

A Study of Managed Care Health System During Pandemic

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Abstract.

The present study reports the comprehensive study on managed care during the pandemic, regarding to the cases of the covid-19 outbreak increased every day, even reaching 2,000 cases per day in Indonesia. The surge in the cost of handling covid-19 patients and delays in payment of covid-19 claims by the Indonesian Ministry of Health have worsened the situation and the handling of the quality of services by health service providers. For this reason, the role of managed care is needed in these conditions. The purpose of this study is to analyze and find out the pattern and course of managed care in Indonesia by comparing it with several countries that have also been infected with covid-19. This research method is a literature review study with an online database search strategy or search engine in the form of related research journals from the year 2020-2023. The results obtained by researchers are the lack of health human resources, medical devices and "pandemic fatigue" which are problems that contribute to the course of managed care in almost every region in Indonesia. The role of society and government policies affect the overall implementation of managed care programs. When the community complies with the policies that apply in the pandemic era and the government provides policies in collaboration with health experts. Managed care program one of prospective plan for Indonesia healthcare industry development in the future.

Keywords: Covid-19, government policy, healthcare system and managed care.

I. INTRODUCTION

Since it was discovered in Wuhan, China at the end of 2019, covid-19 has quickly infected the whole world [1]. In early March 2020, the first recorded case of covid-19 appeared in Indonesia, infecting 2 residents of Depok City [2]. The spread of covid-19 through direct contact allows this virus to spread more quickly and the very dense structure of the covid-19 virus makes it stronger to infect humans because it can attach more strongly to the ACE2 (Angiotensin Converting Enzyme 2) receptor [3]. So that the effect causes the number of cases to soar. It was recorded that at the end of August 2020 there were 2000 cases per day and based on the results of a survey conducted by the team in 2022 it was found that 6.8 million out of 273.8 million Indonesian population had been infected with covid19 or at least 1/5 of Indonesia's population had been infected with the covid-19 virus [4]. Deaths due to covid-19 were recorded in the latest covid-19 task force report reaching 161,674 victims. In 2020, in ASEAN countries, Indonesia was in second place with covid-19 cases and the highest death rate [5]. Non-natural disasters such as the covid-19 pandemic can indeed cause a death rate 1.5 times higher than natural disasters [6]. On the other hand, people who refrained from checking their health at health facilities, especially hospitals because they were afraid, they would also be infected with covid-19 from where the health facility was at that time, causing a decrease in the average hospital income [7].

The condition of the surge in costs for handling covid-19 patients at the hospital and delays in payment of covid-19 claims by the Indonesia Ministry of Health at that time also exacerbated the situation [8]. This is an additional cause of death cases of covid-19 patients increasing. Large-scale social closure and restriction policies have also had a major impact on workers in Indonesia. It was recorded that in February 2021 due to business closures and restrictions after the emergence of covid19, more than 10 million people were unemployed [9]. As a result, many people are unable to pay and even lose their health care during covid19 which sharply increases the need for medical services [10]. In May 2020, the Ministry of Health confirmed that covid-19 patients were not covered by BPJS, but all medical expenses were borne by the government through the Ministry of Health's budget. In handling the covid-19 pandemic, BPJS role is only to

verify hospital claims that can provide services for covid-19 positive patients [11]. The government does bear the cost of treating covid-19, but the problem is that government-owned health facilities have a limited number.

Unresolved problems related to BPJS in Indonesia not covering the treatment of covid-19 patients, rolling information that BPJS premiums increased by 100% during the covid-19 pandemic starting July 1, 2020. The increase in BPJS premiums is an effort by the government to prevent the budget deficit that existed at BPJS during the covid-19 pandemic so that services health during a pandemic can run on time and with quality [12]. This has further aggravated the situation for the community, especially for people who have lost their income due to restrictions during the covid-19 pandemic. For this reason, the role of managed care is needed in this condition. The term “managed care” is used to describe a type of health care focused on helping to reduce costs, while keeping quality of care high. The most common health plans available today often include features of managed care. These include provider networks, provider oversight, prescription drug tiers, and more. These are designed to manage costs for everyone without sacrificing quality care. Managed care is a solution to the problem of the high cost of health services in health insurance [13].

II. METHODS

The analytical techniques selected to conduct this investigation are based on the suitability for characterizing of the manage care system in Indonesia. The method used in this journal uses descriptive qualitative methods through a literature study approach to obtain data and information. The qualitative study method is an analytical technique to get an in-depth picture of a data. Meanwhile, the literature study approach is a technique of collecting data and information from secondary sources such as actual and accountability documents [14]. Systematic literature search strategy using online databases or search engines. An online database is an online library in the form of a web which is a place for finding information data [15]. The search engines are online so that they find relevant articles and media that lead users to enter online databases [16]. The journal review was conducted using electronic media from 4 (four) databases namely Researchgate, Elsevier, Scopus and PubMed including 1 search engine such as Google Scholar.

III. RESULT AND DISCUSSION

Managed care is a systematic solution that arises when there are challenges and problems in implementation, especially regarding funding in the field of health services. Managed care aims to control health care costs while still providing quality patient care. One of the characteristics of managed care is quality and cost control. These characteristics are the spearhead of the success of a managed care system. Managed care efforts in controlling costs can be carried out from two sides, like the supply side (health service providers) and the demand side (insurance participants) or both simultaneously [17]. In 2020, all countries in various parts of the world are faced with new challenges of disease outbreaks from the covid-19 virus. This plague can destroy the world in an instant. Every sector of life is experiencing the impact of this outbreak, starting from the economic, social and health sectors. The challenge that almost all countries experienced was the structure of financing health services, almost all countries experienced a surge in the cost of handling covid-19 patients in hospitals and it was exacerbated by the country's declining economic conditions at that time, causing delays in payment of covid-19 claims by the government. This has finally become the focus of building a managed care solution in each country. If highlighted from the state of Indonesia, it is recorded from the data from the covid-19 task force report that currently Indonesia is in 20th place out of 231 countries and territories in the world that have been affected by covid-19. From the ASEAN group of countries analyzed in this study, compared to Indonesia, Thailand has lower cases of covid19. This can be seen in Thailand, which experienced a decrease in visits by around 2/3 of the number of patients with respiratory problems in outpatient departments at hospitals, which means that the recommendation to wear masks in public spaces has a positive impact [18].

Decreasing the number of outpatient visits for patients with respiratory problems can also be interpreted as reducing expenses for treating covid-19 patients so that the budget prepared by the government for the treatment and care of covid-19 can be fulfilled. This proves that policies issued during a pandemic

such as 3M health program in Indonesia that are policies have been considered to support quality managed care. Shifting to European countries such as Ireland and the United Kingdom which were analyzed in this study, from these two European countries, the UK is still in the top 10 countries with the highest cases of covid-19, while Ireland is far below the UK, which is in 52nd place out of 231 countries infected with covid-19. This can illustrate that managed care implemented in Ireland is better than in England. This is also supported by the Irish population who adhere to government policies during the covid-19 pandemic so that they can reduce the rate of spread of the co-19 virus. The testing policy that is distributed to vital places such as hospitals, general practitioners, covid-19 testing centers and nursing homes provides a positive value for the Republic of Ireland, with this systematic way it can be known and get treatment immediately, especially for vulnerable groups who are infected with covid-19. During the covid-19 pandemic, it was recorded that Ireland did not experience a shortage of PPE and this is a factor that further supports the success of managed care in that country. Ireland has a health care system whose government funds residents, immigrants and overseas visitors ranging from testing and treating covid-19 patients [19]. Community compliance is also an important thing in the success of managed care, the compliance of Irish citizens was able to suppress the high positive number of covid-19, therefore the state was able to allocate funds to cover the covid-19 testing and treatment system.

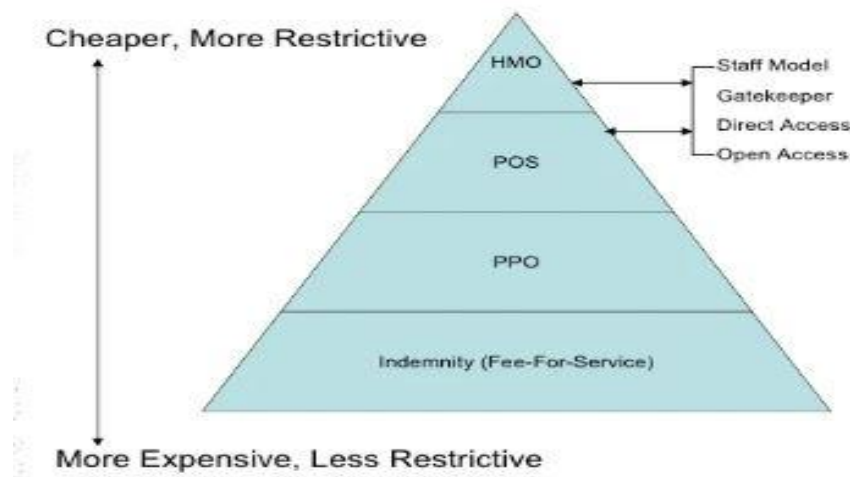


Fig 1. Historical of Managed Care Model, 2023

In the Americas, such as the United States and Canada. Observed, America occupies the first position with the highest rate of covid-19 cases and is the only country that has declared a national emergency. This has become a public spotlight, especially regarding managed care policies in that country. The United States with 331.9 million people, the largest population compared to Canada, America has often experienced opposition during the covid-19 pandemic which has driven the effectiveness of managed care in that country. Several things were highlighted in the covid-19 case in the country such as the government leadership which gave push-back related to published health advice which had an impact on undermining public health guidelines in a pandemic and this contributed to prolonging the pandemic phase and worsening economic conditions, government leadership who believed that a pandemic was a condition excess of scientists stimulated the American population to distrust and oppose policies in breaking the chain of the spread of covid-19 and the large number of American people who do not have and/or lose their health insurance coverage, so they tend to delay treatment and intensive care during the covid-19 pandemic, contributing to positive numbers and high mortality rates [19]. This can prove that leadership is able to influence the overall managed care in a country. The government should trust the advice of public health and scientific experts so they can work together to produce quality managed care. In Indonesia, the Ministry of Health's budget which finances the limited treatment and care of covid-19 patients requires a strategy and policy program to be able to provide covid-19 health services with the funds they have.

Some of the programs being promoted are rehabilitation for people who have recovered from covid-19 infection as well as for people who are not infected. This program is believed to be able to reduce the cost of caring for covid-19 patients because it can shorten hospitalization time and optimize the condition of post-

covid-19 patients and avoid repeat infections. Obstructed by the circumstances and situation of limiting mobility during the covid-19 pandemic, fueled the government's motivation to create an innovation movement by using digital health technology, namely forming teleconsultation and telerehabilitation that can be accessed by the community remotely [20]. Apart from that, the government also highlighted the preparedness of health workers as the frontline for the covid-19 pandemic. Health workers who are at high risk of being infected with covid-19 are one of the vulnerable groups that can affect the pace of managed care. Several points highlighted by the government are the strength of medical service management which includes management of patient placement, environment, and visitors, then the establishment of standart operating procedures that adjust to the conditions of the covid-19 pandemic, systematic management of clinical governance, including the adequacy of human resources and medical devices.

Sample of a managed care plan and model

A good example of a managed care plan is a Health Maintenance Organization (HMO). HMOs closely manage your care. Your cost is lowest with an HMO. You are limited to seeing providers in a small local network, which also helps keep costs low. We can also require to have a Primary Care Provider (PCP) who coordinates all your care. There are a few other common health plans that fall into this category as well.

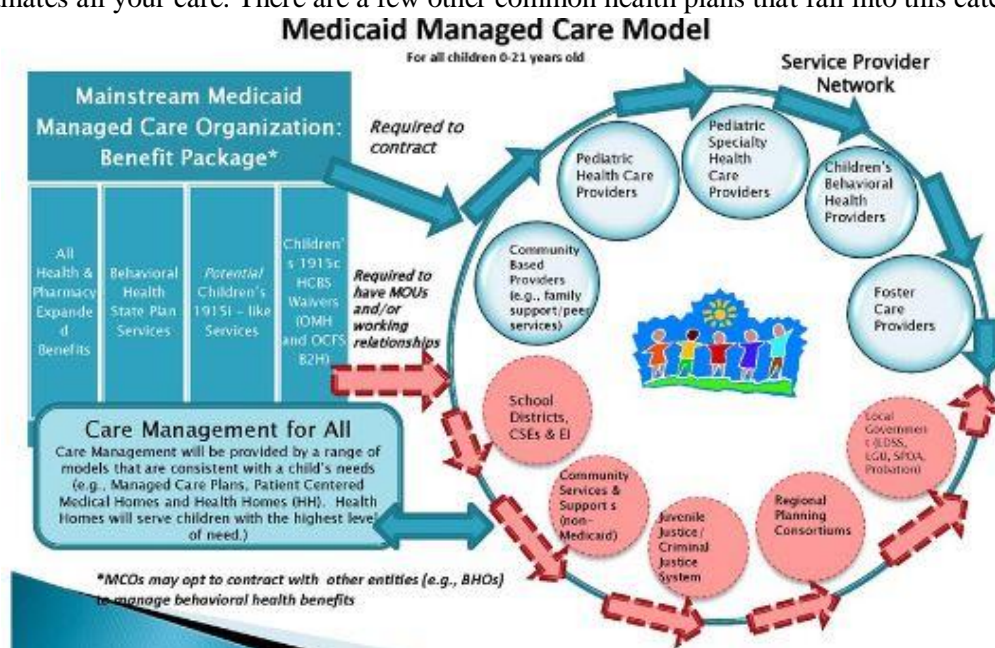


Fig 2. Medicaid Managed Care Model, 2023

Managed care organization

A managed care organization (MCO) is a health care company or a health plan that is focused on managed care as a model to limit costs, while keeping quality of care high. The challenge that existed during the covid19 pandemic was that human resources and medical equipment such as PPE in Indonesia were limited and even the number of needs exceeded the existing capacity. This problem was finally tackled by the Indonesian government as well as other countries, namely by empowering health students to take part in helping to deal with the covid-19 pandemic and the community in producing hand sanitizer products and masks whose needs are currently soaring [21]. The results of this analysis illustrate that both developed and developing countries such as Indonesia have the same challenges in the era of the co-19 pandemic and have their own strategies. Lack of human resources, medical devices, and conditions of "pandemic fatigue" are problems that have contributed to the course of managed care in every country.

Adequate human resources, medical equipment and supporting government will provide success in creating managed care where health services are fulfilled with the country's limited budget in dealing with the pandemic problem. Without exception, the role of the community affects the overall managed care where the community is required to have compliance with the policies that are enforced in the era of covid19. The surge in the transmission of positive covid-19 patients will decrease, so that the costs that have been prepared by the government are able to support quality health services for the community. However, the government

also needs to provide economic policies that can protect businesses, jobs, and livelihoods because one of the factors of public compliance is concern about their economic conditions during the covid-19 pandemic restrictions.

IV. CONCLUSION

The features of managed care plans

The following are the most common characteristics included in many popular health insurance plans.

These are examples of managed care:

- **Provider networks:** Health insurance companies' contract with groups of providers to offer plan members reduced rates on care and services. These networks can include doctors, specialists, hospitals, labs, and other health care facilities. Some health plans require you to use the plan's provider network to be covered for your care. For example, HMOs require you to see network providers to be covered by the plan. In return, the cost you pay is typically much less.
- **Preventive care incentives:** Managed care plans typically focus on making preventive care a priority. Most preventive services, such as annual check-ups, routine screenings, and certain vaccines, are covered at 100% by your health plan. Regular check-ups help doctors identify health problems early, before they become major and costly. No-cost preventive care is a big incentive for plan members to try and maintain good health.
- **Primary Care Providers (PCP):** Your health plan may require you to choose a PCP if you do not already have one. You may be required to see your PCP first before going to any other doctor or specialist. As part of a managed care system, this makes your PCP key in helping coordinate all your health care. If you need more specialized care or treatment, your PCP can refer you to the right specialists and facilities, often in the same network. This also helps to manage your care.
- **Prior authorization:** Most managed care plans require you to get approval before you have certain types of procedures or treatments done, or are prescribed certain types of specialty medications. This is called prior authorization, precertification, or preapproval, depending on your insurer. Part of managed care's goal is to help ensure you are not receiving treatment or medications you may not need. It is also a way for the insurer to manage costs for expensive tests, surgeries, or specialized medications. Quite often, as part of a prior authorization, your insurer will ask for additional information from your provider before deciding to approve it or not. This helps them understand the medical need for a more costly treatment, a certain surgical procedure, or a specialty medication, for example.
- **Prescription drug tiers:** If you have prescription coverage, your health plan may provide more coverage for generic medications than brand names. This is another common feature of managed care plans. Generics typically have the same formula and the same active ingredients, but they cost much less. This furthers the goals of managed care, which is to help keep costs lower, while still ensuring you receive quality care and equally effective medications.

Types of managed care plans in Indonesia

Here are the basic types of managed care organizations or plans:

- **Health Maintenance Organization (HMO)** manages care by requiring you to see network providers, usually for a much lower monthly premium. HMOs also often require you to see a PCP before going elsewhere, and do not cover you to see providers outside the network. Preventive care is covered at 100%. HMOs cost less, but offer less flexibility.
- **Preferred Provider Organization (PPO)** gives you the option to see any doctor you like, in- or out-of-network. You may pay less in-network, though. There may be no requirements to get referrals from a PCP, either. Again, most preventive care is covered at 100% emphasizing routine health care to lower health care costs now and in the future. For this flexibility, your costs are usually higher.
- **Point of Service (POS)** plans are a hybrid of HMOs and PPOs. You get the flexibility to see in- or out-of-network doctors like a PPO, but your share of the costs will be higher. Like an HMO, you may be

required to see a PCP to manage your care and provide you with referrals. Goal of a POS is similar, offer you options, while still managing to keep costs lower.

- **Exclusive Provider Organization (EPO)** plans also combine features of HMOs and PPOs. Like a PPO, you may not be required to see a PCP or get a referral, but like an HMO you are often required to see in-network doctors to be covered. Cost for an EPO plan is usually higher than an HMO, but less than a PPO.

HMOs and PPOs managed care plans

Both HMOs and PPOs are examples of managed care plans. An HMO is much more limited in how you can use it, but it also offers you the lowest cost. For example, you must see doctors within the plan's network to be covered—no flexibility. For a PPO, you have the option to see doctors outside the network and still be covered, but you will save money if you see in-network doctors. A PPO also costs a bit more than an HMO for that flexibility. Both types of plans are designed to help keep costs lower and quality high. Managed care is a type of health care model that is commonplace. Most common types of health plans have features of managed care that help keep costs in check and quality of care high.

Managed care work in Indonesia

The primary way in which managed care plans work is by establishing provider networks. A provider network serves plan members over a certain geographic area in which the health plan is available. The providers in these networks agree to offer their services at reduced costs. Your health plan pays more of the cost of your care if you see providers in the network. In fact, some plans will not cover you at all if you go to a doctor out-of-network. The surge in the transmission of positive covid-19 patients will decrease so that the costs that have been prepared by the government are able to support quality health services for the community. The conclusion of good and quality managed care is influenced by two sides, namely: government policies and leaders, also community participation. Leadership that supports covid-19 health experts, community compliance in carrying out policies that apply in the era of the pandemic, also the government's strategic innovation program to deal with the covid-19 pandemic have proven to contribute to the success of managed care in a country, especially Indonesia.

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