# Health insurance service model on the basis of patient-centered care: A scoping review

Mohammad Ali Imron<sup>a,1</sup>, Hilmi Zadah Faidullah<sup>a,2</sup>, Wantonoro<sup>a,3</sup>, Andari Wuri Astuti<sup>a,4,\*</sup>, Siti Fatimah<sup>b,5</sup>, Khaterina Kristina Manurung<sup>c,6</sup>, Maya Febriyanti<sup>c,7</sup>, Dedy Revelino Siregar<sup>c,8</sup>, Wan Aisyah Baros<sup>c,9</sup>

<sup>a</sup> Faculty of Health Sciences, Jalan Siliwangi No 63, Nogotirto, Gamping, Sleman, Yogyakarta, 55592, Indonesia

<sup>b</sup> Universitas Muhammadiyah Banjarmasin, Jl. S. Parman Kompleks RS Islam, Ps. Lama, Kec. Banjarmasin Tengah, Kota Banjarmasin, Kalimantan Selatan 70114, Indonesia

° BPJS Kesehatan, Indonesia

<sup>1</sup>aliimron@unisayogya.ac.id; <sup>2</sup>hilmizafa@unisayogya.ac.id; <sup>3</sup> wantoazam@unisayogya.ac.id; <sup>4</sup>astutiandari@unisayogya.ac.id; <sup>5</sup>fattimaharifin80@umbjm.ac.id; <sup>6</sup>khaterina.kristina@bpjs-kesehatan.go.id; <sup>7</sup>maya.febriyanti@bpjs-kesehatan.go.id; <sup>8</sup>dedy.siregar@pjs-kesehatan.go.id; <sup>9</sup>wan.aisyiah@bpjs-kesehatan.go.id \*astutiandari@unisayogya.ac.id



### ARTICLE INFO

### Article history

Received, 5 April 2024 Revised, 2 May 2024 Accepted, 21 May 2024

Keywords Patient-centered care; Health insurance;

# ABSTRACT

Health insurance provides access to every color of the country to get access to health services in the form of promotive, preventive, curative, and rehabilitative efforts at affordable costs. Integrated health services that focus on patient needs (patient-centered care) will increase the active role of families and communities in making decisions related to health services to be provided and are often associated with health financing and insurance used. This Scoping review aims to explore and map the scientific evidence related to the health insurance model in patientcentered care-based health services. This study uses Arkshey & O'Malley Framework and PRISMA-ScR Checklist. In the identification of articles used using PubMed, EBSCO, ProQuest, Wiley Online Library, and Grey supporting literature such as Google Scholar and appropriate databases. The article inclusion criteria used in the search are primary articles in 2012-2022, articles from relevant Gray literature and databases, scientific articles in English and/ or Indonesian, and scientific articles that focus on the health care insurance model and patient-centered care-based health services. While the exclusion criteria used are articles in the form of guidelines, standard operating procedures, opinion papers, reviews, commentaries, research articles that do not use English and Indonesian, and research articles that focus on medicine-centered care are not included in this review. The keywords used are patient-centered care and health insurance. Assessment of Article quality using the Critical Appraisal Skills Program (CASP) and Joanna Bridge Institute Tools (JBI). A total of 6,388 articles were selected and 14 articles were reviewed. Research articles were reviewed from 8 countries with 12 articles using quantitative research design and 2 articles using qualitative research design. From the review article, the author identified 2 main themes, namely the use of health insurance and the application of patientcentered care. Patient satisfaction among Health Insurance users is higher than patients who do not use health insurance because health insurance provides financial protection for health services. The use of health insurance based on patient-centered care is expected to provide positive benefits to health services such as improving patient healing, reducing unnecessary actions/ care, and reducing the length of hospital treatment so that it is expected to reduce the financing made by patients and health insurance used.

This is an open access article under the CC-BY-SA license.



# 1. Introduction

Universal Health Coverage is a system that provides access guarantees in promotive, preventive, curative, and rehabilitative efforts in health services so that all members of the community can afford the services at affordable costs (Assembly, 2015; WHO, 2021). Each country can develop its own Universal Health Coverage (UHC) financing system according to its country's conditions. The financing system in Universal Health Coverage (UHC) aims to help the community in alleviating the economic burden caused by the unexpected payment of health care costs (WHO, 2021).

Several countries have various Universal Health Coverage (UHC) models, such as the Beveridge model, which is funded by the government by using taxes as a source of health care payments. There is also a Bismark model where health care financing is paid by the company and the source of funds comes from employee contributions every month. The Bismark model, however, cannot cover the total cost of health care services (Pearson et al., 2016).

Financing plays an important role in strengthening the health service system and serving as monitoring so that the community is able to afford the health system (universal health coverage) (Assembly, 2015; UNAIDS, 2018). Universal health coverage covers not only accessible health services but also how to regulate the source of funding for health services financing so that it does not become a burden on the community economy. To provide services that are integrated and focused on the needs of patients (patient-centered care) and the community, fundamental changes are required in the health care systems. Health services that are provided based on the needs of the patients will increase the active role of family and community decision-making.

Patient-centered care is defined as service and care that recognizes and respects patients' needs and rights, as well as ensuring that patients agree and understand all clinical decisions made (Karsnitz, 2013). Patient-centered care provides service based on the needs of each person as a unique individual creature. The role of health personnel and patients is important to achieve maximum results (Barry & Edgman-Levitan, 2012). The provision of patient-centered care is frequently associated with insurance financing and aids in the delivery of health insurance services (Mead et al., 2021). Providing appropriate information to patients and families, as well as involving families in medical decision-making for patients, can reduce hospital stay length and increase satisfaction with health services (Nilsson et al., 2019). Several factors influence patient-centered care, including information received by patients and families, professionals who provide health services, and health care systems, including a supportive and integrated health insurance system (Epstein et al., 2019). The purpose of this scoping review is to map scientific evidence related to the health care insurance model in patient-centered care-based health services.

# 2. Methods

This Scoping review article aims to map the scientific evidence and identify differences between scientific studies. This scoping review does not require an assessment of the quality of the article (critical appraisal) (Fulpagare et al., 2019). The scoping review stage refers to the scoping review step of Arkshey and O'Malley enhanced by Levac, Colquhoun, and O'Brien (Pham et al., 2014).

# 2.1. Identification of Research Questions

The review question in this scoping review is "What is the latest scientific evidence about the health care insurance model in patient-centered care-based health services?".

Framework	Keywords
Population	Patient
	Patient-centered care
Intervention	-
Comparison	-
Outcomes	Health care insurance

Table	1.	Framework
Lanc	1.	1 I diffe work

# 2.2. Identification of relevant articles

The researcher uses the inclusion and exclusion criteria to determine research articles that are following research questions and objectives. Inclusion criteria used in article selection are primary articles published from 2012-2022, articles from grey literature and relevant *databases*, scientific articles in English and/or Indonesian, and scientific articles that focus on the model of *health care insurance* and health services based on *patient-centered care*. Meanwhile, this review excludes research articles in the form of *guidelines*, standard operating procedures (SOPs), *paper opinions, reviews, commentary,* research articles that do not use English or Indonesian, and research articles that focus on medicine-centered care.

The articles are identified using several strategies, namely using *keywords*, using *medical subject heading (MeSH)*, using *truncation*, using *Boolean operators* (OR, AND, and NOT), and paying attention to the use of *keywords* in *British* English and *American* English. *This scoping review* makes use of four *databases*: *PubMed*, *EBSCO*, *ProQuest*, *and Wiley Online Library*, while grey literature is sought using Google Scholar and supporting *databases*.

To avoid errors in *database* searches and reference lists(Levac et al., 2010), it is necessary to search for research articles using appropriate keywords. The following keywords were used in this study's article search:

Population	<b>Exposure/Intervention</b>	Comparison	Outcomes
Patient* OR	-	-	health insurance* OR
Patient-centered* care			health coverage* OR
OR patient center*			health insurance
approach AND			

### Table 2. Keywords

## 2.3. Article Selection

Research articles are selected through article duplication examination, title, and abstract screening, and then reading in full to assess their suitability for the purpose of *scoping review*. *Preferred Reporting Items for Systematic Reviews and Meta-Analysis* (PRISMA) *flow chart* and PRISMA-ScR *Checklist* is used in providing an overview of the scientific article search protocol, and for writing review reports as well as providing information on research steps that have been carried out and also to assess the quality to improve the quality of scientific article writing (Pham et al., 2014; Tricco et al., 2018).

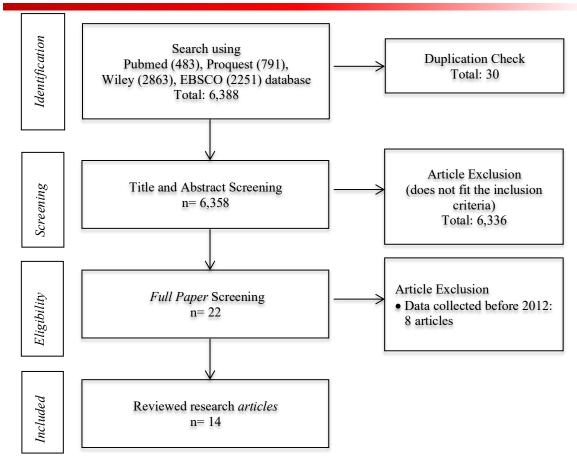


Fig. 1. PRISMA Flow Chart

6,388 articles are obtained based on search results using keywords in the database and search engines. All articles were included in *Mendeley* and 30 articles were eliminated through article duplication checks. Furthermore, the researcher manually screened the title and abstracts of 6,358 research articles. 6,336 of them were excluded because they did not meet the inclusion and exclusion criteria. A total of 22 articles were screened as a whole; 8 of the 22 articles were excluded because the research data collection was carried out before 2012. Article extraction and article quality assessment were carried out on 14 *eligible* articles.

# 2.4. Data Charting

The synthesis of research article data was performed using data *charting* adopted from the *Joanna Briggs Institute* including article author data, article title, year, country, research purpose, type of research, data collection method, participant/sample size, and research results (Peters et al., 2020). Data *charting* is accomplished through discussion with the second author.

			Table 3.	Data Charting	
No.	Author/Year/Title	Objective	Country	Type of Research, Participants/Sample Size, Data Collection Method, Data Analysis	Result
Al	(Zisman-Ilani et al., 2020)/ Shared Decision Making and Patient- Centered Care in Israel, Jordan, and the United States: Exploratory and Comparative Survey Study of Physician Perceptions	To determine the trust, perception, and attitude of health personnel toward the subject of patient-centered care (PCC)	Israel, Jordan, and the United States.	Quantitative research by using the survey method with 36 samples taken with snowball sampling (Jordan: n=15; United States: n=12; Israel: n=9).	Respondents in the United States, Jordan, and Israel knew about the Patient- centered care (PCC) method. Some obstacles found in Patient-centered care (PCC) include a lack of health care personnel, a lack of health knowledge, a limited number of staff, a large number of patients, a lack of training, and a lack of support for health care personnel. Furthermore, obstacles in the care of Patient-centered care (PCC) related to the health system can be a lack of support in the health care and payment system (incentives, drug costs, insurance coverage), and there are differences in the health care system.
A2	(Hsu et al., 2019)/ Impact of patient- centered and family- centered care meetings on intensive care and resource utilization in patients with terminal illness: a single-center retrospective observational study in Taiwan	Evaluating the benefits of patient-centered and family- centered care meetings (PFCCM) for terminal patients in hospitals	Taiwan	Retrospective research with a <b>cross-sectional</b> method using medical records	Patients who receive PCC care and family center care have a strong relationship with decreased ICU use and reduced daily medical use in terminal patients
A3	(Vennedey et al., 2020)/ Patients' perspectives of facilitators and barriers to patient-centered care: insights from qualitative patient interviews	To identify obstacles and support in the implementation of patient- centered care (PCC)	Germany	Qualitative research by using semi-structured interviews	Obstacles faced by PCC at the Microlevel include available interventions, physical and mental health, and individual characteristics (personal and professional). Obstacles faced by PCC at the Meso- level include the culture in the organization of health care and the infrastructure of health care officers. Obstacles faced by PCC at the Macrolevel include financing structures, reimbursement, laws and regulations in health care, insurance payment schemes
A4	(Doshi et al., 2017)/ Health Professionals' perceptions of insurance coverage for weight loss services	To assess perceptions of obstacles and opportunities for treatment in overweight patients	USA	Cross-sectional research with survey method	Health personnel assesses that health insurance covers the cost of care for patients who are overweight (58%). Significant increase in health insurance coverage in patients with overweight and is one of the effective

Andari Wuri Astuti et al. (Health insurance service model on the basis of...)

# Journal of Health Technology Assessment in Midwifery Vol. 7, No. 1, May 2024, pp. 11-25

			ol. 7, No. 1, May		
No.	Author/Year/Title	Objective	Country	Type of Research, Participants/Sample Size, Data Collection Method, Data Analysis	Result
					solutions (0.08). There is no clear regulation related to weight loss treatment in health insurance coverage.
A5	(Badu, Agyei-Baffour, Ofori Acheampong, et al., 2019)/ Perceived satisfaction with health services under National Health Insurance Scheme: Clients' perspectives	This research aims to identify factors that affect patient satisfaction in using insurance in Ghana.	Ghana	Quantitative research with 380 respondents using multistage cluster sampling and cross- sectional research design with time in February-April 2015.	According to 51.6% of insurance users, obtaining a general health consultation card is difficult. Insurance users had 3.04 times higher satisfaction than patients who did not use insurance. Insurance users who pay higher will have a higher satisfaction rate of 3.81 times than insurance users who do not pay.
A6	(Mobley et al., 2022)/ Insurance coverage change and survivorship care among young adult survivors of childhood cancer	To assess the type of insurance used in children with cancer	USA	Population-based observational research in 2015-2017 with multivariate logistic regression analysis	A total of 609 pediatric cancer patients used private insurance (54%), using public insurance (34%) and as many as 13% did not use health insurance. Pediatric cancer patients who have no change in insurance coverage have a good understanding of insurance, are female, and come from an upper socioeconomic background.
A7	(Myint et al., 2019)/Health insurance in Myanmar: Knowledge, perceptions, and preferences of Social Security Scheme members and the general adult population	This study aims to explore knowledge, perception, willingness to pay, and health insurance options in Myanmar	Myanmar	This research is a cross- sectional study with a survey method and Mann-Whitney analysis	Respondents had a good perception of financial protection and health insurance (p-Value <0.05). Respondents were willing to pay higher if children under the age of 18 were included in insurance coverage (63.8%, p-value <0.05). Respondents prefer government-managed health insurance. Some respondents prefer to pay for insurance every month rather than every 3 months (10.9%)
A8	(Berkowitz et al., 2021)/Health insurance coverage and self- employment	To assess self- payment associated with low health insurance coverage	USA	Secondary research using secondary data in 2014-2017	The type of insurance that is most frequently used is independent insurance. Age, gender, ethnicity, education, income, region, health status, and working as an entrepreneur are closely related to the significant number of insurance users (26.1% vs 8.0%, risk difference 18.0%, 95% confidence interval [CI] 9.2% to 26.9%, P =.0001). Self-employed residents have reported a lack of sufficient insurance

Andari Wuri Astuti et al. (Health insurance service model on the basis of ...)

Journal of Health Technology Assessment in Midwifery Vol. 7, No. 1, May 2024, pp. 11-25

No.	Author/Year/Title	Objective	Country	Type of Research, Participants/Sample Size, Data Collection Method, Data Analysis	Result
A9	(Pearson et al., 2016)/ Willingness to Use Health Insurance at a Sexually Transmitted Disease Clinic: A Survey of Patients	To assess clinic patients' use of health insurance	USA	Research using logistic regression analysis was done in 4364 clinics across 21 American metropolitan areas.	coverage for their current needs.Independentinsurance payment (private) is related to the risk of health care delays, a lack of insurance coverage, or inadequate insurance coverage.Patients with public insurance are 3.6 times more likely to use their insurance than patients with private insurance. Personal and financial reasons are the main challenges in accessing
A10	at 21 US Clinics (Han et al., 2015)/ Reports of Insurance- Based Discrimination in Health Care and Its Association With Access to Care	To assess the existence of discrimination in health insurance associated with the type of insurance and how to access insurance	USA	Data was taken from the health care data of the city of Minessota in 2013 as many as 4123 adults aged 18-64 years reported their experience of discrimination in using insurance	health services. Discrimination in insurance use was 5.75 times higher in people with no insurance (95% CI = $3.19$ , 10.37) and 4.40 times higher in adults with public insurance compared to private insurance users (95% CI = 2.58, 7.52). Discrimination occurs more frequently in public insurance (25%) than in private insurance (3%). The discrimination related to insurance includes lack of services, inability to access care, refusal to seek medical help due to cost, and interferences from health care providers
A11	(Kennedy et al., 2020)/ Free Clinic Patients' Perceptions and Barriers to Applying for Health Insurance After Implementation of the Affordable Care Act Free Clinic Patients' Perceptions and Barriers to Applying for Health Insurance After Implementation of the Affordable Care Act	To assess free medical clinics' perceptions and experiences with health insurance	USA	September 2016 to February 2017, using descriptive analysis of 203 respondents.	Lack of knowledge about health, a lack of understanding of how to use health insurance, insurance documents, and a lack of understanding of the cost of health insurance are all common obstacles in the use of health insurance
A12	(Sessions et al., 2018)/ Health Insurance Status and Eligibility Among Patients who Seek Health care at a Free Clinic in the Affordable Care Act Era Health Insurance Status and Eligibility Among Patients who Seek Health care at a Free Clinic in the Affordable Care Act Era	To identify the eligibility of insurance users	USA	Using descriptive analysis with respondents from March to September 2016	There are some obstacles due to differences in regulations and the implementation of the health insurance registration process.

No.	Author/Year/Title	Objective	Country	Type of Research, Participants/Sample Size, Data Collection Method, Data Analysis	Result
A13	(Calvo et al., 2017)/ Obamacare in action: how access to the health care system contributes to immigrants' sense of belonging	To investigate the immigrant experience while living in the United States	USA	The study used snowball sampling to conduct 44 semi- structured interviews with Latin American immigrants living in Miami and Boston	According to the findings of this study, immigrants are frequently treated unfairly. Lack of information about health insurance is an obstacle to immigrants' access to health care
A14	(Kamra et al., 2016)/ Factors affecting patient satisfaction: an exploratory study for quality management in the health care sector	To identify the factors that influence patient satisfaction in health care services.	India	Quantitative research using the ANOVA test for data analysis	Patients with insurance were more satisfied (3.62 times) with registration and administrative procedures than patients without insurance (3.1 times). Factors that affect patient satisfaction are affordability and comfort, met requirements for using insurance in clinical care, nursing care and staff, doctor attitudes, registration and administration procedures, infrastructure and facilities, and professional behavior of doctors and facilities in the reception and outpatient areas. It was also discovered that health insurance and various demographic categories of respondents, such as gender, place of residence, education, and occupation, were statistically significantly different (P, .05) from the factors identified.

Article was assessed for quality using the *Critical Appraisal Skill Program* (CASP) assessment *tool* for qualitative research. In this *scoping review*, the article was assessed for quality using *Critical Appraisal Skill Program* (CASP) assessment *tool* for quantitative research. *Joanna Bridge Institute Tools (JBI Tools)* are used for cross-sectional research methods.

#### A1 JBI Tools for Cross-sectional Study Good 1 2 A2 JBI Tools for Cross-sectional Study Good 3 A3 CASP Good 4 A4 JBI Tools for Cross-sectional Study Good 5 JBI Tools for Cross-sectional Study A5 Good JBI Tools for Cross-sectional Study 6 A6 Good 7 A7 JBI Tools for Cross-sectional Study Good JBI Tools for Cross-sectional Study 8 A8 Good 9 <u>A</u>9 JBI Tools for Cross-sectional Study Good 10 A10 JBI Tools for Cross-sectional Study Good JBI Tools for Cross-sectional Study 11 A11 Good 12 A12 JBI Tools for Cross-sectional Study Good 13 A13 CASP Good 14 A14 JBI Tools for Cross-sectional Study Good

### Table 4. Article Quality Assessment

Based on the results of the article quality assessment, all 14 articles were found to be of good quality (A1, A2, A3, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13, A14).

# 3. Discussion

# **3.1. Article Characteristics**

Characteristics of articles by country can be seen in Fig. 2 below:

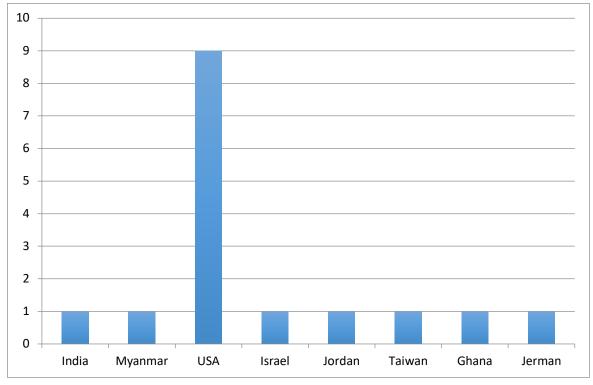


Fig. 2. Characteristics of articles by country

The research articles used in this *scoping review* come from a variety of countries, including Ghana on the African continent, Myanmar, India, Jordan, and Taiwan on the Asian continent, Germany on the European continent, and the United States on the American continent.

The characteristics of the article based on the research design used can be seen in Fig. 3 below:

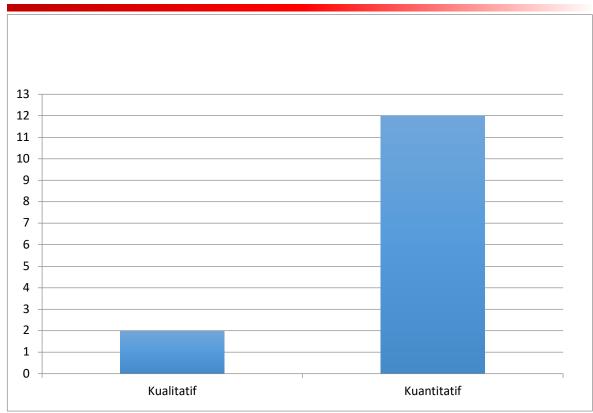
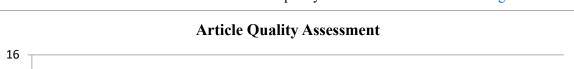


Fig. 3. Characteristics of articles based on research design

A total of 15 selected research articles used qualitative research design with data collection methods through interviews (2 articles) and 12 articles using quantitative research design.



The characteristics of the article based on the quality of the article can be seen in Fig. 4 below:

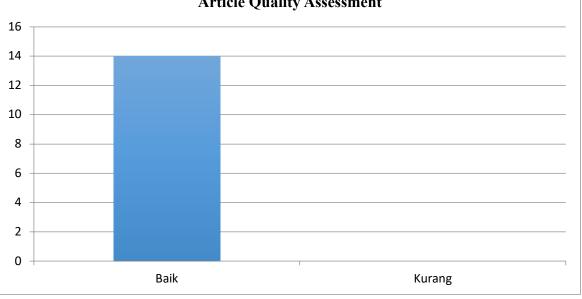


Fig. 4. Characteristics of the article based on the quality of the article

According to the critical appraisal conducted for the 14 articles used in this study, the article quality is good because it conforms and provides information clearly related to the objectives, methods, sample inclusion and exclusion criteria, and research results.

### 3.2. Theme Analysis

Based on the analysis of the theme of the article performed after data extraction and assessment of the quality of the research article, the theme of the research article that has been selected is:

No.	Theme	Sub-themes	<b>Research Article</b>	
		Microlevel Obstacles	A1, A3	
1	The Implementation of Patient-	Meso-level Obstacles	A1, A3	
1	centered care	Macrolevel Obstacles	A1, A3	
		Benefits	A2	
2 Use of Health Insuranc		Satisfaction, Perception	A7, A5, A14	
	Use of Uselth Insurance	User Insurance	A6, A7, A8, A9	
		Type of Insurance	A7, A9	
		Obstacles	A5, A10, A11, A12, A13,	

Table 5. Theme Analysis and Mapping in Research Articles

### 3.3. The Implementation of Patient-centered care

The implementation of *patient-centered care* has often been performed in the United States, Jordan, and Israel so that the public has understood patient-centered care. There are frequently various microlevel obstacles in the implementation of patient-centered care, such as the number of patients receiving care, the patient's condition, and individual characteristics (personal and professional). The Meso-level obstacles in the implementation of patient-centered care include the limited number of available health workers, the culture of available health services, lack of knowledge, and health-related training, especially patient-centered care. Furthermore, differences in the health care system and payment systems such as incentives, drug financing, and insurance dependents become macrolevel obstacles in the implementation of patient-centered care (Vennedey et al., 2020; Zisman-Ilani et al., 2020). The implementation of patient-centered care has a strong relationship with decreasing the use of intentional care rooms and reducing the use of daily medical measures in terminal patients (Hsu et al., 2019).

The care that patients will receive is significantly influenced by the decisions made during the implementation of *patient-centered care* (Moore et al., 2017). The implementation of *patient-centered care* is increased by five times when patients and families are involved in making decisions about the care to be provided (Wittenberg-Lyles et al., 2010). Communication between caregivers and employees, financial problems, human resources, training, and the approach used is also identified as factors that affect the implementation of patient-centered care (Hower et al., 2019; Moore et al., 2017) but the leadership and management in the care provided by health personnel help patients get the right and timely examination and treatment (National Department of Health, 2019). When compared to standard care, the implementation of *patient-centered care* is more effective and results in lower treatment costs, which reduces the costs covered by health insurance (Pirhonen et al., 2020) and almost a quarter of the costs for diagnostic tests, meaning that the more *patient-centered care-based* health care provided, the lower the costs for diagnostic tests (Stewart et al., 2017).

### 3.4. Use of Insurance

The public has a good perception of financial protection and health insurance in Myanmar (*p* <0.05) (Myint et al., 2019). In Ghana (Badu, Agyei-Baffour, Ofori Acheampong, et al., 2019), patients who used insurance reported greater satisfaction by a factor of 3.04 compared to those who did not. In India, it was found that patients with insurance expressed greater satisfaction with registration services and administrative processes (3.62) than patients without insurance (3.1 times) . Insurance users who (Kamra et al., 2016) pay higher will have a higher satisfaction rate of 3.81 times than insurance users who do not pay. Factors that affect patient satisfaction are affordability and comfort, met requirements for using insurance in clinical care, nursing care and staff, doctor attitudes, registration and administration procedures, infrastructure and facilities, professional behavior of doctors and facilities in the reception and outpatient areas. Implementing *patient-centered care* speeds up patients' physical and mental recovery and increases their satisfaction with the care received (Kuipers et al., 2019) by increasing their reliance on the drugs used, increasing their cooperation with other health professionals, such as collaborations relating to diet and exercise, and decreasing the psychological burden associated with financial issues resulting from medical expenses (Lipton, 2020).

Patients with public insurance are 3.6 times more likely to use their insurance than patients with private insurance (Pearson et al., 2016). Due to high health care costs, financial constraints (Liu et al., 2012), and the length of treatment, utilization of health services is frequently delayed or not executed at all (Socías et al., 2016). However, of the 609 pediatric cancer patients with insurance, 54% have private insurance, 34% have public insurance, and 13% do not have insurance (Mobley et al., 2022). Health insurance through *universal health coverage* can improve access to quality health services by providing financial protection in the payment of health services (Vian et al., 2015). Insurance users in Myanmar are more likely to agree if health insurance is managed by the government. But, in the United States, independent/private insurance is the largest insurance used (Berkowitz et al., 2021) that is influenced by age, gender, ethnicity, education, income, region, health status, and employment.

Respondents prefer government-managed health insurance. Patients with public insurance are 3.6 times more likely to use their insurance than patients with private insurance. Health insurance is more often used in hospitalized patients than outpatients in China and Vietnam because outpatients often encounter problems related to long service hours, limited number and type of drugs, and experience of getting poor services. Insurance users in China cover the health costs of about 85%-91.3% of the population. Whereas, in Vietnam, only about 50% of the population is protected by insurance (Liu et al., 2012).

Respondents are willing to pay higher if children under 18 are included in insurance dependents (63.8%, p-value <0.05). Some respondents also prefer to pay insurance every month rather than paying contributions every 3 months (10.9%) (Mead et al., 2021; Myint et al., 2019). Residents who work as self-employed have experience of lack of insurance financing dependents in health service payments this is because independent (private) insurance payments are often associated with the risk of delay in getting health care, lack of dependents of health service payment costs with insurance and or low insurance dependents value. Low-income individuals frequently have minor medical expenses (Dake, 2018). Insurance enhances patient satisfaction and raises access to health services, reducing health access inequalities in the community (Badu, Agyei-Baffour, Ofori Acheampong, et al., 2019).

Obstacles to insurance use were 5.75 times higher in patients without insurance (95% CI = 3.19, 10.37) and 4.40 times higher in adults who used public insurance versus private insurance users (95% CI = 2.58, 7.52) by 25% in public insurance users and 3% in private insurance users. Immigrants in the United States often get unpleasant treatment related to the use of insurance in health services caused by a lack of information (Barry & Edgman-Levitan, 2012; Calvo et al., 2017). Women with health insurance in Canada frequently encounter obstacles to accessing health care, such as long queues and limited service hours, and they frequently receive unfavorable treatment (Levac et al., 2010). The discrimination related to insurance includes lack of services, inability to access care, refusal to seek medical help due to cost, and interferences from health care providers, lack of knowledge about health, a lack of understanding of how to use health insurance, insurance documents, and a lack of understanding of the cost of health insurance, the difference between regulations and the implementation of the health insurance registration process 51.6% of insurance users said it was difficult to get a treatment card for public health services (Badu, Agyei-Baffour, Acheampong, et al., 2019).

# 4. Conclusion

The implementation of *patient-centered care* provides benefits for patients and health personnel. Insurance users are more satisfied than non-insured patients because they have financial protection in health services, despite community obstacles such as low coverage in medicine, short service hours, and care provided by health workers. Health insurance based on *patient-centered care* is expected to increase patient and family participation in the decision-making process of care given to patients to improve the recovery process of patients, reduce the actions given to patients and reduce the length of hospitalization to reduce the costs incurred by patients and insurance. Future research should focus to explore patient centre care within health insurance service.

### Acknowledgment

This review's scoping has limitations because it is based on previous research analysis and no direct data collection was conducted.

# References

- Assembly, W. H. (2015). Social health insurance: sustainable health financing, universal coverage and social health insurance: report by the Secretariat. In *World Health Organization, April, 4.* (p. 58).
- Badu, Agyei-Baffour, Acheampong, O., Opoku, & Addai-Donkor. (2019). Perceived satisfaction with health services under National Health Insurance Scheme: Clients' perspectives. *The International Journal of Health Planning and Management*, 34(1), e964–e975. https://doi.org/https://doi.org/10.1002/hpm.2711
- Badu, E., Agyei-Baffour, P., Ofori Acheampong, I., Opoku, M. P., & Addai-Donkor, K. (2019). Perceived satisfaction with health services under National Health Insurance Scheme: Clients' perspectives. *The International Journal of Health Planning and Management*, 34(1), e964– e975. https://doi.org/https://doi.org/10.1002/hpm.2711
- Barry, M. J., & Edgman-Levitan, S. (2012). Shared Decision Making The Pinnacle of Patient-Centered Care. New England Journal of Medicine, 366(9), 780–781. https://doi.org/10.1056/NEJMP1109283
- Berkowitz, S. A., Gold, R., Domino, M. E., & Basu, S. (2021). Health insurance coverage and selfemployment. *Health Services Research*, 56(2), 247–255. https://doi.org/10.1111/1475-6773.13598
- Calvo, R., Jablonska-Bayro, J. M., & Waters, M. C. (2017). Obamacare in action: how access to the health care system contributes to immigrants' sense of belonging. *Journal of Ethnic & Migration Studies*, 43(12), 2020–2036.
- Dake, F. A. A. (2018). Examining equity in health insurance coverage: an analysis of Ghana's National Health Insurance Scheme. *International Journal for Equity in Health*, 17. https://doi.org/http://dx.doi.org/10.1186/s12939-018-0793-1
- Doshi, R. S., Bleich, S. N., & Gudzune, K. A. (2017). Health Professionals' perceptions of insurance coverage for weight loss services. *Obesity Science & Practice*, 3(4), 384–389. https://doi.org/https://doi.org/10.1002/osp4.137
- Epstein, Fiscella, Lesser, & Stange. (2019). Analysis & commentary: Why the nation needs a policy push on patient-centered health care. *Health Affairs*, 29(8), 1489–1495. https://doi.org/10.1377/hlthaff.2009.0888
- Fulpagare, P. H., Saraswat, A., Dinachandra, K., Surani, N., Parhi, R. N., Bhattacharjee, S., Somya, S., Purty, A., Mohapatra, B., Kejrewal, N., Agrawal, N., Bhatia, V., Ruikar, M., Gope, R. K., Murira, Z., De Wagt, A., & Sethi, V. (2019). Antenatal Care Service Utilization Among Adolescent Pregnant Women–Evidence From Swabhimaan Programme in India. *Frontiers in Public Health*, 7(December). https://doi.org/10.3389/fpubh.2019.00369
- Han, X., Call, K. T., Pintor, J. K., Alarcon-Espinoza, G., & Simon, A. B. (2015). Reports of Insurance-Based Discrimination in Health Care and Its Association With Access to Care. *American Journal of Public Health*, 105, S517–S525.
- Hower, K. I., Vennedey, V., Hillen, H. A., Kuntz, L., Stock, S., Pfaff, H., & Ansmann, L. (2019). Implementation of patient-centred care: Which organisational determinants matter from decision maker's perspective? Results from a qualitative interview study across various health and social care organisations. *BMJ Open*, 9(4), 1–14. https://doi.org/10.1136/bmjopen-2018-027591
- Hsu, N.-C., Chun-Che, H., Wei-Chun, C., & Chong-Jen, Y. (2019). Impact of patient-centred and family-centred care meetings on intensive care and resource utilisation in patients with terminal illness: a single-centre retrospective observational study in Taiwan. *BMJ Open*, 9(2). https://doi.org/https://doi.org/10.1136/bmjopen-2018-021561

Andari Wuri Astuti et al. (Health insurance service model on the basis of ...)

- Kamra, V., Singh, H., & Kumar De, K. (2016). Factors affecting patient satisfaction: an exploratory study for quality management in the health-care sector. *Total Quality Management & Business Excellence*, 27(9/10), 1013–1027.
- Karsnitz, D. B. (2013). Puerperal infections of the genital tract: A clinical review. Journal of Midwifery and Women's Health, 58(6), 632–642. https://doi.org/10.1111/jmwh.12119
- Kennedy, A. J., Bakalov, V., Reyes-Uribe, L., Kensler, C., Connor, S. E., Benson, M., Bui, T., & Radomski, T. R. (2020). Free Clinic Patients' Perceptions and Barriers to Applying for Health Insurance After Implementation of the Affordable Care Act. *Journal of Community Health*, 45(3), 492–500.
- Kuipers, S. J., Cramm, J. M., & Nieboer, A. P. (2019). The importance of patient-centered care and co-creation of care for satisfaction with care and physical and social well-being of patients with multi-morbidity in the primary care setting. *BMC Health Services Research*, 19(1), 1–9. https://doi.org/10.1186/s12913-018-3818-y
- Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. *Implementation Science*, 5(1). https://doi.org/10.1186/1748-5908-5-69
- Lipton, B. J. (2020). Association between Health Insurance and Health among Adults with Diabetes: Evidence from Medicare. *Journal of the American Geriatrics Society*, 68(2), 388–394. https://doi.org/10.1111/jgs.16238
- Liu, X., Tang, S., Yu, B., Phuong, N. K., Yan, F., Thien, D. D., & Tolhurst, R. (2012). Can rural health insurance improve equity in health care utilization? a comparison between China and Vietnam. *International Journal for Equity in Health*, 11(1), 10. https://doi.org/10.1186/1475-9276-11-10
- Mead, Wang, Cleary, Arem, & Pratt-Chapman. (2021). Defining a patient-centered approach to cancer survivorship care: development of the patient centered survivorship care index (PC-SCI). *BMC Health Services Research*, 21(1), 1–14. https://doi.org/10.1186/s12913-021-07356-6
- Mobley, E. M., Kim, S. E., Cousineau, M., Tsui, J., Miller, K. A., Tobin, J., Freyer, D. R., & Milam, J. E. (2022). Insurance coverage change and survivorship care among young adult survivors of childhood cancer. *Health Services Research*, 57(1), 159–171. https://doi.org/https://doi.org/10.1111/1475-6773.13868
- Moore, L., Britten, N., Lydahl, D., Naldemirci, Ö., Elam, M., & Wolf, A. (2017). Barriers and facilitators to the implementation of person-centred care in different healthcare contexts. *Scandinavian Journal of Caring Sciences*, *31*(4), 662–673. https://doi.org/10.1111/scs.12376
- Myint, C.-Y., Pavlova, M., & Groot, W. (2019). Health insurance in Myanmar: Knowledge, perceptions, and preferences of Social Security Scheme members and general adult population. *The International Journal of Health Planning and Management*, *34*(1), 346–369. https://doi.org/https://doi.org/10.1002/hpm.2643

National Department of Health. (2019). National Health Insurance Bill [B 11-2019] (Issue 42598).

- Nilsson, M., From, I., & Lindwall, L. (2019). The significance of patient participation in nursing care a concept analysis. *Scandinavian Journal of Caring Sciences*, 33(1), 244–251. https://doi.org/10.1111/scs.12609
- Pearson, W. S., Cramer, R., Tao, G., Leichliter, J. S., Gift, T. L., & Hoover, K. W. (2016). Willingness to Use Health Insurance at a Sexually Transmitted Disease Clinic: A Survey of Patients at 21 US Clinics. *American Journal of Public Health*, 106(8), 1511–1513.
- Peters, Godfrey, McInerney, Munn, Trico, & Khalil. (2020). Chapter 11: Scoping Reviews (2020 version). JBI Manual for Evidence Synthesis. https://doi.org/10.46658/JBIMES-20-12

- Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A., & Mcewen, S. A. (2014). A scoping review of scoping reviews: Advancing the approach and enhancing the consistency. *Research Synthesis Methods*, 5(4), 371–385. https://doi.org/10.1002/jrsm.1123
- Pirhonen, L., Gyllensten, H., Fors, A., & Bolin, K. (2020). Modelling the cost-effectiveness of person-centred care for patients with acute coronary syndrome. *European Journal of Health Economics*, 21(9), 1317–1327. https://doi.org/10.1007/s10198-020-01230-8
- Sessions, K., Hassan, A., McLeod, T. G., & Wieland, M. L. (2018). Health Insurance Status and Eligibility Among Patients who Seek Healthcare at a Free Clinic in the Affordable Care Act Era. *Journal of Community Health*, 43(2), 263–267.
- Socías, E., Shoveller, Bean, Nguyen, Montaner, & Shannon. (2016). Universal Coverage without Universal Access: Institutional Barriers to Health Care among Women Sex Workers in Vancouver, Canada. PLoS ONE, 11(5), 1–16. https://doi.org/10.1371/journal.pone.0155828
- Stewart, Ryan, & Bodea. (2017). Is patient-centred care associated with lower diagnostic costs? *Healthcare Policy*, 6(4), 27–31. https://doi.org/10.12927/hcpol.2011.22393
- Tricco, Lillie, Zarin, O'Brien, Colquhoun, Levac, & Moher. (2018). PRISMA Extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. Annals of Internal Medicine, 169(7), 467–473. https://doi.org/10.7326/M18-0850
- UNAIDS. (2018). UNAIDS Data 2018. 1-376.
- Vennedey, V., Hower, K. I., Hillen, H., Ansmann, L., Kuntz, L., & Stock, S. (2020). Patients' perspectives of facilitators and barriers to patient-centred care: insights from qualitative patient interviews. *BMJ Open*, 10(5). https://doi.org/https://doi.org/10.1136/bmjopen-2019-033449
- Vian, T., Feeley, F. G., Domente, S., Negruta, A., Matei, A., & Habicht, J. (2015). Barriers to universal health coverage in Republic of Moldova: A policy analysis of formal and informal out-of-pocket payments. *BMC Health Services Research*, 15(1), 1–16. https://doi.org/10.1186/s12913-015-0984-z
- WHO. (2021). Universal Health Coverage (UHC). WHO.
- Wittenberg-Lyles, E., Oliver, D. P., Demiris, G., Burt, S., & Regehr, K. (2010). Inviting the absent members: Examining how caregivers participation affects hospice team communication. *Palliative Medicine*, 24(2), 192–195. https://doi.org/10.1177/0269216309352066
- Zisman-Ilani, Y., Obeidat, R., Fang, L., Hsieh, S., & Berger, Z. (2020). Shared Decision Making and Patient-Centered Care in Israel, Jordan, and the United States: Exploratory and Comparative Survey Study of Physician Perceptions. *JMIR Formative Research*, 4(8). https://doi.org/https://doi.org/10.2196/18223