IJPHS:
International Journal of Psychology and Health Science
GREENATION PUBLISHER
+62 812 1046 7572 http://greenpub.org greenation.info@gmail.com
DOI: https://doi.org/10.38035/ijphs.v3i3

Analysis Of M-JKN Utilization for Registration Efficiency on EMR Management of RSB Sartika Asih

Sali Setiatin[1], Nadila Nur Umitri[2]
[1]Politeknik Piksi Ganesha, Bandung, Indonesia, salisetiatin@gmail.com
[2]Politeknik Piksi Ganesha, Bandung, Indonesia, nadilanurumitri@gmail.com

Corresponding Author: nadilanurumiti@gmail.com[2]

Abstract: The development of digital technology in health services drives the transformation of patient administration and data management systems. One of the innovation ideas in the digitalization era that supports this is the operation of the JKN mobile application managed by the Health Social Security Agency. The use of mobile JKN is expected to be able to drive the efficiency of the electronic medical record process at the Bhayangkara Hospital Class II Sartika Asih Bandung. For this reason, this study aims to examine the elements related to behavior in using and utilizing Mobile JKN efficiently for online registration at the Bhayangkara Hospital Class II Sartika Asih Bandung, it can be observed that there are still many people who do not know about the use of the Mobile JKN application due to the lack of information. However, there are also people who understand Mobile JKN but still fail to register, which is one of the reasons for this study. The research location was at the Bhayangkara Hospital Class II Sartika Asih Bandung and was carried out in April 2025. The research sample numbered 243 people and the sampling used the proportionate stratified random sampling technique.

Keyword: Utilization of MJKN, Registration efficiency, EMR

INTRODUCTION

Public health development requires efforts from the health sector to procure health resources, as well as good management to achieve an optimal level of public health. It is based on the principles of welfare, equity, non-discrimination, participation, and sustainability. The aim is to build high-quality and professional, productive human resources, reduce disparities, improve quality health services, strengthen health resilience, ensure healthy living, and encourage the welfare of all communities and strengthen the nation's competitiveness in order to achieve national development goals (Presiden RI, 2023). One form of government commitment in organizing national health services is providing National Health Insurance (JKN) (Sudrajat, 2020). Which can be used in health services, one of which is a hospital. Hospitals function as institutions that provide comprehensive health services to individuals, including care with hospitalization, outpatient care, and emergency services (Kemenkes RI, 2019).

Therefore, digitization is now an important part of hospital needs as a strategy to reduce operational costs, improve work efficiency, and optimize the use of available resources. Through the application of digital technology, hospitals are targeted to provide services that better meet the standards to be in line with the times (Nugroho, 2025). Moreover, Indonesia has now entered the industrial era 5.0, where technological developments are expected to facilitate various human activities. At this stage, technology allows computer devices to connect and communicate automatically. In the context of ever-evolving globalization, all sectors, including the health sector, need to adapt to these changes. With the application of digital technology, information exchange can be done more quickly and efficiently, so that health services, especially in hospitals, can become more effective and responsive to patient needs (Fatima, 2023). Therefore, the President Director of the Health Social Security Organizing Agency, commonly referred to as BPJS Kesehatan, announced that to improve the national health insurance (JKN-KIS), they have developed the *Mobile* JKN application or commonly called M-JKN (Mariana, 2020).

The M-JKN application is an application created and managed by BPJS (Badan Pengelolaan Jaminan Sosial) Kesehatan. JKN is a national health insurance program owned by the Indonesian government (Putra, 2024). BPJS Kesehatan launched the M-JKN application on November 15, 2017 in Jakarta and now the M-JKN-KIS application is ready to use for Android and IOS(Suhadi et al., 2022). The launch of this application is driven by the *trend of* information technology that leads to the use of mobile applications, where all tasks are assisted by digital systems online, one of which is the way electronic medical records work, with the existence of M-JKN all patient data starting from registration data, patient data such as medical history, treatment, visits automatically enter the hospital information system data stored neatly and can be directly accessed by health workers without having to write manually on paper. This makes services faster and data more accurate so that health services are more effective and efficient. Effectiveness is a measure of how well someone does something to achieve the expected results. This means that work will be considered effective if it is carried out as planned without loss of time, energy, or other things (Oktaviar et al., 2024). (Oktaviar et al., 2024). However, it seems that there are still many influencing factors such as lack of information regarding the use of applications, limited technological capabilities among the elderly. Low digital literacy and limited internet access in remote areas (University, 2025). People's habit or preference for conventional services. One of the hospitals that implemented M-JKN is Bhayangkara TK II Sartika Asih Bandung Hospital, which has implemented Electronic Medical Records (EMR) by *bridging* patient data from M-JKN to SIMRS used by the hospital.

EMR is an information technology-based system used to assist health workers, such as doctors and nurses, in managing patient data. This system serves to collect, store, process, and retrieve patient information to improve the efficiency and quality of health services (Setiatin1 & Meli Kusuma Dewi2, 2024). EMR is utilized to complete various medical records in accordance with the medical information obtained by patients when they visit(Cahyani Yunisa1, 2024). The implementation of this system is one of the forms of new technology implementation in the hospital, even based on data from the new hospital in 2024 patients began to register *online* through M-JKN. Throughout 2025 from January to March, outpatients participating in BPJS *Onsite* amounted to 12,816 patients while the number of patients who registered *online* for outpatient services through M-JKN was only 9,243 patients.

Several previous studies have discussed the utilization of the M-JKN application. One of them was conducted by Rindha Mareta Kusumawati and team (2024) They found that although the majority of respondents were already JKN participants, and had good knowledge and accessibility to the M-JKN application, the level of utilization was still low.

This was due to a lack of practical information, not all had downloaded the app, and technical and habitual constraints. Therefore, further socialization and assistance in using the application, especially to the younger generation, is needed so that this application can be fully utilized. This finding shows that digital health service innovation has great potential to facilitate access and administration of JKN participants, but is still not optimally utilized by some people even though the level of knowledge and accessibility to this application is high (Kusumawati et al., 2024)

Based on the problems found, this study aims to determine the extent to which the M-JKN application has been used by patients in conducting outpatient registration at Bhayangkara TK II Sartika Asih Bandung Hospital. In addition, this study wanted to see whether the use of the application made the registration process faster and helped in the management of EMR. This study also tries to find out what are the obstacles that make this application not maximally utilized, as well as how it affects the accuracy and speed of recording patient data. The findings of this study are expected to provide advice to hospitals in order to better utilize M-JKN in digital services at Bhayangkara TK II Sartika Asih Bandung Hospital. Therefore, the researcher made this study with the title "Analysis of M-JKN Utilization for Registration Efficiency towards Management at Sartika Asih Bandung Hospital".

METHOD

Research methods are generally scientific ways to collect data with specific purposes and benefits. In this research, the method used is quantitative method. Quantitative methods are referred to as classic methods, because they have been used for a long time and have become a tradition in research. This method is also referred to as the *positivistic* method or research that emphasizes data collection by direct observation because it is based on the positivism philosophy. This method is categorized as a *scientific* / scientific method because it meets the rules, namely concrete / empirical, objective, measurable, rational, and systematic. This method is also called the *discovery* method, because with this method various new science and technology can be discovered and developed. This method is called a quantitative method because the research data is in the form of numbers and analysis using statistics(Sugiyono, 1967). The population in this *study* were all outpatients of BPJS participants at Bhayangkara TK II Sartika Asih Bandung Hospital in 2025 (January-March) who registered *online* through M-JKN with a total of 9,243 patients and BPJS *onsite* patients with a total of 12,816. The study sample amounted to 243 people and sample selection was carried out using *proportionate stratified random sampling* technique. Data Collection Method The data collection technique used in this research is the documentation method. Data was obtained from the Hospital Management Information System (SIMRS), which is a digital system that records all patient service activities automatically and integrated. The data collected includes information on the type of BPJS membership, patient age group, and type of service used (*online* and *onsite*). This data has been directly *bridged* to the SIMRS used in the hospital. The existence of *bridging* can increase the effectiveness of data entry, processing, and efficiency of resource utilization. In addition, this system also accelerates the management of claims, receivables, and verification(Rohman et al., 2021). *Bridging system* is an integration mechanism that connects two different systems without requiring direct intervention between the two, so that the security of existing data is maintained. The application of this system can improve service and administrative efficiency, save the use of facilities and infrastructure, and simplify the data processing process (Putri et al., 2023). (Putri et al., 2023). he documentation technique was chosen because able to provide access to data that has been available systematically and digitized, making it more efficient than primary methods such as questionnaires or interviews. According to Sugiyono (2017),

documentation is a data collection technique through documents, written records, archives, images, or data that has been previously available in an organized system.

The validity test is a test used to observe whether a measuring instrument is valid or invalid (Wardani et al., 2025). The validity test in this study was carried out by assessing the validity of the data source, because the data was obtained from SIMRS, not through instruments such as questionnaires. Data source validity refers to the level of validity and accuracy of information recorded and stored by the system. SIMRS is a communication information technology system that processes and integrates the entire flow of hospital service processes in the form of coordination networks, reporting and administrative procedures in order to obtain accurate and appropriate information, and is part of the health information system (Heryant, 2015). According to Sugiyono (2017), secondary data obtained from official institutions can be considered valid if the data management system has been proven capable of producing data that is in accordance with field facts

Data reliability in this study refers to the consistency and stability of data obtained from SIMRS. Because recording is done systematically and repeatedly by hospital staff, the possibility of error or inconsistency is relatively small.According to Sugiyono (2017), secondary data is declared reliable if it comes from a system or institution that applies fixed and consistent recording standards. SIMRS is used in daily hospital operations and data is recorded by professionals according to standard procedures, so its reliability can be accounted for. Therefore, it can be stated that the data used in this study has a high level of reliability and is suitable for use in the analysis process.

Table 1. Online and Onsite outpatient visit data at Bhayangkara TK II Sartika Asih Hospital

No	Month	Number of invalid claims
1	January	6787
2	February	7918
3	March	7354
	Total	22.059

RESULT AND DISCUSSION

The results of this study are based on administrative data obtained from SIMRS Bhayangkara TK II Sartika Asih Bandung regarding the number of non-inpatient JKN participants in the period January to March 2025. The data includes information on the number of patients by gender and the registration methods used, namely *onsite* and *online* through the M-JKN application. The data includes information on the number of patients by gender as well as the enrollment methods used, namely *onsite* and *online* through the M-JKN application. The details of the data are attached in Table 2 below:

Table 2. Object of Study

Category	Number	%
Gender		
Male	117	46
Female	126	54
Total	243	100
Use of M-JKN Application		
Online	97	40
Onsite	146	60
Total	243	100

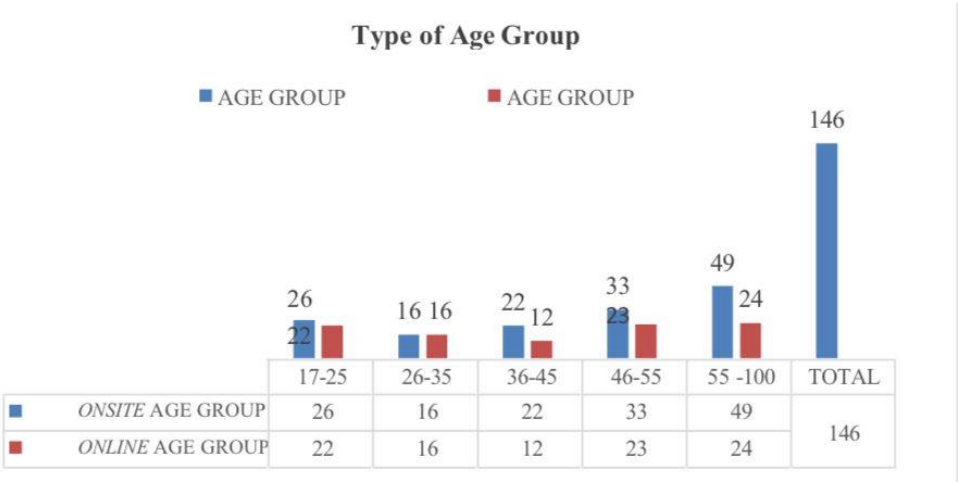
From the table above, it can be seen that there is a total of 243 data, of which 126 people or 54% are women, while 97 people or 46% are men. By looking at this data, we can conclude that the majority of respondents in this study are women and from the data above it is also found that BPJS user participants are divided into 2, namely *Online* and *Onsite* with a total of 243 and it can be found that *online* or M-JKN users are 97 people or 40% and those who register *onsite* are 146 people or 60%. It can be concluded that there are still many participants who prefer to register via *onsite* rather than *online* using M-JKN. However, over time, Bhayangkara TK II SartikaAsih Hospital has begun to improve the quality of services and *systems* that are increasingly organized by holding a JKN corner for patients who fail to register through M-JKN, banners containing procedures for using M-JKN, and at the hospital Rs Bhayangkara Sartikaasih has an M-JKN ambassador whose job is to guide patients who have successfully registered online through M-JKN to *check-in* so that patients can follow the flow of digital services appropriately, and overcome technical obstacles.

Table 3. Distribution of Health Service Participants by BPJS Membership Type and Service Method (Online and Onsite) Service (*Online* and *Onsite*)

BPJS Membership Type	Online	Onsite
Police	12	23
Private Employees	12	24
Independent	20	39
PBI Health Insurance	20	32
Askes	9	11
PBPU and BP Local Government	13	14
Government Employees with Employment Agreement	4	1
CIVIL SERVANTS	6	1
Army Soldier	1	1
Total	97	146

And based on the type of BPJS membership, the distribution of health service participants conducted *online* and *onsite* shows significant variations. Participants from a fairly significant category, participants from the independent category dominated the number of visits both *online* as many as 20 people and 39 people *onsite*, making the largest category overall at Bhayangkara TK II Sartika Asih Bandung Hospital. This reflects the high awareness and accessibility of independent participants to health services. The PBI Health Insurance category ranked second, with 20 participants *online* and 32 *onsite*. The high number of participants from this group shows that people who get contributions from the government are also quite active in utilizing health services. Furthermore, the categories of Private Employees and the National Police each recorded 12 *online* participants with the number of *onsite* 24 and 23 people, indicating that formal workers from both the private sector and state apparatus tend to use health services directly or (*onsite)* The number of participants from the PBPU and BP Local Government categories was 13 *online* and 14 *onsite*, relatively balanced, indicating that informal sector workers and local governments are also quite consistent in utilizing both types of services other categories such as Askes (9 *online* and 11 *onsite*), Government Employees with Employment Agreements (4 *online* and 1 *onsite*), Civil Servants (6 online and 1 onsite) and Army Soldiers (1 online, 1 onsite). The smaller numbers may be due to the limited number of participants or different preferences in accessing health services. Based on the distribution table above, there are several types of health insurance contributions including PBI Health Insurance which is the poor and

underprivileged as participants in the health insurance program, PPU includes individuals who work as employers and get salaries or wages. On the other hand, PBPU are people who perform work or business actions at their own risk(BPJS Kesehatan, 2019). In general, this pattern shows that *onsite* services are still the main choice in most membership groups, although *online* services have also been utilized significantly, especially by independent participants and PBI Health Insurance This reflects the growing trend of adaptation to the digitization of health services. There are also results on the age range of BPJS participants across *onsite* and *online* categories. The following bar chart shows the distribution of health service participants by age group and service type.



	17-25	26-35	36-45	46-55	55 -100	TOTAL
ONSITE AGE GROUP	26	16	22	33	49	146
ONLINE AGE GROUP	22	16	12	23	24	

Figure 1. Bar graph showing the number of health service participants by age group and type of service (*Online* and *Onsite*)

The graph shows the number of health service participants differentiated by age group and type of service (*online* and *onsite*). In general, *onsite* services are more widely utilized across all age groups, although *online* services are also quite significant in certain groups. The 55-100 years age group was the most dominant in using the services mainly *onsite* (49 people), which may be due to the need for direct physical examination due to health conditions or it could also be due to the difficulty for those aged 55-100 in using *smartphones* to access M-JKN. This was followed by the 46-55 year old group who also used *onsite* services more (33 people) than *online* (23 people). This suggests that as age increases, the need for onsite services tends to increase. 26-35 year olds were the only group to show a balanced number of participants between *online* and *onsite* services (16 people each), reflecting flexibility and perhaps also preferences based on time and convenience. 36-45 year olds had a greater preference for *onsite* services (22 people) than *online* (12 people), although not as many as other age groups, perhaps due to lack of information.

CONCLUSION

The results of the research conducted by the author show that the utilization of the M-JKN application at Bhayangkara TK II Sartika Asih Bandung Hospital is not yet fully optimal in supporting the efficiency of registration and management of electronic medical records. Although this application has great potential in improving the speed and accuracy of services, there are still barriers that cause most patients to continue to choose *onsite* registration services. Factors such as lack of information regarding the use of the application, limited technological capabilities among the elderly. The lack of digital literacy and limited internet access or networks in remote areas, as well as people's preference for conventional services, are the main obstacles to the adoption of digital services. The distribution of membership by

type and age also shows that the productive age group is starting to adapt to *online* services, but the elderly group relies more *on onsite* services due to convenience and technical limitations. In addition, independent and PBI participants are the two categories that utilize the services the most, both *online* and *onsite*, indicating a high level of participation and service needs from these two segments. Thus, it can be concluded that although the M-JKN application has significant potential in driving the digitization of health services, its success is still highly dependent on more intensive socialization, increased digital literacy of the community, as well as adequate technical support at the health facility level. Strategic steps are needed to bridge the gap between technological capabilities and service access to realize an efficient healthcare system.

REFERENCES

BPJS Kesehatan. (2019). Peraturan BPJS Kesehatan Nomor 5 Tahun 2020. *Https://Peraturan.Go.Id/Id/Peraturan-Bpjs-Kesehatan-No-7-Tahun-2019*, *1634*, 119–119. https://peraturan.go.id/id/peraturan-bpjs-kesehatan-no-7-tahun-2019

Cahyani Yunisa1, E. G. (2024). *PENGARUH IMPLEMENTASI REKAM MEDIS ELEKTRONIK TERHADAP KUALITAS PELAYANAN RAWAT JALAN DI RUMAH SAKIT X*. *18*(1978), 2873–2880.

Fatima, A. (2023). Dampak Era Society 5.0 Terhadap Kompetensi Perekam Medis dan Informasi Kesehatan (PMIK). *Jurnal Rekam Medis Dan Informasi Kesehatan*, *6*(1), 16–21. https://doi.org/10.31983/jrmik.v6i1.9298

Heryant. (2015). *Peraturan Menteri Kesehatan No 82 Tentang Sistem Informasi Manajemen Rumah Sakit*. https://r.search.yahoo.com/_ylt=Awr1QNe25CFoEAIAWpzLQwx.;_ylu=Y29sbwNzZzMEcG9zAzYEdnRpZAMEc2VjA3Ny/RV=2/RE=1748261302/RO=10/RU=https%3A%2F%2Fheryant.web.ugm.ac.id%2Flainnya%2Fperaturan-menteri-kesehatan-no-82-tentang-sistem-informasi-manajemen-rumah-sakit

Kemenkes RI. (2019). *Peraturan Menteri Kesehatan Nomor 3 Tahun 2020 tentang Klasifikasi dan Perizinan Rumah Sakit*. *3*, 1–80.

Kusumawati, R. M., Apriyani, A., Wulandari, K., & Suwignyo, S. (2024). Pemanfaatan Penggunaan Aplikasi Mobile JKN. *Jurnal Kebijakan Kesehatan Indonesia*, *13*(1), 52. https://doi.org/10.22146/jkki.89234

Mariana, H. (2020). *Mobile JKN, Jawaban Kemudahan Layanan Kesehatan di Masa Pandemi*. Kompas.Com. https://r.search.yahoo.com/_ylt=AwrKGlUjqiBoIwIAKyfLQwx.;_ylu=Y29sbwNzZzMEcG9zAzcEdnRpZAMEc2VjA3Ny/RV=2/RE=1748180772/RO=10/RU=https%3A%2F%2Fnasional.kompas.com%2Fread%2F2020%2F10%2F20%2F12110021%2Fmobile-jkn-jawaban-kemudahan-layanan-kesehatan-di-masa-pa

Nugroho, S. J. (2025). *Digitalisasi : Solusi Efisiensi Pelayanan Rumah Sakit Masa Kini*. *January*.

Oktaviar, S., Wahab, S., Studi, P., & Ganesha, P. P. (2024). *TINJAUAN PENGGUNAAN MOBILE JKN GUNA MENUNJANG DI RUMAH SAKIT TINGKAT II DUSTIRA*. 25–32.

Presiden RI. (2023). Undang-Undang Republik Indonesia Nomor 17 Tahun 2023 Tentang Kesehatan. *Undang-Undang*, *187315*, 1–300.

Putra, R. permana. (2024). *Pengertian Mobile JKN, Aplikasi yang Bermanfaat bagi Peserta BPJS Kesehatan*. https://r.search.yahoo.com/_ylt=Awr1QNdVwiBoAwIAQPLLQwx.;_ylu=Y29sbwNzZzMEcG9zAzEEdnRpZAMEc2VjA3Ny/RV=2/RE=1748186966/RO=10/RU=https%3A%2F%2Fwww.suratdokter.com%2Fteknologi-inovasi-

kesehatan%2F1484454510%2Fpengertian-mobile-jkn-aplikasi-yang-bermanfaat-ba

Putri, E. P., Nasywa Syakira, I., Ferdian Salim, M., Miftachul Janah, F., Studi D-, P., Informasi Kesehatan, M., Vokasi, S., Gadjah Mada, U., & Layanan Informasi Kesehatan, D. (2023). Analisis Kesiapan Bridging Simrs Dan V-Claim Di Rumah Sakit Pratama Kota Yogyakarta. *Jurnal Informasi Kesehatan Indonesia*, *9*(1), 47–58.

Rohman, H., Utami, E. B., & ... (2021). Analisis Pelaksanaan Bridging System Antara Aplikasi Sisfomas Dengan P-Care Di Puskesmas. *... DISKUSI ILMIAH" Inovasi ...*, 9–23. https://www.publikasi.aptirmik.or.id/index.php/prosidingdiskusiilmiahyogya/article/view/217/210

Setiatin1, S., & Meli Kusuma Dewi2. (2024). *PENGARUH PENGGUNAAN REKAM MEDIS ELEKTRONIK RAWAT JALAN GUNA MENUNJANG MUTU PELAYANAN DI RUMAH SAKIT X*. *15*(1), 37–48.

Sudrajat, T. (2020). Perlindungan Hukum dan Pemenuhan Hak Pekerja pada Program Jaminan Kesehatan Nasional. *Pandecta Research Law Journal*, *15*(1), 83–92. https://doi.org/10.15294/pandecta.v15i1.23647

Sugiyono. (1967). Metode Penelitian Kuantitatif, Kualitatif Dan R&D. In *Alvabeta. CV*. https://www.academia.edu/118903676/Metode_Penelitian_Kuantitatif_Kualitatif_dan_R_and_D_Prof_Sugiono

Suhadi, Jumakil, & Irma. (2022). Aplikasi Mobile JKN untuk Memudahkan Akses Pelayanan BPJS. *Jurnal Penelitian Kesehatan SUara Forikes*, *13*(2), 262–267.

University, B. (2025). *Mobile JKN : Solusi atau Tantangan dalam Pembiayaan Kesehatan Nasional?* 2 July 2024. https://r.search.yahoo.com/_ylt=AwrPrNNr8CFoOAIAUR_LQwx.;_ylu=Y29sbwNzZzMEcG9zAzIEdnRpZAMEc2VjA3Ny/RV=2/RE=1748264299/RO=10/RU=https%3A%2F%2Fir.binus.ac.id%2Fcbds%2Fpost%2Fmobile-jkn-solusi-atau-tantangan-dalam-pembiayaan-kesehatan-nasional%2F/RK=2/RS=i6L

Wardani, A. K., Rifai, A., Pitoyo, A. Z., Studi, P., Rekam, D., Kesehatan, I., & Malang, P. K. (2025). *Faktor yang Berhubungan dengan Penerimaan Sistem Pendaftaran Online Rumah Sakit*. *6*(2), 100–108. https://doi.org/10.25047/j-remi.v6i2.5465