



A Study on Strategizing and Implementing Outpatient Department Services in a Newly Established Healthcare Facility

Submitted by : Dr. Nitika Yadav
Roll No. – 1558
MBA HOM-27



INTRODUCTION

➤ **Healthcare Evolution:**

- Driven by technology, patient expectations, and new policies.
- Essential for new healthcare facilities to establish a robust operational base.

➤ **Outpatient Department (OPD) Services:**

- Provide non-admission medical care including advice, diagnosis, treatment, and follow-up.
- Critical components: general & specialty consultations, diagnostics, day care procedures, preventive health services.

➤ **Strategic Planning for OPD:**

- Aligns services with community needs and hospital goals.
- Enhances operational efficiency and patient flow management.

➤ **Impact of Effective OPD Services:**

- Improves patient satisfaction.
- Facilitates efficient handling of larger patient volumes.
- Optimizes resource use leading to better financial performance.



Aims & Objective

Investigating critical elements essential for strategically planning and implementing outpatient department (OPD) services within a newly established tertiary care hospital.

TO ANALYZE THE DEMOGRAPHICS OF THE AREA WHERE THE HOSPITAL IS ESTABLISHED.

TO IDENTIFY FACTORS INFLUENCING PATIENT PREFERENCES IN SELECTING A HOSPITAL.

TO UNDERSTAND THE REQUIREMENTS OF THE TARGET AUDIENCE.

TO INCORPORATE THE OUTCOMES OF MARKET, NEED ANALYSIS INTO PLANNING AND STRATEGIZING OPD SERVICES AT FORTIS HOSPITAL MANESAR.

LITERATURE REVIEW



S.no.	Author (date)	Study Location	Sample Size	Sampling Technique	Silent Features
1	Chawis Boonmee, Chompoonoot Kasemset, and T. Phongthiya. 2022.	The study was conducted in a hospital setting in Thailand.	The study does not refer to a traditional sample size as it is a simulation study. Instead, it evaluates different layout scenarios within the outpatient department	Since this is a simulation study, traditional sampling techniques were not used. The research involved creating different scenarios based on data from existing hospital operations to analyze the efficiency of various outpatient department layouts.	The study utilized Activity Relationship Analysis (ARA) and simulation to evaluate multiple layout designs (A, B, C, D, E, F) for the outpatient department. - The efficiency of each layout was measured by the average total service time per patient. - Layouts A, D, E, and F showed lower average service times compared to B and C, with Scenario A being selected as the most efficient after careful consideration by hospital specialists.
2	D. Herrera-Granda, María del Mar Eva Alemany, Diego Hernán Peluffo-Ordóñez. 2022.	The study has been conducted by authors affiliated with academic or research institutions.	As a literature review, this study does not have a traditional sample size. Instead, it reviews and analyses many articles and research papers related to facility layout planning in the field of Operations Management (OM). Typically, such reviews cover dozens to hundreds of sources to ensure a comprehensive analysis.	The review uses a systematic review approach, which involves systematically identifying, evaluating, and synthesizing research studies on facility layout planning from various academic databases. Inclusion criteria likely include relevance to the topic, the methodological quality of the studies, and publication in reputable journals.	- The study provides a comprehensive analysis of existing literature reviews on facility layout planning from an operations Management perspective. - It identifies key themes and trends within the literature, such as the evolution of layout planning methodologies, the application of various optimization techniques, and the practical implications of layout design in different industries. - The review highlights the most influential theories, models, and practices in facility layout planning and assesses their effectiveness and impact on operational efficiency. - The conclusions rest on recognising the significance of facility layout planning in relation to its organisational objectives and adopted work patterns in order to raise organisational effectiveness.

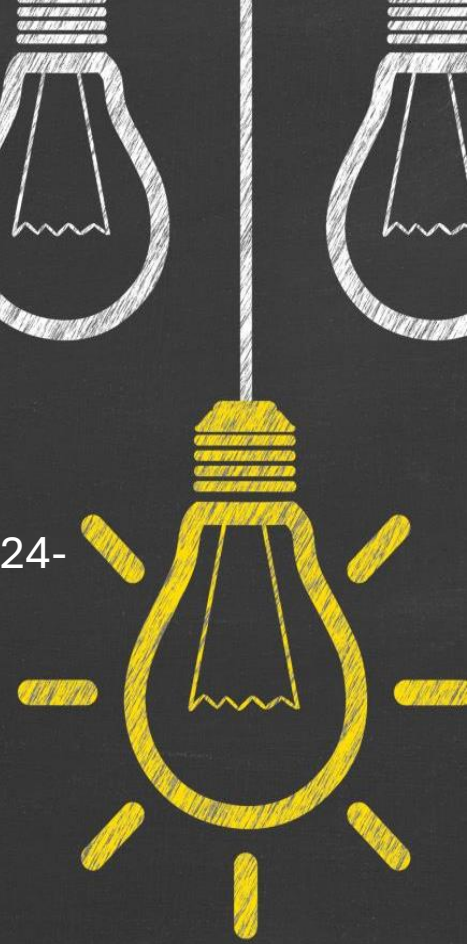
S.no.	Author (date)	Study Location	Sample Size	Sampling Technique	Silent Features
3	Rajagopal. 2016.	Rajagopal is typically associated with research institutions or universities.	Since this is likely a chapter from a book on market research and organizational design, there is no conventional sample size as the work is theoretical and conceptual in nature rather than empirical research involving direct sample data collection	The content is derived from literature review and conceptual analysis rather than empirical sampling techniques. The approach involves synthesizing existing knowledge and theories from various sources to present a comprehensive view of market research and organizational design	Market research is a symphony in the chapter; it is defined as the coordination between business information gathering and organizational design. - It talks about different strategies on how to carry out market analysis and how these findings are useful in decision making regarding the organization's structure, people, and work procedures. - Citing concepts from both the market and organizational perspectives, the author gives examples of ways through which companies can synchronize the structures within their organizations with the market environment in order to operate proficiently and in a more flexible manner. - This is done with the aim of illustrating specific instances where market research information was used in defining organisational structures and business strategies of the firm. - Developing the role of technology and the function of data analysis in making market research more precise and efficient are discussed in the context of possible further evolution of organizational structures and strategies.

S.no.	Author (date)	Study Location	Sample Size	Sampling Technique	Silent Features
4	William A. Flexner, Eric N. Berkowitz. 1979	The study was conducted in Public Health Reports, U.S.	As the study revolves around the presentation of a model for marketing research in the implementation of health services, the study does not include a precise notion of sample size in the empirical research tradition. The model used in the study is conceptual based on the fact that it is theoretical in nature.	The study primarily uses a conceptual framework approach to develop a model for applying marketing research to health services planning. It integrates existing marketing and healthcare planning theories rather than utilizing direct sampling or empirical data collection.	The paper proposes a model for integrating marketing research into health services planning, emphasizing its importance for understanding and meeting community health needs. - It outlines how health service planners can use marketing research techniques to gather data on population health trends, patient preferences, and service utilization. - The model includes steps such as defining target markets, assessing needs and demands, designing health services to meet those needs, and evaluating service effectiveness. - Flexner and Berkowitz argue that adopting marketing principles in health planning can improve the alignment of services with patient expectations and enhance the overall efficiency and effectiveness of health services. - The study highlights several case studies and practical applications of the model, demonstrating how marketing research has been successfully used in different healthcare settings to guide service development and planning.



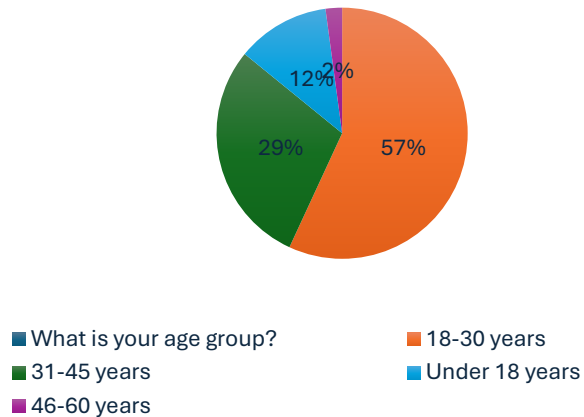
METHODOLOGY

- **Study Design:** Cross-sectional study in form of survey conducted over three months (1 April 2024-30 June 2024).
- **Study Setting:** Fortis Hospital Manesar.
- **Data Collection:** Data was collected using Google Forms from residents of Manesar.
- **Sample Size:** Responses from 283 participants was taken as sample size.
- **Sampling Technique:** Convenient Sampling
- **Data Collection Tools:** Questionnaire covering demographic details, healthcare preferences, and expectations from a new healthcare facility.
- **Ethical Considerations:** Ensuring confidentiality and informed consent from participants.



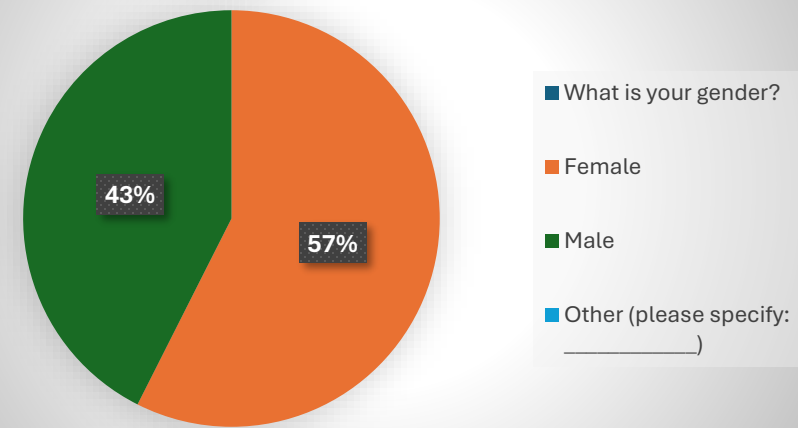
DATA ANALYSIS

Age Distribution of Population



This pie chart depicts the age distribution of 283 respondents. The majority (58.9%) are in the 18-30 years age group, represented by the large orange segment. The 31-45 years age group accounts for 29% (yellow), while those under 18 years make up 12% (blue). A small green segment shows that 46-60 years old participants are the least represented.

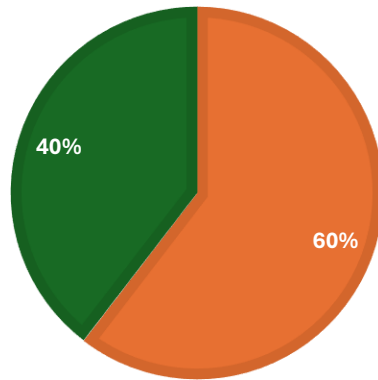
GENDER DISTRIBUTION



The pie chart illustrates the gender distribution of 283 respondents. A majority, 57.6%, identify as female (represented by the red segment), highlighting a higher participation rate from women. Males, shown in blue, account for 42.4% of the respondents, making them the second-largest group. There is no visible segment for individuals identifying as "Other," indicating no or negligible representation in this category.

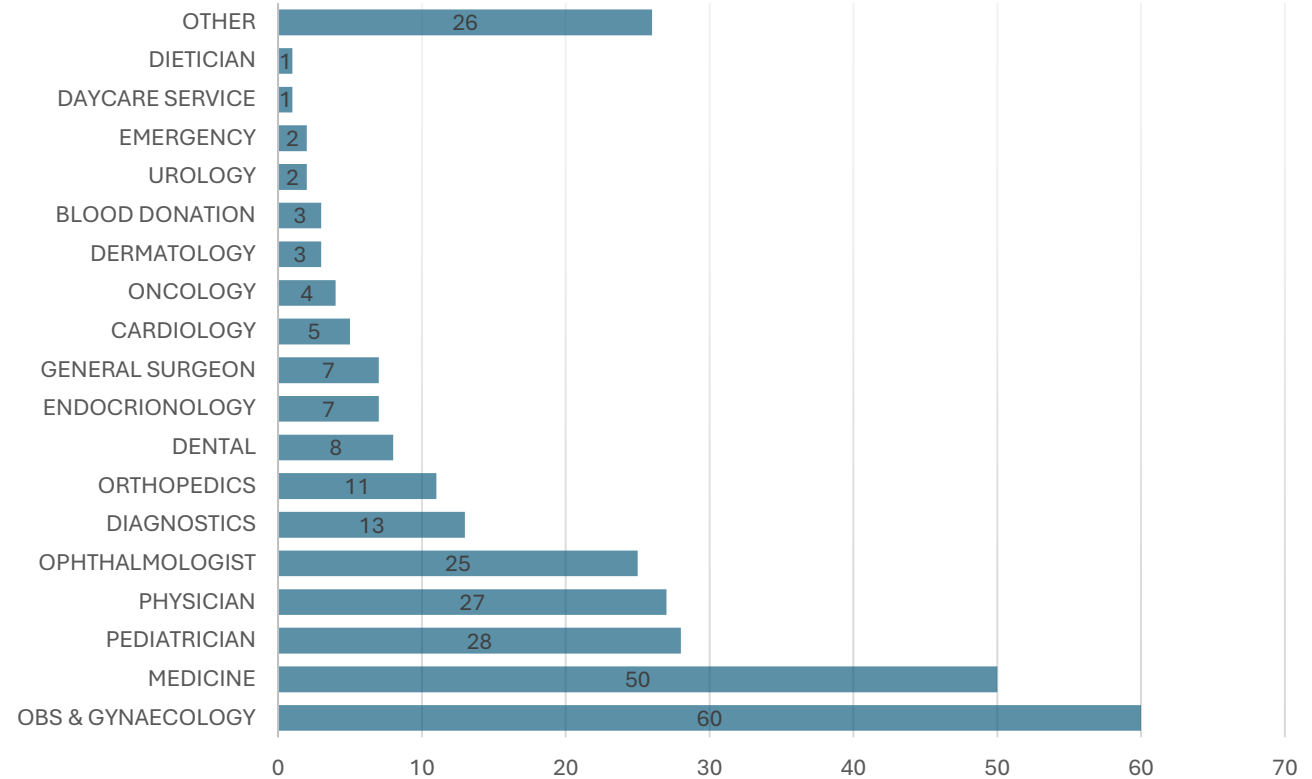
ACCESSIBILITY TO HEALTHCARE SERVICES

■ Do you currently have access to healthcare services nearby?
■ Yes
■ No



The pie chart reveals that 60.4% of the 283 participants have access to nearby healthcare services, while 39.6% do not. This highlights a significant gap in local healthcare availability for a notable portion of the population.

MOST FREQUENTLY AVAILED MEDICAL SERVICES



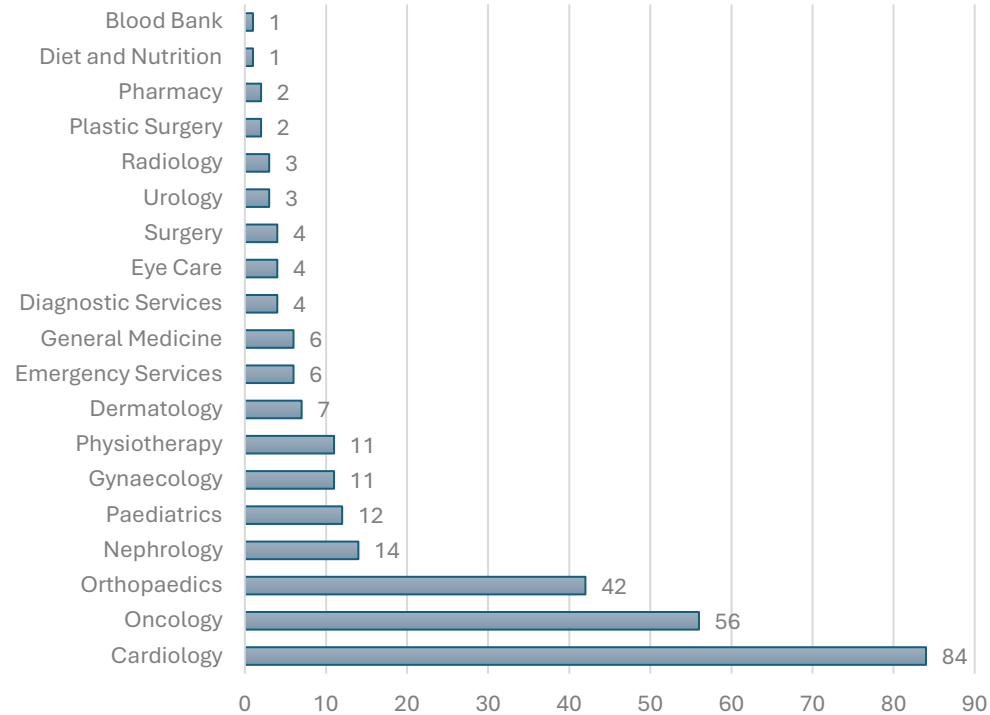
Gynaecology and Obstetrics: 21.2%, General Medicine:17.7%

Paediatrics:9.9%, Diagnostics:8.8%, Orthopaedics:3.9%

Dermatology:2.8%, ENT (Ear, Nose, and Throat): 2.5%

Neurology:1.8%, Psychiatry:1.4%

REQUIRED MEDICAL SPECIALITIES



Here are the percentages for the required medical specialties based on 283 respondents:

Cardiology:29.7%

Oncology:19.8%

Orthopaedics:14.8%

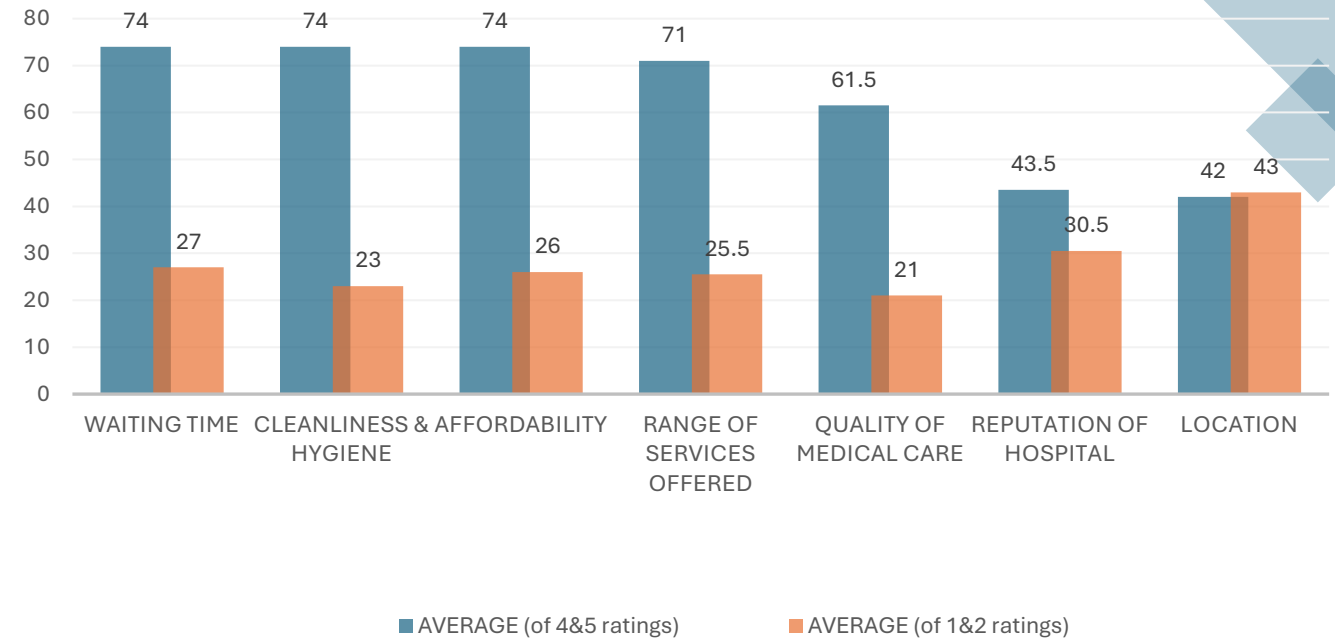
Nephrology:4.9%

Paediatrics:4.2%

Gynaecology:3.9%

Physiotherapy:3.9%

Patient Priorities in Hospital Selection: High vs. Low Importance



The average ratings for factors affecting patient preferences are summarized as follows:

Waiting Time: High importance (74), Low importance (27)

Cleanliness and Hygiene: High importance (74), Low importance (23)

Affordability: High importance (74), Low importance (26)

Range of Services Offered: High importance (71), Low importance (25.5)

Quality of Medical Care: High importance (61.5), Low importance (21)

Reputation of the Hospital: High importance (43.5), Low importance (30.5)

Location: High importance (42), Low importance (43)

A close-up photograph of a wooden pencil with a sharpened lead tip, resting diagonally across a document. The document features a line graph with a grid. The y-axis has labels for 50 and 100. A line is plotted on the graph, showing an upward trend. The background is slightly blurred, focusing attention on the pencil and the graph.

RESULT

➤ **Demographic Analysis:**

- Age and gender distribution of the population.
- Accessibility to healthcare services.

➤ **Healthcare Preferences:**

- Most frequently availed medical specialties.
- Factors influencing hospital selection (cleanliness, treatment quality, cost, etc.).

➤ **Key Insights:**

- High demand for Gynecology, Pediatrics, General Medicine, Diagnostics, and Orthopedics.
- Significant interest in Cardiology, Oncology, and Nephrology, which are currently lacking in the region.

DISCUSSION

Demographics and Healthcare Needs: Manesar has a diverse population with high demand for cardiology, orthopedics, and general medicine among working-age individuals. Services need to be accessible and flexible.

Factors Influencing Patient Choice: Proximity to healthcare facilities, service quality, and availability of modern medical facilities are key factors.

Expectations from New Healthcare Facilities: Patients expect reduced waiting times, comprehensive specialized services, and digital solutions like online appointments and telemedicine.

Strategic Planning and Implementation: Focus on accessible locations, centralized services, adoption of digital technologies, and a patient-centric approach to minimize wait times and improve follow-up care.

Business Strategy: Prioritize customer satisfaction and operational efficiency, optimize staffing, digitalize registration processes, implement efficient triage systems, improve signage and communication, and use telemedicine for minor cases.

RECOMMENDATION



CONCLUSION



- The research identifies significant demand for specialized medical services such as Gynaecology and Obstetrics, General Medicine, Pediatrics, Diagnostics, Orthopaedics, Cardiology, Oncology, and Nephrology at Fortis Hospital Manesar. Key factors influencing patient choices include hospital cleanliness, quality of medical treatments, affordability, waiting times, hospital reputation, and location.

Reference:

- Boonmee C, Kasemset C, Phongthiya T. Layout Design of Outpatient Department: Simulation Study and Implementation. LogForum. 2022;18(1):87-97. doi: 10.17270/J.LOG.2022.639.
- Herrera-Granda D, Alemany E, Peluffo-Ordóñez DH. Analysis of OM-Based Literature Reviews on Facility Layout Planning. J Sci Ind Res. 2022;81(10):995-1004. Available from: <https://doi.org/10.56042/jsir.v81i10.61161>.
- Pérez-Gosende P, Mula J, Díaz-Madroñero M. Facility Layout Planning: An Extended Literature Review. Int J Prod Res. 2021;59(20):6249-71. doi:10.1080/00207543.2021.1931336.
- Rajagopal. Market Research and Organizational Design. J Market Res Dev. 2016;25(3):189-200. Available from: <https://doi.org/10.2139/ssrn.3143123>.
- Flexner WA, Berkowitz EN. Marketing Research in Health Services Planning: A Model. Public Health Rep. 1979;94(1):29-35. doi:10.2307/4595563.
- May DE. How to Conduct a Needs Assessment. J Strateg Manag. 2020;12(2):155-67. Available from: <https://doi.org/10.1080/09585192.2019.1656811>.
- Halawa F, Madathil SC, Gittler A, Khasawneh MT. Advancing Evidence-Based Healthcare Facility Design: A Systematic Literature Review. Health Care Manag Sci. 2020;23(4):539-57. doi:10.1007/s10729-020-09515-y.
- Holschneider CH, Mulholland MW, Oldham KT, Lillemoe KD, Jones RS. General and Specialty Consultations. In: Holschneider CH, editor. Surgical Principles. 2nd ed. Springer; 2012. p. 15-29.
- Singh A, Jha R. Imaging and Diagnostic Services in OPD. J Clin Diagn Res. 2013;7(8):1797-1799. doi: 10.7860/JCDR/2013/6275.3247.
- Fleisher LA, Roizen MF, Linde-Zwirble WT, et al. Outpatient Procedures and Day Care in Ambulatory Surgery. N Engl J Med. 2004; 351:1581-1589.
- Porter ME, Teisberg EO. Strategic Planning and Competitive Advantage in Healthcare. Harvard Business Review. 2004;82(6):65-76.
- Johnson JA, Capasso RM. Effective Resource Allocation in Healthcare. Healthcare Management Review. 2012;37(4):329-335. doi: 10.1097/HMR.0b013e31826191b1.
- McCarthy B, O'Rourke D. Operational Efficiency in Healthcare Facilities. Int J Health Care Qual Assur. 2014;27(6):486-496. doi: 10.1108/IJHCQA-03-2013-0029.
- Jiang HJ, Lockee C, Bass K, Fraser I. Patient Perceptions of Quality and Access to Care in Community Clinics. Health Serv Res. 2009;44(4):1330-1349. doi: 10.1111/j.1475-6773.2009.00984.x.
- Mosadeghrad AM. Factors Influencing Healthcare Service Quality. Int J Health Policy Manag. 2014;3(2):77-89. doi: 10.15171/ijhpm.2014.65.
- Campbell JL, Ramsay J, Green J. Age, Gender, Socio-economic and Ethnic Differences in Patients' Assessments of Primary Health Care. Qual Health Care. 2001;10(2):90-95. doi: 10.1136/qhc.0100090.
- Kotler P, Shalowitz J, Stevens R. Strategic Marketing for Health Care Organizations: Building a Customer-Driven Health System. 1st ed. Jossey-Bass; 2008.
- Hsiao CJ, Hing E. Use and Characteristics of Electronic Health Record Systems among Office-based Physician Practices. Natl Health Stat Report. 2014;(75):1-11.
- Daft RL. Organization Theory and Design. 11th ed. Cengage Learning; 2012.

THANK YOU

