

User Expectations on Telemedicine Financing in the National Health Insurance Era

*Rani Tiyas Budiyanti**, *Chriswardani Suryawati**, *Murni***, *Matsna Hanifah****

**Fakultas Kesehatan Masyarakat, Universitas Diponegoro*

***Dinas Kesehatan Kabupaten Temanggung*

****Universitas Gajah Mada*

**email: ranitiyas@lecturer.undip.ac.id*

ABSTRACT

Telemedicine users had increased during the Covid-19 pandemic. Telemedicine could provide alternative solutions to improve quality, access, and reduce disparities in health services, especially in urban and remote areas. However, in the era of national health insurance, there were not all telemedicine covered by Healthcare and Social Security Agency called BPJS Kesehatan. This study aimed to determine user expectations of telemedicine financing in the national health insurance era. This research was quantitative research with descriptive approach which was conducted in February-April 2022. The respondents were 102 people who had used telemedicine services in Indonesia that were selected through the quota sampling method. The results showed that 95.1% of respondents agreed that telemedicine services were covered by the National Health Insurance (NHI), either fully or by sharing costs. As many as 31.95% of respondents expect 25% of cost-sharing with NHI, 35.05% of respondents expect 50% of cost-sharing with NHI, 12.37% of respondents expect 80% of cost-sharing with NHI, and 20.63 % hope 100% will be covered by NHI. Further and specific regulation related to

telemedicine is needed. The type of telemedicine service covered communication with the telemedicine service provider, and the amount of the service fee covered needs to be communicated between the relevant parties.

Keywords: *telemedicine financing, NHI, telehealth*

INTRODUCTION

The Coronavirus Disease-19 (COVID-19) pandemic case has changed the community, economic, and health systems in every country, including Indonesia.¹ Many strategies have been developed, one of those through innovative health approaches such as telemedicine.² The technology is expected to support the healthcare services and reduce the risk of direct person-to-person transmission.³ Telemedicine is a digital information and communication technology that can used

from distance. It limits human interaction physically, so the telemedicine is effective in reducing the spread of Covid-19. It offers a variety of affordable, effective, and attractive health services and treatment options.⁴

The Covid-19 pandemic has made the use of telemedicine more numerous and widespread. During the COVID-19 pandemic, the Minister of Health also issued a Circular Number HK.02.01/MENKES/303/2020 as a reference in providing health services by utilizing information and communication technology to prevent the spread of COVID-19, namely the telemedicine.⁵ Indonesia through the Healthcare and Social Security Agency named BPJS Kesehatan has launched an internet-based application under the name JKN-KIS (Jaminan Kesehatan Nasional-Kartu Indonesia Sehat) Mobile. The JKN-KIS Mobile is a telemedicine service with a choice of doctor consultation features.⁶ The Indonesian Ministry of Health has the TEMENIN (Telemedicine Indonesia) telemedicine platform.⁷ Apart from Healthcare and Social Security Agency and the Ministry of Health, telemedicine technology has also been widely developed by private innovators in the form of digital startup companies, where this platform provides a large selection of features for its users.

During the Covid-19 pandemic, the Indonesian Ministry of Health and healthtech startups have collaborated in providing health services for the community so that during the self-isolation period, patients can still access and consult their health which can be accessed anywhere and anytime. The Ministry of Health has agreed to work with 11 Indonesian healthtech startups to provide telemedicine services. Among them are Alodokter, Getwell, Gooddoctor, Halodoc, Klikdokter, Klinikgo, Linksehat, Milvikdokter, Prosehat, Sehatq, and Yesdok. The cooperation carried out is only limited to doctor consultations and also free drug delivery.⁸ However, this service can only be accessed by people who live in big cities and cannot be accessed evenly by people throughout Indonesia, especially in remote areas. In addition, this service is only used for handling Covid-19 and has not reached other health aspects such as non-communicable disease, infectious disease, or mental health.

The use of telemedicine can be a solution to the limitations of infrastructure and health human resources, improve the quality and access of health services and reduce disparities in health services, especially in urban and remote areas. regulations, laws and financial systems.⁹ With the existence of telemedicine, it should be able to support the government in

realizing Universal Health Coverage (UHC) but this has not been achieved not all telemedicine services have been covered by the financing of the National Health Insurance organized by the Healthcare and Social Security Agency.

Currently, Indonesia, through the Indonesian Ministry of Health, is also committed to transforming its health system, which is supported by 6 pillars, including the transformation of health financing and the transformation of health technology. In the principle of transformation of health financing, it must, in accordance with the mandate of Law No. 39 of 2009 on Health, where health financing aims to create sufficient, sustainable, fair, effective, and efficient allocations, comprehensive, ensure equity, as well as transparent and accountable with the main function of mobilizing resources. financing, allocation of the national health budget, and utilization of the health budget. Therefore, it is very necessary to improve coordination between health insurance providers in the form of coordination of benefits and cost-sharing in telemedicine services.¹⁰ Based on the above background, it is necessary to analyze the telemedicine user expectation in National Health Insurance Era. It is hoped that the public in telemedicine services in the era of the National Health Insurance will be more

comfortable, safe, secure, and ensure the equity.

METHODS

This research was quantitative research with a descriptive approach. It was conducted from February until April 2022. The sample consisted of 102 people who had used telemedicine services in Indonesia, which were selected using the accidental sampling method. Data were collected using online survey, with inclusion criteria being users over 18 years of age and having used telemedicine services. Meanwhile, the exclusion criteria were incomplete data. Data were analyzed and presented descriptively. This study received an ethical license with the number: 50/EA/KEPK-FKM/2022

RESULTS AND DISCUSSION

Based on table 1, telemedicine users are dominated by female users (85.3%), with the most vulnerable ages 20 years (52.9%) and 21-30 years (30.4%). This is in line with the research of Darrat, et al (2021), where the age factor is the most influential factor in the utilization of telemedicine services by 0.98 times where the age of 20 and over has a higher percentage of telemedicine use than other age groups.¹¹ This is in line with the research of Alessandri, et al (2021), the age

factor affects 0.21 times, the education factor, the ease of access factor, and the service experience factor received from health workers in telemedicine with an opportunity of 0.38 times.¹² Ramaswmy, et.al (2020) also said that the factor that affects the use of telemedicine is the

opportunity for the elderly to be 0.70 times using telemedicine services.¹³ It can correlate with the millennial generation (Y and Z generation) that were born above 1990 and were familiar with technology and the internet of things.

a. Characteristics of Respondent

Table 1. Characteristics of respondent

Variable		F	%
Gender	Men	15	14,7
	Women	87	85.3
Age	18-20 years	54	52.9
	21-30 years	31	30.4
	31-40 years	12	11.8
	<40 years	5	4.9
Occupation	Student	78	76.5
	Civil servant	9	8.8
	Entrepreneur	8	7.8
	Others	7	6.9
Education	Senior High School	59	57.8
	Vocational	1	1.0
	Bachelor Degree	36	35.3
	Master Degree	6	5.9
Health Insurance Member (NHI)	Yes	88	86.3
	No	14	13.7

Other factors that have influenced the use of telemedicine services during the Covid-19 pandemic are gender, household income, insurance ownership, and marital status. The female gender is more dominant in the use of telemedicine because women feel health is more important, have free time, and pay more attention to saving and practical costs. The research of Yi-chin Kato-Lin, et.al (2021) stated that

apart from age and education factors also have an influence on the use of telemedicine services during the Covid-19 pandemic.¹⁴

Table 1 also describes that as many as 86.3% of respondents are participants in the National Health Insurance organized by the Healthcare and Social Security Agency. Health insurance participation is important in health financing, health insurance

participation will be used as data on national health insurance expenditures from both the government and the private sector and can later be used for the analysis of health insurance performance. Based on Havivi (2020), Healthcare and Social Security Agency, especially in class segmentation, affects the use of JKN telemedicine in Primary Health Care Facilities.¹⁵

Health Insurance participation includes health insurance profiles, health insurance history, premium payment notifications, and integration of insurance participant data in Health transformation is very important for the basis of claim submission and service recapitulation management.¹⁰ Health insurance participation will guarantee the community to reach and access health services both face-to-face and long-distance or telemedicine. Health insurance participation will also be the

basis for determining what services may be claimed and coordination of benefits and cost-sharing can be carried out.

b. User Experience in Telemedicine Service

From the table (2) , it can be seen that the use of telemedicine is paid (76.4%), with 33.4% of respondents paying < 50,000 rupiahs, 18.6% of respondents paying 50,000-100,000 rupiahs, and 4.9% respondents paying 100,000-200,000 rupiahs. Telemedicine financing is strongly influenced by the service rates that have been set by the provider and the services used by the respondents. Respondents who have jobs and sufficient income will have a greater opportunity to take advantage of paid telemedicine services, while those who do not have sufficient income usually choose free telemedicine services.

Table 2. User Experience on Telemedicine Payment

Variable		f	%
Type of telemedicine payment	Free	44	43.1
	Paid	78	76.4
Cost of telemedicine payment	Free	44	43.1
	<50.000	34	33.4
	50.000-100.000	19	18.6
	100.000-200.000	5	4.9
Cost-sharing with Healthcare and Social Security Agency (BPJS Kesehatan)	Yes	33	32.4
	No	69	67.6

Generally, startup telemedicine services have free services in the form of health-related information and health articles, while doctor/psychologist consultation services are carried out using a paid method. For example, in the Halodoc telemedicine service, a consultation fee is charged starting from 25,000 until 200.000 rupiahs for various selected health packages.¹⁶

This results also shown that only 32.4% telemedicine platform managed sharing cost financing with BPJS Health. In the era of the Covid-19 pandemic, 11 private telemedicine services were partnered with the Ministry of Health and National Disaster Management Agency to provide free services to Covid-19 patients with mild symptoms who were undergoing self-isolation, namely Alodokter, Getwell, Good Doctor, Halodoc, Klik Dokter, KlikGo, Healthy Link, Milvik Dokter, ProSehat, SehatQ, and YesDok [8]. Of these 11 telemedicine platforms,

all forms of financing outside the consultation package are paid independently or cost-sharing with the health insurance they have.

c. User Expectation on Telemedicine Payment in National Health Insurance Era

From the research conducted as many as 95.1% of respondents expressed their expectations related to telemedicine financing can be covered by the Healthcare and Social Security Agency (BPJS Kesehatan). So that respondent can more freely access specialist doctor service packages and specific treatments. Of the 102 respondents, the average respondent expects that 25%-50% of the financing from the total telemedicine services can be claimed to Healthcare and Social Security Agency so that it is not too heavy for the community. Respondents expect that all services should be covered by Healthcare and Social Security Agency, both consultation services without treatment or with medication, drug redemption services, and psychological consulting services.

Table 3. User expectation on Telemedicine Payment in NHI Era

Variable	F	%
Covered by Healthcare and Social Security Agency (BPJS Kesehatan)	97	95.1
No	5	4.9

Cost-sharing with Healthcare and Social Security Agency (BPJS Kesehatan)	25% from total payment	31	31.95
	50% from total payment	34	35.05
	80% from total payment	12	12.37
	100% from total payment	20	20.63
Telemedicine Services that expected to covered by Healthcare and Social Security Agency (BPJS Kesehatan)	Online consultation without treatment/medicine	59	57.8
	Online consultation and medicine	80	78.4
	Medicine	57	55.9
	Phsycology consultation	1	1.0

In South Korea, several telemedicine services available to NHI participants during the Covid-19 pandemic are online consultations as a form of online medical treatment, which doctors then prescribe online by sending them via email to the patient's designated pharmacy. Reimbursement is provided by NHI at 80% of medical costs, which means that the amount of the fee set is the same as the cost for face-to-face services, so the fees charged to patients are the same as the co-payment rates for outpatients.¹⁷

In Taiwan, the NHI reimbursement system is intended for the use of telemedicine for communities in mountainous areas, islands and remote areas so that these communities can also enjoy co-payments at low rates.¹⁸ In addition, adjustments to the payment scheme were made by NHIA to provide high incentives for health workers who have served the community with these criteria. Telemedicine services are

growing with the existence of telemedicine outpatient clinics in the southeastern region of Taiwan by utilizing information technology and telemedicine-based medical equipment.¹⁸

Conclusion

Telemedicine users in Indonesia consist of various characteristics from age, education, and occupation. Telemedicine users expect that all forms of services in the telemedicine application, from consultation to treatment, can be covered by Healthcare and Social Security Agent (BPJS Kesehatan), both as a whole and in the form of sharing costs. This expectation is intended so that all forms of service can be guaranteed in terms of quality, quality, law, and financing. In the era of National Health Insurance, telemedicine financing still does not have specific regulations, where many telemedicine are found in collaboration with the government (Ministry of Health and Healthcare and Social Security Agent). Further regulations are needed to regulate

the types of telemedicine services covered, communication with telemedicine service providers, and the number of service costs incurred need to be communicated between related parties to form a national financing system in the era of National Health Insurance. Not only in the Covid-19 pandemic era but also further health services in Indonesia

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Conflict of Interest

Authors declare that there are no conflict of interest in this research.

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