persons' Health Financing
1.	West Java	Ciamis district	NCD integrated post budget sources come from health centres at Rp1.5 million per activity, supported by older persons' donations according to their capacity. Health centres obtain funding from the regional income and expenditure budget and health operational assistance, and budget management through the regional public service agency. The health department's budget sources come from the provincial and district regional income and expenditure budgets, and the national income and expenditure budget, with a special allocation fund and health operational assistance.
		Bekasi city	Programme financing is sourced from the regional income and expenditure budgets, which are channelled through the district health office. Health centres source financing from capitation and the health offices. Health centres' financing is focused on service activities inside the building, including human resource and facility costs. Services outside the building – outreach and NCD integrated posts – have not been prioritised.

	Province	District or City	Older Persons' Health Financing
2.	Yogyakarta	Gunung Kidul district	Independent health financing schemes and BPJS support old persons' health services. BPJS Health contribution assistance participants are based on integrated social welfare data from the social affairs office, but those not in the records can request that BPJS be paid by the regional income and expenditure budgets. Health financing at the health centre is allocated from health operational assistance and the regional public service agency (including BPJS capitation). Health operational assistance funds in the older persons' programme are mostly for officers' transport to health posts and cannot be used for other activities. Supplementary feeding at integrated service posts or NCD integrated posts usually depends on villages' policy of allocating funds. The health office finances procurement of blood sugar and cholesterol screening tools, but funds were cut in 2023. Special funds for programmes are issued by the provincial government. Another source is the general allocation fund, especially to procure reagents, but the 2023 budget received only Rp10 million. The general allocation fund no longer supports other items and is used only for coordination meetings and for procurement of screening equipment, in limited quantities and only at a few integrated service posts.
		Yogyakarta city	BPJS Health, especially contribution assistance, supports older persons' health programmes. Operational funding for health centres comes from the regional public service agency, regional income and expenditure budget, and health operational assistance. Community-based health efforts are supported mostly by health operational assistance funds, which, however, face challenges. For example, the funds do not fund LTC. Budgeting is not specific to programmes (e.g., for older persons). Budgeting in the local government is done according to nomenclature.
3.	Bali	Gianyar district	Two schemes finance health services for older persons: BPJS Health and Gianyar Aman, which cover all diseases and services, but patients must have a Gianyar identity card. The health assistance fund is sourced from the Gianyar budget. Gianyar Aman is considered more beneficial than the community health service guarantee. The budget for the community health service guarantee amounted to Rp70 billion, whilst Gianyar Aman spent only Rp20 billion per year.

	Province	District or City	Older Persons' Health Financing
		Denpasar city	Health office staff said that funding for health programmes comes from the cigarette tax, the provincial special allocation fund, and the local government. Bappeda staff said that 40% of regional expenditure is for infrastructure, 40% for personnel, and 20% for other programmes. The personnel expenditure requirement is 40%. Denpasar has not been able meet it because of the city's large number of health workers and teachers. The 24-hour emergency service is supported by Denpasar Public Health (Denpasar Mantap Kesehatan Masyarakat) in the form of free community health services, including for older persons, from the city government's regional income and expenditure budgets.
4.	Central Sulawesi	Sigi district and Palu city	Older persons' health financing is sourced from BPJS Health. Health centre financing for operations comes from the regional income and expenditure budgets. The district government's Sigi Masagena Programme provides free health services at regional health facilities for middle and lower economic groups. Funding is from the regional income and expenditure budgets.
5.	Papua	Merauke district and Jayapura city	Financing for older persons' curative and rehabilitative treatment comes from BPJS Health or National Health Insurance–Healthy Indonesia Card. Promotion and prevention activities are financed by the regional income and expenditure budgets, village funds, or special autonomy funds. Budgets are allocated to each regional apparatus organisation, based on Bappeda approval, which then allocates funding to each programme. The budget for older persons' programmes is mixed with budgets of programmes not specifically for older persons. Health centre budgets are insufficient to provide medicines for hypertension, paracetamol, and CTM, for example, so the gap must be filled by BPJS capitation funds.

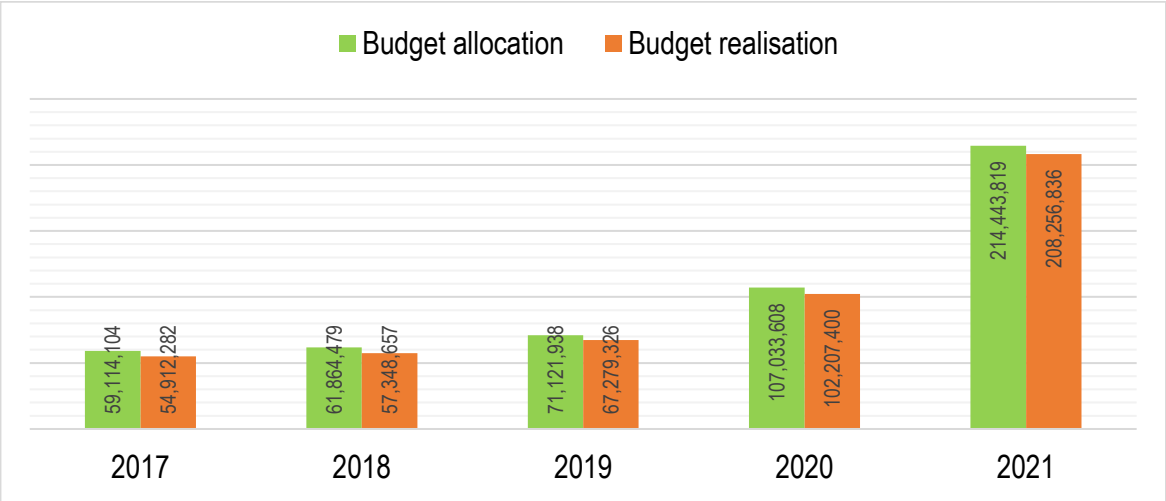
Bappeda = Badan Perencanaan Pembangunan Daerah (provincial development planning agency), BPJS = Badan Penyelenggara Jaminan Sosial (Social Security Administrator for Health), CTM = chlorpheniramine.
Source: Results of field data collection (2022).

Financing for older persons' health is sourced from the basic health service budget and has no specific budget allocation. Budgeting for older persons' health programmes has not been a priority in the regions, hindering the provision of health services for older persons. Health service financing is generally from the national and regional income and expenditure budgets, revenue-sharing funds, the general allocation fund, and the special allocation fund. Older persons' health services consist of health promotion, disease prevention, treatment, and rehabilitation conducted at various health service facilities, including in communities.

MoH increased its budget allocation in 2017–2021 (Figure 3.8). Allocation was highest

in 2021 at Rp214.44 trillion; realisation was Rp208.25 trillion. About 21.2% (Rp45.4 trillion) was allocated for contribution assistance in the National Health Insurance scheme, 74.4% for procurement of goods, 2.4% for employee salaries, and 2.0% for capital. Social assistance received the highest share of the realised budget at 98.5% and basic capital received the lowest at 57.9% (Kementerian Kesehatan, 2022).

Figure 3.8 Budget Allocation and Realisation (in Millions of Rupiah), Ministry of Health, Indonesia, 2017–2021

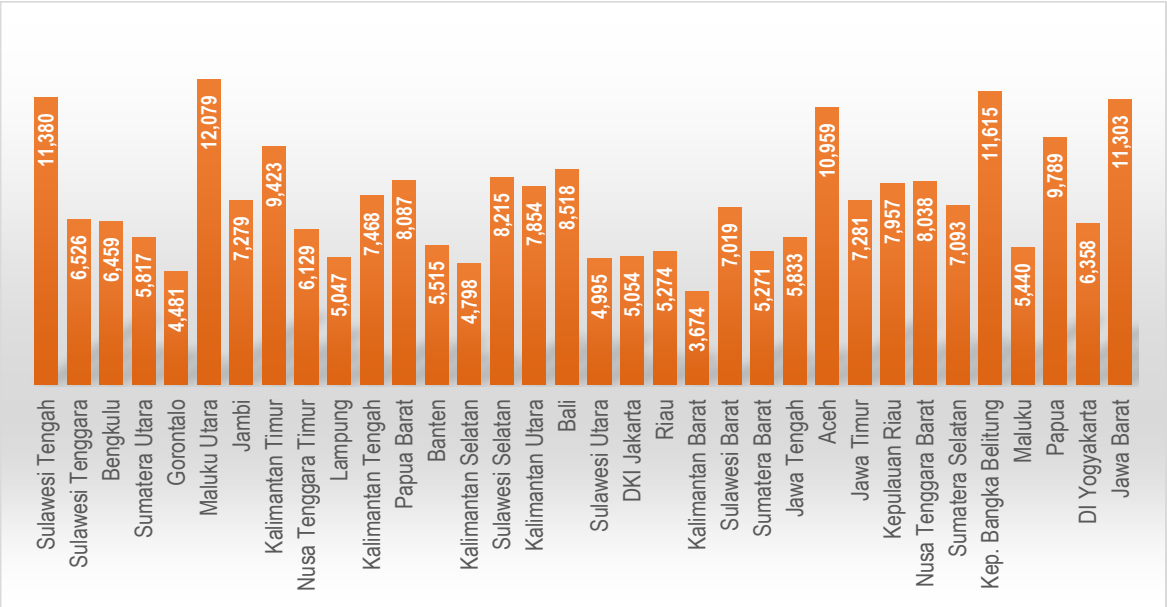


Source: (Kementerian Kesehatan, 2022).

De-concentration funds are allocated for non-physical activities and do not add to fixed assets. Activities include synchronisation and coordination of planning, facilitation, technical assistance, training, promotion, supervision, workshops, research and surveys, guidance, monitoring, and supervision.

Realisation of de-concentration funds is highest in Central Sulawesi (97.6%) and lowest in West Java (48.1%). The reasons for low usage of the de-concentration budget in several provinces must be reviewed. The adequacy of the de-concentration budget allocation for each programme in every province must be ascertained (Figure 3.9).

Figure 3.9 Realisation of Health De-concentration Funds (Rp million) by Province, Indonesia, 2021



Source: Kementerian Kesehatan (2022).

Special allocation funds finance physical activities such as provision of health centre facilities, infrastructure, and medical equipment; procurement of health information system equipment; and provision of tools and materials for disease control and environmental health. Physical activities also include ensuring the continuity of hospitals and community health centres that are not yet operational; strengthening regional health laboratories; developing, upgrading, rehabilitating, and/or renovating provincial, district, and city hospital facilities; providing medical equipment and infrastructure to hospitals; and improving and building blood transfusion units, including meeting the need for equipment, facilities, and infrastructure at provincial, district, and city hospitals. Other physical activities include providing medicines and consumable medical materials to district and city health centres; and developing, rehabilitating, and providing infrastructure for provincial, district, and city pharmaceutical installations.

Nationally, physical special allocation fund realisation was 36.7% in 2021, with the highest in Jakarta (81.6%) and the lowest in West Papua (10.5%). The non-physical special allocation fund for health consists of health operational assistance, maternity insurance, accreditation of community health centres, and drug and food supervision. Nationally, non-physical special allocation fund realisation was 34.5% in 2021, with the highest in East Nusa Tenggara (56.7%) and the lowest in Maluku (16.3%).

Based on the findings from the study's five districts and five cities, the national income and expenditure budgets financed strengthening integrated service posts, community health centres, and hospitals; increasing the capability of health workers; and strengthening human resources, including geriatric doctors. The budget for health programmes comes from the special and general allocation funds for health.

Older persons' health financing at health centres is from health operational assistance funds. Health centre budgets are managed by regional public service agencies, so the health centre heads have the authority to plan programmes and activities, initiate innovations in older persons' health services, and plan human resources based on needs. Several health facilities also receive support from corporate social responsibility funds and use village funds for older persons' health post programmes.

Several regions share budgets to support older persons' health. Papua has special autonomy funds, especially for indigenous Papuans. Older people's health financing in Gianyar, Bali comes from BPJS Health, and Gianyar Safe Health Support from the district's regional income and expenditure budgets and the tobacco tax fund. Yogyakarta has a special fund to support older persons' health, which, however, is not used as proposals face obstacles. Sigi district's Masagena programme supports medium and lower economic communities through free services for older persons seeking medication or inpatient treatment.

In general, older persons' health services are financed by BPJS Health, with recipients of contribution assistance outnumbering independent recipients of non-contribution assistance. Older persons will face increasing health costs if the increase in their number is not accompanied by better health status. No special budget posts exist for older persons' health services. The government must increase independent participation so that BPJS does not financially burden the government.

3.4. Readiness of Health Services to Manage Older Persons' Needs

Older persons face various obstacles, in their health and in their socio-economic status. The government, in cooperation with various stakeholders, must pay attention to the preparedness of older persons' health services. The time has come to integrate national, regional, and community health services.

Health services should not only consider older persons now but also take a life-cycle approach starting when people are young. Healthy lifestyles from an early age are an investment to ensure healthy old age.

Facilities, human resources, and health financing must be based on older persons' needs, which various health service components have not met. The entire country must pay serious attention to the components' quantity, quality, and distribution. The eastern region generally has fewer facilities and health providers than other regions.

The number of health facilities is insufficient for older people. Primary health facilities face obstacles in providing age-friendly services because of limited space and number of health providers. Several health centres require older persons to queue, have no special counters for older persons, and place older persons in the same rooms as other patients.

Many primary health providers have no knowledge of geriatrics and must be trained. Few follow-up referral hospitals, even type A hospitals, have geriatric clinics, which are needed to manage older persons' health.

Chapter 2 showed that the number of older persons needing LTC has increased, which means that the need for caregivers is increasing. The Economic Research Institute for ASEAN and East Asia (ERIA) projects that older persons requiring LTC will increase from 446,000 in 2020 to 665,000 in 2030. If one nurse or caregiver looks after three older persons in a nursing home, then 222,000 nurses or caregivers will be needed by 2030.

Financing is important for preparedness of older persons' health services and is often an obstacle to providing them. National government programmes are sometimes constrained by the lack of regional funds. Budgets must increase shared programme funds so that programmes rely not only on national but also provincial, district, and city funding. Rural areas can use the village fund allocation for older persons' programmes. Leaders in some regions allocate funds for older persons' programmes but depend on the regional budget to fund cadres and/or caregivers, geriatric training, and older persons' kits. A scheme is needed to utilise BPJS Health for LTC for older persons.

The most important factor is the commitment of programme officers. Field work found that sources of funding are available. If the officers perform well, show commitment, and are serious about programme implementation, then programmes will be sustainable. Conversely, if officers do not prioritise the programmes, then funding will be terminated.

The preparedness of older persons' health services is hindered by lack of medicine and health-screening instruments. This is an obstacle to efforts to improve the health of older persons.

Service Preparedness

Older persons' health services must anticipate the impact of the increasing proportion of older persons. Challenges in service delivery include inadequate quantity and quality of facilities, human resources, data, financing, regulations, and institutional strengthening. In 2030, about 222,000 nurses or paid caregivers are projected to be needed for long-term care. If a nurse of caregiver is paid Rp6,000,000 per month, the cost of hiring the needed nurses and caregivers will be Rp1.3 trillion per month.

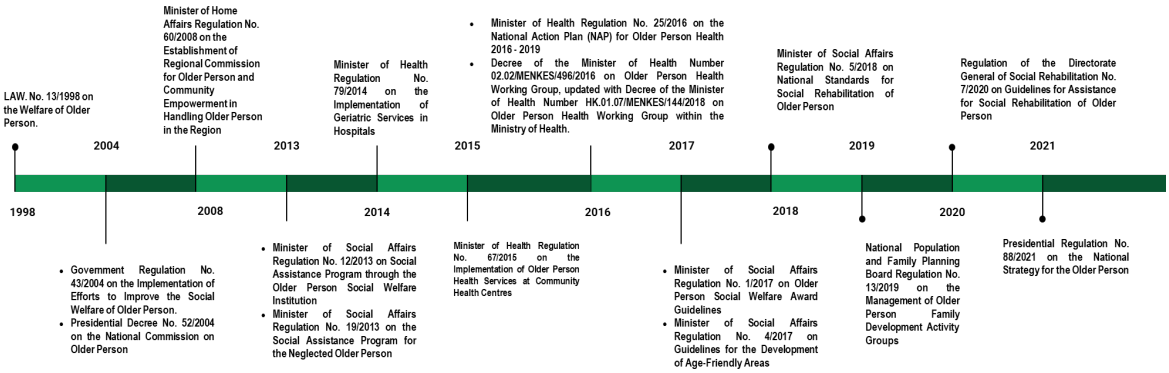
CHAPTER 4

Policies and Regulations related to Older Persons in Indonesia

Policies and older persons' health programmes must be supported by laws and regulations. The study identified policy instruments for strengthening future older persons' health services. This chapter reviews existing regulations and identifies aspects that must be renewed and proposed in line with the shifting paradigm and older persons' future characteristics.

Older persons' health services have been in accordance with the Constitutional Basic Law of 1945 and other laws and regulations, both directly related to older persons and general. National laws and regulations relate to older persons' welfare. Figure 4.1 shows the timeline of regulations related to ageing up to 2021.

Figure 4.1 Timeline of Ageing Regulation in Indonesia



Source: Various laws and regulations.

4.1. Regulation Reviews

This section presents the various laws and regulations related to ageing. National laws, government regulations, presidential regulations, ministerial regulations, and minister decrees cover older persons' health. Provincial, district, and city laws and regulations ease the implementation of national legislation.

Ministries and institutions, including the Ministry of Health (MoH), have formulated national laws and regulations, some of which are directly related to health whilst several are related to the older population and other sectors.

Various laws and regulations on the Social Security Administrator for Health (Badan Penyelenggara Jaminan Sosial [BPJS]) Health are related to its implementation, coverage, procedures, and other aspects. Health services are implemented through BPJS Health, including the premium to be paid and services received.

The following are national laws and regulations related to older persons' health:

1). Health and social security system

a) Law 40 (2004) concerning the National Social Security System, related to implementation of social security programmes

b) Law 36 (2009) concerning health, on the definition of health and health services

c) Regulation of the Minister of Health 28 (2014) concerning guidelines for the implementation of the National Health Insurance Programme

d) Regulation of the Minister of Health 25 (2016) concerning the National Action Plan (NAP) for Older Persons' Health 2016–2019

e) Regulation of the Minister of Health 7 (2021) concerning the fourth amendment to Regulation of the Minister of Health 71 (2013) concerning health services in the National Health Insurance Programme

f) Decree of the Minister of Health 02.02/MENKES/496/2016 concerning the Older Persons' Health Working Group, updated with Decree of the Minister of Health HK.01.07/MENKES/144/2018 concerning the Older Persons' Health Working Group within the Ministry of Health.

2). Health facilities

a) Law 44 (2009) concerning hospitals

b) Government Regulation 47 (2016) concerning health service facilities

c) Government Regulation 47 (2021) concerning the implementation of hospital

d) Regulation of the Minister of Health 43 (2019) concerning community health centres

e) Decree of the Minister of Health 298 (2008) concerning guidelines for accreditation of health laboratories

f) Regulation of the Minister of Health 755 (2011) on the implementation of medical committees in hospitals

g) Regulation of the Minister of Health 40 (2018) concerning guidelines for government cooperation with business entities in the provision of health infrastructure

h) Regulation of the Minister of Health 43 (2019) concerning health centres

i) Regulation of the Minister of Health 3 (2020) concerning hospital classification and licensing

3). Health services

a) Law 29 (2004) concerning medical practices, related to the number of members of the Indonesian Medical Council (17 persons)

b) Regulation of the Minister of Health 1691 (2011) concerning hospital patient safety

c) Regulation of the Minister of Health 5 (2014) concerning clinical practice guidelines for physicians in primary healthcare facilities

d) Regulation of the Minister of Health 79 (2014) concerning the implementation of geriatric services in hospitals

e) Regulation of the Minister of Health 4 (2019) concerning technical standards for fulfilment of basic service quality at minimum service standards in the health sector

f) Regulation of the Minister of Health 11 (2022) concerning occupational disease health services

g) Regulation of the Minister of Home Affairs 19 (2011) concerning guidelines for integrating basic social services at integrated service posts

h) Regulation of the Minister of Health 67 (2015) concerning the implementation of older persons' health services at community health centres

4). Health financing

a) Regulation of the Minister of Health 12 (2021) concerning technical guidelines for the use of the special allocation for the health sector, budget year 2021

b) Regulation of the Minister of Health 2 (2022) concerning technical guidelines for the use of nonphysical special allocation for the health sector, fiscal year 2022

c) Regulation of the Minister of Finance 240 (2020) concerning operational funds of BPJS Health in 2021

5). Laws and regulations related to older persons, various sectors

a) Law 13 (1998) concerning the welfare of older persons

b) Law 39 (1999) on human rights

c) Law 11 (2009) concerning social welfare

d) Law 52 (2009) on population and family development

e) Law 23 (2014) concerning regional governments

f) Law 8 (2016) concerning persons with disabilities

g) Law 2 (2020) on the government regulation in lieu of Law 1 (2020) on state financial policy and financial system stability for handling the coronavirus disease 2019 (COVID-19) pandemic and/or in the context of threats endangering the national economy and/or financial system stability

h) Government Regulation 43 (2004) concerning the implementation of efforts to

improve the social welfare of older persons

i) Government Regulation 2 (2018) concerning minimum service standards

j) Presidential Regulation 88 (2021) concerning the National Strategy for Ageing

k) Regulation of the Minister of Social Affairs 19 (2012) concerning guidelines for social services for older persons

l) Regulation of the Minister of Social Affairs of the Republic of Indonesia Number 12 of 2013 concerning the Social Assistance Programme for Older Persons

m) Regulation of the Minister of Social Affairs 19 (2013) concerning social assistance through older persons' social welfare institutions

n) Regulation of the Minister of Social Affairs 22 (2016) concerning National Social Welfare Institute (Lembaga Kesejahteraan Sosial) standards

o) Regulation of the Minister of Social Affairs 1 (2017) concerning guidelines for older persons' social welfare awards

p) Regulation of the Minister of Social Affairs 4 (2017) concerning guidelines for the development of age-friendly areas

q) Regulation of the Minister of Social Affairs 1 (2018) concerning the Family Hope Programme

r) Regulation of the Minister of Social Affairs 5 (2018) concerning national standards for social rehabilitation of older persons

s) Regulation of the Minister of Social Affairs 7 (2022) concerning social rehabilitation assistance

t) Regulation of the Director General of Social Rehabilitation of the Ministry of Social Affairs 7 (2020) concerning operational guidelines for social rehabilitation assistance for older persons

u) Regulation of the Minister of Women's Empowerment and Child Protection 24 (2010) concerning gender-responsive elderly protection models

v) National Population and Family Planning Agency (Badan Koordinasi Keluarga Berencana Nasional [BKKBN]) Regulation 13 (2019) concerning management of activities of older persons' family groups

w) Regulation of the Minister of Home Affairs 60 (2008) concerning the establishment of regional commissions for older persons and community empowerment of older persons in regions

x) Government Regulation 44 (2015) concerning the implementation of the Work Accident and Death Insurance Programme

y) Regulation of the Minister of Social Affairs 184 (2011) concerning social welfare institutions

Table 4.1 summarises regulations related to ageing programmes, including health services for older persons.

Table 4.1 Regulations Related to Older Persons' Health Programmes

Regulatory Framework	Facilities	Services	Human Resources	Ageing Institutional	Financing	Governance
Law	Law 44/2009	Law 8/2016	Law 29/2004	Law 23/2014	Law 40/2004	Law 36/2009
		Law 11/2009		Law 2/2020		Law 13/1998
	Law 36/2009	Law 13/1998	Law 36/2009	Law 52/2009		Law 39/1999
		Law 36/2009		Law 36/2009		Law 23/2014
Government regulation	Government Regulation 47/2021	Government Regulation 47/2021	-	-	Government Regulation 44/2015	Government Regulation 3/2020
	Government Regulation 43/2004	Government Regulation 43/2004	-	-	-	-
		Government Regulation 25/2016				
Presidential regulation	-	-	-	-	Presidential Regulation 88/2021	Presidential Regulation 88/2021
Ministerial	Minister of Health Regulation 4/2019	Minister of Health Regulation 4/2019	Minister of Health Regulation 5/2014	Minister of Health Regulation 40/2018	Minister of Health Regulation 28/2014	Minister of Health Regulation 28/2014
	Minister of Health Regulation 43/2019	Minister of Health Regulation 147/2010			Minister of Health Regulation 12/2021	
	Minister of Health Regulation 3/2020	Minister of Health Regulation 755/2011			HDC 240/2020	
	Minister of Health Regulation 755/2011	Minister of Health Regulation 1691/2011	Minister of Health Regulation 79/2014			Minister of Home Affairs Regulation 19/2011
	Minister of Health Regulation	Decree of the Minister of Health 298/2014			Minister of Social Regulation	

<table>
<tr><th>Regulatory Framework</th><th>Facilities</th><th>Services</th><th>Human Resources</th><th>Ageing Institutional</th><th>Financing</th><th>Governance</th></tr>
<tr><td rowspan="11">regulation*</td><td>1691/2011</td><td></td><td rowspan="2"></td><td rowspan="5">Minister of Health Regulation 25/2016</td><td>19/2013</td><td rowspan="2"></td></tr>
<tr><td>Decree of the Minister of Health 298/2014</td><td>Minister of Home Affairs Regulation 19/2011</td><td rowspan="4">Director General of Social Rehabilitation Regulation 7/2020</td></tr>
<tr><td>Minister of Health Regulation 67/2015</td><td>Minister of Health Regulation 67/2015</td><td rowspan="4">Minister of Social Regulation 1/2017</td><td rowspan="4">Minister of Health Regulation 25/2016</td></tr>
<tr><td>Minister of Health Regulation 79/2014</td><td>Minister of Health Regulation 79/2014</td></tr>
<tr><td>Minister of Social Regulation 4/2017</td><td>Minister of Social Regulation 4/2017</td><td rowspan="6">Decree of the Minister of Health 2/2016</td><td rowspan="2">Minister of Social Regulation 1/2018</td></tr>
<tr><td>Minister of Social Regulation 5/2018</td><td>Minister of Social Regulation 5/2018</td><td rowspan="4">BKKBN Regulation 13/2019</td><td rowspan="5">Minister of Home Affairs Regulation 60/2008</td></tr>
<tr><td>Minister of PPPA 24/2010</td><td>Minister of PPPA 24/2010</td><td rowspan="2">Minister of Social Regulation 7/2022</td></tr>
<tr><td>Minister of Social Regulation 22/2016</td><td>Minister of Social Regulation 44/2011</td></tr>
<tr><td rowspan="2">Minister of Health Regulation 43/2019</td><td>Minister of Health Regulation 11/2022</td><td rowspan="2">Minister of Health Regulation 11/2022</td><td rowspan="2">Minister of Health Regulation 2/2022</td></tr>
<tr><td>Minister of Health Regulation 7/2021</td></tr>
</table>

*Including ministerial decrees and/or regulations within ministry institutions.

BKKBN = Badan Koordinasi Keluarga Berencana Nasional (National Population and Family Planning Agency), HDC = Coordinating Ministry for Human Development and Culture (Kementerian Koordinator Bidang Pembangunan Manusia dan Kebudayaan [Kemenko PMK]), PPPA = Pemberdayaan Perempuan dan Perlindungan Anak (Women's Empowerment and Child Protection).
Sources: Various sources.

Not all provinces, districts, and cities have laws and regulations related to older

persons. Denpasar, Yogyakarta, and Bekasi cities and Ciamis district have them. Palu city and Sigi and Gunung Kidul districts do not. The following are regional regulations related to older persons:

Yogyakarta Province

1. Governor's Regulation 18 (2014) concerning service standards for social institutions
2. Regional Regulation 11 (2015) concerning social welfare institutions
3. Governor's Regulation 191 (2017) concerning guidelines for the implementation of integrating basic social services at integrated service posts
4. Governor's Decree 126 (2018) concerning the management of the regional commission for older persons, 2018–2021
5. Regional Regulation 3 (2021) concerning older persons' welfare
6. Mayor's Regulation 69 (2006) on the establishment of the regional commission for older persons in Yogyakarta city
7. Mayor's Regulation 61 (2013) concerning health home services for older persons in Yogyakarta city
8. Mayor's Regulation 29 (2016) on the establishment, structure, position, and job details of the technical implementation unit of the Wiloso Projo Childcare Home and the technical implementation unit of the Budhi Dharma Social Service Home for Displaced Older Persons at the Social, Manpower and Transmigration Agency
9. Mayor's Regulation 38 (2019) concerning older persons' welfare
10. Mayor's Regulation 16 (2020) concerning guidelines for providing social assistance to poor older persons in Yogyakarta city
11. Mayor's Decree 450 (2019) concerning Yogyakarta city's road map to becoming age friendly
12. Gunung Kidul Regent's Regulation 68 (2020) concerning the adoption of the new normal, coronavirus disease prevention health protocol 2019

Bali Province

1. Regional Regulation 11 (2018) concerning the welfare of older persons
2. Governor's Regulation 48 (2020) concerning implementation regulations of Regional Regulation 11 (2018) concerning older persons' welfare
3. Denpasar Mayor's Regulation 66 (2019) concerning social protection for older persons
4. Regent's Regulation of Badung City 48 (2019) concerning social protection and rehabilitation of older persons

West Java Province

1. Governor's Regulation 28 (2020) concerning improving the social welfare of older persons in the province

2. Bekasi City Regional Regulation 3 (2022) concerning older persons' welfare
3. Regional Regulation of Ciamis District 3 (2021) concerning older persons' welfare

Central Sulawesi Province

1. Provincial Health Office Strategic Plan 2021–2026
2. Regional Regulation of Palu City 1 (2010) concerning the regional health system
3. Regulation of the Mayor of Palu 44 (2017) concerning the establishment, organisational structure, duties, functions, and work procedures of the regional technical implementation units of community health centres

Papua Province

1. Circular Letter of the Governor 440/14417/SET (2021) concerning the prevention and control of coronavirus disease 2019 during Christmas 2021 and New Year 2022 and the imposition of restrictions on community activities during the COVID-19 pandemic.

4.2. Gap Analysis of Policies and Regulations

Older persons have the right to obtain adequate health services and make decisions about health-seeking services. They have the same human rights as other groups in line with the United Nations principle of leaving no one behind. Many laws and regulations concerning older people guide policy and programmes, but their implementation remains a challenge. National laws and regulations are outdated and not followed by province, district, and city governments.

Law 13 (1998) on older persons' welfare is an example. The law is the basis for various laws and regulations related to older persons, including regulations in the regions (provinces, and districts/cities). But almost all its articles need to be revised. It would be more efficient to formulate a new law. A parliamentary expert body has drawn up a comparative matrix of all changes related to the articles. Older persons must be seen not as burdens but as having economic and social potential. Services for older persons, which were previously charity based (for example, providing social assistance in the form of food), have begun to change to rights-based services.

Ageing has become a highly complex issue, and laws should keep in step with global commitments to older persons' welfare, which change every decade. As with Law 13 (1998), changes need to be made in line with current and future conditions. For example, several terminologies are used, such as older persons with potential are those who can work or engage in other activities producing goods and/or services, whilst older persons without potential are those unable to work for a living and are dependent on other people. The terminology is considered irrelevant because older persons' productivity must not be viewed only as activities creating monetary gain.

Law 13 (1998) needs to adapt to current and future needs of older persons' health services, such as long-term care (LTC). As more older persons become disabled, an LTC system has become even more necessary.

New regulations related to ageing are necessary, as a legal umbrella for all ageing activities, both national and regional. While the new law is not yet in force, Presidential Regulation Number 88 of 2021 governs the National Strategy (Strategi Nasional [Stranas]) for Ageing.

Regulations Related to Older Persons' Health

The 1998 older persons' welfare law is considered outdated, some definitions need to be changed, and it does not cover all long-term care sectors and services.

A special law for older persons is needed as a guideline or legal umbrella for other laws and regulations, including regionally.

The Ministry of Health has regulations on older age-friendly health centres but no clear explanation of such centres' specifications and criteria.

The National Strategy on Ageing has five components, one related directly to health. The strategy is meant to promote synergy, collaboration, and coordination amongst older persons' programmes in ministries and institutions. However, its implementation faces obstacles because decision makers have yet to commit to the services or integrated programmes. Lower-tier regulations must be drawn up in the ministries and institutions.

To control the integrated services in older persons' programmes and create synergy between ministries and institutions, a working group must be mandated by decree. The laws and regulations will be well run if supported by national and regional commitment and budgeting. Decision makers must disseminate information to the lowest government levels, including villages.

Based on 2020 BPJS Health data, National Health Insurance (NHI)–Healthy Indonesia Card participants aged 60 years and above number 27 million. The risk of chronic degenerative diseases at this age is extremely high. The government has determined that older persons' basic health needs include LTC, but LTC financing is not covered by BPJS Health.

LTC includes integrated services rendered by informal or professional caregivers to older persons, especially those bedridden. Caregiver assistance allows older persons to work, maintain a level of independence, prevent disease complications or disability, prevent accidents, preserve self-care and quality of life, relieve lower-back pain, and heighten feelings of dignity. Laws and regulations on LTC, including efforts to ensure its sustainability and quality, are needed.

Minister of Health Regulation 43 (2019) concerning community health centres, and Minister of Health Regulation 67 (2015) concerning the implementation of older

persons' health services at community health centres support old persons' health. However, the second regulation does not fully explain the criteria and classifications of age-friendly health centres, giving rise to differences in interpretation. The regulation states only that older persons' health services at health centres and the health centre buildings focus on function, security, comfortability, safety, and a healthy environment. The regulation covers people of all ages, including the disabled and children.

Although ministries and institutions are covered by laws and regulations related to ageing, ageing issues are not as great a priority as other issues. In the regions, implementing old persons' programmes still faces obstacles.

The Ministry of Health formulated the 2016–2019 NAP on Older Persons' Health, which was legalised by Minister of Health Regulation 25 (2016). The regions, however, are not all aware of its existence even though they are responsible for its implementation. Even health providers do not know who is responsible for the NAP's implementation, which is likely a factor for the low coverage of older persons' health services.

A working group for older persons' health was formed under MoH to monitor the implementation of the 2016–2019 NAP. However, a change in the MoH organisation had implications for changes in personnel and working group activities. Therefore, the working group should be revived as a think tank.

Based on focus group discussions with the national government, various ministries and institutions have formulated laws and regulations. Their implementation still faces challenges. For example, programmes do not cover all older persons requiring services:

1). Ministry of Social Affairs Regulation 7 (2022) concerning Social Rehabilitation Assistance. Several components related to Social Rehabilitation Assistance (Asistensi Rehabilitasi Sosial [ATENSI]) services are directed at meeting older persons' livelihood needs (care, therapy, entrepreneurship assistance, vocational assistance, accessibility of services). The services are provided nationally by 31 health providers. Old-age homes provide regular health services to older persons but not to all of them. The Family Hope Programme and other social assistance programmes are expected to cover older persons who need government assistance.

2). BKKBN issued Regulation 13 (2019) concerning management of activity groups of older persons' family's guidance (Bina Keluarga Lanjut Usia [BKL]). The groups provide counselling, home visits, and informal education. Only 100 such groups exist and are fully functioning in only nine provinces. Family guidance programmes are needed mostly to manage and provide care for older persons but face challenges in their implementation in the regions.

3). Minister of Health Regulation 67 (2015) concerning organising older persons health services in health centres, and 79 (2014) on organising geriatric services

in hospitals. A digital application to provide integrated data on disease from early life to old age (Aplikasi Sehat IndonesiaKu [ASIK]) is to be launched in 2024. The Chronic Disease Management Program (Program Pengelolaan Penyakit Kronis [PROLANIS]) consists of activities for older persons, such as exercise and screening of blood sugar and other degenerative disease indicators. Implementing the programme is a challenge because not all health facilities can provide the services.

4). National Development Planning Agency (Badan Perencanaan Pembangunan Nasional). The agency has a road map on social security, including for older persons in 2021–2024, in the National Medium-Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional) 2020–2024. However, the road map and the development plan have not yet been enacted. The road map provides for contribution-based LTC under MoH and the Ministry of Manpower. LTC financing will be part of the benefits of social security in NHI and pension security.

The implementation of laws and regulations is hindered by decentralisation. MoH cannot directly mandate regional governments (provincial, district, or city). Provincial, district, and city health services are under the mandate of the regional government and Ministry of Home Affairs. The information conveyed by the national government should be forwarded by the regions to community health centres, which depends on the readiness of regional governments to do so.

Under Law 23 (2014) on regional government, which regulates national and regional authorities, the three health function subsystems (financing, regulation, management, and information systems) and research and health development are regulated only at the national level. Financing for treatment, for example, is arranged by the national government through NHI. Regional governments no longer have the authority to implement the regional health insurance *(jaminan kesehatan daerah [JAMKESDA])* scheme. Based on this law, the health office has little authority to monitor health programmes, including for older persons. This has an important impact on NHI, because the health office has no authority to monitor NHI implementation at health centres and hospitals.

The national government has issued regulations related to gaps in resources and services. However, if a region is requested to achieve the minimum service standard *(standar pelayanan minimal)* target and the cost of doing so is not covered by the regional budget, the standard will not be achieved. Regulation or lower-tier regulation from the province to the village is needed so that the standard's implementation can be measured, as the study found out in several locations.

Before reforms in 1998, all hospital income was owned by the state and sent to regional original revenue *(pendapatan asli daerah)*. State-owned hospital budgets

and/or changes needed approval from the regional parliament *(dewan perwakilan rakyat daerah)*. This process was bureaucratic, slow, rigid, and susceptible to politicisation.

Regional laws and regulations are needed to organise tasks and functions of regional government organisations. Future reforms must include policies to strengthen and regulate the health office. The health office carries out regulatory functions, while hospitals provide health services. Hospitals must be organisationally autonomous but also provide health service reports to the health office. Policy must allow the health office to monitor NHI and BPJS Health in their regions.

The government has enacted laws and regulations to regulate the quality and safety of healthcare but challenges remain in implementation. Despite Minister of Health Regulation 1691 (2011) concerning patient safety in hospitals, no national document explains the rights of patients, including older persons', to select health services or to protect their privacy or information. The patients' association issued only one document, specifically for tuberculosis disease care. Transparency and accountability must be enforced in the health system, especially in an era of democratisation and decentralisation.

Even though laws and regulations govern BPJS Health, cases of fraud always emerge because of inappropriate back referral, hindering efforts to achieve universal health coverage. To avoid high health costs, hospitals take in more patients so they can refer new claims to BPJS Health. Minister of Health Regulation 36 (2015) concerning fraud prevention in the implementation of the health insurance programme in the NHI system bolsters the role of health services in fraud prevention by issuing regional regulations and forming district prevention teams. The district or city health office plays an important role in ensuring accountability and good practices of universal health coverage programmes. All parties – hospitals and patients – must have a common understanding of BPJS Health.

BPJS Health includes all health services and medication during treatment. However, some older persons still have not received the required prescriptions or are not healed because the hospital has terminated their care.

A study in Bogor by showed that most communities have limited knowledge on NHI (Kurniawati, and Rachmayanti, 2018; Rohmatullailah et al., 2021). Badan Penyelenggara Jaminan Sosial (BPJS) can educate the public regarding the importance of JKN card ownership.

Based on qualitative data collected at the national level and in the study's five districts and five cities, key national government and non-government informants suggested the following:

- With the formulation of NAP, older persons' health will be regulated at the national level. However, regulation needs to be done in coordination with the Ministry of Social Affairs' social rehabilitation assistance and BKKBN to ease

categorising older persons by health or need for LTC. Older persons are divided into those who are active, those requiring preventive LTC, and those requiring LTC. LTC is being piloted, but its implementation must be assisted and monitored, including for the referral scheme.

- Regional governments formulate tier-based regulations in regions requiring specific regulation.

Key regional informants from the regional government, institutions, academia, health centre providers, nursing home providers, and cadres conveyed their hopes:

- Ciamis district. A ministerial regulation regarding villages (peraturan menteri desa [permendes]) mandates allocating a budget for older persons' health services in villages. It would encourage village heads to place priority on village fund budgets for older persons' health services.
- Yogyakarta city. Regulations are needed to manage partnerships in handling older persons' programme activities and monitoring and sanctioning regional offices. A regional regulation must impose sanctions on local offices that do not carry out their main duties related to ageing programmes. Regional regulations should clarify the duties of each local office, not only of the social and health office. The city should have an integrated older persons' programme.
- Gunung Kidul district. A regulation is needed to ensure that village funds are used especially to support older persons' programmes.
- Denpasar city. Regulations are needed that are related to the availability of health providers and the special budget allocation for older persons' programmes. A special allocation fund (*dana alokasi khusus*) should support older persons' activities and programmes.
- Gianyar district. A district regulation exists but needs to be disseminated to stakeholders in the regional offices and communities. Social, education, culture, and tourism services should collaborate and coordinate on implementing the regulation.
- Palu city. A strong regulation is needed to manage ageing policy implementation. The regional offices will execute and prioritise old persons' programmes.
- Jayapura city. A regional regulation is needed to manage the availability of age-friendly public facilities and to strengthen budget allocation for old persons' programme activities.
- Merauke district. Regional regulations on ageing should encourage institutions to cooperate.

CHAPTER 5

Comparison of Older Persons' Health Systems in Indonesia and Other Countries

The research examined older persons' health systems in several ageing countries to inform the development of the older persons' health system in Indonesia. The study reviewed conditions in Japan, Thailand, and Viet Nam.

5.1. Comparison of Three Countries' Health Systems and How They Handle Ageing

Information on older persons' health systems in Japan, Viet Nam, and Thailand is compared to extract examples of best practices in managing older persons' healthcare systems (including long-term care [LTC]), consisting of healthcare providers, institutions, and health financing.

5.1.1. Management of Ageing in Japan

Trends in Ageing Population and Income Security of Older Persons

Japan has the highest proportion of older persons in the world. Since 1985, the population has been ageing, defined as the proportion people 65 years, and above reaching 10% or more for the first time (Stastitics Bureau, 2022). The number is projected to continuously increase to reach 38.1% in 2060.

Life expectancy is the second highest after Hong Kong, at 84.7 years (World Population Review, 2022). The difference in life expectancy at birth based on gender is high, at about 6 years: 87.7 years for females and 81.5 years for males. World Health Organization data showed that life expectancy at 60 years and above was 26.4 years in 2019, and that life expectancy of older males was 23.9 years and of older females 28.6 years. The difference between life expectancy and healthy life expectancy at those ages is about 6.0 years: 5.1 years for older males and 6.7 years for older females.

Mostly older persons in Japan suffer from degenerative diseases, such as hearing loss, oral and dental disease, osteoarthritis, chronic kidney disease, and headache (Institute for Health Metrics and Evaluation [IHME], 2019). The trend was constant during 1999–2019, with the prevalence rate of osteoarthritis decreasing in 2019.

The proportion of older persons participating in the labour market reached 25.6% in 2021 (Organisation for Economic Co-operation and Development (OECD), 2022) because of better health conditions and education levels and the shift to sedentary jobs (Oshio et al., 2018). Higher labour force participation is also driven by higher retirement ages (Moriyama, 2022).

The Act on Stabilisation of Employment of Older Persons ensures that older persons can continue to work, find jobs, and receive assistance in job seeking. The average

wage of older persons in Japan is ¥189,000 (Nippon.com, 2020) or nearly half that of the 55–59 year group (¥368,600) (Ministry of Health Labour and Welfare (MHLW), 2021).

Older persons seek work mainly to support themselves (Nippon.com, 2020). Social security is often insufficient to meet their daily needs. Older persons are compelled to continue working because their assets are declining (Niimi, 2018), and, if they are unemployed, they are liquidating their assets.

Japan gives significant budgetary support for social security, which accounted for ¥36.3 trillion (33.7%) of all government spending in 2022 (Ministry of Finance (MoF), 2022). Japan has a compulsory pension fund programme supported by public and private industries. Participation in the National Pension Insurance (NPI) and the Employees' Pension Insurance (EPI) is compulsory (Japan Pension Service, 2022). NPI covers everyone aged 20–59, including self-employed individuals and users' dependents, and deducts a proportion of base pay. Only private sector and government employees are covered by EPI.

The most important aspect of income security for older persons' pension is old-age security (Niimi, 2018) showed that the older persons who receive pensions were less likely to experience a decrease in assets.

Income Security and Regulations

Japan has laws on National Health Insurance, older persons' welfare and health services, and long-term care, and comprehensive ageing policies. National and regional governments manage related programmes.

A cross-sector council was established to draft and coordinate ageing policies and oversee their implementation.

Milestones and Policy Directions on the Ageing Population

In 1958, Japan enacted the National Health Insurance (NHI) Law, providing for a 50% co-payment mechanism for those not covered by company insurance. Those covered by company insurance are not required to make co-payments. In 1980, the government enacted a maximum co-payment of 30% to bridge the gap between both groups, using taxes to close the health expenditure deficit. In 1973, the government introduced an insurance mechanism, and older persons' health expenditures were charged to the government budget (Japan International Cooperation Agency (JICA), 2005).

The 1963 Law on the Welfare for the Older Persons sought to help meet demand for nursing homes (*yogo rojin homu*) (Nakamura, 2018). Another law is the Health and Medical Services for Older Persons Act, which regulates older persons' co-payment for preventive and rehabilitative services. At the end of 1989, Japan developed the Ten-Year Strategy to Promote Health and Welfare for the Aged – the 'Gold Plan' – to set up the infrastructure to provide health and welfare services for older persons by 2000.

The Long-Term Care Insurance (LTCI) Law was enacted in 1994 and the Basic Law on Measures for the Ageing Society in 1995. They are the basis for the comprehensive ageing policy, with authority divided between the national and local governments. The laws cover (i) employment and income, (ii) health and welfare, (iii) social engagement and learning, and (iv) the surrounding environment. To implement the laws, the cross-sector Ageing Social Policy Council was established, headed by the Prime Minister. The council designed the ageing policy, coordinates with sectors on the policy, and monitors the implementation of related policies.

In 2000, the government developed the LTCI system. Service users and providers are integrated into the system, allowing users to choose the type of provider to be used. Social and health services can be integrated with private services, with a maximum mandatory co-payment of 20% (Ministry of Health Labour and Welfare (MHLW), 2016). In 2015, the programme reached more than 15 million older persons or about 17% of the total older population (Nakatani, 2019).

Health System and National Health Insurance in Older Population Groups

Japan is ageing thanks to expenditures for healthcare and LTC. In 2019, Japan spent 10.9% of gross domestic product (GDP) for health expenditure, more than the global average (9.8%), ranking it 15th for share of health spending relative to GDP (World Bank, 2020) Because of its high health expenditure, Japan has a complex and fragmented health insurance scheme, which, with co-payment, is a hallmark of the health system. The health system is supported by premiums and tax subsidies and allows participants to freely choose health facilities.

The government applies a community-based integrated care system to develop comprehensive older persons' services in every community. The system has four proposed elements: self-help (*ji-jo*), mutual aid (*go-jo*), social solidarity care (*kyo-jo*), and government care (*ko-jo*) (Sudo et al., 2018). *Kyo-jo* is provided by social security programs such as LTC insurance, and *ko-jo* by public medical and welfare services or by public assistance funded by tax revenues.

The government provides subsidies and enforces cross subsidies to support healthy ageing (Ikegami et al., 2011). Older persons registered in LTCI facilities, for example, have lower medical care costs, signifying the importance of integrating healthcare and LTC (Akiyama et al., 2018).

LTC integration begins with a series of assessments conducted by the district or city government to assess whether older persons covered by LTCI need intensive LTC (Yamada and Arai, 2020). After assessment, older persons are provided primary care based on their needs: intensive and preventive LTC and community-based support. Those requiring intensive LTC are provided primary to advanced care at a facility 30 minutes from where they live. They have the right to receive home visits and community-based services. Older persons requiring preventive LTC receive only preventive health and community-based services: older persons' clubs, volunteer

groups, and other activities to support active ageing. Older persons not requiring intensive or preventive services may receive preventive services with additional support from community-based activities.

Integrated LTC services include home visits by nurses and health providers that provide outpatient services, especially for intensive LTC (Ministry of Health Labour and Welfare (MHLW), 2017). Nursing homes provide geriatric services and care for dementia patients. Sick older persons requiring advance care regularly visit medical clinics providing inpatient services, regional hospitals, as well as outpatient facilities equipped with pharmaceutical services. Those with chronic disease might be referred to hospitals.

National Health Insurance Scheme, Financing, and Benefit Packages

Health security in Japan is provided by NHI, the Japan Health Insurance Association (JHIA), the Health Insurance Society, and mutual aid associations for those 65 years and older (Ministry of Health Labour and Welfare (MHLW), 2022). Japan has special health insurance for groups 75 years and above; the premium charged is the same as for NHI, calculated based on the beneficiary's income, with the average contribution accounting for 10% of the total cost of services. NHI covers pension groups (who were previously under a labour health insurance scheme), irregular employment, as well as individual businesses not covered by other health insurance schemes (e.g. farmers). NHI schemes may vary depending on regional policies. The premium is based on (i) income (of the head of household), (ii) assets (of the family head), (iii) equality, and (iv) justice (Japan Health Policy NOW (JHPN), 2022).

JHIA covers private small and medium-sized enterprise employees and fishers. The Health Insurance Society (HIS) covers private large-scale business employees. JHIA and HIS scheme participants pay premiums equivalent to the premium contribution rate multiplied by average monthly remuneration. Premium contribution rates may be different (JHIA, 10% on average; HIS, 7.7% on average) (Japan Health Policy NOW (JHPN), 2022; Ministry of Health Labour and Welfare (MHLW), 2022). Mutual aid associations cover national and regional civil servants and private sector workers, with premiums averaging 8.0%.

The government subsidises the schemes (Ministry of Health Labour and Welfare (MHLW), 2021), covering 16.4% for JHIA and a fixed subsidy for HIS. Under NHI, only farmers and the self-employed receive government subsidies (28.4%–47.4%)(Ministry of Health Labour and Welfare (MHLW), 2021). Pensioners under NHI do not receive subsidies. The subsidy for special health insurance for older persons is as much as 10% of health expenditure, which is shared amongst the national, prefecture, and regional governments in a proportion of 4:1:1; 40% is cross-subsidised by working-age groups.

Even though the schemes differ, their general benefits and co-payments are similar, except for the 70 years and above group. Health insurance participant benefits include

inpatient and outpatient care, transport costs for mental care, medical prescriptions, home visits, and dental care (Japan Health Policy NOW (JHPN), 2022). Catastrophic diseases are subsidised under the high-cost medical expense benefit package, which helps with out-of-pocket expenses of households, which have different maximum limitations depending on household income (Japan Health Policy NOW (JHPN), 2022).

The health insurance schemes generally differ only in cash benefits (Ministry of Health Labour and Welfare (MHLW), 2021). NHI has a funeral allowance but only for those 75 years or older. The co-payment system is tiered: not of school age, 20%; school age up to 70 years, 30%; 70–75 years, 20%; and older than 75, 10%. Those 70 years or older at a certain income level pay 30% (Ministry of Health Labour and Welfare (MHLW), 2021).

Long-term Care System: Human Resources and Financing

As a mandatory programme for pre-older and older persons, LTC is provided by the community-based integrated care system and supported by LTCI. The programme has the following characteristics (Japan Health Policy NOW (JHPN), 2015).

- Every citizen aged 40 years and above pays a premium proportional to their income.
- Every citizen aged 65 years and above is entitled to benefits from the programme.
- Benefits include institution-based services (at health facilities such as hospitals and clinics; intensive LTC at nursing homes, especially for people with dementia; short-term socialisation; outpatient services); home visits by physicians and nurses; bathing or other services at home; and groups and clubs for older persons; volunteer groups; and other activities that support active ageing.
- All services are levied 10% co-payment (20% for certain income groups).
- Participants may choose the type of medication and number of services.
- Local governments manage the programme and set the premiums and licences for service providers.
- Service fees are determined by the government and reviewed every 3 years.

LTCI has a preventive scheme and a utilisation scheme. The schemes are based on the Kihon checklist, which consists of 74 questions, a doctor's opinion, and home visit reports (Yamada and Arai, 2020). The Kihon checklist is a screening instrument to identify community-dwelling, frailty-prone older adults with a higher risk of dependency. The Kihon checklist categories include physical strength, nutrition, eating, socialisation, memory, mood, and lifestyle, each with certain criteria. Older persons requiring assistance because of a mild disability receive preventive and community-based services. Preventive services are (i) outpatient services (assistance in bathing, supplementary feeding, and training to increase functionality); (ii) home visits to

prevent dementia, involving groups of 5–9 persons with dementia; and (iii) multifunctional community health services offered at the nearest health post and available 24 hours a day (Japan International Cooperation Agency (JICA), 2022). Older persons requiring services due to severe disability receive LTC in the form of health, home, and community-based services (Ministry of Health Labour and Welfare (MHLW), 2022).

The LTCI Act categorises care services into in-home, nursing-home (sanatorium), and community-based LTC services. In-home and nursing-home services were created by the LTCI Act in 2000, under the jurisdiction of the prefecture governments. Community-based services were added in 2006 to provide services for residents requiring moderate care (e.g., residents with dementia) in their immediate community (Konishi et al., 2024).

Community-based LTC prevents isolation, which can lead to increased disability and mortality (Nomura et al., 2016). Therefore, the government encourages older persons to participate in their communities. The main form of LTC is home-based services, home visits, and nursing care. LTC supports the health of older persons whilst encouraging social activities and active engagement with the community (Yamada and Arai, 2020).

Community-based Integrated Care System

The Japanese government has proposed the establishment of a community-based integrated care system by 2025. Its purpose is to comprehensively ensure the provision of healthcare, nursing care, preventive care, housing, and livelihood support in each community.

The regional governments provide LTCI services. Payment schemes for two groups are as follows (Ministry of Health Labour and Welfare (MHLW), 2002):

(i) Aged 65 years and above, requiring intensive LTC (have dementia or are bedridden) and need support in their daily activities. Premiums are withdrawn from the pension fund.

(ii) Aged 40–64 years, receiving benefits only if suffering disease or disability requiring LTC. Premiums are taken from health insurance.

About half of LTCI financing comes from premiums and the other half from taxes. LTCI services are different from health insurance as they are rendered to those aged 40 years and above. The 50% financing from taxes is from the national government (25%), prefectures (12.5%), and local governments (12.5%) (Yamada and Arai, 2020). LTCI uses a cross-subsidy system, where the total premium of the second group is used to cover 27% of funding whilst the first group covers 23%. Older persons verified and eligible to receive LTCI have a co-payment of 10%.

Challenges for LTCI include the rapid growth of the older population, which will increase the need for care providers. As family caregivers decline in number, the

government is recruiting nurses from other countries, an effort that, however, has its own problems (Japan Health Policy NOW (JHPN), 2015). In 2016, the government launched the Asia Health and Wellbeing Initiative, which aims to ease the movement of LTC workers between countries (Ogawa, 2021). Japan is cooperating with Indonesia, the Philippines, and Viet Nam. The government has developed a seven-level curriculum to train and formally qualify LTC workers. The Ministry of Education has developed training modules on health services, including dementia care.

The Ministry of Health, Labour, and Welfare projects that Japan will need at least 2.45 million LTC providers by 2025. However, the number of available LTC providers is estimated at only 2.11 million (Satake, 2018), meaning that Japan will have a shortage of up to 340,000 LTC providers.

The implementation of LTC programmes, however, has failed because of difficulties in identifying at-risk persons and recruiting participation in community-based prevention programmes (Saito et al., 2019). In response to the increasing awareness on health inequality, the second term of the National Health Promotion Movement: Health Japan 21 (2013–2022) started including the social determinants of health. Specifically, public LTC prevention plans now focus on promoting social participation and preventing isolation of older persons.

5.1.2. Management of Ageing in Viet Nam

Trends in Ageing Population and Income Security of Older Persons

In the past decade, Viet Nam's older population has grown rapidly. In 2019, 11.9% of the population was 65 years and above (General Statistics Office, 2021). Older women made up almost 60% of the total older population. The proportion of older persons is projected to increase to 21.9% by 2060 and decrease to 27.1% by 2069 (General Statistics Office, 2021).

The increase in the number of older persons has an impact on their care needs, which are projected to increase, especially related to living arrangements. A significant proportion of older persons are living alone or living only with spouses (General Statistics Office, 2021). The reason is an increase in older persons who are economically independent or no longer dependent on children; a decrease in the number of household members; or independent children preferring to live apart from their parents (Long et al., 2010; Teerawichitchainan et al., 2015) .

Tuberculosis disease is one of the five main diseases suffered by older persons (65 years and above) in 1999–2019. The disease was the second most prevalent in 1999 and the third most prevalent in 2009 and 2019. The four other diseases are related to hearing, dental and oral diseases, cirrhosis, chronic hepatic disease, and vision loss.

Up to 35.1% of older persons are still working (General Statistics Office, 2021), especially the young-old (60–69 years) at 50.4%. Working older persons in rural areas are almost double the number of those in urban areas, and more males than females

work. However, the proportion of working older persons is declining, mostly amongst those 70–79 years (middle-old). Most working older persons are self-employed (60.9%) and domestic workers (23.8%) (General Statistics Office, 2021). Only 12.9% of older persons are paid workers. Most older persons work in the informal sector. The challenge is developing social security policies for older persons.

A prime ministerial decree established the pension fund in 1995. The pension fund is a division of the social security system, with public and private providers. The social security fund established by the government is managed by the Social Insurance Agency or Viet Nam Social Security (VSS).

Social Security

Pension funds as a form of social security have been developed in Viet Nam, supported by the existence of related regulations.

The social security law provides benefits in terms of old-age security but is only mandatory for formal workers

Under the Social Security Act of 2014, formal workers are required to participate in VSS. Self-employed and unpaid workers are vulnerable as they do not have mandatory coverage.

VSS guarantees lifetime old-age pensions. Female recipients must be at least 55 years old and males 60 years old and have paid premiums for at least 20 years (Viet Nam Social Security (VSS), 2017). The result is a gap in income security (International Labour Organization, 2018). VSS participants pay a premium of about 22%, of which 8% is paid by employees.

Most older persons depend on their children for income support. Older persons who live with their children are more income secure than those who do not (Long, 2010). The study also found that 38.5% of older persons' income is from their children, 37.3% from working, and only 23.8% fully from pension funds (Tran, 2020). Of older persons, 15.9% receive government subsidies; of those 80 years and above, about 46.3% receive government subsidies.

Milestones and Policy Direction of Ageing Population

In 2000, the government enacted the Ordinance on Older Persons, on care, services, and support for older persons, including health services, and on older persons' work productivity. The policy was mandated by the Law on Older Persons in 2009, which covers health and care. The law encourages active community participation in supporting older persons through age-friendly and accessible infrastructure and public facilities. The law provides cash assistance to those 80 years and above.

The 2012–2020 National Action Programme on Older Persons consisted of a set of policy targets and indicators on ageing, including health, social security, housing, and promotion of active ageing (Viet Nam National Committee on Aging (VNCA) and United Nations Population Fund (UNFPA), 2019). However, the programme was viewed as focusing too much on current ageing issues and not enough on the future of pre-older persons. In 2017, the government enacted the Population Action Programme.

Vietnamese Government Commitment

The government has paid attention to the issue of continuity through various laws and regulations made, which regulate various matters related to older persons, including healthcare and services.

The Older Persons Programme Plan sets out the roles of ministries in improving the quality of life of the older persons now and in the future.

The healthcare system is a combination of public and private financing through the National Health Insurance.

The programme regulates the role of each ministry in improving the quality of older persons' services now and in the future. The Healthcare for Older Persons Project (2017–2025) under the Ministry of Health (MoH) shows that the government is anticipating the impact of an ageing population. However, the project is considered specific to various issues and does not cover the wider context (Viet Nam National Committee on Aging (VNCA) and United Nations Population Fund (UNFPA), 2019).

Health System and National Health Insurance for the Older Population

Healthcare costs for older persons are estimated at about seven or eight times higher than those for children. Older persons greatly depend on the government's healthcare system (Nguyen, and Giang, 2021).

The healthcare system is provided by the government and private sector. Hospital care services are mostly provided by the government. Small-scale care services such as outpatient care and pharmacy are provided by the private sector. Public health facilities consist of community health centres and district, city, provincial, and national hospitals.

Under the Ordinance on Older Persons, older persons are entitled to receive general health services (for all ages) and specific ones (for older persons) (United Nations Population Fund (UNFPA), 2021). Health services consist of (i) primary health services at home; and (ii) community health services (health stations), including preventive services in the form of monitoring and health screening. Services for older persons are mandated to government hospitals that have geriatric departments or beds especially

for older persons' care. The regulation encourages research as well as reviews on techniques for caring for older persons.

In 1983, the government established the Central Geriatric Hospital in Hanoi. General hospitals must have at least 50 beds especially for older persons. By 2016, more than 50 geriatric departments were operating in provincial and national government general hospitals, and 302 geriatric clinics were spread throughout 49 of 63 provinces (United Nations Population Fund (UNFPA), 2021). Hospitals generally have special check-up rooms and special-care beds for older persons. To improve services, especially for older patients, MoH implemented family medicine in 2019 to promote regional home services by 52 health service providers.

A 2020 Economic Research Institute for ASEAN and East Asia (ERIA) study found that 94% of older persons preferred general facilities for inpatient care. The cost of older persons' hospital care is mostly the responsibility of children (42%), of the older persons themselves (37%), and of their spouses (14%). Most hospitalised older persons (92%) were covered by NHI, either as active members (90.2%) or as dependents of active members (1.4%). Lacking financial resources, however, two out of five older persons have difficulty consulting physicians when requiring outpatient services (Vu et al., 2020).

In 2021, more than a quarter of older patients (27.9%) used health services in district and/or city hospitals, followed by provincial hospitals (23.6%), national hospitals (15.1%), private hospitals (18.3%), community health centres (8.8%), and other facilities (6.20%) (Nguyen, and Giang, 2021). As health service usage amongst older persons increases, NHI's role has become most important.

The main method of financing health services is NHI, which was established in 1992. Financing comes from taxes, which the government uses to subsidise vulnerable groups such as the poor, ethnic minorities, children under 6 years old, and older persons 80 years and above. By 2018, about 87% of the population was covered by NHI (World Health Organisation (WHO), 2021). Health insurance is a determinant in older persons' choosing national and provincial hospital services but not in choosing private health services. Total health expenditure in 2016 was about 6.5% of GDP; the government financed half, drawing on government tax revenues and NHI (World Health Organization (WHO), 2021).

NHI reform was in five stages from 1992 to 2014 based on Law 46 (2014) concerning health insurance (Le et al., 2020). Under the law, voluntary schemes were eliminated, premiums increased, and income mechanisms and benefit packages revised. In VSS, a 20% co-payment was applied, except for children under 6 years, groups having lost their capacity to work, the unemployed, the poor, veterans, and social assistance recipients. The poor, veterans, and social assistance recipients used to have a 5% co-payment under VSS, with premiums of a maximum of 6% of monthly income and two-thirds of that covered by employers.

VSS benefit packages include health services, blood transfusion, medicine, primary health services, medical consultation, and treatment at health facilities in the event of an emergency (Viet Nam Social Security (VSS), 2017). VSS health benefits do not have a specific scheme for older persons.

Long-term Care System: Human Resources and Financing

The LTC system is included in the Viet Nam System of Health Accounts and consists of two sections: (i) long-term healthcare, including health services and patient care requiring follow-up assistance; and (ii) long-term social care, including personal care services for activities of daily living and instrumental activities of daily living assistance, as well as family informal care (Glinskaya et al., 2021). LTC provision is both community and institutional based.

There are three community-based LTC schemes (Glinskaya et al., 2021): (i) the Intergenerational Self-Help Club, a pilot project that provides cash and in-kind loans and improves skills and education of older persons so they can work; (ii) LTC groups that can provide low-cost and subsidised services, such as voluntary caregivers, social workers, regional community health centres, and village cadres; and (iii) institutional LTC or LTC groups that provide high-cost services, such as paid caregivers who visit homes, private family physicians, or home-care services. Institutional LTC is provided by the government, private sector, and non-government organisations (charities).

Of older persons, 20.4% are covered in the LTC system, most cared for primarily by spouses or children. Older males are commonly cared for by their spouses, whilst most older females are cared for by their sons. Most older persons requiring LTC are cared for by close family members. Most older persons prefer as the closest caregiver sons (37.1%), spouses (31.6%), and daughters (19.6%). Older persons generally rely more on sons than on institutional facilities such as nursing homes (Vu et al., 2020).

Family-based care, however, is diminishing and considered insufficient, and the need for adequate LTC and competent human resources is increasing (Van et al., 2021). Viet Nam has two LTC models: community- and family-based care and the institutional approach. The first consists of home care by volunteers, an intergenerational self-help group, or a counselling club. The second consists of social protection centres provided by MoH and the Ministry of Labour, Disability, and Social Affairs, and several private nursing homes (Van et al., 2021).

Institution-based LTC financing provided by the government covers only recipients of VSS benefits or social security. Benefits received are health and social care, and monthly cash allowances. To motivate more people to work as caregivers, the Vietnamese government provides incentives in the form of monthly cash transfers to caregivers of older persons with certain conditions. (Glinskaya et al., 2021).

A 2021 survey of 3,619 respondents showed that 73% of older persons' care providers are informal or close family members (Laguna, 2020). Another survey showed that LTC recipients or caregivers outside the family were not a priority for older persons (United

Nations Population Fund [UNFPA], 2021). Only 30% stated cited the need for institutional LTC.

5.1.3. Management of Ageing in Thailand

Trends in Ageing Population and Income Security of Older Persons

Thailand has the second-highest proportion of older persons (60 years and above) in Southeast Asia, at 18% of the total population (Thai Gerontology Research and Development Institute (TGRI), 2020) . Over the next 20 years, the proportion will increase to 31.4%. The rapid increase (almost doubling) will occur amongst those 80 years and above, from 3.4% in 2020 to 5.2% in 2040. In this cohort, those living alone make up 11% and those living with spouses 21%.

Hearing loss and other degenerative diseases, oral and dental diseases, and chronic kidney disease are the top-three diseases suffered by those 65 years and above. Two other main diseases are vision loss and cirrhosis or other chronic liver diseases (IHME, 2019). The trend has remained relatively constant throughout 1999–2019, with the prevalence of cirrhosis and other chronic liver diseases decreasing.

The 2021 Household Socio-economic Survey by the National Statistical Office found that 49.2% of those aged 60 years and above were employed (Thai Gerontology Research and Development Institute (TGRI), 2021), with males (49%) significantly outnumbering females (28%). Most older persons (85%) are covered by old-age security. However, about 79% of older persons still receive assistance from children for their daily needs; the proportion is 87% for older persons 80 years and above. Of the older population, 6% are covered by an old-age security pension scheme whilst 9% are not (United Nations and Population Fund (UNFPA) and Helpage International, 2016).

Milestones and Policy Direction of Ageing Population

Thailand had an older persons' welfare institute in 1953 and the National Policy on Ageing in 1986. Thailand formed the National Older Persons' Committee, chaired by the minister of interior affairs. The committee developed the First National Long-term Plan of Action for the Older Persons (1986–2001). This had an impact on Thailand's Eighth National Economic and Social Development Plan (1997–

Government Commitment

Thailand has an older persons' welfare organisation and a national policy on ageing.

The national committee for older persons is developing a long-term plan that will impact national economic and social development plans.

Long-term planning for older persons covers various aspects of their lives, including specialised social security strategies for pre-

2001) in providing social welfare benefits to older persons.

older persons.

The special law for older persons is implemented by various ministries.

Thailand has had laws specifically for older persons since 2003. In developing the national agenda for older persons, Thailand involves the ministries of social development and human safety public health, culture, home affairs, and education.

The goal of the First National Long-term Plan of Action for Older Persons is to provide health services, education, income, employment, and social and cultural enrichment for the older population. The government developed a social security benefit package for older persons, including cash benefits (old-age allowance) for the poor, free health services, and subsidised public transport fares (Jitapunkul and Chayovan, 2001). However, the package was criticised for failing to prepare older and the pre-older persons for retirement.

The second National Plan for the Older Persons 2002–2021 included five strategies: (i) prepare people for quality ageing; (ii) promote and develop older persons' well-being; (iii) increase social security for older persons; (iv) manage the development of the national comprehensive system for undertakings and developing the personnel for the older person involving missions; (v) process, upgrade, and disseminate knowledge on older persons and monitoring of the implementation of the National Plan for the Older Persons (National Commission on the Elderly [NCE], 2002). Strategies, measures, and agencies involved are presented in Table 5.1.

Table 5.1. Strategies under the Second National Action Plan 2002–2021

NO	STRATEGY	MEASURES	AGENCIES INVOLVED
1	Prepare older persons for quality ageing	Income security for old age	Ministry of Finance, Ministry of Labour, Ministry of Home Affairs, and local governments
		Education and lifelong learning	Ministry of Education, Ministry of Public Health, Ministry of Social Affairs and Human Security, Ministry of Home Affairs, local governments, and the Prime Minister's Office
		Promotion of awareness of respect for and recognition of older persons' value and dignity	Ministry of Education, Ministry of Social Affairs and Human Security, and Ministry of Culture
2	Promote development of older persons' well-being	Health promotion, prevention of disease, and primary self-care	Ministry of Health, Ministry of Home Affairs, local governments, Thai Health Promotion Foundation, National Health Security Office, and the Prime Minister's Office
		Encouragement of older persons to join social groups and strengthening of older persons' organizations	Ministry of Social Development and Human Security, Ministry of Public Health, Ministry of Home Affairs, and local governments

		Promotion of employment and income of older persons	Ministry of Labour, Ministry of Agriculture and Cooperatives, Ministry of Home Affairs, local governments, and Ministry of Industry
		Promotion of older persons' skills	Ministry of Social Development and Human Security, government, and private networks
		Encouragement of all mass media to include older persons in programmes and support for the elderly in accessing knowledge and data, information, and news	Prime Minister's Office, Ministry of Education, Ministry of Information and Communication Technology, Ministry of Social Development and Human Security, Ministry of Home Affairs, and local governments
		Promotion and provision of enabling and friendly housing and environment for older persons	Ministry of Social Development and Human Security, Ministry of Industry, government banks (to provide housing finance), and Ministry of Trade
3	Increase social security for older persons	Income security	See strategy 1
		More health insurance	See strategy 2
		Provision of social security for family and caregivers	Ministry of Finance, Ministry of Social Development and Security, Ministry of Home Affairs, local governments, Ministry of Culture, Ministry of Education, Ministry of Public Health, and Ministry of Labour
		Stronger service system and supportive communication network	Ministry of Communications and Transportation, Ministry of Tourism and Sports, Ministry of Social Development and Security, Ministry of Finance, Ministry of Home Affairs, Ministry of

			Défense, local governments, and public and private networks
4	Manage the development of the national comprehensive system for undertakings and developing the personnel for the older person involving missions	Management of the development of the national comprehensive system for the older persons involving undertakings	National Commission for Older Persons, Ministry Social Development and Security, Ministry of Public Health, Ministry of Home Affairs, local governments, Ministry of Finance, Ministry of Education, and Ministry of Labour
		Promotion and support of personnel caring for older persons	Ministry of Education, Ministry of Public Health, Ministry of Home Affairs, Ministry of Social Development and Human Security, and National Commission for Older Persons

NO	STRATEGY	MEASURES	AGENCIES INVOLVED
5	Process, upgrade, and disseminate knowledge on older persons and monitor the implementation of the national action plan	Encouragement of and support for gerontology research to formulate policies and develop services for older persons	National Commission for Older Persons, National Research Committee, Ministry of Education, Ministry of Public Health, Research Funding Office, Institute for Research in the Public Health System, Thai Health Promotion Foundation, Institute for Development and Research in Thai Gerontology, and National Health Security (NHS)
		Continuous and effective monitoring of the national action plan	National Commission for older Persons, and Ministry of Social Development and Human Security
		Upgrading and updating of the database on older persons to make data accessible and searchable	National Commission for Older Persons, Ministry of Social Development and Human Security, Ministry of Public Health, Ministry of Information and Communication Technology, and Ministry of Home Affairs

Source: (National Commission on the Elderly, 2002).

The 12th National Economic and Social Development Plan (2017–2021) included the ageing population. The government focused on formulating a dynamic and balanced policy for older persons, protecting not only economic well-being and physical health but also mental health (Chanprasert, 2021).

Health System for the Older Population

Since 2002, health services and health insurance coverage have advanced. In 2007, every citizen was guaranteed equal access to basic health and other services (World Health Organization (WHO), 2015).

Health services are provided by the government under the National Health Commission (NHCO), with the involvement of academia and communities in formulating strategic health policy (National Health Commission Office [NHCO], 2022). NHCO is responsible

for the National Health Assembly; the provincial and regional area health assemblies; and the Issue Health Assembly, which formulates health policy. The National Health Assembly discusses national public health policy, whilst the area health assemblies and Issue Health Assembly discuss public health in certain areas or related to certain issues. The role of local government is minimal in health service provision and financing (World Health Organization (WHO), 2015).

The Ministry of Public Health provides health services, controls diseases, and implements other policies to promote health and prevent disease. Policy on older persons includes establishment of clinics for the aged in government hospitals. At least 120 special beds are available in hospitals for older persons. Comprehensive services such as routine health checks, health promotion, geriatric clinics, and LTC are provided for older persons.

Older persons may stay in primary health facilities for up to 3 days. Patients who continue to suffer acute disease are referred to intermediate care for up to 6 months. If they require intensive health services beyond 6 months, they are referred to LTC facilities (Larpsombatsiri, 2019).

NSS Scheme, Financing, and Benefits Package

Healthcare financing is under the command of the National Health Security Office (NHSO), which has regional branches. Under it is the Universal Coverage Scheme (UCS), which was developed in 2002. In 2019, it covered more than 72% of the total population (Sumriddetchkajorn et al., 2019). UCS is funded mostly by taxes; social security participants contribute 5% of their salary (Sakunphanit, 2015). All UCS recipients receive similar benefits.

The benefits consist of promotive, preventive, curative, basic health, and medication services (including organ transplants and health instrumentation); ambulance and patient transport; transport for special-needs patients; and physical and mental rehabilitation (Sakunphanit, 2015).

Civil servants, private employees, and UCS participants in general have different cost bearers and co-payment terms (Sakunphanit, 2015). For the social security scheme for government employees, the insurer is managed by a special department under the Ministry of Finance. For private employee schemes, the insurer is managed by the Social Security Office. NHSO covers the cost for UCS participants. Thailand does not have a specific NHI scheme for older persons, although it provides an old-age allowance.

Long-term Care System: Human Resources and Funding

Since the National Health Assembly resolution in 2013, Thailand has developed the LTC system, which began with a community-based LTC pilot project in 2010. All costs of

community-based LTC are covered by UCS. Social services were provided by families and volunteers with support from the local government and communities of the older persons in the region (Chanprasert, 2021).

The government developed a model to implement a pilot project on sub-district and community LTC in 12 regions in 2011. The standard criteria of LTC implementation are (i) having data on older persons and classifying older persons into three groups according to activities of daily living (independent or socially bound, semi-dependent or homebound, and dependent or bed-bound); (ii) having a quality home healthcare system; (iii) having older persons' care volunteers and health volunteers to care for dependent older persons; and (iv) having quality older persons' clubs (Chanprasert, 2021).

Long-term Care Services

Community-based long-term care (LTC) is under the local government, financed by UCS, and supported by families and volunteers who deliver social services.

LTC is developed by health-related ministries, which must provide human resources for caregivers and allocate budgets for training to care managers and caregivers.

In 2014, the Ministry of Public Health developed a training base curriculum for care managers and caregivers. Training was funded by NHSO. In 2018, the training budget was mandated as the responsibility of the Ministry of Public Health.

The Ministry of Public Health also provides policy support to provide human resources for care and to support the sustainability of community based LTC. The ministry backs home visits to older persons by physicians and palliative care. NHSO allocates a budget to train care managers and promote public health programmes for older persons.

LTC in Thailand differs from that in Japan and Viet Nam in that it is entirely community rather than institution based. The national government focuses on policy whilst local governments implement the programme by involving volunteers as service providers.

A study using longitudinal data shows low demand for formal LTC services in Thailand (Phetsitong, and Vapattanawong, 2023). In 2007, demand for formal LTC services was estimated at only 5%, whilst in 2017 it increased to 6.6%.

Primary care starts at community health centres. Secondary services are provided at district hospitals. Tertiary and specialist services are provided at provincial and regional hospitals. The role of families, communities, cadres, and health workers, consisting of physicians, nurses, physiotherapists, nutritionists, pharmacists, volunteers, and others, is highly important in providing LTC.

5.2. Lessons from Japan, Viet Nam, and Thailand for Development of Older Persons' Health Services in Indonesia

Lessons from Japan, Thailand, and Viet Nam are summarised in Table 5.2. It shows that, unlike in Thailand and Viet Nam, Indonesia does not have an NHI specifically for older persons. Indonesia has health service providers, an NHI scheme, and NHI funding schemes related to LTC. However, Indonesia still has challenges in implementing LTC because no specific system regulates it.

Japan, as a developed country with the highest proportion of older persons in the world, has a health service system, including social security for all citizens. Health financing schemes provide LTC, including from foreign caregivers. Japan has various technologies to assist in providing older persons' health services. Even though the role of family in caring for older persons has decreased, the country has community based LTC services.

Indonesia can learn from Japan's experience and develop a community-based older persons' health system that focuses on LTC. While community-based older persons' health systems have existed in Indonesia for several decades, no national system provides LTC services.

Indonesians have long had a culture of working together (*gotong royong*) and respecting older persons, but these traits are fading. Thus, the government must reinforce the role of family and community in improving the health of older persons, which will require cooperation amongst sectors to build their synergy.

The role of the family and community must be strengthened in anticipation of rapid ageing population growth. Many older persons still live with their family, and their existence may be in its optimised role as informal caregiver, if older persons need heath care or LTC. However, they must receive training related to older persons' care. The government should give attention to the welfare of family members caring for older persons, such as in Japan.

Guidance for older persons' families should be strengthened to make them more resilient. The number of community posts (integrated service posts and non-communicable disease integrated posts) must be increased to improve older persons' health. Older persons' assistants need to increase social and religious activities in families to nurture concern and respect for older persons.

Health cadres are still inadequate as the work is voluntary and interest in becoming a cadre is not widespread. The incentives cadres do receive, however, are minimal for the work required of them. They spearhead various activities as needed by the national government. Most cadres are old. Japan's community-based LTC service programme, in anticipation of rapid population ageing, is managing high health costs. Thus, the government is trying to motivate communities to participate in providing older persons' social security. However, in the future, the programme will be integrated into the health security system to include all ages.

Japan's experience serves as a lesson for Indonesia in health financing, including for LTC for older persons. Even though government-owned older persons' homes, the private sector, and communities provide LTC, they must be supported by a system that is prepared for ageing. Indonesia can learn how to support financing from Japan, which employs cross-subsidy schemes such as health funding (NHS) with LTC or special schemes for the non-productive oldest-old (75 years).

Civil servants who are at least are 40 years old should be covered by LTC insurance, which can be widened to cover other groups. Old-age security premiums are an alternative to ensure post-pension quality of life of civil servants, especially when they need LTC and services outside NHI coverage.

Older persons' programmes in Viet Nam are community based, as the law defines older persons as a priority group. Families, the government, and communities are responsible for the care of older persons (Van et al., 2021). The lesson is that laws and regulations must state that ageing is a development priority, not only nationally but also at the lowest levels of administration.

Like Japan, Viet Nam faces the challenge of having an insufficient number of older persons' health service providers. In Viet Nam, the challenge is related to training of health providers, especially geriatricians. In Indonesia, recruiting health providers for older persons is difficult because of limited funding and lack of incentives.

Viet Nam shows the importance of regulations mandating the availability of geriatric services in government hospitals and special beds for older persons in all hospitals. Viet Nam shows that community-based schemes supporting intergenerational self-help clubs can empower older persons; subsidise LTC; motivate caregivers to volunteer; support social work, regional health centres, and village cadres; and give incentives to caregivers performing home visits.

Thailand's experience also offers lessons to Indonesia. One is that while LTC services are provided by communities, which value respect for older persons, the government fully supports these efforts by funding them and providing assistants or caregivers. The government has a special budget for training and certification of cadres in families and communities to become older persons' caregivers (Chanprasert, 2021). The government gives the cadres incentives. It also collects data on older persons to identify and classify them as, for example, being healthy or needing LTC.

Another lesson from Thailand lies in its focus on promoting health and encouraging respect for older persons' rights, as outlined in the NAP for older people. This makes it easier for Thailand to recruit voluntary and economically independent caregivers, who therefore need not depend on caregiver incentives. The focus on promoting health lessens the cost of curative and rehabilitative health services. The Thai Health Promotion Foundation enables coordination across sectors.

Thailand uses the excise tax (sin tax) to finance promotion and prevention. Curative and rehabilitative health financing, including LTC, which is included in UCS, is completely

sourced from taxes. However, the biggest challenge is the fiscal sustainability or funding sources of such a program. Indonesia's Social Security Administrator for Health (Badan Penyelenggara Jaminan Sosial [BPJS]) Health does not yet cover financing of LTC for older persons. BPJS Health financing for older persons is mostly from contribution assistance, which is a challenge for the sustainability of government funding. BPJS Health needs to ensure health facility service quality to attract community participation. Claims should be determined not only by the number of patients visiting the hospital (especially types C and D) but also by the quality of services.

The governments of Japan, Thailand, and Viet Nam are committed to resolving ageing issues. They see older persons as a segment that must be supported by law. Improving older persons' health is a priority. Indonesia can integrate healthy-ageing programmes of MoH, MoSA, National Population and Family Planning Agency (Badan Koordinasi Keluarga Berencana Nasional), and other related ministries and institutions. Like the three countries, Indonesia can focus on human development using a life-cycle approach (Chanprasert, 2021). In the three countries, national and regional governments coordinate so that national programmes are implemented not only nationally but also regionally, supported by local regulations.

Table 5.2 Comparison of Older Persons' Health Systems in Japan, Viet Nam, Thailand, and Indonesia

Aspect	Japan	Viet Nam	Thailand	Indonesia
Health service provider	National and regional governments, and private sector	National and regional governments, and private sector	National and regional governments, and private sector	National and regional governments, and private sector
NHI scheme	Divided into NHI, JHIA, Health Insurance Society, and mutual aid associations; includes a special scheme for those 75 years and above	Divided into VSS (general) and employer-specific social security	Divided into general UCS and UCS for government and private employees	Divided into wage-earning workers and the business entities they work for, residents registered by the local government, non–wage-earning workers, and non-workers; and contribution assistance health security
NHI financing scheme	Sourced from premiums and taxes. Tiered co-payments of up to 30% are applied. Older persons' NHI uses cross-subsidies.	Sourced from premiums and taxes. Subject to tiered co- payments of up to 20%	Sourced entirely from taxes (for general UCS schemes) and participant premiums (only for government and private employee UCS schemes). Co-payment is used for UCS for government and private employees.	Sourced from premiums (for non-contribution assistance from BPJS Health), national and regional revenue and expenditure budgets (specifically for contribution assistance health security)
Older persons' NHI special scheme	Available	Not available	Not available	Not available
LTC provider	National and local governments	National and local governments, private sector, and NGOs	Local government	National and local governments, private sector, and NGOs
LTC scheme	Divided into community- and institution-based integrated care systems*	Divided into long- term healthcare and long-term social care Divided into community-based LTC	Fully community-based LTC services are formally developed and managed by	Institution-based services managed by the government, the private sector, and communities (integrated service post)

Aspect	Japan	Viet Nam	Thailand	Indonesia
	Nursing care service in the form of home visits by nurses and health workers	(intergenerational self-help clubs, and low-cost and high-cost community LTC), and institution-based LTC	local governments according to certain criteria. Home visits by doctors to older persons, and palliative care	
LTC human resources	Most are recruited formally by institutions. Most are migrant workers.	Families; community (volunteers, intergenerational self-help groups, counselling clubs); and caregivers formally recruited through institutions and provided incentives	Families recruit cadres and request home visits by health providers and palliative care	Family cadres (integrated service posts, BKL, ATENSI), human resources trained in private LTC, older persons' nursing homes, and LTC providers from NGOs
LTC financing scheme	Sourced from premiums (50%) automatically charged to people aged 40 and above (from pension or health insurance funds), national government taxes (25%), prefectural governments (12.5%), and municipal and district governments (12.5%) 10%–20% co-payment applies.	Sourced from VSS or social security premium	Sourced from the national government budget, charged to the Ministry of Health for cadre training and local government budget for programme implementation	Sourced from national and local government budgets (for nursing homes under the Ministry of Social Affairs or Social Affairs Office) or private fees (for private LTC services)
Regulations	NHI Law, Act on the Welfare for Older Persons, Long-Term Care Insurance Law, Basic Law on Measures for an Ageing Society	Laws on ageing, National Action Programme on Older Persons 2012–2020, Government's Programme of Action on Population	Specific laws for older persons, First National Long-term Action Plan for Older Persons, and Second National Action Plan for Older Persons 2002–2021	Law 13 (1998) concerning the welfare of older persons, Minister of Health Regulation 79 (2014) concerning the implementation of geriatric services in hospitals, Minister of Health Regulation 67 (2015) concerning the implementation of older persons' health services at community health centres, Minister of Health Regulation 28 (2014) concerning guidelines for

Aspect	Japan	Viet Nam	Thailand	Indonesia
				the implementation of the National Health Insurance Programme.

ATENSI = Asistensi Rehabilitasi Sosial (Assistance of Social Rehabilitation), BKL = Bina Keluarga Lansia (Older Persons' Family Guidance), BPJS = Badan Penyelenggara Jaminan Sosial (Social Security Administrator), JHIA = Japan Health Insurance Association, LTC = long-term care, NGO = non-governmental organization, NHI = National Health Insurance, UCS = Universal Coverage Scheme, VSS = Viet Nam Social Security.

* An institution-based LTC scheme is LTC provided by an institution and is formal in nature, with adequate infrastructure and facilities such as nursing home services, homes for the aged, etc.

CHAPTER 6

Strategic Issues and Older Persons' Health Policy Recommendations

The proposals here serve as input to the formulation of the 2024–2029 National Medium-Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional [RPJMN]).

6.1. Strategic Issues in and Challenges for Older Persons' Health Services

Older persons have rapidly risen in number and proportion. However, the increase is not accompanied by improved health conditions. The following need attention:

(i) Life expectancy is increasing but the gap with healthy life expectancy was about 4.59 years in 2019.
(ii) The prevalence of disability is projected to increase, as seen in the decrease in disability-free life expectancy from 11.9 years in 2010 to 8.5 in 2050 for males and from 12.95 to 7.3 for females.
(iii) The need for long-term care (LTC) is projected to steadily increase, from about 446,000 older persons in 2020 to 665,000 in 2030.
(iv) During the coronavirus disease (COVID-19) pandemic, the physical and mental health of older persons was most at risk.

Those 80 years and above, and females more than males, generally suffer more than other groups from all health conditions. Older females generally have lower education levels and economic status than older males (Chapter 2).

The challenges are how to prepare future older populations to be healthy, productive, and independent physically and financially to prevent healthcare costs from rising.

Older persons' health services focus more on health promotion and less on disease prevention. For example, health screening to detect various diseases is hindered by the lack of instruments and guides that are easily understood by health providers.

Strategies, processes, and multidimensional efforts to

Ageing Population and Supporting Older Persons' Health

Awareness of the health conditions of older persons, especially in vulnerable groups – those aged 80 and above, females, those living alone, those in rural areas, and those of low socio-economic status – is important for achieving healthy ageing.

Making ageing a priority is essential so that it can be integrated into all policy areas and levels.

Strengthening and developing older persons' health services must be supported by facilities, human resources, financing, institutions, regulations, family and community participation, and data.

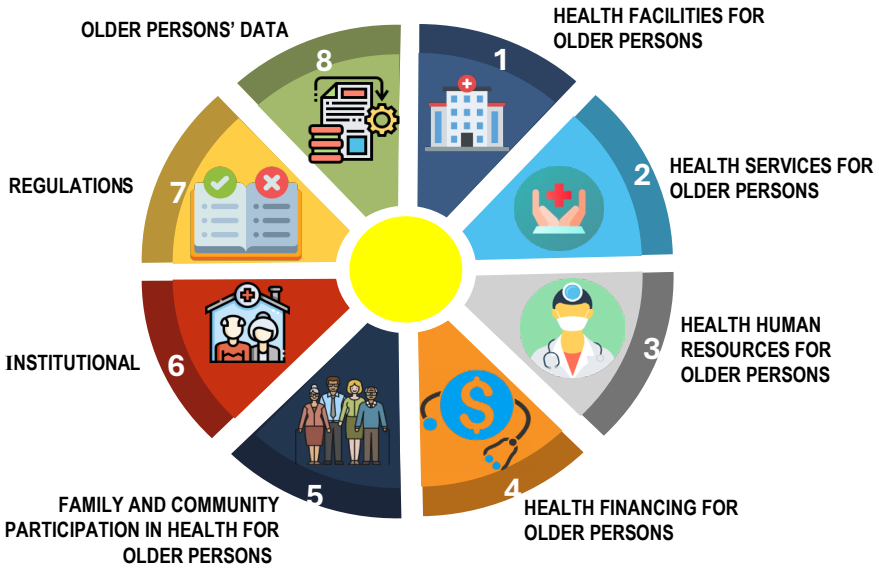
integrate ageing issues into all fields and national and regional policy are important.

Japan and Thailand encourage community-based older persons' health services through government budgets and regulations. These countries have financing schemes for special services, including for older persons who need long-term care.

Health provision must be adequate and aligned with healthcare needs to improve older persons' health services. The preparedness of older persons' health services encompasses facilities, human resources, and health financing, supported by family and community participation, easy access, institutions, regulations, and data. Anticipating the impact of the increase in the number of older persons is a challenge.

The following are strategic issues and challenges related to older persons' health services (Chapters 2–5) (Figure 6.1).

Figure 6.1 Strategic Issues and Challenges of Older Persons' Health Services



Source: Author (2023).

The following are strategic issues and challenges facing older persons' health services:

1) Health facilities. According to Government Regulation 47 (2016) concerning health service facilities, article 4, health services are provided by (a) independent health providers, (b) community health centres, (c) clinics, (d) hospitals, (e) pharmacies, (f) blood transfusion units, (g) health laboratories, (h) optical clinics, (i) health facilities for legal purposses (Pelayanan Kedokteran Untuk Kepentingan Hukum [Yandokum])[8], and (j) traditional health service facilities.

   Facilities face challenges of number and quality. Not all regions have health facilities, especially eastern Indonesia. Many primary health facilities are not age friendly. Each sub-district should have at least one age-friendly health centre. Not all health centres have portable laboratories and ambulances. Drugs for older persons are not always available.

   Many follow-up referral hospitals do not have integrated geriatric clinics or age-friendly services, especially for Social Security Administrator (Badan Penyelenggara Jaminan Sosial [BPJS]) Health patients. In 2021, only 9.38% of all hospitals provided geriatric services with integrated teams. Integrated older persons' care is needed in comprehensive geriatric clinics in every hospital. If each district and city have 1 hospital, at least 507 regional hospitals will have geriatric clinics. The challenge is that geriatric clinics are not as profitable for hospitals as separate specialist clinics. BPJS Health referrals are based on one disease per related specialist clinic. An older patient with multi-pathologies must be initially assessed at the comprehensive geriatric clinic.

2) Health services. Under Law 36 (2009) concerning health, health efforts are any activity performed in a comprehensive, integrated, and sustainable way to maintain and increase the community's health status: disease prevention, health improvement, treatment of disease, and health recovery. The efforts include promotion, prevention, treatment, and rehabilitation.

   Older persons' health services are generally provided by health facilities, including community-based health facilities or private ones, such as LTC facilities, nursing homes, or home healthcare services. However, provision of older persons' health services faces obstacles related to integrating national, regional, and community healthcare programmes and facilities.

   Older persons' health services need (i) better management; (ii) more knowledgeable and skilled health providers; (iii) easier access (better transport, lower cost, user-friendly roads and routes, and more assistance) for older persons using primary health facilities and follow-up referral health facilities; (iv) easier access to health technology such as telehealth and telemedicine; (v) more LTC services; (vi) more disease prevention and health promotion community efforts; and (vii) data to determine

[8] Health facilities, for legal purposes, are used to examine a body or object originating or suspected of originating from a human body. The examination is carried out based on legal necessity or for purposes suspected to have the potential to become a legal problem.

priorities.

Other countries' experience shows that older persons' health services, especially LTC to relieve families, are developed through the community. Such services are supported by technology.

Indonesia must develop community-based health services in anticipation of the government's financing burden, the inadequacy of human resources, and the lack of LTC special services and financing.

3) Health human resources. Human resources are most important in providing older persons' health services. However, Indonesia's service providers are insufficient, not qualified, and unevenly distributed across regions. Personnel changes have an impact on programme sustainability.

   Several health centres have insufficient physicians or dentists, and hospitals have insufficient specialists. Only 48.9% of health centres have nine types of health services. The prevalence of mental disorders is increasing amongst older persons, who need psychologists at primary and follow-up referral health facilities.

   Because their number is limited, health providers must perform two or more tasks. Their capacity and knowledge related to older persons' health or geriatrics must be increased. Hospitals and health centres have few geriatric physicians and nurses, and health providers are not adequately trained in comprehensive geriatric assessment.[9]

   Training in health centres is generally provided by older persons' programmes' responsible officers, usually physicians, nurses, or midwives. Training in geriatrics is provided to build the capacity of responsible officers to provide older persons' health services based on their professional competency.

   Another challenge is providing assistants or caregivers. Their numbers are insufficient to provide LTC. Formal caregivers go through formal education such as nursing, whilst informal caregivers are recruited from families and cadres in communities. Informal caregivers face obstacles in finding volunteers to provide empathetic care for older persons.

   Cadres may be different than caregivers. The caregivers are formal or informal. Informal caregivers are usually family members and cadres are engaged through home-care programmes. Home-care programmes are guided by health centre workers. Cadres conduct home visits to older persons who need assistance for activities of daily living or instrumental activities of daily living because they do not have family members who can care them or because they live alone. Cadres generally receive basic health service training from health centres and assist older persons who cannot afford to hire formal caregivers.

[9] Comprehensive geriatric assessment is an evaluation of physical, psychosocial, and environmental factors that impact the well-being of the elderly (Devons, 2002).

Informal caregivers are available in several regions but have insufficient knowledge and skills to provide basic services. Older persons needing LTC will continuously increase, from 446,000 in 2020 to 665,000 in 2030 (Chapter 2). If 1 nurse or informal caregiver manages 3 older persons requiring LTC, then in 2030, 222,000 informal caregivers will be needed.

Formal caregivers generally receive an honorarium or payment. Their availability depends on national and regional governments, the private sector, communities, and families. Formal caregivers may be trained by the government or the private sector. Informal caregivers may be family members or cadres trained, including in LTC, by health centres or health professionals.

Challenges of Providing and Strengthening the Capacity of Health Workers and Caregivers

The number of health workers providing older persons' health services is still limited.

The distribution of health workers is uneven across Indonesia.

Frequent transfers of health workers make it difficult to sustain knowledge gained from training.

The capacity and knowledge of health workers and caregivers related to geriatrics need to be improved.

No recruitment, financing, or capacity-building scheme exists for informal caregivers.

Informal caregivers from cadres are generally volunteers. They must receive incentives from the national and regional governments as they do in Japan and Thailand.

4) Health financing. Financing older persons' health services depends on special budget posts (which do not yet exist) for older persons' health, especially in the regions; the effectiveness of the use of health budgets; and other sources of innovative funding. The absence of special budget posts shows that ageing programmes are not a government priority.

   Information from the study's five districts and five cities (Chapter 3) show that older persons' health budget source is the government, such as BPJS Health, health operational assistance, special allocation funds, village fund allocations, and the cigarette tax fund; and/or the private sector's corporate social responsibility (CSR) funds; and/or community sources. Older persons' health budgets at health centres are merged with basic health service budgets such as those for non-communicable (NCD) screening. Therefore, the provincial development planning agency of Denpasar city has proposed a special allocation fund special post for older persons.

   The budget is used to fund older persons' health services, including health providers' training in geriatrics and LTC at health centres; provide screening kits and mobile

screening units; and shoulder operational costs for providers and cadres.

Another obstacle is evaluating the use of the government budget, including CSR donations, for older persons' health services conducted by communities and cadres.

Even with BPJS Health, however, participation in and the quality of health services are challenges. BPJS Health participants, mostly older persons, are generally categorised as receiving contribution assistance (48% in 2022). As the number of older persons increases, so will the need for BPJS Health financing through contribution assistance.

BPJS Health is not supported by capitation funds, makes referrals only to type C and D hospitals. National health insurance does not fund home care although home visits are most important for older persons not able to visit health centres. Currently, home visits to older persons are not covered by BPJS Health, which requires procedures such as using fingerprints.

Need for Planning of Older Persons' Health Financing

Older persons' health financing is not yet a priority and is not supported by a specific budget post, especially in the regions.

Financing comes mostly from BPJS (Badan Penyelenggara Jaminan Sosial [Social Security Administrator]) for Health contribution assistance.

Financing needs must be anticipated as the number of older persons rapidly increases. For example, the quality of and public confidence in insurance practices must improve.

BPJS Health does not yet cover home care or LTC (long-term care).

Japan, Thailand, and Viet Nam show that health financing schemes for LTC providers must include provision of incentives for informal caregivers.

Financing schemes through partnerships with businesses need to be improved to support older persons' health services.

Minister of Health Regulation 2 (2022), chapter 1, article 1 states that health operational assistance consists of funds used to lighten the burden of health costs on the community, specifically of health centre services, and to lower maternal and infant mortality rates and malnutrition. Health centres can provide incentives to cadres from health operational assistance funds only and generally only small amounts.

Japan, Thailand, and Viet Nam have health services and social security for older persons. Health financing schemes support those requiring LTC, including, especially in Japan, by recruiting foreign caregivers.

Japan's financing schemes include cross subsidies and LTC or special schemes for older persons 75 years and above and non-productive older persons. Japan has an LTC

assurance scheme for government employees, but which can include other groups, when they reach 40. Thailand taps excise taxes, especially from cigarettes (sin tax).

5) Family and community participation. Family and community support is most important in improving older persons' health, as observed in Japan, Viet Nam, and Thailand. Older persons generally prefer to live with their families.

   Indonesia faces obstacles, especially in mobilising and integrating resources (human and financial) to train families and communities, which have limited knowledge of and skills in the care, especially LTC.

   As society changes, so does the family structure, which is becoming more nuclear. Family caregivers are usually female household members, but more females are entering the labour market.

   Informal caregivers from cadres do not receive enough incentives or honorariums, which are not budgeted and depend on the availability of funds, discouraging young community members from becoming caregivers.

   The culture of communities working together has been weakened by modernisation. Individuals or groups used to assist one another without expecting any compensation. Nowadays, the honorarium or incentive is calculated by time and energy spent. The study found that older persons' participation in health or NCD integrated post activities is low because of the lack of supplementary feeding and souvenir.

   Health centres and cadres must increase their efforts to participate in community activities, including in integrated service posts or NCD integrated posts, which are important in maintaining older persons' quality of life. The two types of community-based health services not only perform health screening but also facilitate various non-medical activities. However, the limited availability of screening tools, such as blood sugar, cholesterol, and uric acid tests, is an obstacle hindering older persons and their families from utilising integrated service posts or NCD integrated posts.

   Indonesia faces a challenge in prioritising disease prevention and health promotion amongst older persons, unlike in Thailand, where health promotion programmes significantly contribute to community awareness of respect for older persons' rights. It is easier in Thailand than in Indonesia to recruit voluntary and economically independent caregivers.

   Older persons in several study locations showed low interest in older persons' integrated service posts or NCD integrated posts. Older persons had low health literacy, lacked interest in the services, found the services too far, had schedule conflicts, and found transport too expensive. Families had little knowledge of and skills in basic geriatrics. Cadres, therefore, must share basic knowledge on geriatrics and older persons' health.

6) Older persons' institutional. Strengthening older persons' institutions is supported by the Shanghai Implementation Strategy, Regional Implementation Strategy for the Madrid International Plan of Action on Ageing 2002, the Macao Plan of Action of Ageing

for Asia and the Pacific 1999, and Indonesia's Law 13 (1998) concerning older persons' welfare. This is the basis for establishing institutions or bodies to coordinate the implementation of ageing programmes at every level of government. In Indonesia, the National Commission for Older Persons was formed in 2003 but disbanded in 2020.

Optimising the role of institutions as coordinators of ageing programs is a significant challenge, particularly at the regional and community levels.

The National Strategy on Ageing aims to strengthen institutions implementing ageing programmes, including service providers (such as hospitals, health centres, nursing homes, senior citizens' associations), through accreditation, standardisation, and certification. Standard services must be established to guide various institutions.

Institutional Strengthening

Institutional strengthening is needed to optimise synergy and collaboration between national and regional programmes and sectors to encourage the execution of older persons' programmes as priorities.

Stakeholders strengthen institutions according to their duties and government functions and in collaboration with non-government institutions.

7) **Regulations**. Many regulations support older persons but implementing them remains a challenge (Chapter 4).

Law 13 (1998) concerning older persons' welfare is no longer relevant to present and future older persons' conditions. Since 2016, ministries; institutions; related stakeholders (including higher education institutions, private, and community); and Parliament have deliberated amendments to it. In 2018, academic reports and draft designs were submitted to the coordinating minister for human development and culture. In 2019, an expert body of Parliament discussed the law further and considered the academic report and draft design. However, prioritising ageing issues remains a challenge.

Several changes in Law 13 (1998) concerning older persons' welfare relate to age categories. A proposed amendment is to define an older person as 65 years or older rather than 60.

Regulatory Support

Ageing regulations need to be adjusted to changing conditions and needs of older persons. Existing regulations related to older persons' health need to be refined, including criteria for age-friendly health centres, alternative financing, and programme budget management.

Older persons with potential can work and/or produce goods and services. Older persons without potential are unable to work and dependent on others. These definitions consider only economic activities. The World Health Organization (WHO) maintains that older persons' participation consists not only of economic activities but also of non-monetary activities in daily life.

Obstacles remain in formulating a new law on ageing, including in drawing up regional regulations. Japan, Thailand, and Viet Nam show that ageing programmes must be supported by laws and regulations and that the government is committed to resolving ageing issues.

Regulations must be formulated to support alternative financing – village funds or the private sector's corporate social responsibility, for example – of older persons' health services. Regulations are needed to manage health service budgets and taxes and to define criteria for age-friendly health centres.

8) Older persons' data. Data are the basis for crafting policies and programmes. A single database on older persons is needed to determine programme targets. Older persons' data are separated based on sector. The Ministry of Social Affairs (MoSA) uses Integrated Social Welfare Data (Data Terpadu Kesejahteraan Sosial) by name and address, the National Population and Family Planning Agency (Badan Koordinasi Keluarga Berencana Nasional [BKKBN]) uses Older Persons' Family Guidance (Bina Keluarga Lansia [BKL]) data, and the Ministry of Health (MoH) uses health centre data. Such uncoordinated data collection poses a challenge to cadres and data collection surveyors.

   Several health centres have difficulty determining programme targets. They use data on older persons from the Population and Civil Registration (Kependudukan dan Catatan Sipil [Dukcapil]) or the Central Bureau of Statistics (Badan Pusat Statistik) and the regional health office. In the field, older persons' data are based on the number of older persons visiting the health centres.

   The reporting system limits the tracking of older persons' access health services. Healthcare providers at health centres are overburdened by the numerous applications mandated by national and local authorities.

   To manage the issue, MoH is developing a communication data application *(komunikasi data* [Komdat]). Komdat will include all applications under the Directorate General of Public Health, including National Medium-Term Development Plan (Rencana Pembangunan Jangka Menengah Nasional [RPJMN]) data, Strategic Plan (Rencana Strategis [Renstra], public health programme data, and mortality data. Komdat will allow health centres to easily access databases and report on data sets and minimum service standards. However, health centre information systems are not yet integrated with Komdat, so the health office receives their reports manually. Not all health centres report outside activities, impacting data reported. Providers must consider their competency in using the application.

Even though an online Komdat information system exists, reporting of the 2020–2024 National Action Plan uses separate applications. They must be integrated to reduce the number of applications to be filled out by health providers at various tiers.

Integrated data

Indonesia does not have an integrated older persons' database for programme targeting in various sectors. Simplified and integrated applications can reduce the burden on health workers. Health workers have limited ability to use technology applications. Indonesia needs longitudinal data on older persons for programme targeting.

Determining the target population for older persons' programmes is hampered by a lack of data on funeral space needs. Poor older persons living in densely populated areas struggle with funeral costs and access to burial space.

6.2. Recommendations on Strengthening the Older Persons' Health Service System

Improving older persons' health services requires a synergistic and integrated approach across programmes and sectors to reduce overlapping benefits, effectiveness, and efficiency, and to simplify control, monitoring, and evaluation. Programmes and health service systems, regulation of institutions and partnerships, data and information, and financing are the pillars of older persons' health.

Integrated older persons' health service system. The older persons' health system should be integrated with the overall health system and consist of health services, health facilities, health human resources, data and information, leadership and governance, and health financing, amongst others (World Health Organization, 2018).The old persons' programme must first be nationally integrated to guide regional governments, which can then execute older persons' health services across health ministry programmes and related sectors.

Older persons' health services must be executed by MoSA, MoH, and BKKBN. Collaboration must extend beyond ministries and integrate services across different levels of healthcare facilities. For example, older persons' health services at an integrated service post may be performed by health providers from health centres and assisted by cadres. The activity is integrated with MoSA's Assistance of Social Rehabilitation (Asistensi Rehabilitasi Sosial) programme and may be in the form of wheelchair assistance and/or walking sticks and/or older persons' kits. Raising family awareness of older persons' health can be integrated with BKKBN's BKL programme. Villages can assist by providing infrastructure or funds for integrated service posts.

LTC may be provided at older persons' homes, homes for the aged, and nursing homes with 24-hour supervision. Services for homes for the aged provided by MoSA and the private sector generally consist of housing and food, supported by social, religious, physical, recreational, and health checks for early detection of degenerative diseases and provision of simple treatment. Older persons living at home and needing LTC may receive

services through home visits carried out by community health centres; community groups (BKL, integrated service posts, NCD integrated post cadres); or by the Social Welfare Institute (Lembaga Kesejahteraan Sosial [LKS]) or the Family Compassion Centre (Pusat Santunan Keluarga [PUSAKA]).

Cooperation and coordination are in line with services to prevent disease and promote health, especially at integrated service posts or NCD integrated posts. Such alignment is most important because older persons' health is the result of investing throughout the life cycle. Screening is needed and integrated care for older people (ICOPE) guides can be easily applied by providers.[10]

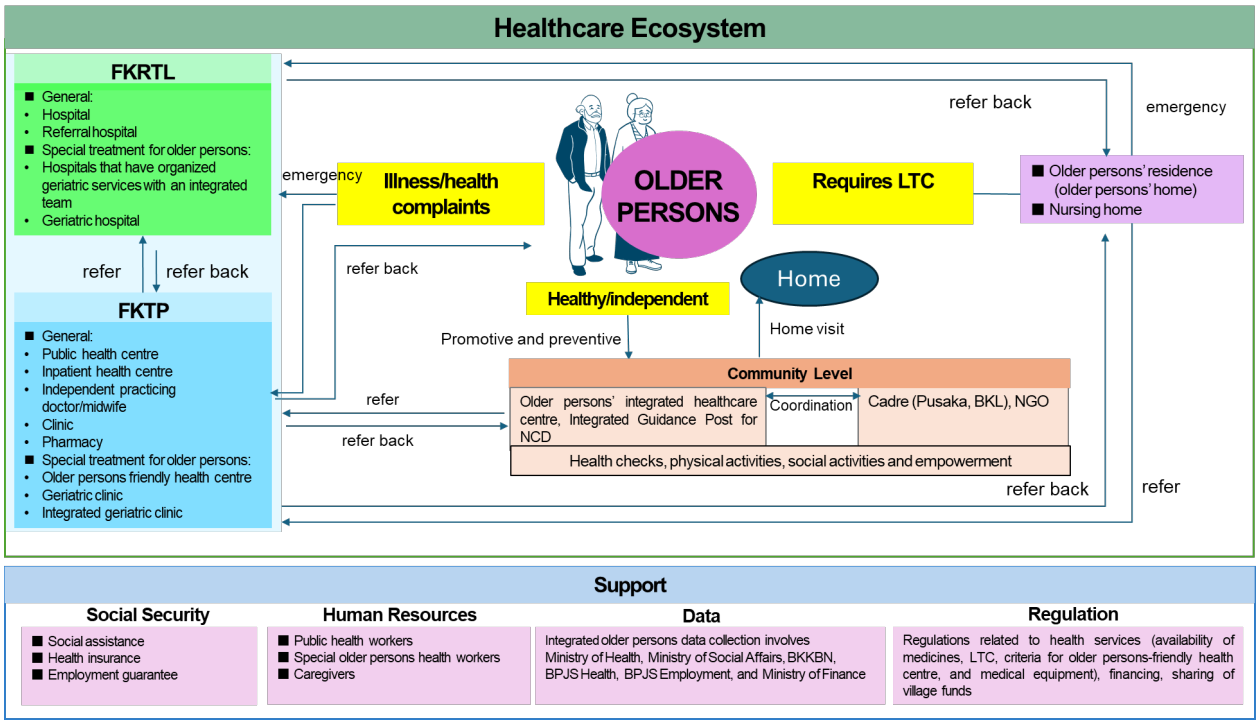
The proposed health ecosystem for older persons is illustrated in Figure 6.2. Older persons' health services are integrated between sectors and involve the community (families, cadres, non-government organisations [NGOs], and institutions related to ageing). Health service provision needs support from social safety nets; human resources; integrated data (involving MoH, MoSA, BKKBN, BPJS Health, and the Ministry of Finance); and regulations. A longitudinal data survey of older persons must be conducted to support ageing policies.

Health services are provided based on older persons' conditions and needs. Those suffering health problems can visit primary health facilities (community health centres). If they need medical specialists who are not available at primary health facilities, they are referred to follow-up referral health facilities (hospitals). If older persons need emergency services, they can go directly to hospitals. Older persons requiring LTC may be living in homes for the aged or nursing homes. Those living at home need informal caregivers from amongst household members and/or formal caregivers. Older persons who need health services at home should receive them through the home care programme. Home visits are carried out by health workers from the health centre or through community participation (cadres, volunteers, NGOs, or other institutions related to older persons).

Older persons who are active and independent may receive preventive and promotive health services provided at health facilities and/or community-based health services at integrated service posts and NCD integrated posts. Community-based health services include body weighing; height measuring; tests for blood pressure, blood sugar, uric acid, and cholesterol; and counselling.

[10] ICOPE refers to guidance for person-centred assessment and pathways in primary care, care for older persons, and healthy ageing.

Figure 6.2 Ecosystem of Older Persons' Health Services



BKKBN = Badan Koordinasi Keluarga Berencana Nasional (National Population and Family Planning Agency), BKL = Bina Keluarga Lanjut Usia (Older Persons' Family Guidance), BPJS = Badan Penyelenggara Jaminan Sosial (Social Security Administrator for Health), FKRTL = *fasilitas kesehatan rujukan tingkat lanjutan* (follow-up referral health facility), FKTP = *fasilitas kesehatan tingkat pertama* (primary healthcare facility), LTC = long-term care, NCD = non-communicable disease, Pusaka = Pusat Santunan Keluarga (Family Compassion Centre), NGO = non-government organisation.
Sources: Adapted from various sources.

To strengthen the older persons' integrated health service ecosystem, the following are recommended:

1) Increase the number and quality of health facilities for older persons.
2) Increase the number, quality, and equitable distribution of health human resources.
3) Increase financing for older persons' health services.
4) Increase family and community participation.
5) Revitalise and strengthen ageing institutions, especially for age-friendly providers.
6) Strengthen health regulations.
7) Improve the overall health dissemination.

1) **Increase the number and quality of older persons' health facilities.** All health centres must have age-friendly primary health facilities to shorten waiting time and to ensure the safety of older persons. Age-friendly services consist not only of rooms for special services but are also equipped with other mobility infrastructure such as wheelchairs and railing.

   Follow-up referral health facilities (hospitals) must have geriatric clinics managed by

comprehensive geriatric teams. Age-friendly health facilities and integrated health services are important for healthy ageing.

Primary health facilities provide first-contact services: comprehensive care that fulfils older persons' essential needs. Primary health facilities are important in coordination of care and in cross-sector cooperation, including communities. In integrated health services, comprehensive screening identifies older persons' needs. In primary health services, preventive and promotive efforts are being developed to prevent and treat increasingly common degenerative diseases.

Older persons' kits must always be available at health centres and integrated service posts or integrated NCD posts. The kits consist of tools to detect early NCD risk factors, including high blood pressure, blood sugar, cholesterol, and uric acid; and to measure height, weight, waist circumference, and body mass index. Bedridden older persons need diapers. The home care programme must be revitalised to increase the scope of older persons' health services, including for the bedridden and those needing LTC. Health centre home-care programmes must be equipped with ambulances, and transport costs for providers and cadres providing home care to older persons must be supported.

Older persons should be able to access health facilities through mobile health centres or health information technology (telehealth, telemedicine), which bring health services to areas not yet reached by in-building services.

2) Increase the number, quality, and equal distribution of health human resources. Adequate numbers of health centres should be distributed equally across the regions. Government programmes to make health human resources available should be strengthened. The culture and norms of older persons should be fully understood so they become more amenable to services.

   Human resources needed include general practitioners, dentists, nurses, and geriatricians. Psychologists are needed to manage older persons' mental health. Mental health services may be provided through cooperation and partnerships with professional organisations and institutions of higher education.

   Ageing programme officers at health centres, such as physicians or nurses, should receive training in geriatrics. Geriatric clinics are set up by integrated geriatric services as provided by Minister of Health Regulation 79 (2014) concerning organising geriatric services at hospitals.

   Families and communities must add to the number of caregivers. However, they must be equipped with the knowledge and skills needed to provide older persons' or geriatric care.

   Community caregivers may be cadres from BKL, LKS, PUSAKA, and integrated service posts; private service providers; NGOs; and staff of nursing homes. They must receive assistance from health centre case managers.

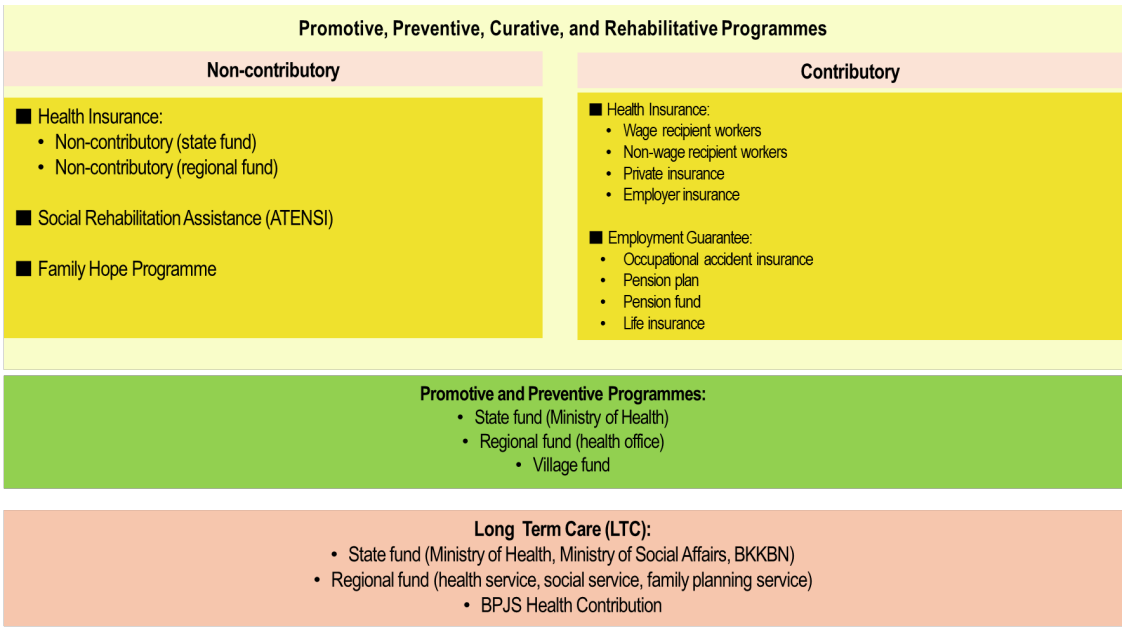
Increasing the knowledge, skills, and empathy of health providers and caregivers requires (i) using information technology; (ii) providing sustainable training programmes in gerontology and geriatrics, focusing on common problems such as multimorbidity and frailty; and (iii) providing regular training to cadres at integrated service posts or integrated NCD posts to increase their competence.

3) **Increase financing for older persons' health services**. Older persons' health services need more financing to be sustainable. Japan has a social protection system whilst Indonesia's requires further development.

   The proposed financing of older persons' health services is illustrated in Figure 6.3. Budget for services must be allocated to protect their sustainability. Health financing should provide older persons' kits (health-screening tools), medicines, cadre incentives, training of providers and cadres, support for older persons requiring LTC, and ambulances at health centres.

   Village budgets must be optimised, especially to finance older persons' community health programmes such as integrated service posts or NCD integrated posts and incentives for cadres and assistants.

Figure 6.3 Financing Schemes of Ageing Programmes



ATENSI = Asistensi Rehabilitasi Sosial (Social Rehabilitation Assistance), BKKBN = Badan Koordinasi Keluarga Berencana Nasional (National Population and Family Planning Agency), BPJS = Badan Penyelenggara Jaminan Sosial (Social Security Administrator for Health).
Sources: Adapted from various sources

BPJS Health benefits and implementation should be reviewed. Obstacles faced by older persons in obtaining health services – such as administrative matters, procedures, waiting times, hospitalisation times, and medication administration times, especially in type C or D hospitals – should be removed. Support for older persons

(especially those who need LTC) can include costs of visiting health facilities, transport, companions, and age-friendly access to public facilities.

Communities must learn good financial management practices, such as allocating emergency funds and using insurance. They need alternative innovative funds from, for example, the regional public service agency and CSR.

4) Increase family and community participation. Families and communities must be more involved in strengthening older persons' health services by deploying their own knowledge and providing care. Cadres can help collect older persons' data to determine programme targets and encourage older persons to participate in activities. Cadres' role in increasing knowledge on older persons' health should be strengthened.

5) Revitalise and strengthen ageing institutions. Ageing institutions must be revistalised nationally and regionally. Institutions and partnerships with NGOs must be strengthened. Coordinating institutions must include the national and regional governments, the private sector, and communities. A working group with a clear division of tasks and tenure can be formed. The institutions must be supported by laws and regulations mandating their roles and responsibilities.

   Community ageing institutions must collaborate to implement ageing programmes to manage the needs of older persons. Health cadres, for example, must cooperate with other sectors to implement integrated service posts.

   Institutions must integrate older persons' data into a database of programme targets and updated regularly. The database must be supported by health and social agencies, BKKBN, and Dukcapil.

6) Strengthen regulations. Regulations are needed to manage financing, village funds, institutions, human resources, and healthcare (Chapter 4). Regulations must be improved: (i) new laws must replace Law 13 (1998) concerning older persons' welfare. Proposed amendments are related to older persons' rights to receive information, communication, and infrastructure to ease access to health services; and integrated health services to support healthy lives and longevity; (ii) regulations must ensure that drugs, screening tools, and data are available; the LTC system is stable; health centres meet age-friendly criteria; programmes are financed; village funds are shared (including other non-government funds); institutions, human resources, and recruitment schemes are supported; and cadres and informal caregivers are given incentives.

7) Increase overall dissemination. Policies and programmes on older persons' health services, and the importance of ageing issues must be disseminated to national and regional governments, health centres, and communities. Laws, regulations, and technical guidelines should be made known through training and education.

6.3. Proposed Policy Directions, Strategies, and Key Interventions for the 2025–2029 National Medium-term Development Plan

Older persons needing LTC should be provided treatment and rehabilitation, whilst healthy and active older persons should receive services that prevent disease and promote health. Impact and outcome indicators are in Table 6.1. Proposed policy directions, strategies, and key interventions for the 2025–2029 RPJMN are in Table 6.2

Table 6.1 Proposed Impact and Outcome Indicators

Indicator		Baseline 2020	Target 2029
Impact	Life expectancy at birth	73.37	74.74
	Life expectancy at 60+	17.04	17.50
Indicator		Baseline 2020	Target 2029
Outcome	Health status		
	● Prevalence of older persons' nutritional status	41%	39%
	● Prevalence of independent older persons	74,3%	81%
	● Prevalence of older persons with NCDs	65%	64%
	● Prevalence of older persons behaviour and/or mental emotional disorders	12.8%	12%
	Services quality		
	● Proportion of older persons receiving standard health services	44.8%	80%
	● Number of integrated LTC systems for older persons	0	1

LTC = long-term care, NCD = non-communicable disease.
Sources: 2020–2050 Indonesia Population Projections (Central Bureau of Statistics [Badan Pusat Statistik]); 2018 Basic Health Research (Riset Kesehatan Dasar) (Ministry of Health); and 2020 Life Expectancy (World Health Organization)

Policy directions: Strengthening the older persons' health system

Priorities in the 2025–2029 RPJMN are as follows:

1. Increase coverage, access, and quality of older persons' health services.
2. Increase coverage of health insurance and health financing for older persons' health services
3. Strengthen integrated ageing institutions.
4. Align laws and regulations related to older persons' health services.

Table 6.2 Proposed Policy Directions, Strategies, and Key Interventions for the 2025–2029 National Medium-Term Development Plan (*Rencana Pembangunan Jangka Menengah Nasional*)

	Strategy	Key Interventions	Indicator	Responsible Institution
1. Increase coverage, access, and quality of older persons' health services				
1	Fulfil the need for older persons' health facilities	Increase coverage of age-friendly health centres	Percentage of age-friendly health centres	Ministry of Health* Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Finance, Ministry of Home Affairs, local governments
		Increase coverage of hospitals with comprehensive geriatric clinics	Percentage of hospitals with comprehensive geriatric clinics	Ministry of Health* Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Finance, Ministry of Home Affairs, BPJS Health, local governments
2	Fulfil the needs of older persons' health services	Strengthen coverage of community-based services that promote health and prevent diseases	Percentage of integrated service posts and NCD integrated posts conducting activities that promote health and prevent diseases	Ministry of Health* Coordinator Ministry Human Development and Culture, Ministry of Social Affairs, BKKBN, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments

	Strategy	Key Interventions	Indicator	Responsible Institution
			Percentage of integrated service posts with complete older persons' kits	Ministry of Health* Coordinator Ministry of Human Development and Culture, Ministry of Social Affairs, BKKBN, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments, public and private partners
		Disseminate information on balanced nutrition for older persons	Percentage of health centres disseminating information on balanced nutrition for older persons	Ministry of Health* Ministry of Social Affairs, Ministry of Home Affairs, local governments, public and private partners
		Disseminate information on health and healthy lifestyles to older and pre-older persons	Percentage of health centres disseminating information on health and healthy lifestyles	Ministry of Health* Ministry of Social Affairs, Ministry of Home Affairs, local governments, public and private partners
		Conduct activities on early detection and control of NCDs and mental health issues	Percentage of health centres that conduct health screening to prevent NCDs and mental health issues	Ministry of Health* Ministry of Social Affairs, BKKBN, Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments, public and private partners
			Percentage of integrated services posts and NCD integrated posts that conduct health screening for NCD prevention and mental health	Ministry of Health* Ministry of Social Affairs, BKKBN, Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments, public and private partners

	Strategy	Key Interventions	Indicator	Responsible Institution
		Fulfil the need for age-friendly health centres	Percentage of older persons undergoing health screening at age-friendly health centres	Ministry of Health* Coordinator Ministry of Human Development and Culture, BAPPENAS Ministry of Home Affairs, BPJS Health, local governments, public and private partners
		Fulfil the need for comprehensive geriatrics at hospitals	Percentage of older persons who receive health checks at comprehensive geriatric clinics	Ministry of Health* Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments, public and private partners
		Meet the needs of older persons requiring LTC	Percentage of older persons requiring LTC whose needs were met	Ministry of Health* Ministry of Social Affairs, BKKBN, Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments, public and private partners
		Develop older persons' home-care activities	Percentage of health centres providing older persons' home care	Ministry of Health* Ministry of Social Affairs, BKKBN, Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments, public and private partners
			Number of older persons' cadres providing home care	Ministry of Health* Ministry of Social Affairs, BKKBN, Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments, public and private partners

	Strategy	Key Interventions	Indicator	Responsible Institution
			Number of older persons whose need for home care was met	Ministry of Health* Ministry of Social Affairs, BKKBN, Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments, public and private partners
		Meet needs of health centre mobile units	Mobile units provide older persons' health services or visit older persons needing LTC at home	Ministry of Health* BAPPENAS, Ministry of Finance, Ministry of Home Affairs, Public Works and Peoples' Housing, private partners, Ministry of Social Affairs, local governments
		Develop an integrated LTC system for older persons (by location, service, ministry and/or institution activity)	Establishment of an integrated LTC system for older persons	Ministry of Health* Ministry of Social Affairs, BKKBN, Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments, public and private partners
			Provision of comprehensive guidelines on LTC services	Ministry of Health* Ministry of Social Affairs, BKKBN, Coordinator Ministry of Human Development and Culture, BAPPENAS
			Number of older persons' groups with LTC	Ministry of Health* Ministry of Social Affairs, BKKBN, Ministry of Home Affairs, local governments, public and private partners

	Strategy	Key Interventions	Indicator	Responsible Institution
			Percentage of health centres developing LTC	Ministry of Health* Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry Home Affairs, BPJS Health, Local Government
			Percentage of older persons' residences with LTC	Ministry of Health* Ministry of Social Affairs, BKKBN, Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, Local Government
		Provide older persons with digital technology–based health services supported by communication networks	Percentage of older persons with access to digital technology–based health services	Ministry of Health* Communication and Information, BAPPENAS, Ministry of Social Affairs, Ministry of Home Affairs, local government, and private partners
3	Fulfil human resources for older persons' health services	Fulfil needs of providers of older persons' health services at health centres	Percentage of health centres with programme officers for older persons' health	Ministry of Health* Ministry of Social Affairs, Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BKKBN, local governments
		Provide health providers at hospitals' comprehensive geriatric clinics	Percentage of hospitals with a comprehensive geriatric clinic	Ministry of Health* Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments

	Strategy	Key Interventions	Indicator	Responsible Institution
		Increase the availability of geriatricians	Percentage of geriatricians	Ministry of Health* Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments, government partners, and private sector
		Provide geriatric training to health providers	Percentage of health centres with geriatric training	Ministry of Health* Ministry of Home Affairs, BAPPENAS, BPJS Health, local governments
			Number of older persons' cadre groups with geriatric training	Ministry of Health* Ministry of Social Affairs, BKKBN, Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, local governments, government partners, and the private sector
4.	Increase family and community participation in older persons' health services	Disseminate information on health and older persons' care, including LTC, to families	Percentage of households that received dissemination on health and older care, including LTC	Ministry of Health* Ministry of Social Affairs, BKKBN, Ministry of Home Affairs, local governments, government partners, and private sector
		Disseminate health and care information to community institutions that provide older persons' health services, including LTC	Percentage of older persons' homes receiving information on health and care, including LTC	Ministry of Health* Ministry of Social Affairs, BKKBN, Ministry of Home Affairs, local governments

		Increase knowledge and skills of cadres providing older persons' health services	Percentage of cadres receiving knowledge on older persons' health services	Ministry of Health* BAPPENAS, Ministry of Social Affairs, BKKBN, Ministry of Home Affairs, local governments, government partners, and private sector
	Strategy	Key Interventions	Indicator	Responsible Institution
2. Increase coverage of health insurance and health financing for older persons' health services				
1	Fulfil financing for older persons' health	Develop an NHI benefit package for LTC	NHI benefit package available for older persons' LTC	Ministry of Health* Ministry of Finance, BAPPENAS, DJSN, Ministry of Home Affairs, local governments
		Fulfil financing needs for cadres' incentives	Percentage of cadres receiving incentives for older persons' health services	Ministry of Health* Ministry of Finance, BAPPENAS, DJSN, Ministry of Home Affairs, Ministry of Village Affairs, local governments
		Fulfil financing to provide complete and sustainable health-screening kits	Number of integrated service posts with complete and sustainable health-screening kits	Ministry of Health* Ministry of Social Affairs, BKKBN, Coordinator Ministry of Human Development & Culture, BAPPENAS, Ministry of Home Affairs, BPJS Health, Ministry of Village Affairs, local governments, government partners, and private sector

3. Strengthen integrated ageing institutions				
1	Strengthen institutions related to older persons' health services	Develop and increase partnerships across programmes and sectors related to older persons' health	Availability of an active and functioning central partnership forum on older persons' health	Ministry of Health* Coordinator Ministry of Human Development and Culture, Ministry of Education, Communication and Information, BKKBN, Ministry of Social Affairs, BAPPENAS, Ministry of Home Affairs, local governments, government partners, and private sector
			Percentage of provinces with an active partnership forum on older persons' health	Ministry of Health* Coordinator Ministry of Human Development and Culture, BAPPENAS, BKKBN, Ministry of Education, Ministry of Social Affairs, Ministry of Home Affairs, local governments, government partners, and private sector
			Percentage of districts and cities with an active partnership forum on older persons' health	Ministry of Health* Coordinator Ministry of Human Development and Culture, BAPPENAS, BKKBN, Ministry of Education, Ministry of Social Affairs, Ministry of Home Affairs, local governments, government partners, and private sector

4. Align laws and regulations on older persons' health services				
1	Improve laws and regulations on older persons' health	Revise Minister of Health Regulation 67 (2015) concerning the provision of older persons' health services at community health centres (with detailed criteria)	Availability of a guide, with clear criteria, on age-friendly health centres	Ministry of Health* Coordinator Ministry of Human Development and Culture, BAPPENAS, Ministry of Home Affairs, local governments

BAPPENAS = Badan Perencanaan Pembangunan Nasional (National Development Planning Agency), BKKBN = Badan Koordinasi Keluarga Berencana Nasional (National Population and Family Planning Agency), BPJS = Badan Koordinasi Keluarga Berencana Nasional (National Population and Family Planning Agency), DJSN = Dewan Jaminan Sosial Nasional (National Social Security Board), LTC = long-term care, NHI = National Health Insurance.
*Main responsible officer.

References

Aji, B., S. Mohammed., M.A. Haque, and M. de Allegri (2017), 'The Dynamics of Catastrophic and Impoverishing Health Spending in Indonesia: How Well Does the Indonesian Health Care Financing System Perform?' *Asia-Pacific Journal of Public Health*, *29*(6), 506–15. https://doi.org/10.1177/1010539517729778

Akiyama, N., T. Shiroiwa, T. Fukuda, S. Murashima, and K. Hayashida (2018), 'Healthcare costs for the elderly in Japan: Analysis of Medical Care and Long-Term Care Claim Records', *PLoS ONE*, *13*(5), pp.1–15. https://doi.org/10.1371/journal.pone.0190392

Asian Development Bank (2021), *Country Diagnostic Study on Long-Term Care in Indonesia*. Manila. https://www.adb.org/publications/indonesia-country-diagnostic-study-long-term-care

Astari, D.W. and Kismiantini (2019), 'Analysis of Factors Affecting the Health Insurance Ownership with Binary Logistic Regression Model', *Journal of Physics: Conference Series*, *1320*(1). https://doi.org/10.1088/1742-6596/1320/1/012011

Badan Pusat Statistik (BPS) (2015a), *Hasil Survey Penduduk Antar Sensus 2015 (Result of 2015 Intercencal Population Surveys)*. https://webapi.bps.go.id/download.php

Badan Pusat Statistik (BPS) (2015b), *Statistik Penduduk Lanjut Usia 2015 (2015 Older Persons Population Statistics)*. https://bps.go.id/id/publicatioan/2016/11/07/f9d00ad72285396ecb1801dc/statistik-penduduk-lanjut-usia-2015.html

Badan Pusat Statistik (BPS) (2016), *Statistik Penduduk Lanjut Usia 2016 (2016 Older Persons Population Statistics)*. https://bps.go.id/id/publicatioan/2017/11/17/107752aa20f3f8cb08d9dabe/statistik-penduduk-lanjut-usia-2016.html

Badan Pusat Statistik (BPS) (2017), *Statistik Penduduk Lanjut Usia 2017 (2017 Older Persons Population Statistics)*. https://www.bps.go.id/id/publication/2018/04/13/7a130a22aa29cc8219c5d153/statistik-penduduk-lanjut-usia-2017.html

Badan Pusat Statistik (BPS) (2018), *Statistik Penduduk Lanjut Usia 2018 (2018 Older Persons Population Statistics)*. https://www.bps.go.id/id/publication/2018/12/21/eadbab6507c06294b74adf71/statistik-penduduk-lanjut-usia-2018.html

Badan Pusat Statistik (BPS) (2019), *Statistik Penduduk Lanjut Usia 2019* (2019 *Older Persons Population Statistics)*. https://www.bps.go.id/id/publication/2019/12/20/ab17e75dbe630e05110ae53b/statistik-penduduk-lanjut-usia-2019.html

Badan Pusat Statistik (BPS) (2020a), *Mortalitas di Indonesia Hasil Long Form Sensus Penduduk 2020*. https://indonesia.unfpa.org/sites/default/files/pub-pdf/mortalitas-di-indonesia-hasil-long-form-sensus-penduduk-2020.pdf

Badan Pusat Statistik (BPS) (2020b), *Statistik Penduduk Lanjut Usia 2020 (2020 Older Persons Population Statistics)*. https://www.bps.go.id/id/publication/2020/12/21/0fc023221965624a644c1111/statistik-penduduk-lanjut-usia-2020.html

Badan Pusat Statistik (BPS) (2021), *Statistik Penduduk Lanjut Usia 2021 (2021 Older Persons Population Statistics)*. https://www.bps.go.id/id/publication/2021/12/21/c3fd9f27372f6ddcf7462006/statistik-penduduk-lanjut-usia-2021.html

Badan Pusat Statistik (BPS) (2022), *Statistik Penduduk Lanjut Usia 2022 (2022 Older Persons Population Statistics)*. https://www.bps.go.id/id/publication/2022/12/27/3752f1d1d9b41aa69be4c65c/statistik-penduduk-lanjut-usia-2022.html

Bloom, D.E., E. Jimenez, and L. Rosenberg (2011), 'Social Protection of Older People', *Global Population Ageing: Peril or Promise? 83*, pp.83–88. https://cdn1.sph.harvard.edu/wp-content/uploads/sites/1288/2013/10/PGDA_WP_89.pdf#page=86

Chanprasert, P. (2021), 'Long-term Care Policy and Implementation in Thai-land', in O. Komazawa and Y. Saito (eds.), *Coping with Rapid Population Ageing in Asia* (June), pp.36–44). https://www.eria.org/uploads/media/Books/2021-Coping-with-Rapid-Population-Ageing-Asia/10_Part1-Ch-6-Long-term-Care-Thailand.pdf

Chen, C.-M. and Baithesda (2020), 'Primary healthcare utilization by the elderly: a secondary analysis of the 5th Indonesian Family Life Survey', *Working with Older People*, *24*(2), pp.81–94. https://doi.org/10.1108/WWOP-01-2020-0001

Christiani, Y., J.E. Byles, M. Tavener, and D.P. (2016), 'Exploring the implementation of poslansia, Indonesia's community-based health programme for older people', *Australian Journal on Ageing*, 35(3). https://pubmed.ncbi.nlm.nih.gov/27198005/

Descatha, A., G. Sembajwe, F. Pega, Y. Ujita, M. Baer, et al. (2020), 'The effect of exposure to long working hours on stroke: A systematic review and meta-analysis from the WHO/ILO Joint Estimates of the Work-related Burden of Disease and Injury', *Environment International*, *142*(June), 105746. https://pubmed.ncbi.nlm.nih.gov/32505015

Dewan Jaminan Sosial Nasional and BPJS Kesehatan (2020). *Statistik JKN 2014-2018 (2014-2018 National Health Insurance Statistics).* https://djsn.go.id/files/dokumen/Dokumen%20Kajian/202104151516Statistik%20JKN%202014-2018_PDF%20E-Book_Cetakan%20Pertama(DJSN%20-%20BPJS%20Kesehatan).pdf

Dewan Jaminan Sosial Nasional, and BPJS Kesehatan (2022). *Statistik JKN 2016-2021 (2016-2021 National Health Insurance Statistics).* https://djsn.go.id/files/dokumen/Dokumen%20Kajian/202212131425Buku%20Statistik%20JKN%202016-2021.pdf

Economic Research Institute for ASEAN and East Asia (ERIA) (2019), *Demand of Long-term Care: Care Need* (R. Hayashi (ed.); Demand and, Issue ERIA Research Project Report FY2018 no.8). ERIA. https://www.eria.org/uploads/media/7_RPR_FY2018_08_Chapter_2.pdf

Erlangga, D., S. Ali, and K. Bloor (2019), 'The Impact of Public Health Insurance on Healthcare Utilisation in Indonesia: Evidence from Panel Data', *International Journal of Public Health*, *64*. https://doi.org/10.1007/s00038-019-01215-2

General Statistics Office (2021), 'Population Ageing and Older Persons in Viet Nam', *The Population and Housing Census 2019* (July). chrome-extension://efahttps//www.gso.gov.vn/wp-content/uploads/2021/08/Dan-so-gia-hoaEN.pdf

Glinskaya, E., A.I. de Kleine Feige, L.H. Vu Thi, G.T. Long, T. Hoang, et al. (2021), Vietnam – Adapting to an Aging Society, World Bank Group. http://documents.worldbank.org/curated/en/544371632385243499/Vietnam-Adapting-to-an-Aging-Society

Hanafi, A.S. and N.A. Prihartono (2018), 'Joint effect of obesity and cigarette smoking against hypertension stage 1 among men adults: Finding from the indonesian family life survey-5', *Indian Journal of Public Health Research and Development*, *9*(12), pp.673–678. https://doi.org/10.5958/0976-5506.2018.01915.0

Hendarwan, H. (2022). *Masukan Penguatan Sistem Kesehatan Penduduk Lanjut Usia*.

Ho, Y.C.L., V.S.Y. Lee, M.H.R. Ho, G.J. Lin, and J. Thumboo (2021), 'Towards a parsimonious pathway model of modifiable and mediating risk factors leading to diabetes risk', *International Journal of Environmental Research and Public Health*, 18(20). https://doi.org/10.3390/ijerph182010907

Institute for Health Metrics and Evaluation (2019), *Global Burden of Disease*. https://www.healthdata.org/research-analysis/gbd

Ikegami, N., B.-K. Yoo, H. Hashimoto, M. Matsumoto, H. Ogata, et al. (2011), 'Japanese universal health coverage: evolution, achievements, and challenges', *The Lancet*, *378*(9796), pp.1106–15.

Isaura, E.R., Y.C. Chen, and S.H. Yang (2018), 'Pathways from food consumption score to cardiovascular disease: A seven-year follow-up study of Indonesian adults', *International Journal of Environmental Research and Public Health*, *15*(8), pp.1–15. https://doi.org/10.3390/ijerph15081567

Japan Health Policy NOW (2015), *Long-Term Care Insurance*.

https://japanhpn.org/en/longtermcare/

Japan Health Policy NOW (2022), *Japan's Health Insurance System*. https://japanhpn.org/en/section-3-1/

Japan International Cooperation Agency (2005), *Japan's Experiences in Public Health and Medical Systems: Towards Improving Public Health and Medical Systems in Developing Countries*. https://openjicareport.jica.go.jp/pdf/11868221.pdf

Japan International Cooperation Agency (2022), *Signing Record of Discussions with Indonesian National Police: Project for Promoting Preventive Measures against Crimes*. https://www.jica.go.jp/Resource/indonesia/english/office/topics/220923.html

Japan Pension Service (2022), *National Pension System*. https://www.nenkin.go.jp/international/japanese-system/nationalpension/nationalpension.html#cms02

Jitapunkul, S. and N. Chayovan (2001), *National Policies on Ageing in Thailand*. https://extranet.who.int/countryplanningcycles/sites/default/files/planning_cycle_repository/thailand/national_policies_on_ageing_in_thailand_2001_-_2020.pdf

Kementerian Kesehatan (2018), *Laporan Riskesdas 2018 Nasional (Report of National 2018 Basic Health Research)* . https//repository.badankebijakan.kemkes.go.id/id/eprint/3514/1/Laporan Riskesdas 2018 Nasional.pdf

Kementerian Kesehatan (2022), *Profil Kesehatan Indonesia 2022 (2022 Indonesia Health Profile)*. https://www.kemkes.go.id/id/profil-kesehatan-indonesia-2022

Kementerian Kesehatan (2023), 'Penguatan Sistem Kesehatan Untuk Penduduk Lanjut Usia di Indonesia (Strengthening the health system for Indonesias' older persons)'. Presented in dissemination of final report.

Komazawa, O., N.W. Suriastini, Wijayanti, Y. Ika, M. Achmad, and K. Dinar Dana (2021), *Older People and COVID-19 in Indonesia*. Jakarta. https//www.eria.org/publications/older-people-and-covid-19-in-indonesia

Konishi, T., H. Inokuchi, and H. Yasunaga, H. (2024), 'Services in public long-term care insurance in Japan', *Annals of Clinical Epidemiology*, *6*(1), 1–4. https://doi.org/10.37737/ace.24001

Kristanti, D. and N. Prihartono (2019), 'Obesity as a Predictor of Hypertension in Adult Population: A 14-Years Retrospective Cohort Study', *Indian Journal of Public Health Research & Development*, *10*(6), pp.491–97. https://doi.org/10.5958/0976-5506.2019.01322.6

Kurniawati, W. and R.D. Rachmayanti (2018),' Identifikasi Penyebab Rendahnya Kepesertaan JKN pada Pekerja Sektor Informal di Kawasan Pedesaan', *Jurnal*

Administrasi Kesehatan Indonesia, *6*(1), p.33. https://doi.org/10.20473/jaki.v6i1.2018.33-39

Laguna, E.P. (2020), 'Caregiving in Vietnamese Families', in and Y.S. Vu, N.C., M.T. Tran, L.T. Dang, and C.L. Chei (eds.), *Ageing and Health in Viet Nam* (pp.146–62). Jakarta: ERIA.

Larpsombatsiri, K. (2019), 'Policies on Health of Older Adults in Thailand', *Integrating Policy and Research on Ageing in ASEAN: Conversations Across the Policy and Research Divide*, September, pp.4–6. https://www.duke-nus.edu.sg/docs/librariesprovider3/education-docs/1)-policies-on-the-health-of-older-adults-(thailand)-by-dr-kitti-larpsombatsiri.pdf?sfvrsn=e28d57e9_4

Le, Q.N., L. Blizzard, L. Si, L.T. Giang, and A.L. Neil (2020), 'The evolution of social health insurance in Vietnam and its role towards achieving universal health coverage', *Health Policy OPEN*, *1*, p.100011. https://doi.org/10.1016/j.hpopen.2020.100011

Li, J., F. Pega, Y. Ujita, C. Brisson, E. Clays, et al. (2020), 'The effect of exposure to long working hours on ischaemic heart disease: A systematic review and meta-analysis from the WHO/ILO Joint Estimates of the Work-related Burden of Disease and Injury', *Environment International*, *142*(June), p.105739. https://doi.org/10.1016/j.envint.2020.105739

Liu, N., L. Zeng, Z. Li, and J. Wang (2013), 'Health-related quality of life and longterm care needs among elderly individuals living alone: a cross-sectional study in rural areas of Shaanxi Province China'*, BMC-Public-Health, 8(13),* p.313.

Giang, T.L. and W.D. Pfau (2010), 'Patterns and Determinants of Living Arrangements for the Elderly in Vietnam Patterns and Determinants of Living Arrangements', MPRA Paper No. 24949. https//mpra.ub.uni-muenchen.de/24949/1/2007_06_Social_Issues_Vol._2_Long_and_Pfau_Elderly_Living_Arrangements_final_2007June30_.pdf

Madyaningrum, E., Y.C. Chuang, and K.Y. Chuang (2018), 'Factors associated with the use of outpatient services among the elderly in Indonesia', *BMC Health Services Research*, *18*(1), 707. https://doi.org/10.1186/s12913-018-3512-0

Mahiroh, H., E. Astutik, and R.A. Pratama (2019), 'The Association of Body Mass Index, Physical Activity and Hypertension in Indonesia', *Jurnal Ners*, *14*(1), pp.16–22. https://doi.org/10.20473/jn.v14i1.12811

Meijer, C. de., M. Koopmanschap, T.B. Uva, E. van Doorslaer (2011), 'Determinants of long-term care spending: Age, time to death or disability?' *Journal of Health Economics*, *30*(2), pp.425–38. https://www.sciencedirect.com/science/article/abs/pii/S0167629611000063?via%3Dihub

Miladinov, G. (2021), 'The mechanism between mortality, population growth and ageing of

the population in the European lower and upper middle income countries', *PLoS ONE*, *16* (10 October), pp.1–19. https://doi.org/10.1371/journal.pone.0259169

Ministry of Finance (MoF) (2022), Highlights of the FY2022 Draft Budget. https://www.mof.go.jp/english/policy/budget/budget/fy2022/01.pdf

Ministry of Health Labour and Welfare (MHLW) (2002), Long-term Care Insurance in Japan. https://www.mhlw.go.jp/english/topics/elderly/care/index.html

Ministry of Health Labour and Welfare (MHLW) (2016), 'Long-Term Care Insurance System of Japan', in <*Title of Publication*>, *Https://Www.Mhlw.Go.Jp/English/Policy/Care-Welfare/Care-Welfare-Elderly/Dl/Ltcisj_E.Pdf* (November). http://www.mhlw.go.jp/english/policy/care-welfare/care-welfare-elderly/dl/ltcisj_e.pdf

Ministry of Health Labour and Welfare (MHLW) (2017), *Annual Health, Labour and Welfare Report. Social Security and Economic Growth*. https://www.mhlw.go.jp/english/wp/wp-hw11/dl/summary.pdf

Ministry of Health Labour and Welfare (MHLW) (2021), *Annual Health, Labour and Welfare Report 2021*. https://www.mhlw.go.jp/english/wp/wp-hw14/index.html

Ministry of Health Labour and Welfare (MHLW) (2022), *Overview of Medical Service Regime in Japan*. https://www.mhlw.go.jp/bunya/iryouhoken/iryouhoken01/dl/01_eng.pdf

Moriyama, T. (2022), 'Why Does the Older Population in Japan Work So Much?' *Japan Labor Issues*, 6(39), pp.20–26.

Mulyanto, J., D.S. Kringos, and A.E. Kunst (2019), 'Socioeconomic inequalities in healthcare utilisation in Indonesia: A comprehensive survey-based overview', *BMJ Open*, 9(7). https://doi.org/10.1136/bmjopen-2018-026164

Nakamura, S. (2018), *Japan's Welfare System for the Elderly Past , Present , and Future*. <Place of publication: Publisher>. https://www.ahwin.org/japans-welfare-for-the-elderly-past-present-and-future/

Nakatani, H. (2019), 'Population aging in Japan: policy transformation, sustainable development goals, universal health coverage, and social determinates of health', *Global Health & Medicine*, 1(1), pp.3–10. https://doi.org/10.35772/ghm.2019.01011

National Commission on the Elderly (NCE). (2002). *The Second National Plan for Older Persons 2002–2021*. <Place of publication>. https://www.dop.go.th/dowload/laws/law_th_20161107091458_1.pdf

National Health Commission Office (NHCO). (2022). *National Health Assembly (NHA)*. <Place of publication>. https://en.nationalhealth.or.th/nha/

National Institute of Population and Social Security Research (2017), 'Population

Projections for Japan (2017): 2016 to 2065', *National Institute of Population and Social Security Research in Japan*. <Place of publication>. http://www.ipss.go.jp/index-e.asp

Nguyen, T.A. and L.T. Giang (2021), 'Factors Influencing the Vietnamese Older Persons in Choosing Healthcare Facilities', *Health Services Insights*, 14. https://doi.org/10.1177/11786329211017426

Niimi, Y. (2018), *The Wealth Decumulation Behavior of the Retired Elderly in Japan : the Relative Importance of Precautionary Saving and Bequest Motives.* <Other bibliographic information>. https://ideas.repec.org/p/dpr/wpaper/1042.html

Nippon.com. (2020). Many Japanese Seniors Support Working Until 70. https://www.nippon.com/en/japan-data/h00651/many-japanese-seniors-support-working-until-70.html#:~:text=The survey found that most,the average being ¥189%2C000

Ogawa, T. and O. Komazawa (2021), 'Qualifications Framework for Long-term Care Workers in India, Japan, and the Philippines', ERIA Research Project No. 09. Jakarta. https://eria.org/upload/media/Research-Project-Report/2021-09-Framework-Qualifications-Long-term-Care-Workers-India-Japan-Philippines.pdf

Organisation for Economic Co-operation and Development (OECD) (2022), LSF by sex and age: Labour force participation rate. https://stats.oecd.org/index.aspx?queryid=64197

Oshio, T., E. Usui, and S. Shimizutani (2018), '*Labor Force Participation of the Elderly in Japan*', NBER Working Paper No. 24614. https://www.nber.org/system/files/working_papers/w24614/w24614.pdf

P2PTM Kemenkes RI (2018), *10 Dampak Negatif Alkohol Bagi Kesehatan (10 Negative Impacts of Alcohol on Health)*. http://p2ptm.kemkes.go.id/infographic-p2ptm/stress/page/21/10-dampak-negatif-alkohol-bagi-kesehatan

Peltzer, K. and S. Pengpid (2019), 'Prevalence, and social and health correlates of insomnia among persons 15 years and older in South Africa', *South African Journal of Psychology*, 49(4), pp.467–78. https://doi.org/10.1177/0081246318818623

Pengpid, S., K. Peltzer, and I.H. Susilowati (2019), 'Cognitive Functioning and Associated Factors in Older Adults: Results from the Indonesian Family Life Survey-5 (IFLS-5) in 2014-2015', *Current Gerontology and Geriatrics Research*, *2019*, pp.23–25. https://doi.org/10.1155/2019/4527647

Phetsitong, R. and P. Vapattanawong (2023), 'Household Need and Unmet Need for Caregivers of Older Persons in Thailand', *Journal of Aging & Social Policy*, 35(6), pp.824–41. https://www.tandfonline.com/doi/full/10.1080/08959420.2022.2132081?scroll=t

op&needAccess=true

Rohmatullailah, D., D. Agustina, F. Rahmansyah, N.K. Trisna, N. Anasta, et al. (2021), 'Peningkatan Pengetahuan tentang JKN dengan Sosialisasi dan Pembentukan Kader JKN Kota Bogor', *Jurnal Pengabdian Kesehatan Masyarakat (Pengmaskesmas)*, *1*(2), pp.110–18. https://journal.fkm.ui.ac.id

Saito, Y. and L.H.M. Cicih (2022), *National Study on the Impact of COVID-19 Pandemic on Older Persons (Including those with disabilities) in Indonesia*. <Other information>. https//indonesia.unfpa.org/sites/default/files/pub-pdf/eng_studi_lansia_launch_260722_0.pdf

Saito, Y., J.-M. Robine, and E.M. Crimmins (2014), 'The methods and materials of health expectancy', *Physiology & Behavior*, 176(5), pp.139–48. https://doi.org/10.3233/SJI-140840.The

Saito, J., M. Haseda, A. Amemiya, D. Takagi, K. Kondo, and N. Kondo (2019), 'Community-based care for healthy ageing: Lessons from Japan | Prise en charge dans la communauté pour un vieillissement en bonne santé: Leçons tirées du Japon | Atención basada en la comunidad para un envejecimiento saludable: Lecciones de Japón', *Bulletin of the World Health Organization*, 97(8), pp.570–74.

Sakunphanit, T. (2015), *Universal Health Care Coverage Through Pluralistic Approaches* (Social Security Extension Initiatives in East Asia). <Other information>. https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_protect/@soc_sec/documents/publication/wcms_secsoc_6612.pdf

Satake, J. (2018), 'Graying Japan Needs Foreign Caregivers, but Language Barrier Poses Challenge', *Nippon.com*.

Stastitics Bureau (2022), *Statistical Handbook of Japan*. Tokyo. https://www.stat.go.jp/english/data/handbook/pdf/2022all.pdf

Sudo, K., J. Kobayashi, S. Noda, Y. Fukuda, and J. Takahashi (2018), 'Japan's healthcare policy for the elderly through the concepts of self-help (Ji-jo), mutual aid (Go-jo), social solidarity care (Kyo-jo), and governmental care (Ko-jo)', *BioScience Trends*, *12*(1), pp.7–11. https://doi.org/10.5582/bst.2017.01271

Sumriddetchkajorn, K., K. Shimazaki, T. Ono, T. Kusaba, K. Sato, and N. Kobayashi (2019), 'Universal health coverage and primary care Thailand', *Bulletin of the World Health Organization,* 97(6). https://doi.org/10.2471/BLT.18.223693

Suriastini, W., A.L. Buffardi, and J. Fauzan (2019), 'What Prompts Policy Change? Comparative Analyses of Efforts to Create Age-friendly Cities in 14 Cities in Indonesia', *Journal of Aging and Social Policy*, 31(3), pp.250–70. https://doi.org/10.1080/08959420.2019.1589889

Teerawichitchainan, B., W. Pothisiri, and G.T. Long (2015), 'How do living arrangements and intergenerational support matter for psychological health of elderly parents?

Evidence from Myanmar, Vietnam, and Thailand', *Social Science & Medicine*, 136–137, pp.106–16. https://doi.org/https://doi.org/10.1016/j.socscimed.2015.05.019

Thai Gerontology Research and Development Institute (TGRI) (2020), *Situation of the Thai Older Persons 2020*. Bangkok. chrome-extension://efhttps//www.dop.go.th/download/knowledge/th1635826412-975_0.pdf

Thai Gerontology Research and Development Institute (TGRI) (2021), *Situation of the Thai older persons 2021*. Bangkok. https://www.dop.go.th/download/knowledge/th1663828576-1747_1.pdf

Tran, M.T., L.T. Dang, and N.C. Vu (2020), 'Economic Well-being of Older Persons', In and Y. S. Vu, N.C., M.T. Tran, L.T. Dang, C.L. Chei (eds.), *Ageing and Health in Viet Nam*, pp.86–94. https://www.eria.org/uploads/media/Book/2020-Ageing-and-Health-VietNam/12_Chapter-7-Economoic-Well-being.pdf

United Nations and Population Fund (UNFPA) and Helpage International (2016), *Old age income security in Thailand*. Bangkok. https://www.refworld.org/reference/countryrep/helpage/2017/en/120390

United Nations Department of Economic and Social Affairs (UNDESA) (2022), World Population Prospects 2022. https://population.un.org/wpp/

United Nations Population Fund (UNFPA) (2021), Market Outlook for Elderly Care Service in Vietnam. https://vietnam.unfpa.org/sites/default/files/pub-pdf/en_-_market_mapping_on_elderly_care_service.pdf

Van, P.H., Tuan, K.A., and T.T.M. Oanh (2021), 'Older Persons and Long-term Care in Viet Nam', *Coping with Rapid Population Ageing in Asia*, June, pp.45–56. https://www.eria.org/uploads/media/Books/2021-Coping-with-Rapid-Population-Ageing-Asia/11_Part1-Ch-7-Long-term-Care-Viet-Nam.pdf

Viet Nam National Committee on Aging (VNCA) and United Nations Population Fund (UNFPA) (2019), *Towards a comprehensive national policy for an aging Viet Nam* (March). https://vietnam.un.org/sites/default/files/2019-08/Toward a comprehensive ageing policy_ENG_0.pdf

Viet Nam Social Security (VSS) (2017). Old-age Benefit. https://vss.gov.vn/english/thebenefits/Pages/old-age.aspx

Vu, N.C, M.T. Tran, L.T. Dang, C.-L. Chei, and Y. Saito (2020), 'Ageing and Health in Viet Nam', *<Title of Publication>.* Jakarta: ERIA. pp.86–94. https://www.eria.org/publications/ageing-and-health-in-viet-nam/#:~:text=LSAHV is designed to (1,status and overall well-being.

World Bank (2020), Current health expenditure (% of GDP). https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?most_recent_value_desc=true

World Health Organisation (WHO) (2013), WHO methods and data sources for global burden of disease estimates 2000–2011. *November*, 86. http://www.who.int/healthinfo/statistics/GlobalDALYmethods_2000_2011.pdf?ua=1

World Health Organization (WHO) (2015), 'The Kingdom of Thailand Health System Review', *WHO,* 5. https://iris.who.int/bitstream/handle/10665/208216/9789290617136_eng.pdf?sequence=1&isAllowed=y

World Health Organization (WHO) (2018), *WHO Housing and Health Guidelines*. Geneva. http://www.who.int/phe%0Ahttp://apps.who.int/bookorders.

World Health Organisation (WHO) (2019a), Life expectancy at age 60 (years). https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-age-60-(years)

World Health Organisation (WHO) (2019b), Decade of Healthy Ageing. https://apps.who.int/gb/ebwha/pdf_files/EB146/B146_23-en.pdf

World Health Organisation (WHO) (2021), Health financing in Viet Nam. https://www.who.int/vietnam/health-topics/health-financing

World Population Review (2022), Life Expectancy by Country. https://worldpopulationreview.com/country-rankings/life-expectancy-by-country

Yamada, M. and H. Arai (2020), 'Long-term care system in Japan', *Annals of Geriatric Medicine and Research*, 24(3), pp.174–80. https://doi.org/10.4235/agmr.20.0037

Yiengprugsawan, V. S., J. Piggott, F. Witoelar, F.M. Blyth, and R.G. Cumming (2020), 'Pain and its impact on functional health: 7-year longitudinal findings among middle-aged and older adults in Indonesia', *Geriatrics (Switzerland)*, 5(2), pp.1–13. https://doi.org/10.3390/geriatrics5020039

Yong, V., Y. Saito, and A. Chan (2010), 'Changes in the prevalence of mobility limitations and mobile life expectancy of older adults in Singapore, 1995-2005', *Aging Health* , 22(1), pp.120–40. https://doi.org/10.1177/0898264309351932

Yuniati, F. and S. Kamso (2021), 'Assessing the Quality of Life Among Productive Age in the General Population: A Cross-Sectional Study of Family Life Survey in Indonesia', *Asia-Pacific Journal of Public Health*, 33(1), pp.53–59. https://doi.org/10.1177/1010539520956411

Appendices

Table 1.1 Percentage of Older Persons by Province, Indonesia, 2021

Province	Percentage of Older Persons
North Sulawesi	12.74
Bali	12.71
South Sulawesi	11.24
Yogyakarta Special Region	15.52
East Java	14.53
Central Java	14.17
Lampung	10.22
West Java	10.18
Maluku	8.55
North Maluku	7.78
South Kalimantan	9.81
Gorontalo	9.46
West Nusa Tenggara	9.43
East Nusa Tenggara	9.36
Central Sulawesi	8.96
West Kalimantan	8.78
East Kalimantan	8.29
Southeast Sulawesi	8.06
North Kalimantan	8.02
West Sulawesi	7.94
Central Kalimantan	7.68
West Sumatra	9.86
Bengkulu	9.62
Jambi	9.57
Special Capital Region Jakarta	9.23
Bangka Belitung Islands	9.11
North Sumatra	9.06
South Sumatra	9.02
Banten	8.45
Aceh	8.11
West Papua	5.83
Papua	5.41
Riau	6.55
Riau Islands	5.53

Source: Badan Pusat Statistik (2021).

Table 1.2 Percentage of Older Persons by Regency and City in Selected Provinces, Indonesia, 2021

Province	Regency or City	Percentage of Population Aged 60+
Papua	Nduga	0.94
Papua	Central Mamberano	1.17
Papua	Pegunungan Bintang	1.24
Papua	Yalimo	1.24
Papua	Lanny Jaya	1.3
Papua	Yahukimo	1.67
Papua	Tolikara	1.72
Papua	Paniai	2.08
Papua	Dogiyai	2.18
Papua	Jayawijaya	2.32
Papua	Puncak	2.45
Papua	Mimika	2.58
Papua	Intan Jaya	2.91
Papua	Puncak Jaya	3.02
Papua	Asmat	3.06
Papua	Boven Digoel	3.12
Papua	Mappi	3.52
Papua	Deiyai	3.65
Papua	Mamberamo Raya	4.66
Papua	Sarmi	5.50
Papua	Nabire	5.51
Papua	Keerom	6.66
Papua	Jayapura	6.93
Papua	Waropen	7.17
Papua	Yapen Waropen	7.57
Papua	Merauke	8.14
Papua	Supiori	8.34
Papua	Biak Numfor	8.65
West Java	Bekasi city	5.64
West Java	Bekasi	5.96
West Java	Depok City	6.87
West Java	Bogor	7.06
West Java	Cimahi City	7.98
West Java	Bogor city	8.35
West Java	Bandung	8.55
West Java	Bandung	9.17
West Java	Karawang	9.69
West Java	Purwakarta	9.71
West Java	Cirebon City	9.89
West Java	Cirebon	10.25
West Java	West Bandung	10.35
West Java	Cianjur	10.50
West Java	Tasikmalaya City	10.5
West Java	Sukabumi City	10.55
West Java	Sukabumi	10.81
West Java	Garut	10.84
West Java	Indramayu	11.84
West Java	Banjar City	13.68
West Java	Subang	13.75
West Java	Tasikmalaya	13.8
West Java	Kuningan	14.67

Province	Regency or City	Percentage of Population Aged 60+
West Java	Majalengka	14.71
West Java	Sumedang	15.01
West Java	Pangandaran	15.67
West Java	Ciamis	16.54
Bali	Denpasar City	5.70
Bali	Badung	9.19
Bali	Jembrana	11.87
Bali	Buleleng	12.67
Bali	Gianyar	13.26
Bali	Bangli	14.87
Bali	Karang Asem	14.99
Bali	Tabanan	16.53
Bali	Klungkung	16.62
Central Sulawesi	Banggai Islands	9.62
Central Sulawesi	Banggai	9.63
Central Sulawesi	Morowali	7.87
Central Sulawesi	Poso	10.28
Central Sulawesi	Donggala	8.62
Central Sulawesi	Toli-Toli	8.66
Central Sulawesi	Boo	7.07
Central Sulawesi	Parigi Moutong	8.24
Central Sulawesi	Tojo Una-Una	8.47
Central Sulawesi	Sigi	8.61
Central Sulawesi	Banggai Laut	7.30
Central Sulawesi	North Morowali	9.30
Central Sulawesi	Palu City	6.17
Yogyakarta	Kulon Progo	18.33
Yogyakarta	Bantul	13.51
Yogyakarta	Gunung Kidul	20.4
Yogyakarta	Sleman	12.16
Yogyakarta	Yogyakarta City	11.01

Source: Badan Pusat Statistik (2021).