
| RESEARCH ARTICLE

New Normal: The Impact of HMO in the Health-Seeking Behavior of Patients of Multi-Specialty Clinics

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| ABSTRACT

Routine medical consultations provide individuals to determine any signs of a certain disease they may not even know it exists. During consults, medical professionals can diagnose severe or life-threatening conditions and prevent risks before they become worse. Support in health financial could be considered as one of the factors that a patient would practice medical checkups routinely. This study gauged the demographics of the patients who visited Multi-specialty Clinics and the benefits of Health Maintenance Organizations to support the health needs of this clientele. They measured the number of visits made by an HMO member pre-pandemic and at the height pandemic. Age, sex, and civil status were also included as identifiers to determine the number of patients per category. According to the findings of this study, HMO is evidently a powerful driver in the promotion and improvement of health-seeking behavior of the community and best achieved and enhanced in the group of HMO card users availing medical services at a Multi-Specialty Center in the North region, particularly during pandemic disasters.

| KEYWORDS

HMO, health-seeking behavior, Multi-specialty Clinics, Routine medical consultations, pre-pandemic, height of pandemic

| ARTICLE INFORMATION

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1. Introduction

As the Coronavirus (Covid-19) virus progressed in 2021, many of us did not anticipate the impact of this on every aspect of Filipino lives. There was proof that the impact has taken a heavy toll on the hierarchy of needs of every Filipino. Covid-19 has also hit Filipino's personal finances hard, and companies have imposed retrenchment of employees due to a shortage of funds. Health has been the most affected of all aspects since the number of deaths has reached 66,332, with the total number of confirmed cases of 4,080,182 as of March 31, 2023. (WHO, 2023).

The COVID-19 deaths have made it more important for Filipinos to take care of themselves by adhering to safety procedures and building their immune systems. Making healthcare available to everyone was the top healthcare concern in 2021 as a result of the arrival of the Covid-19 virus in the Philippines. The cost of laboratories and procedures had increased, few doctors had stopped seeing patients out of fear of contracting a virus, there was no longer any market supply of medicines or medical supplies, and there was no transportation available to be used to travel to hospitals or clinics, and groceries had doubled in price. Access to healthcare was also constrained by strict rules on accepting patients in the hospital and community guidelines.

The number of deaths due to Covid has increased, and several tests that need to be undertaken by those who contracted the virus created an impact on the behavior of all Filipinos. Due to the fear of contracting a virus or even death, Filipinos were being compulsive whenever they experienced symptoms related to COVID-19, and the majority of Filipinos were unlikely to be treated due to financial concerns. In this scenario, many Filipinos had no chance to be treated medically and resolved to self-imposed home isolation and even self-medicate, which further resulted in the progression from moderate to severe symptoms. Moreover,

because the majority fears going to the hospital, the second-best alternative was choosing to visit multi-specialty clinics. Treatment or cure was unlikely to be determined, such as specific medication or vaccines to combat the virus. The chance of being well was very unlikely to happen, which made Filipinos scared and invest in any health management systems. The majority of Filipinos invested in Health insurance such as Health Maintenance Organization or Group insurance to support their financial needs in medical and HMO existing members utilized more on their benefits through their unlimited consultations with doctors during symptomatic episodes that, resulted in the increase in HMO utilization to the clinics.

In this study, we emphasized the impact of COVID-19 on Filipinos with HMO in one of the multi-specialty clinics in Quezon City.

1.1 Background Of The Study

Health Maintenance Organization is a network or organization that provides health insurance coverage for a monthly or annual fee. It also requires participants to receive medical care services from an assigned provider known as the Primary Care Physician (PCP). Having HMO, members can always see their PCP first, who will then refer the member to an in-network Specialist. HMO is essential for every individual because it can be used to cover a portion of the cost in emergency situations. HMO complements Philhealth coverage, which is an additional benefit. Combining Philhealth and HMO plans is suggested as a method for addressing medical assistance. Thus, they can reduce expenses even further. Typically, HMO coverage includes financial assistance for a limited number of procedures and consultations. Some HMO plans include coverage for annual physical and dental evaluations (Hayes, 2022).

In line with the pandemic, HMOs have adjusted accordingly to the needs and rising health demands. Most HMO companies have supplied medium to full financial coverage of hospital bills. They have also provided teleconsultation services in place of face-to-face appointments for infection control reasons. In this study, we will emphasize the demand and behavior of every Filipino in seeking insurance to support their medical needs during a pandemic. In one prominent multi-specialty clinic in Quezon City, data showed that as early as 2019, there were a significant number of patients seen by doctors, and the majority of it was because of the COVID-19 like related symptoms they were facing.

1.2 Statement Of The Problem

This research aims to understand whether or not there is a significant association between the health seeking behavior of HMO members prior to the pandemic, referred to as 2019, and at the height of the pandemic, referred to as 2021. Specifically, the year 2019 will serve as the base year for this comparison. Researchers acknowledge that a number of factors, such as a series of community lockdowns, the unemployment rate, and the emergence of alternative health delivery systems such as telehealth and teleconsultation, can have a substantial impact on data analysis. Consequently, the subsequent analysis of data output will be considered. This research seeks to answer the following queries:

1. What is the demographic profile of the data subjects in terms of gender, age and civil status that will impact the variables of the study?
 - 1.1 Gender
 - 1.2 Age
 - 1.3 Civil Status
2. What is the likelihood that patients would seek medical consultations with HMO as the driver?
3. Is there a significant difference between the patient demographic and the number of visits as reported?
4. Is there a significant relationship between HMO visits in a multi-specialty center pre-pandemic and during the height of the pandemic?

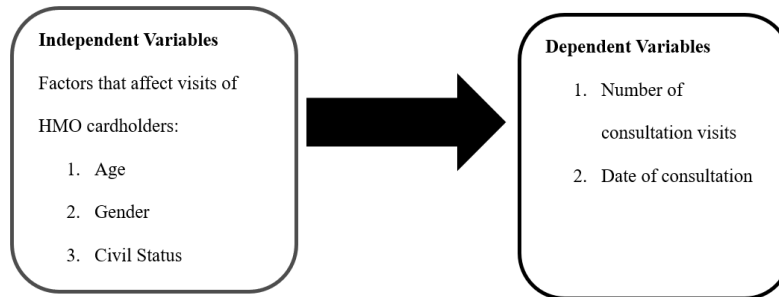
1.4 Hypothesis Of The Study

H₀ There is no significant relationship between the HMO visits pre-pandemic (2019) and at the height of the pandemic (2021)

H₁ There is a significant relationship between HMO patient visits pre-pandemic (2019) and at the height of the pandemic (2021)

1.5 Operational Framework

Figure 1.4.1: Factors Affecting the Visits of HMO Members



Note: Shown are the dependent and independent variables identified and tested in this study

As seen in Figure 1.4.1, the researchers identified the variables to be used in the study. The study will determine how these variables are connected to the dependent variables that affect the health seeking behavior as evidenced by a number of clinic consultation visits. Moreover, the data collection for the said variables will be available through the extracted report from the Clinic Management System of the Multi-Specialty Clinic.

2. Literature Review

“Loss of income and job opportunities, health restrictions and community lockdowns are some of the many challenges faced by many Health Maintenance Organizations (HMOs) at the onset of the COVID-19 pandemic. As the decline of in-patient visits and face-to-face consultations became the new normal, baselines for the various HMOs have reached an all-time low. ”

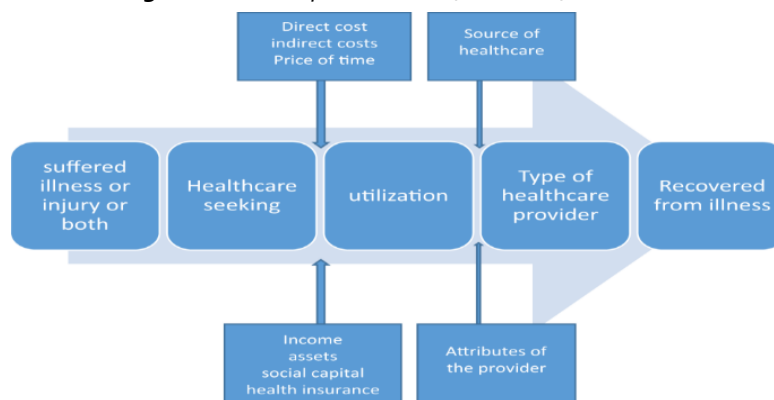
“To cope with this decline, HMOs have adapted to suit their client's needs while performing standard COVID-19 regulations. Telemedicine has been introduced to provide their clients with the necessary health check-ups they have availed, while providing safety by distantly communicating, in light of the ever-changing restrictions.”

“As with any newly introduced technology/method, challenges have sprouted alongside this. Clinical hesitation, lack of technological resolutions, cyber weaknesses and lack of regulation are some of the many problems faced both by the HMO and the patients they provide to. ”

“Despite this, healthcare is an undeniable need of the masses. Without it, all are far more at risk. A simple cough or flu may be deadly without the proper medicinal remedies. Healthcare is a part of life as we know it. It is a right that all must have access to, and HMOs play a vital role in providing the healthcare that is necessary to everyone’s benefit.”

“This chapter covered both foreign and local literature, which discusses the COVID-19 pandemic, its effects within the society along with the challenges it imposes, and the vital role of Health Maintenance Organizations (HMOs).”

Figure 2.1: Conceptualization of demand for healthcare



Adapted from “Effect of National Health Insurance Scheme on Healthcare Utilization and Out-of-Pocket Payment: Evidence from GLSS7” by (Sarkodie, 2021).

The idea of healthcare demand illustrates the progression from when a person is unwell to when he or she is fully recovered. The person has choices to pick between these two opposite extremes. The choice to seek medical attention comes first. Second, the person must pay both the direct and indirect costs associated with their decision to seek medical attention. The indirect costs include travel time, travel expenses, and waiting time. The direct costs include the cost of treatment, which is sometimes expressed as the patient's out-of-pocket expense (amount paid for the file, diagnosis, medications, treatment, hospital stay, or any other payment). The availability of health insurance lowers the cost of care (Sarkodie, 2021).

2.1 COVID-19

Germany, the Republic of Korea, Japan, Thailand, Viet Nam, the United States, and Singapore were also affected by the disease's spread. The 2019 novel coronavirus (2019-nCoV), which brought back the horrifying memories of the severe acute respiratory syndrome (SARS-2003, caused by another beta-coronavirus), which occurred 17 years earlier, was ultimately identified as the source of the outbreak. Singapore, Germany, Thailand, Japan, the Republic of Korea, the United States, and Viet Nam were also affected by the disease's spread. The severe acute respiratory syndrome (SARS-2003), which was brought on by another beta-coronavirus and was finally identified as the outbreak's pathogen, brought back terrible memories. 2019 novel coronavirus (2019-nCoV) is a novel beta-coronavirus (Wu, Cheng, & Chan, 2020).

2.2 Health Maintenance Organization (HMO)

Anyone in need of health insurance can find several insurance providers with unique advantages. Health maintenance organizations (HMOs), a form of insurance arrangement that provides exposure through a network of providers, are well-liked sort of providers on the market for health insurance. (Hayes, 2022).

Table 1: List of Health Maintenance Organizations (HMO) with certificates of authority issued by Insurance Commission

No.	HMO	LICENSE No.
1	Asalus Corporation	HMO-2023-06-R
2	Asiancare Health Systems, Inc.	HMO-2021-01-R
3	Avega Managed Care, Inc.	HMO-2023-05-R
4	Carewell Health Systems, Inc.	HMO-2023-09-R
5	Cooperative Health Management Federation	HMO-2021-05-R
6	EastWest Healthcare, Inc.	HMO-2023-14-R
7	Forticare Health Systems International, Inc.	HMO-2022-01-R
8	Getwell Health Systems, Inc.	HMO-2023-13-R
9	Healthcare & Development Corporation of the Philippines	HMO-2021-03-R
10	Health Delivery System, Inc.	HMO-2021-04-O
11	Health Maintenance, Inc.	HMO-2023-02-R
12	Health Plan Philippines, Inc.	HMO-2023-04-R
13	IMS Wealth Care, Inc.	HMO-2023-01-R
14	Insular Health Care, Inc.	HMO-2023-03-R
15	Life & Health HMP, Inc.	HMO-2023-16-R
16	Kaiser International Healthgroup, Inc.	HMO-2023-08-R
17	Maxicare Healthcare Corp.	HMO-2023-07-R
18	Medicard Philippines, Inc.	HMO-2023-12-R
19	Medocare Health Systems, Inc.	HMO-2023-17-R
20	Metrocare Health Systems, Incorporated	HMO-2023-11-R
21	Pacific Cross Health Care, Inc.	HMO-2023-10-R
22	Philhealth Care, Inc.	HMO-2023-15-R
23	Value Care Health Systems, Inc.	HMO-2023-18-R
24	Wellcare Health Maintenance Inc.	HMO-2021-02-O

Note: Adapted from "List of HMO with certificates of Authority Issued by the Insurance Commission as of April 30, 2023" by National Insurance Commission (Commission, 2023)

The Insurance Commission supervises and controls the activities of life and non-life businesses, mutual benefit organizations, health maintenance organizations (HMOs), and trusts with charitable purposes. The Insurance Commission granted licenses to 24 Health Maintenance Organizations to work in the Philippines as of February 28, 2023.

2.3 HMOs: An Emerging Competitive Front in a Post-COVID World

The COVID-19 crisis caused a recession and abruptly ended the longest economic upswing in American history. The largest yearly loss in (GDP) in the previous 70 years is expected to occur in 2020, according to a forecast made by the Federal Reserve in June (Shah & Ferson, 2020).

The COVID-19 epidemic is altering conventional economic models for clinicians and jeopardizing the viability of many practices due to the sharp declines in elective surgeries and office visits. Despite a surge in practice visits that was partly propelled by a growth in the usage of virtual appointments (e.g., video, telephone) and, compared to February baselines, the total practice volume was 30% lower in May 2020 (Shah & Ferson, 2020).

2.4 Influencing Variables on the health-seeking behavior of civil servants in Ibadan, Nigeria

Healthcare seeking behavior (HSB) is well-defined as "any action or inaction has taken by individuals who perceive themselves to have a health problem or to be ill for the purpose of finding an appropriate remedy." The term "illness" or "sick-term" can also be used to describe behavior that promotes health. The appropriate health seeking behavior was significantly connected with characteristics such as having completed a college education, living in a smaller family, falling into a higher socioeconomic status quartile, and signing up for the National Health Insurance Scheme (Latunji & Akinyemi, 2018).

2.5 Vaccine: The Importance of Global COVID-19 Vaccination

Since March 2020, when the World Health Organization (WHO) declared the COVID-19 outbreak a pandemic, the virus has caused more than 2.5 million deaths. As of March 2021, more than 113 million cases had been confirmed by laboratory tests. Practically every aspect of life has been affected by the epidemic, which has delayed the global economy, altered our interactions with loved ones and coworkers, and strained healthcare institutions. In order to prevent the virus from spreading, governments from every nation on earth have been forced to institute stringent restrictions on human activities. Currently, this phase of the pandemic is survivable due to the COVID-19 vaccination. Due to the fact that natural herd immunity would not have returned society to its normal state, many experts believe that without them, there would have been a significant number of fatalities. The World Health Organization and other health organizations have endorsed this. In the absence of vaccines, behavioral restraints may have been required from the outset (Moore, 2022).

At the beginning of 2021, a number of vaccines were granted emergency approval and began to be distributed throughout the globe. Globally, nearly 300 million vaccine doses had been administered as of March 2021. The data suggest that everything may return to "normal." For global COVID-19 immunization to be successful, however, a number of obstacles must be overcome. Seven COVID-19 vaccines have been approved and are currently available on three distinct platforms across the globe. The effectiveness of these vaccinations, however, has been heavily criticized, particularly in light of the emergence of new virus strains. To be effective, vaccinations must substantially reduce the virus's ability to spread. Pfizer's Moderna and mRNA-based vaccines have been shown to be between 94% and 95% effective in clinical trials involving high-risk subjects and senior citizens. This is commonly misunderstood to imply that 95% of those who receive the vaccine are immune to the disease, while the remaining 5% are not. In this scenario, vaccination would prevent 100,000 individuals from becoming ill, but 5,000 individuals would still contract the virus within three months. This rate is equivalent to the current COVID-19 case incidence in the United Kingdom (Moore, 2022).

Those who received the vaccine experienced a 95% reduction in the incidence of COVID-19 compared to the control group. Without the vaccination, we can predict that 1% of the population will become unwell, but with it, that number drops to 0.05%. Due to the extremely low vaccination rates, society will be able to return to "normal", and all restrictions will be eliminated permanently (Moore, 2022).

2.6 Is the lockdown important to prevent the COVID-19 pandemic?: Effects on psychology, environment and economy-perspective

To combat this epidemic, governments have begun enforcing bans under various societal constraints. The most limiting of these strategies is the lockdown. The response of nations to the pandemic has caused an unprecedented economic catastrophe. Numerous studies on the socioeconomic effects of the global economy have investigated the global pandemic, specifically COVID-19. Nearly 90% of the world's population is socially isolated in some way, including job loss, travel restrictions, and termination of employees. It will be determined to what extent and when the outbreak will be contained, for how long the current social isolation/distance-focused measures will be relaxed, and when it will begin to normalize within the already implemented expansionary economic policies. Regarding the extent to which the pandemic injured the economy and the rate at which it is anticipated to recover following the pandemic (Atalan, 2020).

2.7 Transitions from ECQ to MECQ: What's The Difference?

Metro Manila and the provinces of Laguna and Bataan are subjected to the modified, enhanced community quarantine (MECQ) until the end of August 2021. Prior to this, the region was placed under an enhanced community quarantine (ECQ) because the number of COVID-19 cases had increased. According to a statement from Harry Roque, the president's spokesman, "These latest classifications are without prejudice to the strict implementation of granular lockdowns." The restriction was put in place to stop the COVID-19 Delta strain's oncoming countrywide outbreak. The World Health Organization (WHO) is actively monitoring 11 SARS-CoV-2 strains, and Delta is one of them. It is referred to as the more dangerous and contagious strain of the virus (Moya, 2021).







It is anticipated that viruses like SARS-CoV-2 will evolve. The bulk of the alterations have little to no effect on the virus' characteristics, but some are being actively monitored because they could have an impact on the virus' rate of transmission, the severity of the illness, the effectiveness of vaccines and treatment drugs, and social measures. The Department of Health (DOH) discovered 182 new cases of the more contagious Delta strain during its most recent census. Except for APOR and other permitted visitors from outside the household, the MECQ's tight stay-at-home rule is still in force. The food, utility, financial, healthcare, and financial industries all employ these employees. Those who deliver goods operate in morgues, and the bare minimum of government employees are also permitted (Moya, 2021).

Only one person per home may leave the property to obtain food, medication, or other supplies. According to the Inter-Agency Task Force against Emerging Infectious Disorders (IATF), pregnant women, children under the age of 18, people over the age of 65, people with immune deficiencies, comorbid disorders, or other health hazards should always stay at home (Moya, 2021)

Unfortunately, curfews are still in place at MECQ. According to a statement made by Metropolitan Manila Development Authority (MMDA) Chairperson Benhur Abalos on Sunday, April 11, all mayors had agreed to adopt curfew hours from 8 p.m. to 5 a.m. through April 30. Gatherings outside of residences are expressly prohibited by the MECQ. Additionally, it is illegal to conduct gatherings inside a house with visitors who are not family. With the permission of the relevant agency, certain necessary meetings that involve official, medical, or humanitarian missions are permitted. Additionally, as long as they use no more than 10% of the available space, religious gatherings are permitted. Additionally needed is a letter of consent or authorization from the relevant local government unit (LGU). For those who went away from causes other than COVID-19, gatherings for necrological services, wakes, inurnments, and funerals are also permitted—but only for intimate family members who can prove their closeness to the deceased. Alfresco or outdoor dining is permissible under MECQ, according to Ramon Lopez, secretary of the Department of Trade and Industry (DTI), even though eating in restaurants is still not allowed. Tatler published advice on dining out safely. Make appointments in advance, carry your own utensils, and keep a safe distance from other people (Moya, 2021)

Figure 2.2: Phased Transition in the Philippines during The New Normal

Phased transition from ECQ to GCQ

	Phase 1: ECQ	Phase 2: Modified ECQ	Phase 3 : GCQ
 Population	100% stay at home	100% stay at home	Vulnerable (e.g., elderly) Transmitters (e.g., youth)
 Exercise	Not allowed	Limited outdoor exercise allowed (e.g., outdoor walk, jog/run, bike) with safety protocols (i.e., masks and 2m distancing)	Limited contact sports (e.g., golf, tennis)
 Gathering (e.g., religious)	Not allowed	Highly restricted (5 maximum)	Restricted (e.g., max 10)
 Travel	No public transport Flights: no domestic, limited international	No public transport Flights: no domestic, limited international Controlled inbound travel (OFWs/ returning filipinos) Biking and non-motorized transport encouraged	Public transport with strict safe distancing Inter-island (GCQ to GCQ), with safety protocols
 Schools	School premises closed	No inter-island travel School premises closed	Skeletal workforce to process requirements from students, and to prepare for graduation and for next semester
 Government	Skeletal onsite Others work from home	Skeletal onsite Others work from home	Alternative work arrangements (e.g., 40 hours, 4-day work week)

Adapted from "MECQ and ECQ: What's The Difference? Guidelines To Know This August 2021" by (Moya, 2021).

Gen. Debold Sinas, the head of the Philippine National Police (PNP), stated that border inspections would still be present for people entering through NCR Plus. Only flights within the United States and abroad are permitted if they are absolutely necessary for the passenger's journey. Cebu Pacific stated in a Tweet that it would continue operating domestic and international flights on time but that passengers who wished to postpone their flights might do so in their preferred way (Moya, 2021).

The public transportation choices that were permitted during GCQ would still be accessible during MECQ, according to DOTR Assistant Secretary Goddes Libiran. Additionally, on April 13 and 15, respectively, 190 provincial PUB routes and 60 PUJ routes will begin service. The aforementioned transports are only permitted for APORs (Moya, 2021).

3. Methodology

3.1 Research Design

The researcher used a combination of descriptive and explanatory research methods for in-depth analysis of the correlation of the pandemic and its influence over the health-seeking behavior of individuals, HMO card holders, in particular; a descriptive study design seeks to deliberately collect data in order to describe a phenomenon, circumstance, or population. This research further studied and correlated one or two variables affecting their drive to seek consultation at a multi-specialty center.

The researcher further studied the impact of having an HMO on one's drive to seek consultation with either general or specialized Doctors and the various factors that influence it. With this, an explanatory design was utilized. The explanatory design further shed light and correlated how the independent variables age, gender, civil status and illness and their significance with the total number of monthly consultation visits in a prominent multi-specialty center located in one of the densely populated cities of Quezon City.

The researchers derived secondary data from the Clinic Management System and used statistical techniques to recognize relationships and patterns in the health seeking behavior of HMO members in two identified timeframes, pre-pandemic (2019) and at the height of the pandemic (2021).

3.2 Sample and Sampling Technique

The researchers used a purposive sampling technique based on the population's characteristics. Purposive sampling is a non-probability sampling approach in which respondents or data collected have qualities that are relevant to the inquiry. Purposive sampling is used when selecting respondents "on purpose" that are suitable to the research.

The chosen population to gather data regarding the foot traffic of health seeking behavior of patients is in Quezon City. Quezon City was chosen due to it being one of the most densely populated cities in the Philippines and the highly urbanized characteristic of the city. It was also chosen due to the ease of gathering data by the researchers. To gather information on the health seeking behavior of patients, the researchers contacted the departments of multi-specialty centers that gather data on their clients, provided that names are omitted to protect the privacy of the latter.

3.3 Research Instrument

The researchers made use of data instruments derived from the clinic information management system exclusively used in the focused multi-specialty center as well as data gathered from government and non-government agencies and commercial information sources such as local news, journals and online radio and TV stations. The data gathered from the clinic management system consisted of all consultation transactions catered from January to December of 2019, defined as the pre-pandemic period or year, and consultation transactions during the same period of 2021, defined as at the height of the pandemic year. The scope of the data will be from one of the multi-specialty centers in Quezon City. The researchers decided to focus on this branch given the prevalence of Covid 19- related illness in the city as reported in various media such as news, government agencies report and bulletins, as well as online and commercial sources.

3.4 Validation Instrument

The researchers presented the secondary data extracted from the clinic management system to a certified statistician to validate reliability and acceptability and further secured clearance to proceed in using such data instrument in proceeding with the data collection vital to the fulfillment of the research.

3.5 Ethical Considerations

This paper confirms that the goal of this investigation is to discover the behavior of patients in a prominent multi-specialty clinic during the pandemic and to measure the utilization of HMO consults based on age, gender, civil status, and illnesses from 2019 and 2021. The tool used by the researchers was the Clinic Management System in the clinic. The personal information, specifically the names, addresses, and contact numbers of each patient, remained anonymous in this study.

3.6 Data Gathering

The researchers made use of the extracted general reports covering consultation count on the noted periods with relevant variables such as age, gender and civil status. The report was redacted as the researchers made sure that the data subject's identity remained anonymous.

The researchers also gathered additional data from the news, bulletins and journals to substantiate the delimitation of the scope of the study and the data that was analyzed.

3.7 Statistical Treatment of Data

The researchers used the Statistical Package for Social Science (SPSS) to evaluate the data collected for the study. With the use of the aforementioned software, the data were arranged into pertinent figures and tables to present and debate the study's findings:

A t-test is a hypothesis-testing method used to analyze the means of one or more populations. This can be used to determine whether one group deviates from a predetermined value (a one-sample t-test), whether two groups deviate from one another (an independent two-sample t-test), or whether there is a statistically significant difference between two measures (a paired, or dependent samples t-test). In this study, the t-test will be used to compare the two different sets of values and will use the patient's number of visits to the HMOs, their dates of consultations and demographic profiles according to age, gender and civil status.

Analysis of variance (ANOVA) is a statistical method that analyzes the influence of one or more independent variables on a dependent variable. In this study, Analysis of variance is used to analyze statistical variations between patient attributes such as age, gender, and civil status and the number of visits and year of visitation.

4. Results and Discussion

The instrument employed in this study is the use and analysis of the secondary data coming from report extractions from the Clinic Management System and other relevant data sets published online. Statistical analysis was performed to determine the frequencies and distributions, weighted mean, T-test and analysis of variance as well as Pearson Correlation.

The researcher offered the conclusions, findings, analysis, and interpretation of the data from the numerous sources mentioned in this Chapter. The reference tables and processed data were analyzed using descriptive analysis and then tabulated.

Table 4.1: Total Patient Transactions Per Service Line Per Market Segment for Y2019 and Y2021

SERVICE LINES	Cash		Corporate		HMO		Others		Total	
	2019	2021	2019	2021	2019	2021	2019	2021	2019	2021
ANCILLARY	598	484	2,358	1,350	2,036	2,076	306	338	5,298	4,248
CCS	-	-	1	-	-	-	-	-	1	-
CLARITY MEDICINE	2	-	-	-	-	-	-	-	2	-
CONSULTATION & PF	30,717	17,174	14,090	10,157	45,404	20,351	2,384	1,630	92,595	49,312
DENTAL	1,174	66	655	37	-	3	112	53	1,941	159
DERMATOLOGY	659	62	655	274	1,258	173	158	80	2,730	589
ENDOSCOPY	96	34	18	4	60	12	2	1	176	51
IMAGING	4,557	2,891	10,291	8,430	8,616	5,438	595	628	24,059	17,387
INDUSTRIAL MEDICINE	468	375	7,033	6,532	810	513	179	218	8,490	7,638
INSURANCE	1	1	-	-	-	-	1,090	560	1,091	561
LABORATORY	12,582	9,387	38,340	30,422	37,853	28,338	5,792	4,590	94,567	72,737
MISCELLANEOUS	4,841	20,839	174	377	45	119	12	154	5,072	21,489
OPERATING ROOM	482	173	30	19	153	68	7	2	672	262
REHAB MED	2,761	2,083	3,341	1,441	14,818	5,512	535	406	21,455	9,442
TREATMENT ROOM	616	248	93	39	356	100	24	4	1,089	391
VACCINES	28	62	183	258	233	35	5	48	449	403
Total Count	59,582	53,879	77,262	59,340	111,642	62,738	11,201	8,712	259,687	184,669
% DISTRIBUTION PER MARKET SEGMENT	23%	29%	30%	32%	43%	34%	4%	5%		

Source: (Clinic Management System)

HMO patients are the leading captured market segment of the Multi-Specialty Clinic, according to data extracted from the Clinic Management System. HMO transactions last 2019 accounted for 43% or equivalent to 111,642 of the total 259,687 services rendered. Corporate patients come in second at 30% or equivalent to 77,262 total transactions availed, while the walk in/cash paying and other insurances came in third and fourth with 23% and 4% contributions, respectively.

The same data sets that were captured from the prospective year, which was categorically stated as occurring during the peak of the pandemic in 2021, also revealed that HMO transactions were predominant in the Multi-Specialty Clinic. These transactions resulted in 62,738 total services rendered, which made up 34% of the total services that were rendered that year, which added up to 184,669 for the entire year. The final tally for corporate transactions was close to 32%, which equalled 59,340 services rendered. Walk-in customers or cash transactions accounted for 29%, or 53,879, of the total number of services given. Other insurance made up the market sector that visited the Clinic the least, accounting for 5%, or 8,712 transactions.

Table 4.2: T-Test analysis of the significant difference between Gender and Year of Consultation

	Gender	N	Mean	SD	F-Value	P-value	Decision of Ho	Interpretation
Year	Male	17,476	1.26	.44	380.55	.001	Reject	Significant
	Female	36,734	1.30	.46				

Note: $>.05$ Accept Ho (Not Significant) $<.05$ Reject Ho (Significant)

Table 4.2 shows the significant difference among groups as determined by the Independent Sample Test between patients' years of consultation according to gender.

It is illustrated in the table according to Year of consultation; it was indicated that scores were significantly higher for females ($M=1.30$, $SD=.46$) than the male with ($M=1.26$, $SD=.44$), with a rating of $t(54208)=-9.441$, $F(2, 54,210)=380.559$, a p-value of .001. This indicates that there is a statistically significant difference among variables that receive the significant level $p < 0.05$.

This only suggests that the probability of gender-related considerations on the health-seeking behavior of HMO patients is of no significance to the year of consultations.

Thompson et al.'s study found gender differences in health care seeking behavior, with women reporting more visits to their primary care physician for both physical and mental health concerns than males. Patients were less likely to seek treatment for mental health problems than for physical health concerns. According to the results of the regression analyses, age, disease prevention, physician trust, and chronic conditions were revealed to be significant predictors of both men's and women's mental health care-seeking behaviors (Thompson, et al., 2016).

Table 4.3: One-way Analysis of Variance of the significant difference between Civil Status and Year of Consultation

	Civil Status	N	Mean	SD	F-Value	p-value	Decision of Ho	Interpretation
Year	Single	26,886	1.24	.43	146.52	.001	Reject	Significant
	Married	23,105	1.34	.47				
	Widowed	911	1.37	.48				
	Separated	90	1.17	.37				
	Did not disclose	3,218	1.34	.47				

Note: $>.05$ Accept Ho (Not Significant) $<.05$ Reject Ho (Significant)

Table 4.3 illustrates the HMO patient's year of consultation according to Civil Status, with a rating of Single ($M=1.24$, $SD= 0.43$), Married ($M=1.34$, $SD= 0.47$), Widowed ($M=1.37$, $SD=0.48$), Separated ($M=1.17$, $SD= 0.37$), Did not disclose ($M=1.34$, $SD= 0.47$).

This indicates a statistical difference among variables that received a significant level of $p < 0.05$. This only suggests that the probability of civil status considerations on health-seeking behavior of HMO patients is of significance relative to the year of consultations.

According to a study by Debra Umberson, men appear to gain more from marriage than women since they have lower mortality rates than the overall population. A theoretical model of social cohesiveness and social control is built to study this phenomenon. Using this idea as a foundation, I suggest that marriage enhances health because partners frequently monitor and attempt to influence one another's health behaviors. Additionally, there might be gender variations in how these social control activities are offered, received, and implemented. Data from the national panel surveys conducted in 1986 ($N = 3617$) and 1989 ($N = 2867$) are

used to examine these hypotheses. The transition from married to single status is linked to an increase in unhealthy behavior, while the transition from single to married is linked to a decrease in unhealthy behavior, the results show, providing some support for the social control and health behavior hypothesis among married people. Theoretically, these changes in behavior based on marital status are explained (Umberson, 2002).

Table 4.4: One-way Analysis of Variance of the significant difference between Age and Year of Consultation

	Age (in years)	N	Mean	SD	F-Value	P-value	Decision of Ho	Interpretation
	below 18	4,301	1.13	.34				
	18 - 25	2,573	1.33	.47				
	26 - 35	12,840	1.27	.45				
Year	36 - 45	12,362	1.30	.46	178.64	.001	Reject	Significant
	46 - 55	8,254	1.38	.49				
	56 - 60	4,062	1.37	.48				
	above 60	9,818	1.26	.44				

Note: $>.05$ Accept Ho (Not Significant) $< .05$ Reject Ho (Significant)

Table 4.4 illustrates the HMO patient’s year of consultation according to Age, with a rating of below 18 years old (M=1.13, SD= 0.34), 18-25 years old (M=1.33, SD= 0.47), 26-35 years old (M=1.27, SD=0.45), 36-45 years old (M=1.30, SD= 0.46), 46-55 years old (M=1.38, SD= 0.49), 56-60 years old (M=1.37, SD=0.48), above 60 years old (M=1.26, SD 0.44).

This indicates a statistical difference among variables that received a significant level of $p < 0.05$. This only suggests that the probability of civil status considerations on health-seeking behavior of HMO patients is of significance relative to the year of consultations.

According to a related study by Lim and his colleagues titled "Age, sex, and primary care setting differences in patients' perception of community healthcare seeking behavior towards health services," age, sex, and healthcare affordability or accessibility all have a significant impact on healthcare-seeking behavior across demographic groups. These variables have unpredictable correlations with healthcare utilization. Community standards influence how people seek assistance, but few studies have examined how people perceive their neighbors' desire for primary care visits. Sex, age, health insurance, and affordability all influence how frequently Malaysians seek community healthcare for a variety of physical and mental health conditions. This study examines community healthcare seeking behavior for acute and preventative physical and mental health concerns in Malaysian primary care clinics, divided by age, gender, and primary setting (a proxy for healthcare affordability). From a total of 3979 patients who completed the patient experience questionnaire, they determined that: 1. the average age of patients was 41.9 years (SD = 15.5), 2. more women (61.6%), and 3. adults under 50 years of age (67.2%) were surveyed (Lim, Lim, Tong, & Sivasampu, 2019).

5. Conclusion

The researchers tested and examined patient demographic information. They looked at how the COVID-19 pandemic affected the health-seeking behaviors of HMO patients who frequently visit a Multi-Specialty clinic. It was discovered that roughly 80% of the patients have a single civil status, are female, and are between the ages of 26 and 45.

According to experts' assessments of data gathered from actual transactions made throughout the years under study, there is a substantial possibility that the frequency of patients utilizing HMOs will significantly improve health-seeking behavior. In a similar vein, there's a chance that the patient will seek medical advice with the HMO as their main motivation.

Researchers have also discovered that those who have HMO cards display the finest and most increased health-seeking behavior, particularly during pandemic situations. Encouragement of health-seeking behavior relevant to the pandemic scenario.

Finally, another conclusion that can be derived from statistically processed data is that there is a significant difference between patient demographics and frequency of visits. Furthermore, there is a substantial association between HMO visits in a multi-specialty institution prior to and during the pandemic's peak.

5.1 Recommendations

Based on the establishment of the data and the statistical results, the researchers have developed the following recommendations:

HMO Leadership Team; By putting an emphasis on preventative care, decision-makers and leaders of HMOs can collaborate most effectively with both private and public health care institutions to, first and foremost, improve the health seeking behavior of the population.

Health care facilities; Health maintenance organizations (HMOs) are businesses that aim to efficiently manage and use costs for all members. The researchers believe that preventive measures like regular visits to primary care providers, specialized consultations, and thorough medical examinations can stop the progression of diseases with more serious consequences, which is equivalent to higher medical care consumption at any rate. With this, Centers and other healthcare institutions can create laboratory and diagnostics test packages for HMO cardholders to detect and treat chronic diseases early.

Medical Professionals; They can also conduct additional research on women's health in light of the fact that it has been demonstrated that females are the most frequent visitors to clinics regardless of the passage of time.

Medical Professionals; Although male statistics showed lower clinic attendance, we may use this to raise healthcare awareness and sell medical services that will motivate men to seek consultation for preventive or therapeutic purposes.

Health Care Providers can also benefit from the single population's assertiveness. Doctors can utilize this population segment as a model for promoting healthcare awareness in comparison to other groups.

Health Care Providers must also work on the services and medical packages that will be supplied to people in the age bracket of 26 to 45 years old, with the primary focus being on the prevention or early diagnosis of chronic diseases such as hypertension, diabetes mellitus, kidney diseases and cancer to mention a few.

Public and Private Health Care Sector Partnership; On a larger scale, both the public and private healthcare sectors of the economy should acknowledge that the age range specified in the previous number constitutes the proportion of the nation's workforce that is both relevant and effective. As a result, it is essential that encouraging behavior that is beneficial to one's health be a top focus.

For future researchers, future in-depth studies on diseases and their occurrence per significant demographics--female, ages 26-45, and single--should be examined and associated. Similarly, future research may look into other market segments such as walk-in or cash-paying patients, patients whose health care benefits are subsidized directly by their workplace (rather than through an HMO), and other insurance carriers other than an HMO.

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