

# Relationship between demographics and patient infographics of company guarantees on utilization of inpatient services



Budhi Setianto<sup>1\*</sup>, Akas Yekti Pulih Asih<sup>1</sup>, Agus Aan Adriansyah<sup>1</sup>,  
Difran Nobel Bistara<sup>2</sup>, Eppy Setiyowati<sup>2</sup>, Nikmatus Sa'adah<sup>3</sup>

<sup>1</sup>Department of Public Health, Faculty of Health, Universitas Nahdlatul Ulama Surabaya, 60237 Surabaya, East Java, Indonesia;

<sup>2</sup>Department of Nursing, Faculty of Nursing and Midwifery, Universitas Nahdlatul Ulama Surabaya, 60237 Surabaya, East Java, Indonesia;

<sup>3</sup>Department of Dentistry, Faculty of Dentistry, Institut Ilmu Kesehatan Bhakti Wiyata Kediri, 64114 Kediri, East Java, Indonesia;

\*Corresponding author:

Budhi Setianto;  
Department of Public Health, Faculty of Health, Universitas Nahdlatul Ulama Surabaya, 60237 Surabaya, East Java, Indonesia;

[budhisetianto@unusa.ac.id](mailto:budhisetianto@unusa.ac.id)

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## ABSTRACT

**Introduction:** Based on the low interest in inpatient visits by company insurance, only 11.4% of employees utilize inpatient facilities at CMH. This study aimed to find the relationship between demographics and infographics of company insurance patients on the use of inpatient services.

**Methods:** This study was conducted on 95 respondents from a customer's company. Ninety-five customers are divided into actual customers who have used inpatient services (58 people) and potential customers who have not utilized (37 people). The data is processed by grouping some between actual and potential customers and processed descriptively using a chi-square of several variables, including demographics and infographics.

**Results:** This study informs that the distance from home and the length of time known to the hospital did not affect inpatient care. At the same time, knowledge of cooperation and socialization of HRD influences the utilization of inpatient services. Repeated socialization and the hospital's proximity to HRD can cause more patients to visit and take advantage of inpatient services.

**Conclusion:** In carrying out inpatient services, the company's role as a guarantor is very decisive in directing customers to CMH. Utilization of inpatient services is not influenced by distance from home and length of time with CMH but by customer knowledge regarding collaboration with CMH and socialization by HRD.

**Keywords:** Demographics, Infographics, Customer Loyalty, Hospitalization.

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## INTRODUCTION

Psychographics is a qualitative way that focuses more on studying customer attitudes.<sup>1</sup> This method utilizes human psychological characteristics, such as desires, values, interests, goals, and lifestyle choices, to be used as segmentation parameters.<sup>2</sup> The main purpose of psychographics is to understand consumers' feelings better so that marketing can be done more precisely. Generally, psychographics is often considered like demographics. In an analogy, demographics can explain who the potential consumers of the product are, while psychographics is more likely to explain why they want to make a purchase.<sup>3</sup>

In marketing and sales, demographics and psychographics will complement and need each other.<sup>1</sup> In a business, the

marketing field is the spearhead of the success of a previously designed business strategy.<sup>4</sup> Various marketing strategies themselves are strongly influenced by the products to be marketed and market trends that are developing. Like the strategy for creating infographic content marketing.<sup>5</sup> Infographics have now grown rapidly in the mass media. Especially when the designers succeeded in combining information from the realm of news into visual forms that were printed or published via the internet.<sup>6</sup> With this progress, the trend of infographics has become very important and is always used by business people to change marketing strategies that tend to be monotonous and sound boring to be more interesting and educative.<sup>7</sup> The reasons for the importance of infographics for today's marketing strategies are (1) Easy to understand, (2) Improves marketing, (3) Displays the

impression of service professionalism, and (4) As a hospital promo.<sup>8</sup>

Customer Relationship Management is mostly used to find out as much as possible about customer needs and behavior, to provide optimal service further, and to maintain existing relationships. Business success depends on how much we know about customers and meet their needs.<sup>9</sup> It is difficult for a company to achieve and maintain leadership and profitability without the ongoing focus that can be placed on CRM.<sup>8</sup> CRM spans many areas within an organization, including (1) Sales, (2) Customer Service, and (3) Marketing.

Hospitals are required to be able to provide services that satisfy customers. One of the most interesting aspects of hospital health care is how to manage the relationship between health care providers and patients. Ciputra Mitra Hospital, referred to as CMH, is a type C private

hospital located in Banjar Regency, South Kalimantan. Consumers of this hospital are non-insured general public, private insurance policyholders, and corporate guarantees. The problem encountered at CMH Hospital is the low interest in inpatient visits by the company guarantee, which is only 11.4% of employees who use inpatient facilities at CMH or an average of only 65 people per month. Companies that cooperate with CMH are differentiated by the CMH marketing team into rings I, II, and III based on distance. This research was conducted on companies that are in the ring I. From this data, further searches were carried out on customers who had used inpatient facilities at CMH in 2019 and had never used inpatient facilities at other hospitals in 2019 and were associated with policies owned by the company.

Then identify actual and potential customers based on demographics, infographics, psychographics, satisfaction, experience, and needs for the hospital.<sup>10</sup> Next, differentiate customers based on needs in the scope of inpatient care to find out actual, and potential customer needs for all facilities and services within the scope of CMH inpatient care, which will then obtain strategic issues.<sup>11</sup>

The next stage is to analyze the

interaction of inpatient hospital staff with customers to improve and study customer needs and build strong relationships in the form of communication and programs or activities that become the needs of customers and partner companies at CMH Banjarmasin.<sup>12</sup> Next, analyze the strategy recommendations and CMH service products according to the needs of each customer and partner company at CMH Banjarmasin. The objectives of this study are (1) to analyze demographics and infographics related to perceptions, knowledge, and experiences, sources of actual and potential customer information about CMH, and (2) to analyze the influence of demographics and infographics on the utilization of inpatients at CMH Hospital.

## METHODS

### Study Design

This type of research is an observational study because the researcher only observes and collects data without treatment or intervention. This study was conducted to develop recommendations for customer relationship management to increase inpatient visits with company guarantees at CMH Banjarmasin. This research was conducted in a partner company on

the research subjects of customers and company employees who have collaborated with CMH in inpatient health facilities.

### Data Collection

Sources of information are: (1) Company customers who use inpatient health services at CMH (called actual customers) as many as 58 people, and (2) Company employees who have never used inpatient health services at CMH, but utilize inpatient health facilities at home other illnesses in 2019 (referred to as potential customers) were 37 people.

### Data Analysis

The data were analyzed by using SPSS version 26.0. A p-value of <0.05 was considered significant.

## RESULTS

The demographic data measured is the distance of the residence. Residential distance is a unit measured in kilometers to measure the distance from the customer's residence to CMH. The distribution of the distance from residence to CMH can be seen in [Table 1](#).

[Table 1](#) provides information that some of the actual customers have a relatively close residence distance of < 10 km with

**Table 1. Distribution of Actual Customer Residence Distance at CMH Hospital Banjarmasin in 2019.**

Company	Distance (km)							
	< 3		3- 7		7 - 10		> 10	
	n	%	n	%	n	%	n	%
Indonesia Central Bank	1	7.7	2	23.1	3	23.1	6	46.2
AirNav Indonesia	4	14.3	7	25.0	7	25.0	11	39.3
South Kalimantan Bank	0	0.0	0	0.0	1	0.0	1	50.0
BRI	2	15.4	2	23.1	3	23.1	5	38.5
BNI Kanwil	0	0.0	1	33.3	1	33.3	1	33.3
Total	7	12.1	12	24.1	15	24.1	24	41.4

Note: BRI: Bank Rakyat Indonesia; BNI Kanwil: Bank Negara Indonesia Kantor Wilayah

**Table 2. Distribution of Residential Distance of Potential CMH Customers in 2019.**

Company	Distance (km)							
	< 3		3- 7		7 - 9		> 10	
	n	%	n	%	n	%	n	%
Indonesia Central Bank	1	16.7	1	16.7	2	33.3	2	33.3
AirNav Indonesia	1	9.1	3	27.3	3	27.3	4	36.4
South Kalimantan Bank	1	20.0	1	20.0	1	20.0	2	40.0
BRI	1	9.1	3	27.3	3	27.3	4	36.4
BNI Kanwil	1	25.0	0	0.0	1	25.0	2	50.0
Total	5	13.5	8	21.6	9	24.3	15	40.5

Note: BRI: Bank Rakyat Indonesia; BNI Kanwil: Bank Negara Indonesia Kantor Wilayah

a CMH of 49.6% and the remaining 41.4% are > 10 km.

Table 2 provides information that most potential customers mostly have a close distance of residence, namely < 10 km to Ciputra Mitra Hospital Banjarmasin by 55.5%.

Table 3 provides information on all actual and potential customers knowing the existence of CMH as one of the hospitals in Banjarmasin. Most of the actual and potential customers know information about the existence of CMH from the company, which is 50 people (52.63%).

Table 4 provides information that most of the actual customers know that CMH Banjarmasin cooperates with companies related to health services, which is 100%.

Table 5 provides information that most potential customers do not know that CMH Banjarmasin cooperates with companies related to health services, which is 48.6%. This knowledge relates to the socialization carried out by the company's HRD, whether it is carried out as a whole or only conveyed to some employees. This can be seen in Table 6 and Table 7.

Table 6 provides information that most of the actual customers have experienced direct socialization by the HRD of each workplace, which is 75.9%.

Table 7 provides information that most potential customers have never received socialization related to health services by the HRD of each workplace, which is 75.7%.

Table 8 provides information that most of the actual customers stated that the companies they work with in relation to health services only amounted to 6 hospitals by 55.2%.

Table 9 provides information that most of the potential customers stated that the companies they work with in relation to health services amounted to 6 hospitals amounting to 59.5%.

Table 10 provides information that most customers understand about service procedures at CMH, which is 89.7%. Customers who understand the service procedures will generally return to use the service later. The frequency of utilization of inpatient services by actual customers can be seen in the following table.

**Table 3. Perceptions of Actual and Potential Customer Information Sources about CMH.**

Sources of Information About CMH	n	%
Internet	14	14.74
Company	50	52.63
Website	16	16.84
Friends	15	15.79
Total	95	100.0

**Table 4. Actual Customer Knowledge About CMH as a Provider of Health Cooperation with Companies.**

Company	Knowledge related to health cooperation			
	Know		Don't know	
	n	%	n	%
Indonesia Central Bank	12	100.0	-	-
AirNav Indonesia	28	100.0	-	-
South Kalimantan Bank	2	100.0	-	-
BRI	13	100.0	-	-
BNI Kanwil	3	100.0	-	-
Total	58	100.0	-	-

Note: BRI: Bank Rakyat Indonesia; BNI Kanwil: Bank Negara Indonesia Kantor Wilayah

**Table 5. Knowledge of Potential Customers About CMH as a Provider of Health Cooperation with Companies.**

Company	Knowledge company related to health cooperation			
	Know		Don't know	
	n	%	n	%
Indonesia Central Bank	4	66.7	2	33.3
AirNav Indonesia	3	27.3	8	72.7
South Kalimantan Bank	3	60.0	2	40.0
BRI	4	36.3	7	63.6
BNI Kanwil	1	25.0	3	75.0
Total	15	24.3	22	48.6

Note: BRI: Bank Rakyat Indonesia; BNI Kanwil: Bank Negara Indonesia Kantor Wilayah

**Table 6. Distribution of Actual Customer Experiences Receiving Socialization Related to Health Cooperation with CMH by Company HRD.**

Company	Socialization of Health Cooperation with CMH by Company HRD			
	Ever		Never	
	n	%	n	%
Indonesia Central Bank	9	75.0	3	25.0
AirNav Indonesia	21	75.0	7	25.0
South Kalimantan Bank	2	100.0	0	0.0
BRI	10	76.9	3	23.1
BNI Kanwil	2	66.7	1	33.3
Total	44	75.9	14	24.1

Note: BRI: Bank Rakyat Indonesia; BNI Kanwil: Bank Negara Indonesia Kantor Wilayah

Table 11 provides information that the utilization of inpatient services shows the frequency of patients being treated during 2019 at CMH. The results showed that most of the actual customers were treated between 1 and 2 times at CMH in 2019, which was 67.0%.

Table 12 provides information in terms of utilizing inpatient services, and most of them are justified because the company cooperates with CMH, which is 27.3%.

Table 13 provides information that potential customers do not take advantage of inpatient services at CMH because the hospital does not cooperate with BPJS.

Table 14 provides information that the distance from home and the length of time known to the hospital did not affect hospitalization utilization. This result is following Table 13, which shows that most potential customers have a house that is quite close to CMH. Meanwhile, knowledge of cooperation and socialization of HRD affects the utilization of inpatient services. These results are following Tables 4 and 6, namely, most potential customers did not know about CMH as a provider of health cooperation with companies, and most potential customers also never receive socialization related to cooperation.

## DISCUSSION

Infographics are information about the extent to which customers know about CMH and CMH as hospitals that work together in terms of inpatient health facilities with the company.<sup>11</sup> Knowledge of cooperation with companies related to health services is the level of knowledge of actual and potential customers that the company is working with CMH. Most potential customers do not know that CMH Banjarmasin cooperates with companies related to health services, which is 48.6%. This knowledge relates to the socialization carried out by the company's HRD, whether it is carried out as a whole or only conveyed to some employees.

Most potential customers have never received socialization related to health services by the HRD of each workplace. This follows the number of potential customers who do not know about the company's cooperation with CMH. The number of hospitals that are the customer's

**Table 7. Distribution of Experiences of Potential Customers Receiving Socialization Related to Health Cooperation with CMH by Company HRD.**

Company	Company Socialization of Health Cooperation with CMH by Company HRD			
	Ever		Never	
	n	%	n	%
Indonesia Central Bank	1	16.7	5	83.3
AirNav Indonesia	3	27.3	8	72.7
South Kalimantan Bank	1	20.0	4	80.0
BRI	3	27.3	8	72.7
BNI Kanwil	1	25.0	3	75.0
Total	9	24.3	28	75.7

Note: BRI: Bank Rakyat Indonesia; BNI Kanwil: Bank Negara Indonesia Kantor Wilayah

**Table 8. Distribution of Number of Hospitals Collaborating with Companies Known by Actual Customers.**

Company	Company Number of Hospitals Cooperating with Company					
	< 2		3-6		≥ 7	
	n	%	n	%	n	%
Indonesia Central Bank	2	16.7	2	16.7	8	66.7
AirNav Indonesia	8	28.6	10	35.7	10	35.7
South Kalimantan Bank	1	50.0	1	50.0	-	-
BRI	2	15.4	4	30.8	7	53.8
BNI Kanwil	1	33.3	2	66.7	-	-
Total	13	22.4	19	32.8	25	43.1

Note: BRI: Bank Rakyat Indonesia; BNI Kanwil: Bank Negara Indonesia Kantor Wilayah

**Table 9. Distribution of Number of Hospitals Collaborating with Companies Known by Potential Customers.**

Company	Company Number of Hospitals Cooperating with Company					
	< 2		3-6		≥ 7	
	n	%	n	%	n	%
Indonesia Central Bank	2	33.3	2	33.3	2	33.3
AirNav Indonesia	2	18.2	7	63.6	2	18.2
South Kalimantan Bank	3	60.0	-	-	2	40.0
BRI	2	18.2	2	18.2	7	63.6
BNI Kanwil	1	25.0	1	25.0	2	50.0
Total	10	27.0	12	32.4	15	40.5

Note: BRI: Bank Rakyat Indonesia; BNI Kanwil: Bank Negara Indonesia Kantor Wilayah

**Table 10. Distribution of Actual Customer Knowledge Levels About Inpatient Service Procedures at CMH.**

Company	Company Knowledge Level of Inpatient Service Procedures at CMH			
	Understand		Don't Understand	
	n	%	n	%
Indonesia Central Bank	11	91.7	1	9.3
AirNav Indonesia	26	92.9	2	7.1
South Kalimantan Bank	2	100.0	0	0.0
BRI	11	84.6	2	15.4
BNI Kanwil	2	66.7	1	33.3
Total	52	89.7	6	10.3

Note: BRI: Bank Rakyat Indonesia; BNI Kanwil: Bank Negara Indonesia Kantor Wilayah

choice in utilizing health facilities is a challenge for hospitals in attracting customer interest. For this reason, it is necessary to know how many and which hospitals are the customer's choice in utilizing health facilities when sick or can be visited as hospitals that serve inpatient care with company guarantees.<sup>10</sup>

Most of the potential customers mentioned that the companies they work with in terms of health services are six hospitals. The data shows that both actual and potential customers do not know the number of hospitals that work with the company because the distribution of answers is significantly different. However, it can be concluded that there are other

hospital options for customers who will take advantage of inpatient services. In terms of using inpatient services, the customer must know all the procedures in the hospital. In terms of knowledge about procedures at CMH, actual customers as customers who use inpatient services at CMH were asked about the process of inpatient services that they know about.

Psychographics describes the customer's self-including motivation, trust, loyalty, and experience in using inpatient services.<sup>11</sup> Trust is the actual customer's belief in choosing CMH to get inpatient health services and why potential customers do not take advantage of inpatient services at CMH. Actual

customers were asked six reasons why they chose inpatient services at CMH and were allowed to fill in more than one reason.

The study results provide information that the distance from home and the length of time known to the hospital do not affect inpatient care utilization. This result follows previous information that most potential customers have a house that is quite close to CMH.<sup>9,11</sup> Meanwhile, knowledge of cooperation and socialization of HRD affects the utilization of inpatient services. The results of this study are supported by information that most potential customers do not know about CMH as a provider of health cooperation with companies. Most potential customers have never received socialization related to cooperation.<sup>9,11</sup>

**Table 11. Utilization of Inpatient Services at CMH in 2019.**

Frequency of Treatment During 2019	Total	Percentage (%)
1 Times	19	33.0
2 Times	20	34.0
3 Times	11	19.0
More Than 4 Times	8	14.0
Total	58	100.0

**Table 12. Reasons for Actual Customers to Choose CMH for Inpatient Services.**

Reason for Choosing CMH	Total	Percentage (%)
Cooperate with my company	16	27.6
The Hospital Building is Attractive, Friendly Service, Availability of the desired Doctor	10	17.8
Complete Facilities	7	12.6
Availability of the desired Doctor	8	13.6
The service is good	7	11.5
Friendly service	10	17.8
Total	58	100.0

**Table 13. Reasons for Potential Customers Not to Use Inpatient Services at CMH.**

Reasons for Potential Customers Not Using Inpatient Services at CMH	Total	Percentage (%)
Not Collaborating with BPJS	16	43.2
Home Distance	12	32.4
Accustomed to Hospitalization in Other Hospitals	9	24.3
Total	37	100.0

**Table 14. The Effect of Demographics and Infographics on the Utilization of Inpatients at CMH Hospital Banjarmasin Corporate Guarantees at CMH.**

Dependent Variable	Independent Variable	Category	Sig.	Interpretation
Utilization of Inpatient Services	House Distance	Demographic	0.520	No Effect
Utilization of Inpatient Services	Knowing	Infographics	0.209	No Effect
Utilization of Inpatient Services	Knowledge Collaboration	Infographics	0.022	Influential
Utilization of Inpatient Services	HRD Socialization	Infographics	0.000	Influential

## CONCLUSION

In carrying out inpatient services, the company's role as a guarantor is very decisive in directing customers to CMH. One form that HRD does is to socialize with customers. Meanwhile, information related to services that customers can access is important in making customers interested in getting services at CMH. Utilization of inpatient services is not influenced by distance from home and length of time with CMH but by customer knowledge regarding collaboration with CMH and socialization by HRD. Also, further research with different study designs needs to be done to identify the factors that influence the relationship between demographics and infographics of company insurance patients on the use of inpatient services.

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## AUTHOR CONTRIBUTION

All authors contributed to this study's conception and design, data analysis and interpretation, article drafting, critical revision, final approval of the article, and publication.

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## CONFLICT OF INTEREST

There is no conflict of interest in this manuscript.

## ETHICAL CONSIDERATION

This research was approved by the Health Research Ethics Committee of the Faculty of Health, Universitas Nahdlatul Ulama Surabaya.

## REFERENCES

1. Arigia MB. Infografis Sebagai Media Dalam Meningkatkan Pemahaman Dan Keterlibatan Publik Bank Indonesia. *J Komun.* 2016;8(2):120–33.
2. Wibawa M. Penciptaan Infografis Transformasi Visual Garuda Di Media. 2020;5(2):60–6.
3. Kurniawan MS, Setyosari P, Ulfa S. Animasi Infografis Bahaya Merokok Mata Pelajaran Penjasorkes. *JKTP J Kaji Teknol Pendidik.* 2021;4(2):138–47.
4. Gebauer H, Gustafsson A, Witell L. Competitive advantage through service differentiation by manufacturing companies. *J Bus Res.* 2011;64(12):1270–80. Available from: <http://dx.doi.org/10.1016/j.jbusres.2011.01.015>
5. Sulistiyo Soegoto D. Analysis of Product Differentiation Strategy and its Implications toward Position Advantage on Customer Retailer's Purchase Decision. 2018;
6. Emaluta FHK, Isnalita I, Soewarno N. The Effect of Customer Relationship Management (CRM) To Customers' Loyalty and Customers' Satisfaction as Mediator Variables. *J AKSI (Akuntansi dan Sist Informasi).* 2019;4(2):59–63.
7. Suhartono J, Cahyadi AV, Yunus D. Perancangan Aplikasi Customer Relationship Management untuk Meningkatkan Pelayanan pada Rumah Sakit St. Carolus. *ComTech Comput Math Eng Appl.* 2015;6(2):161.
8. Sha TL, Nawawi MTNT, Rasyid RRR. Membangun Customer Relationship Management (Crm) Pada Usaha Ritel Pasar Tradisional Di Kota Tangerang Selatan. *J Bakti Masy Indones.* 2021;3(2):536–43.
9. Hardjono B, San LP. Customer Relationship Management Implementation and its Implication to Customer Loyalty in Hospitality Industry. *J Din Manaj.* 2017;8(1):92–107.
10. Sayed Soliman H. Customer Relationship Management and Its Relationship to the Marketing. *Int J Bus Soc Sci.* 2011;2(10):166–82.
11. Guntari C. Penerapan Strategi Crm (Customer Relationship Management) Berbasis Website Pada Rumah Sakit Umum Daerah Bayung Lencir. Universitas Brawijaya; 2020.
12. Sutrisno. Pengaruh Kualitas Layanan dan Costumer Relationship Management terhadap Kepuasan dan Loyalitas Pasien di RS Tingkat Dua TNI. *JMM17 J Ilmu Ekon Manaj.* 2015;2(2):27–41.



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