

## AN EXAMINATION OF THE SIGNIFICANCE OF ENHANCING MANAGEMENT SYSTEMS IN HEALTHCARE AND NURSING INSTITUTIONS AND ORGANISATIONS AND THEIR IMPACT ON PATIENTS.

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### ABSTRACT

Within the scope of this essay, the significance of competent hospital administration in deciding the results of healthcare for patients is investigated in profound detail. An analysis of the main components, strategies, assessment methods, and upcoming patterns of hospital administration sheds light on the fact that hospital management is a complicated field. The findings indicate that the decisions and actions taken by administrative personnel have a significant impact on the health, happiness, and safety of patients. According to the study, improved patient outcomes may be accomplished via the establishment of multidisciplinary teams and the provision of therapy that is centred on the patient. The information emphasises the significance of benchmarking and data-driven evaluation in the process of assessing the performance of hospitals and promoting continuous improvements. The administration of healthcare is in a precarious position owing to a number of causes, including the introduction of new technologies, the evolution of healthcare legislation, and continuous problems. The fact that more effective hospital administration is directly linked to improved patient outcomes is something that has remained constant in spite of all the changes that have taken place. In its conclusion, the research urges policymakers and executives in the healthcare industry to collaborate in order to eradicate healthcare disparities, invest in technology, advocate for value-based treatment, and promote administrators who are capable of doing their jobs. Through collaboration, the researchers will be able to guarantee that the enhancement of patient outcomes will always be the most important concern in the administration of healthcare. Healthcare will be influenced by this for many years to come.

**Keywords:** Healthcare Policies, Emerging Technologies, Quality Improvement, Healthcare Leadership, Patient Outcomes.

### INTRODUCTION

Several worldwide changes impact modern healthcare delivery. These include innovations in communication and technology, changes in legislation, economics,

population, and other socio-environmental issues. These worldwide changes may be classified into three main groups: Information technology is now fundamental to the functioning of many businesses. Indeed, “informatics” is the study of how to best use computers to aid in the gathering, analysing, and presenting of information in order to better assist human understanding and decision-making. Several studies have shown that financial, clinical, and administrative transactions are just a few areas where nurses may benefit from using informatics. By doing so, they can potentially save time and money. The field of nursing is only one of many possible uses for informatics. One cannot limit oneself to a single definition of “nursing informatics.” A good illustration of this is the “application of information technology in connection with any practice within the nursing domain and is suggested by nurses,” which encompasses care for patients, administration, instruction, and study. An additional example is “the application of information technology in connection with any practice within the nursing domain and is suggested by nurses.” A computer with a health information system (HIS) could improve patient care, nursing resource management, and the delivery of nursing services by allowing for the collection, storage, processing, and modification of data (Smith & Johnson, 2021).

Using informatics is becoming more and more common in modern nursing practice. Clients’ use of IT may increase their participation in their own therapy, according to growing data. There is increasing evidence that patients use IT, and studies show that nurses use informatics extensively in their work. This led to the compilation of many studies about the usefulness of IT in healthcare. With the use of informatics, healthcare mistakes can be reduced, care quality can be enhanced, patients can be made safer, clinical warnings and reminders can be provided, nurses can have easier access to patient data, preventive care can be improved, patients can be made happier, and healthcare costs may be lowered. These are just a few of the many advantages of informatics. Reducing expenses, improving preventive care, and making patients happy are other advantages. However, new research reveals that this technology isn’t catching on very quickly, and that consumers are generally unhappy with it (Panteli et al., 2019).

## **BACKGROUND OF THE STUDY**

Like businesses in other sectors, healthcare organisations (HCOs) value usable and high-quality data. In order to meet the demands of regulatory and certification bodies, run the company, document and communicate plans and activities, and provide care for patients, healthcare personnel must have access to sufficient data and information management technologies. Enhancing patients’ health is the goal of clinicians who engage in a wide range of activities, including as diagnosis, treatment planning, and education for both patients and their families. Those in primary care and those in charge of patient care assess new members of health plans. Clinical outcomes, service quality, and total healthcare expenditures are just a few of the

many criteria that medical directors take into account. Budgeting, medication and supply management, and patient payment arrangement coordination are all responsibilities of administrators. Decisions on new product and service development, important partnership formation, and the termination of less successful endeavours are made by the board of directors. Healthcare workers vary greatly in background, experience, and outlook, and they have vastly diverse information demands connected to their jobs (Ehrenstein et al., 2019).

It is necessary to create HCISs because medical practitioners often use massive amounts of data. Healthcare information systems (HCISs) aim to improve collaboration by easing the flow of information and ideas among healthcare practitioners. Data administration and storage, as well as certain aspects of record keeping and reporting, are facilitated by them. An HCIS makes it easier for the administrative and financial tasks of auxiliary and other clinical-support departments to be integrated into the larger health system. Managing the ever-increasing complexity of HCOs is no easy feat, as any HCIS will attest. The HCIS is tasked with organising, managing, and integrating large amounts of financial and clinical data produced by diverse users in diverse situations. Access to comprehensive, accurate, and current information presented in a meaningful way is crucial for healthcare providers (and, more and more, patients). Herein lies one of the strategy's flaws. It becomes apparent that procedures and diagnoses are just a subset of the potential principles that can be utilised to focus a healthcare unit when one considers the abundance of specialised healthcare facilities that are all around us. For example, there are maternity clinics that target homosexual patients, retail clinics, and veteran's hospitals. This is made clear when one considers that such facilities are available. A number of previous studies have had their conclusions skewed because of the restriction that hospitals that are considered "unfocused" may really be focused in other ways, regardless of their classification. In addition, it is now known that the correlation between concentration, size, and efficiency remains unclear. Both the cost and the quality of care (as assessed by indicators like the mortality rate) are often used to evaluate a hospital's efficiency. The main indicators used to measure the effectiveness of healthcare systems are accessibility, cost, and quality. When evaluating a hospital's operational success, cost and quality are more relevant than access when considering the system as a whole. Other, more nuanced studies that account for co-morbidities and selective patient admission find diminishing or nonexistent effects when focussing on focus. Some studies have shown that paying more attention reduces expenses and fatalities, whereas other studies have found the reverse to be true. Because of this, people still can't agree on whether or not healthcare industry consolidation makes things more efficient (Young & Smith, 2023).

## **PURPOSE OF THE STUDY**

This research aims to assess the value of better management systems in healthcare and nursing facilities and the effect these changes have on the quality-of-care patients get and their overall health outcomes. Healthcare organisations must implement and enhance management systems that boost operational efficiency, maximise resource utilisation, and encourage high-quality patient care in order to keep up with the ever-increasing complexity of healthcare delivery. The purpose of this research is to better understand how management systems that include technology, optimise workflow, and educate personnel may help decrease medical mistakes, improve communication, and increase patient happiness. The purpose of this research is to help healthcare organisations and institutions make informed decisions about the value of investing in strong management frameworks that put patients' well-being and the organization's success first by examining the connection between management practices and patient outcomes.

### **LITERATURE REVIEW**

An American government study based on the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) found that some consumers were unhappy with various aspects of their care. Doctors allegedly failed to treat their patients with respect and decency, failed to alleviate their agony, and failed to communicate with them. Carers must know how satisfied their patients are in order to plan ahead for their requirements and meet those needs effectively. From an organisational standpoint, it is critical to understand the linkages between patient happiness, hospital and nursing unit features, and the development of work conditions that promote higher levels of patient satisfaction. As a result, they looked at the interplay between acute care hospitals' organisational context (i.e., the characteristics of the hospitals and nursing units), patients' characteristics, the design of the nursing units (i.e., the capacity of the units, the level of staff involvement, and the working conditions), and the impact (i.e., patient satisfaction). Lack of meaningful treatment is an inherent component of bad nursing care, even if the patient safety movement has focused on rules for minimising healthcare mistakes (such as mislabeling one eye for surgery). In low-quality care facilities, Chinese researchers discovered that nurses often failed to do even the most fundamental patient care duties (Chen & Lee, 2023).

This article delves further into the connection between hospital nursing's organisational structure and patients' perceptions of care by investigating the function of nursing care supply, and more especially, the variety of unfinished nursing care tasks. This study's theoretical underpinnings draw on and expand upon Quality Health Care by Donabedian (1988) in order to explain the "hidden rationing of nursing care" that is often thought to be the main reason for gaps in nursing care. According to Donabedian, the researchers may learn about the quality of treatment the researchers get by observing how various aspects of health care interact with one another. Patient outcomes are often better in institutional settings (like nursing

homes or hospitals) that provide better working conditions and access to superior resources (such trained nurses). If nurses want to provide their patients safe, high-quality care, they need the autonomy and time to put their education and expertise to use. Evidence suggests that higher nurse staffing levels (lower patient-to-nurse ratios) and a higher proportion of nurses with bachelor's degrees are indicators of high-quality labour, which in turn leads to greater productivity. Improved patient outcomes have been associated with nurse professional development opportunities, sufficient staffing, and well-designed workplace enhancements (Ahsan et al., 2022).

Regarding the use and advancement of IT, China's healthcare sector is now behind many others. Patient satisfaction, healthcare system efficiency, and cost reduction may all be achieved via the use of these technologies. To speed up the transition towards a more optimistic future, healthcare practitioners must be open to embracing new technology and finding solutions to the issues they provide. Although there is consensus on the value of nursing informatics, the majority of research has focused on implementing informatics into care delivery rather than its management. By better comprehending the present state of affairs, isolating the causes of any issues or obstacles, and then removing them, care management and nursing services may be enhanced. After then, the reorganisation may go forward (Patel & Kumar, 2020).

## **RESEARCH METHODOLOGY**

### **RESEARCH DESIGN**

This research made use of information collected as part of the Outcomes Research in Nursing Administration Project-II. To achieve this goal, researchers at several institutions conducted a massive study known as ORNAVII: Organisational, Nurse, and Patient Outcomes. The ORNA-II study used the 2002 American Hospitals Association Guide to Hospitals to compile information from two medical-surgical units at 146 randomly chosen U.S. acute care hospitals in 2003 and 2004. The authorised authorities approved the study. After excluding those eight nursing facilities, the total count of institutions used in the study was 278.

### **DATA COLLECTION**

After participating in a 1.5-day training session with the research team, each institution designated a local coordinator to aid with data gathering. Over the course of six months, nurses with more than three months of experience on their unit filled out three surveys. The first data collection from RNs had a 75% response rate (N=4,911), the second data collection from RNs had a 58% response rate (N=3,689), and the third data collection from RNs witnessed a 53% response rate (N=3,272). Two waves of data from a multi-wave survey of nurses were analysed for this study. A survey was filled out by those who had received therapy. Ten patients (18+) from each nursing unit were randomly chosen based on their ability to read and write

English, length of hospital stay (at least 48 hours), and likelihood of being released in the near future. With a response rate of 91%, there were 2720 patients who participated.

The Likert scale is a popular kind of rating scale used in surveys and questionnaires to get an idea of how people feel about certain topics. Participants pick one of numerous alternatives for answering a given question or expressing their opinion on a given statement, which may include “strongly agree,” “agree,” “did not answer,” “disagree,” or “strongly disagree.” Frequently, the response categories are coded numerically, such as 5 = greatly agree, 4 = agree, and so on; in this case, the numerical values must be defined for that specific study.

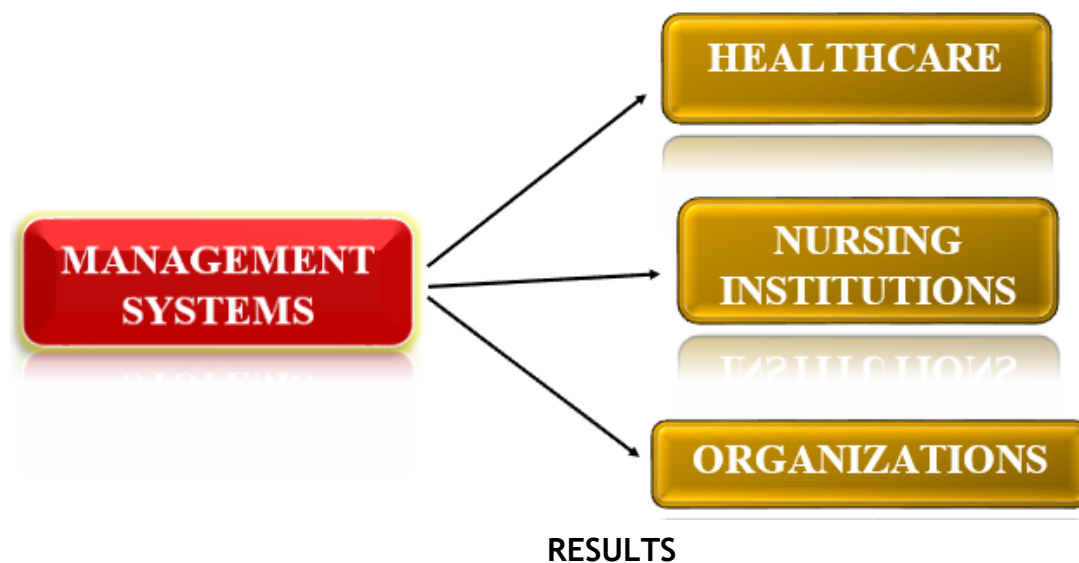
### STATISTICAL SOFTWARE

MS-Excel and SPSS 25 will be used for Statistical analysis.

### STATISTICAL TOOLS

Descriptive analysis was applied to understand the basic nature of the data. Validity will be tested through factor analysis.

### CONCEPTUAL FRAMEWORK



**Test for hypothesis:** An essential measure of a healthcare system’s quality was the degree to which patients were satisfied. An effective tool for tracking customer feedback and enhancing the Patient Experience over time was the Patient Satisfaction Survey. Collecting patient input in this way was both efficient and effective.

**Unit Capacity:** To what extent do patients obtain affordable, high-quality therapy that meets certain standards for safety and efficacy in enhancing their health is what the term “quality of health care” refers to. Studies have shown that patients

report the greatest levels of satisfaction with interpersonal interactions, such as relationships between staff and patients, therefore it is not surprising that this aspect of hospital care has been receiving more attention in recent years. The level of patient satisfaction with therapy is a crucial sign of the treatment's overall fairness, according to new Chinese research. Respondents' high levels of enjoyment may be attributed, in large part, to the referral hospital's privileged position at the top of the healthcare delivery pyramid, where super-specialized treatment was administered. Regardless, many patients were unhappy with the lengthy wait times, expensive treatment costs, and additional investigative expenses. The concept that consumers would seek care from other providers if they are dissatisfied with their present one, was common knowledge.

**Results in a Descriptive Form:** All study variables and relevant psychometric information are included in Table 1, together with descriptive statistics. With an average of 345 available beds and a standard deviation of 185, hospitals reported a case mix index of 1.44 and a standard deviation of 317, respectively. A 56-year-old lady with many hospitalisations in the last year made up the typical patient. According to the patients, their health is either "fair" or "excellent." The percentage of satisfied patients varied from "good" to "outstanding," with an average score of 44.4 (out of 52).

**Unit Structure as Influenced by Hospital and Nursing Unit Qualities:** Quantity Sold Hospitals with declining or very variable admission patterns had lower unit capacity, while larger hospitals, teaching hospitals, and hospitals with more critically unwell patients had higher capacity (unstandardised regression coefficients, Table 1). No matter whether magnets are there or not, the equipment will operate efficiently. No correlation between nursing home capacity and any of the factors was found to be statistically significant.

On basis of the above discussion, the researcher formulated the following hypothesis, which was analyse the relationship between Unit capacity and Patient satisfaction.

**H<sub>01</sub>:** There is a no significant relationship between Unit capacity and Patient satisfaction.

**H<sub>1</sub>:** There is a significant relationship between Unit capacity and Patient satisfaction.



Table 1: Model Variable Estimates and Standard Errors without Normalization.

	Unit Capacity		Work Engagement		Work Conditions		Patient Satisfaction	
	Estimate	Std Error	Estimate	Std Error	Estimate	Std Error	Estimate	Std Error
<b>Hospital Environment</b>								
Hospital Size	0.001 *	0.001	0.000	0.001	0.000	0.001		
Teaching Status	1.808 **	0.425	-0.028	0.554	0.016	0.914		
Case Mix Index	0.545 *	0.257	0.998	0.527	0.464	0.390		
Magnet Certification	0.377	0.317	0.181	0.455	1.116 **	0.383		
<b>Organizational Life Cycle</b>								
Growers	0.483	0.273	-1.299 *	0.626	-0.900	0.555		
Decliner	-0.963 *	0.448	-0.724	0.580	-1.565 *	0.731		
Highly Unstable	-1.014 *	0.464	0.667	0.500	-0.789	0.665		
Unstable	-0.257	0.210	-0.152	0.350	-0.041	0.306		
<b>Nursing Unit Environment</b>								
Unit Size	-0.002	0.008	0.001	0.010	-0.009	0.011		
Support Services Availability	0.016	0.042	0.090	0.068	0.214 **	0.066	0.219 ***	0.061
Patient Acuity	0.024	0.022	0.007	0.034	0.028	0.037		
Work Complexity	-0.051	0.026	-0.114 **	0.048	-0.212 **	0.042		
<b>Patient Characteristics</b>								
Age							0.047 **	0.019
Gender (% Females)							1.309	0.769
Health Status							0.762 **	0.326
Education							-0.354	0.621
Hospitalization in Past Year							-0.090	0.809
Symptom Management							0.367 ***	0.078
<b>Nursing Unit Structure</b>								
Unit Capacity							-0.112	0.106
Work Engagement							0.202 ***	0.063
Work Conditions							0.092	0.065
Intercept	-1.571	1.814	-1.594	3.575	-3.056	3.024	21.465	3.517
R <sup>2</sup>	0.255		0.097		0.258		0.313	

According to the Contentment of Patients Modification index, patients may report higher levels of satisfaction if they are able to use accessibility to support services as a regressor in analyses of patient satisfaction on unit capacity, work engagement, work conditions, and patient characteristics (chi square value = 49.7,  $p = .009$ ; CFI = .92; TLI = .79; RMSEA = .05). They discovered that providing assistance services was substantially linked to increased staff engagement and patient satisfaction after implementing the change the researchers proposed. The degree to which patients were satisfied with their therapy increased as their age, health, and symptom



severity decreased. Several statistical tests revealed a very satisfactory agreement with the data (RMSEA = 0.03, CFI = 0.97, TLI = 0.92, and chi-square = 39.5 (df = 31;  $p = 0.14$ ). This means the “**H<sub>1</sub>: There is a significant relationship between Unit capacity and Patient satisfaction**” is accepted and the null hypothesis is rejected.

## CONCLUSION

Medical care of a high standard is dependent on the effective use of available human resources. Re-establishing a focus on healthcare HRM is essential to the development of new policies. Human resource management strategies that work are crucial for making healthcare more accessible and improving health outcomes worldwide. For the first time, this study used a combined theoretical and statistical framework to show how patients' views on their treatment offer crucial background for the organisational and procedural parts of nursing. According Davies & Lee, Two measures of nursing quality are the proportion of nurses holding a bachelor's degree and the proportion of clinical care tasks that remain unfinished (Davies & Lee, 2019). In light of these findings, it is clear that process improvement initiatives should be prioritised by nursing administration with a focus on direct patient care. Hospitals should hire more nurses with bachelor's degrees since there is growing evidence that this improves patient care and safety. Hospital and nursing unit organisational factors, especially nursing unit support services and procedures that increase nurses' work engagement and effective symptom management, have a substantial influence on patients' satisfaction. In addition to facilitating faster patient movement in and out of the hospital, state-of-the-art ICT also enhances communication between departments, simplifies the procurement of essential medical equipment, and increases the precision of diagnostic testing. Care management processes might be impacted more by electronic records, clinical judgement, and evidence-based care if organisational policies and infrastructure are improved, and by nurses' incentives to produce nursing reports, respectively.

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