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Change Management Adaptation in the Medical and Healthcare Sector: The Case of XYZ Group in Gulf Region

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Abstract

A change management strategy that works for everyone cannot be developed, particularly in a specialized industry like healthcare. Nevertheless, regardless of the sector or industry you work in, you will gain from utilizing the aforementioned methods, plans, and tools. Additionally, an assurance that, when change is managed well, planned outcomes are achieved and that interruptions to routine business operations are minimized. Nevertheless, the healthcare industry is very significant and has a big impact on the economy and society. The COVID-19 pandemic had a major impact on the industry's management paradigm, which opened the door for more advancements in the use of new methods and strategies within healthcare management to meet the challenges that were faced.

A summary of the key theories, models, and challenges for healthcare change management was provided in this thesis, along with an explanation of how their application might support the new medical sector management scheme. Moreover, interviews were executed and a summary was provided to have a deeper review of the challenges and how they might affect the change management in the medical and health sector. However, there will undoubtedly be several challenges and obstacles in the process of implementing a new management system, particularly in the early going. These difficulties and challenges were briefly discussed and presented, highlighting how they may affect the way change management is carried out within healthcare organizations.

Language: English
Key Words: Healthcare Management, Healthcare Change Management Challenges.

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1 Introduction

The healthcare industry is one where it can be especially challenging to bring about change because of its sophisticated and complicated nature. Hospitals have to take care of their patients' requirements, manage staff and resources efficiently, follow rules, and make judgments that will increase their bottom line every single day. Healthcare organizations have a lot to think about, therefore they need to adjust and change to stay current and competitive while tackling the issues of talent loss (David Pagán, 2023).

The main six dimensions of efficiency, safety, patient-centeredness, effectiveness, timeliness, and accessibility are becoming increasingly important in determining healthcare quality, and this has led to an acceleration of change in the adoption of initiatives and the achievement of their goals to satisfy external targets. Moreover, the global interest in sustainable healthcare has increased recently, and the shift to health systems that are economically, socially, and environmentally viable is seen as inevitable and essential. Healthcare systems attempt to fulfill people's right to health by offering services that address population health needs. By offering social care services, they support the maintenance and restoration of good health and allow individuals to live freely. Worldwide, there are many different kinds of healthcare systems, yet they all face similar difficulties and drastic changes (Pereno & Eriksson, 2020). All these reasons increase the interest toward more efficient and up-to-date management.

According to Deloitte, (2016) report, the defragmentation of the healthcare industry is being driven by growing and new financial cuts made to address significant budget shortages in public spending. This is forcing hospitals to collaborate to provide more services at a lower cost and by taking advantage of economies of scale. As a result, this new trend is mostly driven by new

technology that optimizes treatment protocols and improves the digital relationship between physicians and hospitals. Because of required or voluntary monitoring, the need to control healthcare expenditures is also driving increasing openness regarding the quality, outcomes, and prices of care.

So, due to the above-mentioned reasons, healthcare must adapt to changing health requirements and discover innovative, effective ways to address them. According to the United Nations, (2019), The population is aging rapidly; by 2050, there will be twice as many people over 60—nearly 2.1 billion—than there are now (901 million). The aging population challenges health systems by raising the need for services, technologies, and care to prevent and treat chronic illnesses linked to aging and non-communicable diseases. There is a movement towards chronic care: noncommunicable chronic diseases account for more than 70% of healthcare spending in the US and the EU and cause 68% of all deaths worldwide (Gerteis, 2014). Shortly, measures will be required to ensure long-term population health and care systems. Today, national and EU-level policymakers have rightly identified the need to make health systems sustainable by making them more effective, accessible, and resilient. (European Commission, 2016). The focus on healthcare rules, policies, and management techniques is not limited to Europe.

Global healthcare systems must adapt to these challenges, and healthcare management and stakeholders must work together to meet these new demands from society and advance towards more efficient and sustainable systems. Healthcare must aim to become more effective, efficient, and equitable for everyone by reducing costs, enhancing and implementing the use of existing technology, and involving patients in preventive and self-care. Costs and patient numbers will unavoidably rise. The shift to more robust

health systems is complex and complicated, requiring fundamental adjustments in how we view the role of patients as well as the systemic, multidisciplinary nature of healthcare.

1.1 Background

The medical and healthcare industry has a considerable effect and shares on today's economy, it has about 10% of the GDP and 8% of the labor force in the European Union, and the healthcare industry is a major contributor to the economy in different aspects. Public spending on healthcare and long-term care is anticipated to rise due to factors including population pressures, technology advancements, and high levels of public debt in most countries (Pereno & Eriksson, 2020).

Sustainable healthcare refers to a value constellation in which several stakeholders from various industries work together to offer healthcare, creating a system of goods, services, design, and social value that collectively define the system (Desmond, 2018). The research is based on the primary healthcare stakeholders' participation in identifying critical factors that will help promote the transition to a modern and sustainable vision of change management in the healthcare sector. So, to have a wide and obvious understanding, it is worth mentioning the main stakeholders who have a direct effect on the healthcare sector, to have a better understanding of the change management in the sector. As shown in Figure 1, a total of 17 main stakeholders which are as follows, regional/national authorities, policy-makers, public decision makers, policy advisors, universities and research centers, NGOs and healthcare networks, clusters, professional consortia, health industries, clean tech industries, components manufactures, sub-contractors, health providers, university hospitals, installers, maintainers and repairers, patients, patient associations, and waste management will have a

direct interaction in case of any change management occurs and will have a role in the system to supply, provide, and receive healthcare services.

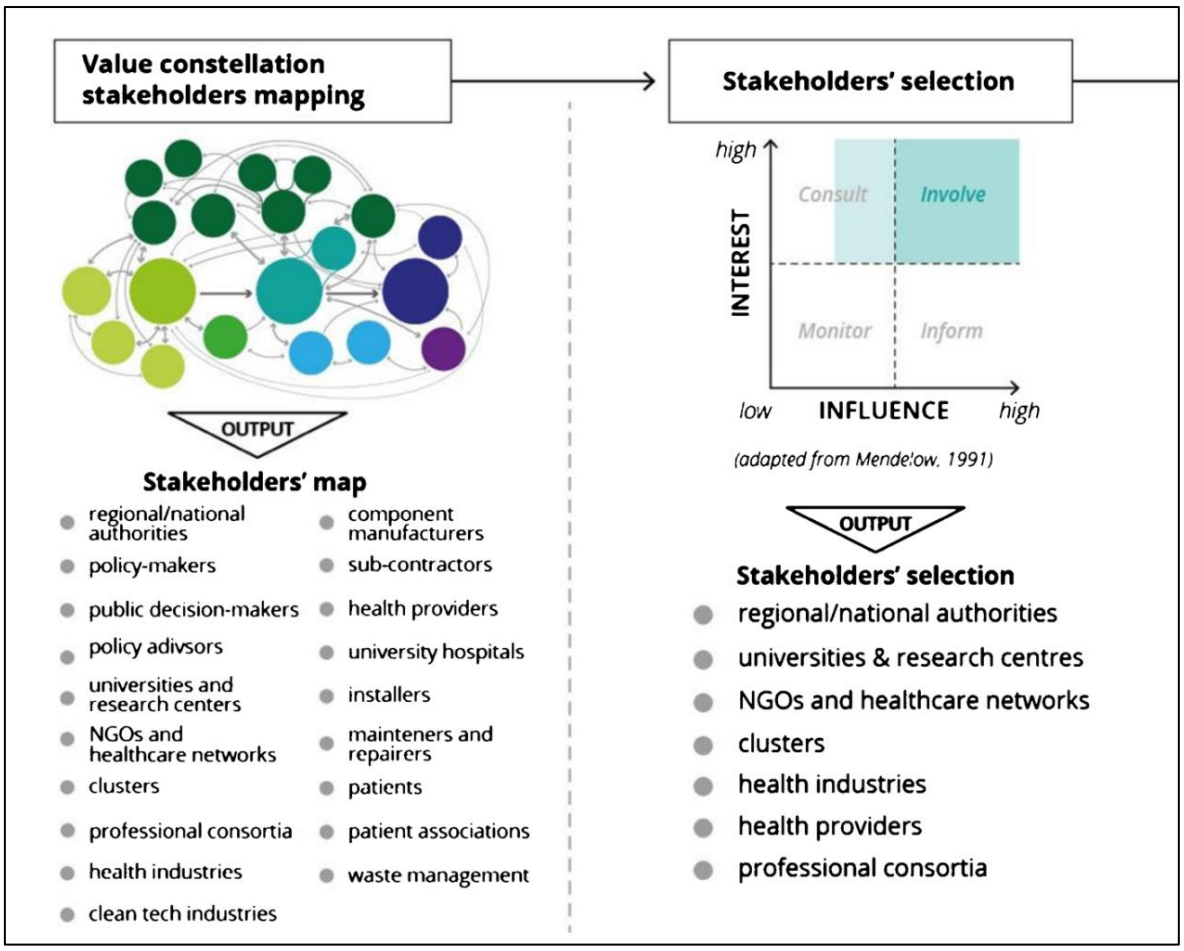

Figure 1. Stakeholders in the Healthcare Sector (Pereno & Eriksson, 2020).

Figure 2 presents a total of eight key stakeholders which are as follows, regional/national authorities, universities, and research centers, NGOs and healthcare networks, clusters, health industries, health providers, and professional consortia, will have more influence and involvement in the management of the healthcare system.

Pereno & Eriksson, (2020) stated that the selection of those eight stakeholder categories was chosen based on their importance to health industries and providers, and showing their fundamental roles in the system and the diversity

of the parties involved. Due to their very nature, patients—another important stakeholder in the health system could not be directly included in the process. A separate analysis, based on sizable samples of the patient community, is necessary for the bottom-up investigation of patients' vision.

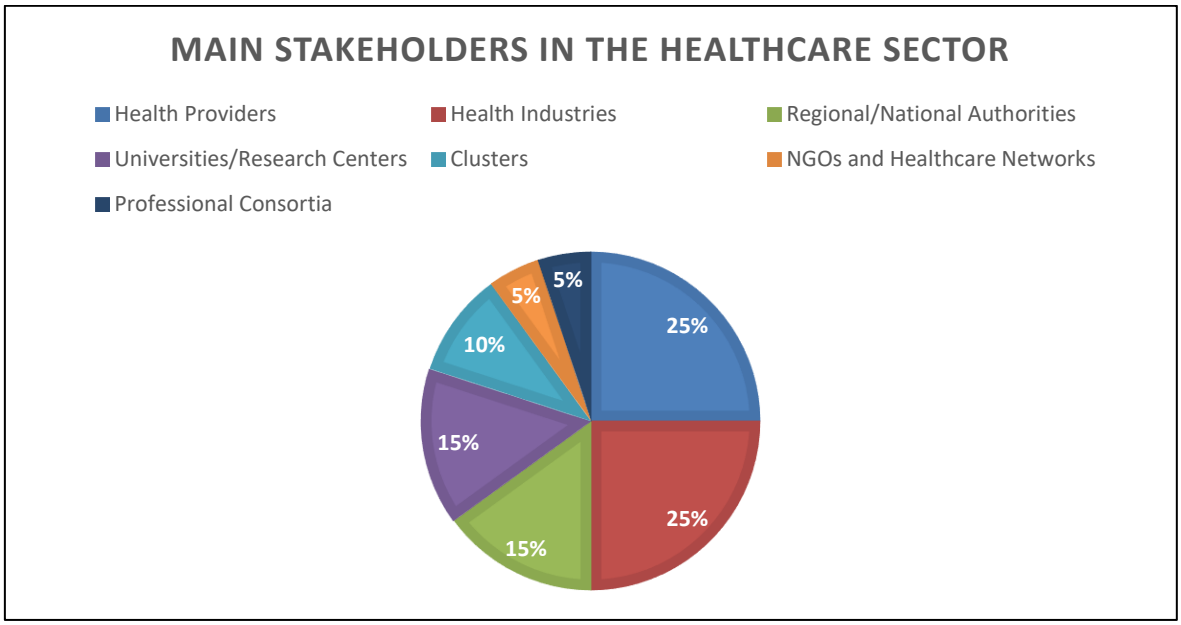

Figure 2. Main Stakeholders in the Healthcare sector (Pereno & Eriksson, 2020).

1.2 Research problem and significance

There is no doubt that the medical and healthcare sectors play a significant role in the everyday life of everyone, besides their major contribution toward the world economy and the well-being of all humans. Living in a fast world and due to the presence of new challenges every day within the healthcare sector, such as the occurrence of the COVID-19 pandemic, increases the need to stay up to date with the fast-forward variation and to modify the current management system including more new technologies witing the healthcare sector to make it capable of matching that progress and to tackle those challenges. The thesis presented an overview of the main elements and factors associated with management in the medical and healthcare sector, and besides that, the main strategies for change management within the

healthcare sector, and finally provided the best ways how to match and improve the management within any healthcare organization.

The research question (RQ) in this master thesis is the following:

RQ: What are the effects of Change Management on the Medical and Healthcare Sector and Overall Performance?!

1.3 The objective of the thesis and delimitations

The main objective of the thesis is to show the main elements of management within the healthcare sector, and the main steps to achieve the optimal changes within the healthcare sector to improve overall performance and to increase its resilience toward the presence of the current and futuristic event, and to avoid the disruption of services as it occurred during the occurrence of the COVID-19 pandemic.

The delimitation of the thesis will be no further research on the usage of new technologies how it can affect change management and how it can increase the resilience of the futuristic healthcare management scheme to face and tackle all upcoming challenges.

1.4 Structure of the Thesis

The master thesis consists of an introduction, four chapters, and a conclusion. The introduction is about healthcare, in general, showing the importance of the sector toward the people and the economy, while mentioning the main stakeholders who will have a direct and indirect effect on any change that might occur within the healthcare organizations.

Chapter two focused on the management within the healthcare sector, introduced the main healthcare policies and main theories related to the

management of the healthcare sector, and emphasized the effect of those policies on the management. In addition to that, a quick overview of the management situation within the healthcare system before the occurrence of the COVID-19 pandemic.

In chapter three, a brief discussion about the change of management in the healthcare sector was discussed showing the main theories of change management, the main models which can be utilized to achieve the change management within the healthcare sector, the main strategies shall be applied to achieve the change management, and finally introducing the main challenges and barriers associated with the execution of the change management in any healthcare organization.

In chapter four, the research methodology conducted in the thesis is presented and discussed in brief. In chapter five, the analysis of the interviews is presented and combined with literature reviews to add more credibility to the obtained results. Finally, in the conclusion chapter, the general findings and suggestions for future research, besides a brief presentation about the best ways to enhance and maintain the optimum usage of change management after applying it to any healthcare organization.

2 Healthcare Management

To have a better understanding of change management and its associated theories, it is worth mentioning the main elements of healthcare management itself first. In this chapter, the main healthcare policies, and management theories related to healthcare will be presented in brief. In addition to that, it is crucial to study the effect of healthcare policies on medical and healthcare management to have a better overview of the management within the healthcare industry, besides the impact of policy shifts impact on the healthcare sector. Moreover, the challenges associated with the orientation of those policies within the healthcare sector will be discussed in brief. Finally, the presence of the COVID-19 pandemic has had a dramatic effect on the management meetings of healthcare, so it is essential to have a quick overview of the status of the management of healthcare before the pandemic and how it affected its process.

2.1 Healthcare Policies

Toritsemogba Tosanbami Omaghomi et al., (2023) presented the framework of healthcare policy, as it plays a crucial role in defining, pursuing, and accomplishing the goals of medical care and public health services. It includes a wide range of rules, legislation, policies, and initiatives aimed at achieving particular healthcare objectives in a community. These laws have a significant impact on how the healthcare system functions as a whole, affecting the way that healthcare is provided, paid for, and accessed by the general public. Recognizing the fundamental principles, goals, and components of healthcare policy, along with the diverse responsibilities of stakeholders in its development and execution, is imperative to fully understand the complex structure of healthcare systems worldwide.

Many concepts have an impact on the development, application, and assessment of healthcare policies. A society's decisions, strategies, and activities aimed at achieving particular healthcare objectives are referred to as healthcare policy (Toritsemogba Tosanbami Omaghomi et al., 2023). This section will present a brief introduction to the main healthcare policies: public health policies, healthcare financing policies, healthcare delivery policies, quality and safety policies, and regulatory policies.

2.1.1 Public Health Policies

Public health policies focus efforts on enhancing population health as a whole by implementing prevention, promotion, and protection measures. Programs for immunization, anti-smoking initiatives, and environmental health laws are a few examples. These theories place a strong emphasis on the part that healthcare policy plays in improving population health and preventing disease. They support initiatives that target environmental variables, health practices, and social determinants of health (Machado et al., 2021).

2.1.2 Healthcare Financing Policies

Economic theories shed light on the distribution of limited resources in the healthcare industry. They direct policies on healthcare funding, pricing, and insurance, addressing concerns of efficiency, equity, and the distribution of health services. Furthermore, it addresses the financial aspects of healthcare, such as out-of-pocket expenses, government support, and health insurance plans. These regulations seek to guarantee healthcare services' accessibility and affordability (Harish et al., 2020).

2.1.3 Healthcare Delivery Policies

Intended to facilitate the planning and delivery of medical care. This covers guidelines for running clinics and hospitals, allocating healthcare workers, and utilizing technology to offer care (Toritsemogba Tosanbami Omaghomi et al., 2023).

2.1.4 Quality and Safety Policies

Pay attention to raising the standard and security of medical care. This includes standards and norms for clinical practice, patient care, and the accrediting processes for healthcare facilities (Toritsemogba Tosanbami Omaghomi et al., 2023).

2.1.5 Regulatory Policies

Involve keeping an eye on and regulating medical professionals, drugs, and gadgets to make sure they adhere to safety and practice guidelines (Tobin & Walsh, 2023).

2.2 Management Theories Relevant to Healthcare

A wide range of theories associated with leadership, organizational behavior, and operational efficiency are included in healthcare management strategies. So, to have a deep understanding of management in the healthcare and medical sector, it is worth mentioning the main theories behind efficient management in the sector. In this section, a brief presentation about the most common theories, which are as follow scientific management, human relations theory, contingency theory, transformational leadership, lean management, and quality improvement theories, will be discussed in brief.

The first approach is scientific management, which is rooted in Frederick Taylor's research, and aims to maximize efficiency by utilizing task distribution, systematic training, and performance evaluation. It serves as the foundation for initiatives in healthcare to enhance clinical workflows and streamline processes (Taylor, 2023). Where the second idea is, human relations theory. This idea highlights the significance of human elements in organizational performance. Specifically, it emphasizes the impact that employee satisfaction, motivation, and team dynamics have in improving productivity and care quality (Toritsemogba Tosanbami Omaghomi et al., 2023).

The third theory is contingency theory, where managing an organization effectively requires matching management methods to the unique conditions of the organization. There is no one right approach to managing an organization. It emphasizes the necessity of flexible management approaches that can address the complex nature of providing healthcare (Smithson, 2022). Finally, the transformational leadership concept, which is particularly relevant to the quickly changing healthcare industry, focuses on leaders who inspire and encourage their teams to accomplish extraordinary results, frequently by placing a strong emphasis on communication, vision, and employee empowerment (Akdere & Egan, 2020).

2.3 The Effect of Healthcare Policies on Medical and Healthcare Management

To have a better understanding of the management in the medical and healthcare sector, it is important to identify the healthcare policies and their effect on the medical industry, in this section a brief discussion about the main impact of policies on the medical sector, which are as follow, operational efficiency, quality of care, financial management, and finally access to care.

Operational practices are directly impacted by policies that encourage resource efficiency, such as those that support the use of electronic health records (EHRs). Under these policies, managers have to modify workflows, provide staff training, and incorporate new technology to cut expenses and increase efficiency (Jianxun et al., 2021). As regards quality of care, healthcare managers must embrace best practices, carry out quality improvement projects, and guarantee standard compliance to comply with policies that set quality and safety standards. This sometimes involves evaluating and altering patient care procedures to comply with or beyond legal criteria (Coles et al., 2020).

Financial management is very important, where healthcare managers' ability to manage revenue cycles, distribute resources, and create budgets is greatly impacted by regulations related to healthcare financing, particularly modifications to the insurance company and government program reimbursement models. While delivering high-quality care, managers must navigate these policies to preserve financial stability (Toritsemogba Tosanbami Omaghomi et al., 2023). Finally, access to care focuses on the policies that target communities with limited resources or increase access to healthcare, such as those that expand insurance coverage, force management to adapt service offerings, build additional facilities, or launch community outreach initiatives to keep up with changing demand patterns (Donohue et al., 2022).

2.4 Policy Shifts Impact on Management Practices in the Medical Sector

The previous section is, a brief introduction to the effect of policies on management in the medical and health sector, however, it is worth mentioning that the shifts that occur to those policies also have a direct impact on the management practices in the health sector, so in this s section,

a brief review for those shifts will be presented in brief which is as follow, digital health records, patient-centered care, and quality and safety standards.

The transition to digital health records has completely changed the way healthcare is managed. To enhance care coordination and patient outcomes, managers have had to supervise the adoption of sophisticated EHR systems, guarantee data security and privacy in compliance with legal requirements, and utilize digital records (Mbunge et al., 2021). Moreover, patient-centered care, where managers are delivering services with a more comprehensive approach as a result of policies that support patient-centered care. This involves increasing patient involvement, customizing care schedules, and boosting patient satisfaction through facility transformations, higher-quality services, and feedback systems (Gorod et al., 2021).

Healthcare managers have prioritized patient safety efforts, implemented continuous quality improvement systems, and participated in certification programs as a result of the emphasis on quality and safety. Organisational cultures must change to support these initiatives, with a stronger emphasis on responsibility, openness, and evidence-based procedures (Wong et al., 2020).

2.5 The Management of Healthcare Before The Pandemic

Before the COVID-19 pandemic, healthcare systems across the globe demonstrated a range of traits, advantages, and disadvantages influenced by regionally specific political, cultural, and economic reasons. The aging population, increased prevalence of chronic diseases, and rising healthcare expenses have put enormous pressure on many healthcare systems. Traditional, in-person healthcare delivery methods were heavily relied upon, with differing levels of investment made in digital health technologies and public health infrastructure (Vallée, 2023).

Zahlan et al., (2023) stated that advanced medical technologies, highly qualified healthcare workers, and, in certain areas, extensive healthcare coverage that made access to a variety of treatments easier were some of the advantages of the pre-pandemic healthcare systems. To improve healthcare inequality, nations with universal healthcare systems, for instance, emphasized their high accessibility and availability of preventative care services. Despite these advantages, several weaknesses were identified. The distribution of resources in healthcare systems can frequently be restricted by issues such as a lack of medical personnel, hospital bed capacity, and a lack of supplies of medical equipment. These problems were made worse by financial limitations, which prevented healthcare systems from making critical infrastructural and innovative investments.

2.5.1 The Pandemic's Effect on Healthcare Systems

The COVID-19 pandemic has placed uncommon pressure on international healthcare systems, exposing serious issues and accelerating innovations and adaptations while calling for a review of management and policy approaches. These reactions have changed the way healthcare is delivered, which will have long-term effects on the healthcare sector.

The occurrence of the pandemic resulted in immediate challenges to the healthcare and medical sector. Allocating crucial resources was one of the major issues in healthcare administration brought about by the COVID-19 epidemic. Healthcare systems around the world were struggling to meet the extraordinary demand for ventilators, hospital beds, and medical supplies. In several cases, this excessive need resulted in care rationing, which raised the danger of infection for healthcare professionals because they were not wearing proper personal protective equipment (PPE). At the same time, the virus's lightning-fast transmission put an unusual burden on medical

personnel, making staffing shortages a serious problem. High infection rates among healthcare personnel, obligatory quarantine restrictions, and the pandemic's severe physical and psychological effects all contributed to the shortages, which ultimately led to burnout and a diminished ability to provide care (Steier & Moxham, 2020).

According to Dehghani Tafti et al., (2023), the pandemic severely restricted the continuity and standard of care provided to patients who were not COVID-19-positive. Regular treatment and elective procedures were frequently canceled or postponed, which hurt people who needed frequent medical interventions or had chronic diseases. Furthermore, it exposed the vulnerabilities of particular demographic groups, like the elderly and those with pre-existing diseases, bringing attention to the gaps in healthcare outcomes and access that now exist.

2.5.2 Adaptations and Innovations to the Management of Health Due to the Pandemic

A major shift in the way healthcare is delivered was brought about by the COVID-19 pandemic, most notably in the quick growth of telehealth services. This change made it possible for medical professionals to give care remotely, which was essential in preserving patient continuity and lowering the danger of virus transmission. A paradigm shift in the provision of healthcare services was brought about by the discovery that telehealth is an essential tool for treating chronic illnesses, providing mental health support, and patient triaging. Telehealth's simplicity and effectiveness have made it easier to provide urgent care and opened the door for its incorporation into the future healthcare paradigm. Simultaneously, the uptake of digital health technology experienced an unparalleled surge (Toritsemogba Tosanbami Omaghomi et al., 2024).

The public health response benefited greatly from the integration of mobile applications for contact tracking, symptom assessment, and vaccine management, which improved the capacity to track and contain the virus's spread. Moreover, major improvements were made to Electronic Health Records (EHR) systems to facilitate the gathering and exchange of COVID-19-related data, thereby enhancing care coordination and facilitating a more comprehensive public health response. These developments demonstrated how digital technologies might transform public health surveillance and healthcare administration (Madhavan et al., 2021).

Likewise, new patient care practices were implemented by healthcare facilities worldwide in response to the problems presented by the epidemic. Strict infection control protocols, COVID-19-specific units, and updated triage protocols were some of these modifications used to better manage patient flow and reduce exposure. Patient care innovations, like using prone positions for ventilated patients and adapting drugs for COVID-19 treatment, were quickly incorporated into practice, demonstrating how quickly the healthcare industry responded to new information. During the pandemic, these modifications enhanced patient outcomes and provided useful knowledge for improving healthcare practices for upcoming difficulties (Peiffer-Smadja et al., 2020).

2.5.3 The Adjustment of Management and Policy After the Pandemic

Wouters et al., (2021) stated that governments and healthcare authorities around the world implemented several policy reforms in response to the COVID-19 pandemic's extraordinary challenges to mitigate the impact on healthcare systems and the general public. These measures included emergency funds to support healthcare resources, changes to regulations to increase the number of healthcare workers (e.g., permitting retired

professionals to resume their practices), and public health orders to wear masks and avoid social situations to stop the virus from spreading. Policies that support fair access to COVID-19 testing, treatments, and vaccines were also developed to guarantee that these vital resources are allocated effectively and equally among populations.

Healthcare management techniques also quickly changed in combination to meet the changing difficulties of the epidemic. This progression included the creation of dedicated crisis response teams, the use of real-time data analytics to guide decision-making, and the forming of alliances with businesses in the private sector to improve supply chain competencies. Healthcare executives adopted flexible staffing methods to overcome workforce constraints. These approaches included retraining employees to do various functions and enlisting volunteers and military people to support healthcare delivery initiatives. During the epidemic, these tactical changes were essential to preserving healthcare services (Wang et al., 2021).

Finally, the pandemic also highlighted the importance of adaptable leadership and transparent communication in crisis management in the healthcare industry. The difficult responsibility of navigating through uncertainty, making difficult decisions about allocating resources, and maintaining the morale of employees facing unprecedented levels of stress and burnout fell on leaders. The crisis highlighted the need for leaders who can encourage teamwork and creativity under pressure and effectively communicate with the public and healthcare experts. The effective handling of these obstacles demonstrated the need for robust leadership in guaranteeing the robustness and flexibility of healthcare systems during a worldwide health crisis (Arslan et al., 2021).

3 Healthcare Change Management

In any organization, conducting change is a remarkable, sometimes terrifying, and a little overwhelming experience. Changes in the economic, political, social, legal, or professional environment might affect the healthcare industry. Alternatively, fresh ideas and direction from strategic, operational, and/or governance leaders can initiate change from within. Modifications may impact the organization's communication systems, fundamental and auxiliary business operations, and all in between. These may include crucial components of health care delivery including the technology, supplies, and personnel involved. Healthcare executives will be better able to steer a successful change journey if they better understand the multifaceted effects that a change can have on an organization. However, it could be helpful, to begin with, a baseline definition to comprehend change's impact on an organization (Scheeres, 2010).

Organizations use change management as a basic method for regenerating their capabilities, direction, and structure in response to the constantly changing needs of their internal and external clients. For organizations, determining their future positioning and managing the transitions required to get there requires constant work. This dynamic is essential for both operational and strategic purposes, highlighting the critical role change management plays in an organization's ability to survive and compete in the fast-paced corporate world of today (Rune, 2005).

Interaction between various stakeholder groups is crucial in organizational change. Change agents are at the forefront, driving the necessary changes. These people, who have a sharp eye for the future, use their abilities and connections to push for change, frequently running into opposition from others who are averse to new approaches. The change supporters, a crucial

partnership including individuals from within the organization as well as outside parties that stand to benefit from the change, stand in support of these change agents. Their support is necessary to ensure that new tactics are implemented smoothly and to obtain broader acceptance. The people who oppose change because they prefer the status situation or are afraid of losing their jobs are on the other side of the spectrum (Mintrom & Norman, 2009).

A crucial part of change management is overcoming resistance via discussion and negotiation; this calls for a thoughtful plan to bring disparate interests together in support of a single objective. The relationship between change agents, those who support them, and those who oppose them highlights the difficulty in managing organizational change and the necessity of leadership and involvement to overcome obstacles and carry out the intended transformation.

3.1 Healthcare Change Management Theories

Based on differing views of how to influence professional and organizational performance, different disciplines offer differing strategies for implementing innovations into practice. While some theories concentrate on changes inside the professional, others address changes in the social, organizational, and economic contexts. So, in this section, the four main categories of theories applied in healthcare management, introduced by Grol et al., (2013) will be presented in brief, which are as follows: theories on factors related to individual professionals, theories on factors related to social interaction and context, theories on factors related to the organizational context, and theories on the influence of economic factors.

3.1.1 Theories on factors related to individual professionals

Many theories explain the unique professional elements that impact change. These can include the judgments and choices made by professionals, as well as their motivation and attitudes toward achieving a specific performance improvement. In these concepts, social or structural conditions might be significant, but only if the individuals think they are meaningful.

According to Grol et al., (2013), three main theories can be applied to individual professionals in the healthcare sector, the first theory is the cognitive theory, which focuses on the logical thought and decision-making processes of individual professionals, and also provides strategies for modifying these processes. The second theory is educational theories, which show the drive to learn and adapt by emphasizing educational ideas more so than cognitive processes. Adult learning theories, for example, believe that when people base their learning on real-world issues rather than abstract knowledge like guidelines, they learn more effectively and are more driven to make changes (Walker & Leary, 2009). The third theory is the motivational theory, which emphasizes the importance of attitudes, perceptions, and intentions concerning the intended performance (Kok et al., 1991).

3.1.2 Theories on factors related to social interaction and context

Theories concentrating on how other people in the environment affect change processes typically address factors that influence how a professional interacts with others. These factors include mutual impact in teams or group processes, the influence of important people and opinion leaders, involvement in social networks, and the role that leaders play in influencing individuals. In this section, the main six theories related to social interaction and context in the healthcare sector management, are as follows, theories on communication, social learning theory, social network and influence theories, theories on

teamwork, theories on professionalization, and theories on leadership will be introduced in brief.

The first theory is communication, which illustrates how good communication affects attitudes and actions. According to the influence communication model, for example, for communication to be effective, the recipient must be exposed to the message, pay attention to it, understand its conclusions and reasons, accept them, keep the message's fundamental terms, and, in the end, adopt a different mindset. To ensure the success of this process, the communication needs to be customized for every stage (Grol et al., 2013).

The second theory is social learning, which is connected to the theory of planned behavior, and describes how people behave in terms of their personal, behavioral, and environmental circumstances (Bandura, 1986). The third theory is Social network and influence, This shows the impact of social network structure on how quickly new concepts and technologies are adopted. The effects of the strength of the connections between people or organizations inside a network have been studied in network research. Even when they have poor connections within a specific network, people who belong to separate networks (such as a healthcare organization and an academic research group) may play a critical role in the exchange of information across networks (Valente, 1996).

The fourth theory is on teamwork, as well know, the healthcare in particular has based on teamwork, which is considered a means of addressing the division of care to generally improve treatment for certain patient groups. Teams must work towards a single, well-defined aim to be successful. Teams that function well design and assign responsibilities and tasks, provide training to individuals to carry out these roles and tasks, and provide transparent

communication structures and procedures to support healthcare systems in doing their work effectively (Grumbach, 2004).

The fifth theory focuses on professionalization, which can be described as a variety of elements that may impact changes in professional behavior. Professionals (such as doctors and nurses) have a body of information that is difficult for non-professionals to access and is highly valued by society due to its application to everyday life. In their field of expertise, the health professions have typically been successful in gaining an advantage in practice as well as some degree of decision-making autonomy. Professional members regulate training and exams that are necessary for admission to their respective fields (Freidson, 1970). Finally, the six theory which focus on leadership, as it is well known, leaders, either formal or informal, can have a significant impact on implementing new procedures or processes or influencing clinical practice. It is believed that strong leadership will encourage, ensure, or occasionally even obstruct innovation. Such authority or influence can originate from a variety of sources, including formal authority, control over limited resources, possession of knowledge, experience, or abilities necessary to accomplish certain, important goals, membership in a robust social network, or cultural dominance (Donaldson, 1995).

3.1.3 Theories on factors related to the organizational context

These theories identify areas where patient care could change, especially in terms of structural, administrative, or organizational conditions and reforms. Examples of these include improved care process organization, reorganizing tasks and roles, altering the work environment's culture, or promoting professional collaboration. In this section a quick discussion related to theories about the organizational context will be presented in brief which are

as follows, innovative of organizations theory, quality management theory, process reengineering theory, complexity theory, organizational learning theory, and finally others about the organizational culture.

The first theory is innovative organizations, which concentrates on the traits of organizations that influence whether and how much they can apply innovations. Innovations are adopted by some organizations more easily and faster than others (Wolfe, 1994). Additionally, according to Hage, (2018), high levels of specialization, functional differentiation, professionalism, decentralized decision-making, improved technical knowledge, effective internal and external communication, a change-friendly mindset among managers and leaders, and, lastly, the capacity to overcome financial obstacles appear to be the main predictors of innovativeness.

The second theory focuses on quality management, the goal of Total Quality Management (TQM), also known as Continuous Quality Improvement (CQI), is to better satisfy the demands of patients by emphasizing the value of ongoing multidisciplinary process improvement in the healthcare industry. It is a planning model as well as an impact theory. CQI places a strong emphasis on comprehending and enhancing work processes and systems to raise the overall quality of the organization (Blumenthal & Kilo, 1998).

The third theory is process reengineering, Similar to total quality management, ideas of process re-engineering center on the incremental or total redesign or reworking of care processes. To provide the best care possible, better meet the needs of patients and minimize costs, approaches like business process redesign (BPR) and disease management seek to better organize and manage the care processes generally as well as for particular patient categories (such as cancer, diabetes, depression, and heart failure). These ideas suggest that rethinking or improving the organization of cross-

disciplinary care procedures is frequently a more effective way to bring about successful change than trying to influence professional decision-making. Top-down, management-driven approaches are typically used in BPR and related processes, whereby present procedures and practices are examined, re-examined, and then revised. These strategies typically involve the establishment of new care provider alliances, a reorganization of work assignments, effective information transfer, effective appointment scheduling, and the utilization of novel health professionals (such as nurse case managers). These processes revolve around the patient and their illness, not the interests of the experts and carers involved in their care (Hunter, 2000).

The fourth theory is complexity theory, which is considered a theoretical approach to systems behavior and change that is predicated on the idea that, given the complexity of the healthcare industry, it is critical to monitor and enhance systems as a whole rather than concentrating on their elements. According to the theory, the majority of healthcare systems, such as primary care teams, hospitals, and treatment plans centered around certain diseases, are classified as complex adaptive systems. These are characterized as "a group of independent agents (i.e., parts or elements) possessing the autonomy to behave in unpredictable ways, and whose activities are linked together, such that the actions of one agent alter the circumstances of the other agents (Plsek & Wilson, 2001).

The fifth theory is organizational learning, where external orientation, an experimental mindset, an openness to trying new things, a culture that accepts debate, openness, and conflict, a continuous commitment to education, growth, and development at all organizational levels, and involved leadership are characteristics of effective learning organizations (Grol et al.,

2013). In addition to that, it is worth mentioning that, Garvin D. A., (1993) Defined a learning organization as “skilled at creating, acquiring and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights”.

Finally, the sixth theory is focused on organizational culture, dependent on the idea that performance and culture are connected and that changing a particular culture may or ought to affect performance (Scott, 2003). When a group of people or an organization supports and begins to share a common history and set of experiences, culture slowly begins to emerge. The organization gains the ability to manage both internal integration and external pressures over time. Routines ("this is the way we do things here") incorporate values and standards that are instilled in the members. Therefore, culture is a set of common information, rules, and values that people may not be particularly aware of rather than just something that can be observed (Schein EH, 2010).

3.1.4 Theories on the influence of economic factors

There are theories about market laws, competition, compensation systems, and financial incentives that shed light on how changes are impacted by the broader economic and societal context. It is crucial to recognize these elements while enacting changes in healthcare, even though many of them are beyond the grasp of change agents. In this section, the two main theories related to economics and contracting will be introduced and discussed briefly.

The first theory focuses on the economic part, which is based on the idea that people seek to minimize risks and maximize their goals. The main focus of economic theories is market regulation, which includes considerations of price setting, competition, reimbursement, and transparency. The kind of

healthcare reimbursement scheme matters for achieving budgetary objectives and preventing financial hazards. Patients and healthcare providers alike are aware of costs and the accompanying financial hazards. Therefore, it is possible to influence professional or organizational performance and achieve change through reimbursement, cost sharing, or co-payment (Grol et al., 2013).

The second theory is related to contracting, which indicates that when the financial risk is shifted to the care provider's compensation, the utilization of innovations, best practices, or clinical guidelines increases. In this approach, by including incentives for using these protocols in contracts, it is possible to encourage the establishment of procedures for hand cleanliness or diabetic treatment (Grol et al., 2013). Additionally, to have a strategy to provide healthcare services, "buyers" (government, insurance companies, etc.), and deliverables—in this case, accountability for satisfying the demands of the populace—are the three components of a service contract. Contracts establish "quality standards" and set goals for better treatment (Allen et al., 2002).

3.2 Healthcare Change Management Models

The theoretical foundations of change management are explored in the section that follows, along with a variety of models and frameworks that can be used in organizational contexts, including the healthcare sector, which is the main focus of this thesis. The models are Kurt Lewin's change management model, John Kotter's 8-step model, the ADKAR model, and McKinsey's 7s model will serve as the basic basis for this research. These four models are among the most widely used in this field and complement one another in several ways. The groundwork is established by presenting change as a three-step process using Lewin's Model. Expanding upon this

fundamental idea, Kotter's 8-Step Model presents a more thorough change management roadmap. The ADKAR Model describes how to shift from an organizational to an individual focus and provides the stages needed for personal change, which are as follows, knowledge, awareness, ability, desire, and reinforcement.

In addition to that, McKinsey's 7-S Model offers a comprehensive viewpoint on change. By prioritizing the alignment of seven interdependent elements—Strategy, Structure, Systems, Shared Values, Skills, Style, and Staff—this model differs from the sequential approach of its predecessors. When combined, these models provide an integrated view of change management and serve as the foundation for the creation of a specific framework designed to meet the particular difficulties and characteristics faced by the healthcare sector.

3.2.1 Kurt Lewin's Change Management Model

Kurt Lewin's well-known three-step change management paradigm sees organizational change as a process of unfreezing, changing, and refreezing Kurt Lewin developed the three-stage Change Management model, which offers a methodical and transparent way of understanding and implementing change, moreover, Lewin's approach emphasizes how crucial it is to complete each step to ensure that the change management process is successful. The concept emphasizes the necessity of stability in an organization both before and following initiatives for change (Cummings et al., 2016). Kurt Lewin's model was selected because of its ease of use and usefulness in promoting organizational transformation.

As shown in Figure 3, the main three stages of Lewin's change management model are presented, which are as follows, unfreezing, change, and final

refreezing. The first stage is unfreezing where, preparing for the upcoming shift comprises questioning prevailing attitudes, values, beliefs, and organizational practices. This stage's main goal is to raise awareness of how the organization's current status restricts progress and, as a result, to make the case for the need for change. The second stage changes, during this phase, which is also known as the actual transition, the organization implements the change. This is usually a confusing time when new perspectives, behaviors, and operating procedures emerge. The organization begins to shift towards a different kind of existence that is driven by the change effort. Finally, the third stage which is refreezing, where combining the changes from the previous phase is the goal of this stage. The daily operations and culture are updated with new perspectives, methods, and behaviors. This phase's goal is to guarantee that the modifications are maintained throughout time and keep the organization from reverting to its former condition (Cummings et al., 2016).

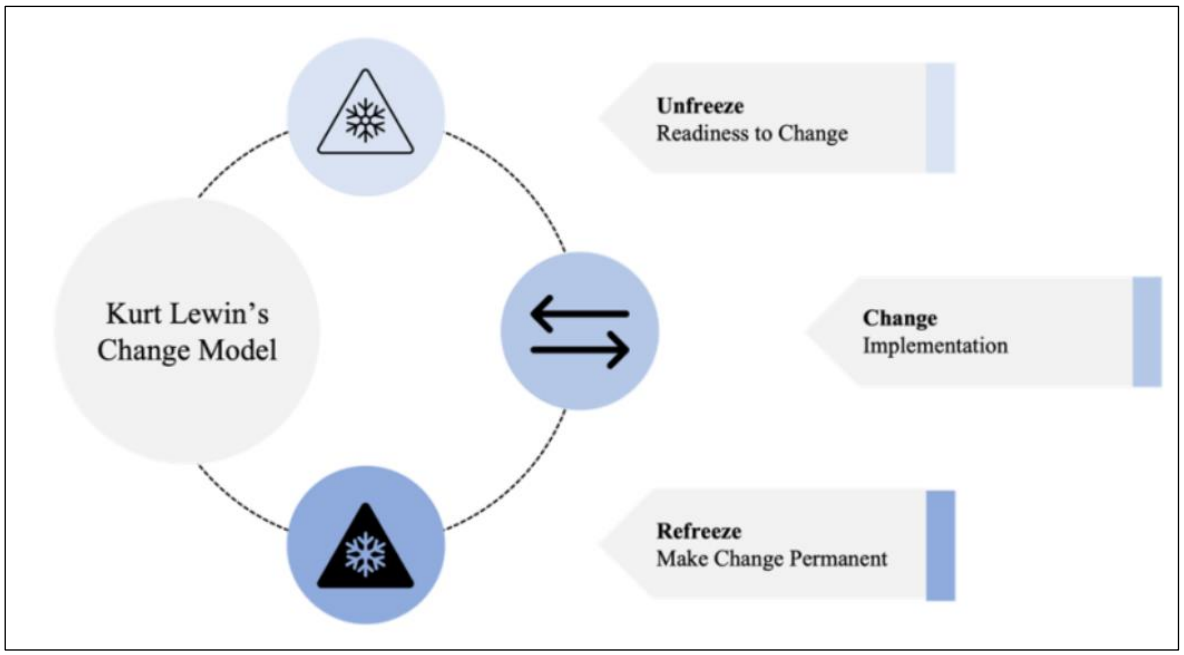

Figure 3. The Three Stages of Kurt Lewin's Change Management Model (Cummings et al., 2016).

3.2.2 John Kotter's 8-step Change Model

The 8-step Change Model developed by John Kotter is preferred because it takes a systematic and comprehensive approach to assist with organizational change, especially strengthening and expanding on the fundamental ideas put forward by Lewin. This model works especially effectively for large-scale, complicated change initiatives that are typical in the healthcare sector, where it is essential to motivate and engage a wide range of stakeholders through a set of clearly defined processes. By dividing the change process into eight manageable parts, Kotter's model builds on Lewin's three-stage framework and addresses some of Lewin's model weaknesses. More specifically, Kotter goes beyond Lewin's emphasis on only the beginning (unfreezing) and end (refreezing) stages of the change process and stresses continuous participation throughout (Haas et al., 2019). While it is worth mentioning that paradigm is sequential, every step builds upon the one before it. Before moving on to the next phase, each must be completed completely for the change to be effectively implemented and maintained.

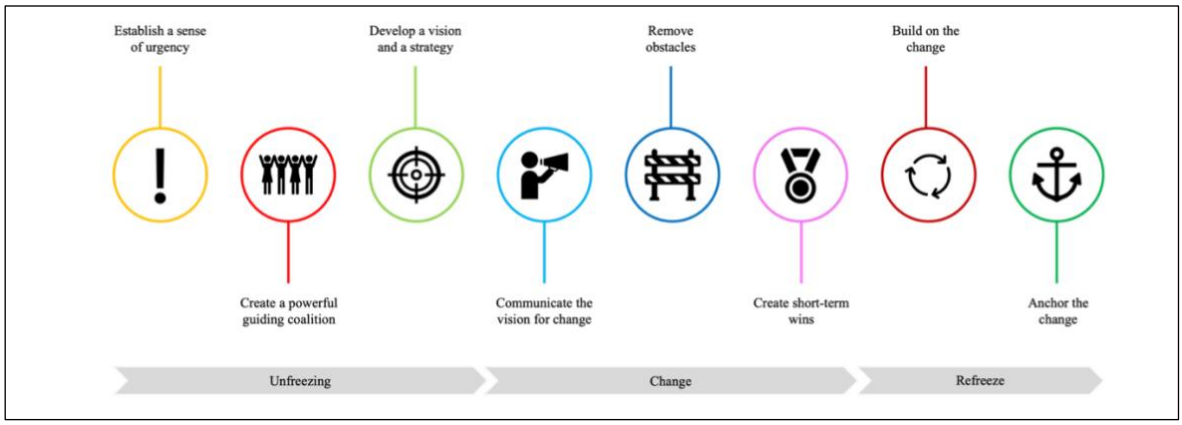

Figure 4. The Eight Stages of John Kotter's 8-step Change Model (Haas et al., 2019).

Figure 4 illustrates the main eight stages of John Kotter's Change Model as described by Haas et al., (2019), which are as follows, the first stage is to

establish a sense of urgency, where the identification and communication of noteworthy opportunities or possible disasters generate a sense of urgency throughout the organization. This step aims to reinforce the belief that change is both urgently needed and necessary. The second stage is to create a powerful guiding coalition, where a powerful group within the company needs to be gathered. This group carries a heavy burden of aiding the joint change-making endeavor. The third stage is to develop a vision and a strategy, where, Understanding the need for change can be assisted by a well-defined vision, and the strategy outlines how to make the vision a reality. The fourth stage is to communicate the vision for change, during this phase, a comprehensive effort is made to explain the change initiative, strategy, and vision. The message should be distributed often by the organization across all accessible channels of communication (Haas et al., 2019).

The fifth stage is to remove the obstacles, where this stage's goal is to eliminate organizational obstacles that restrict change, like cultural groups and systems that threaten the change vision. Additionally, the company needs to provide incentives for taking calculated risks and solving problems that align with the change endeavor. The sixth stage is to create short-term wins, where management should aim for short-term wins during the change program and communicate with staff members. This phase's goal is to demonstrate that change leads to success and that the effort is valuable. The seventh stage is to build on the change, where changes that are in opposition to the change initiative should be made to structures, systems, communities, and policies by utilizing the momentum from the preceding stage. Finally, in stage eight, the change will be anchored, and a good way to strengthen the change is to make links between the organization's current situation and its past achievements. It is important to provide leaders with incentives to make sure the change sticks and is integrated into the organization (Haas et al., 2019).

3.2.3 The ADKAR Model

Hiatt, (2006) stated that the ADKAR model of change is effective on an individual level, additionally, this model's strength is its capacity to identify the main reasons why people don't change and the points at which the change process isn't working. As a result, it concentrates attention on activities that have the best possibility of leading to change. To achieve the desired change, the five steps in the change process represented by ADKAR must be completed in order.

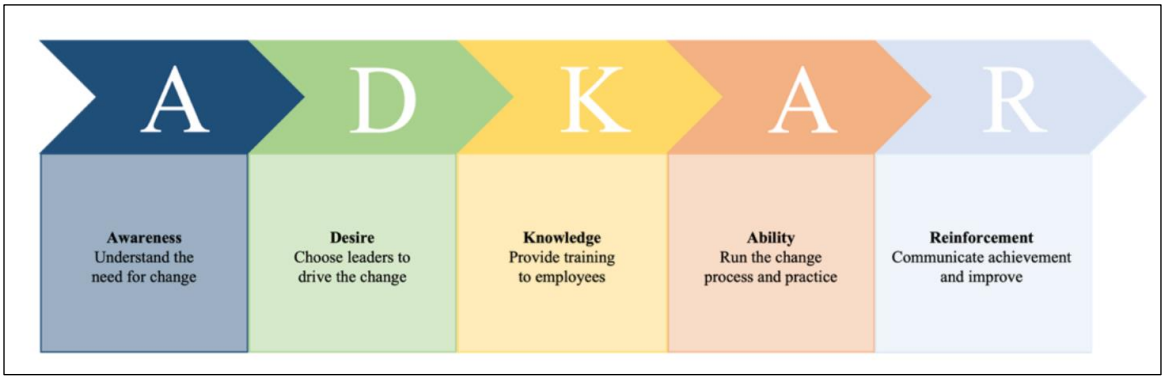

Figure 5. The Five Stages of the ADKAR Model (Hiatt & Creasey, 2003).

As presented in Figure 5, the five stages of the ADKAR model as suggested by Hiatt & Creasey, (2003), which are as follows, where the first stage is Awareness of the need for change, where people have to be properly informed about the changes that are required and the reasons behind them. One might ask themselves, "What are the risks if individuals do not change?" And why has there been a change? Providing clear answers to these queries might increase people's awareness and inspire them to make changes.

The second stage is the desire to participate and change, where It is crucial to take advantage of people's desire to support and participate in the change after knowledge of what needs to change has been raised about it. Due to the possibility of resistance to the change, this second stage is extremely crucial

(J. M. Hiatt & Creasey, 2003). The third stage is the knowledge of how to change, where in this phase, people are given comprehensive instructions on how to bring about the transformation. Details regarding the components of the immediate environment that will be changed as well as the kinds of systems and behaviors that will be put into place as part of the change program should be included in this material. Providing such information is crucial since it will enable people to begin understanding the tasks at hand (Budiwati & Langi, 2013).

The fourth stage is the ability to implement required skills, where applying the knowledge acquired in the preceding step to actual situations. As a result, people must receive enough supervision and guidance at this point to enable them to carry out acts correctly. As a result, proficiency might be attained by applying the new process together with more mentoring, experience, and time. Finally, the fifth stage is the reinforcement to sustain the change, where people have to decide whether the actions they are taking produce the intended results. Therefore, rewarding people for their positive behavior and actions by supervisors plays a significant role in this stage. People who struggle to bring about change won't continue implementing the program's new actions until their accomplishments are acknowledged (Jaaron et al., 2022).

3.2.4 McKinsey's 7-S Model

The model is a detailed tool for evaluating and raising an organization's effectiveness. Seven components make up the model: staff, shared values, skills, structure, shared values, shared values, and strategy. The components are divided into hard and soft aspects: strategy, structure, and systems are considered hard factors, while shared values, staff, skills, and style are considered soft factors. Additionally, there are multiple layers of interaction and connectivity between the components. For instance, strategy is defined

as the plan to establish a competitive advantage and coordinate with the organizational design found in the structure and the operational procedures found in systems. The shared values' fundamental beliefs and attitudes impact skills, which are fundamental organizational competencies, therefore there is a connection between the soft aspects as well. Last but not least, personnel, or human capital, is guided by style and leadership methodology. The model's comprehensive approach to organizational analysis provides insights into change management (Jain & Kansal, 2023).

Erik Larsson & Maren Thesing, (2024) presented a full comparison as introduced in Table 1 between the four models of change management in the healthcare sector showing the main stages, focus and the need for sequential order or not, the key emphasis, the application, the distinct features, and finally the limitations of each model.

Table 1. Comparison Between the Main Four Models of Change Management in the Healthcare Sector (Erik Larsson & Maren Thesing, 2024).

Feature	Kurt Lewin's Model	Kotter's 8-Step Model	ADKAR Model	McKinsey's 7-S Model
Phases/Stages	3 (Unfreeze, Change, Refreeze)	8 Steps	5 Phases (Awareness, Desire, Knowledge, Ability, Reinforcement)	7 Elements (Strategy, Structure, Systems, Shared Values, Skills, Style, Staff)
Focus	Process of Change	Comprehensive Strategy for Change	Individual and Organizational Change	Organizational Effectiveness
Sequential Nature	Yes	Yes	Yes	No
Key Emphasis	Preparation, Transition, Consolidation	Engaging and Motivating Stakeholders	Individual Adoption and Competency	Alignment of Elements (Hard & Soft)
Application	General, with simplicity for practical application	Complex, Large-scale Initiatives	Human Perspective of Change	Holistic Organizational Analysis
Distinct Features	Simplicity and Clarity	Detailed Strategic Approach	Focus on Individual Change Process	Interdependence of Organizational Elements
Limitations	May oversimplify change	Requires rigorous adherence to steps	Focused more on individual than organizational structure	Complexity in balancing and aligning all 7 elements

3.2.5 Model of the Study

As mentioned earlier in this chapter, there are plenty of models for change management, however, the most feasible ones, which can be utilized in the change management in the health sector were presented. Now, it is crucial to focus on the main barriers and challenges associated with the change management adaptation in the health and medical sector. It is worth mentioning that those challenges can be split into two main categories, the first one is associated with organizational barriers such as organizational size,

organizational structure, poor planning, rigid policies and procedures, and restructuring costs. The second main category is associated with cultural barriers such as disrupted workflow, reduced productivity, changed culture, and resistance to change.

Figure 6 presents the main organizational and cultural barriers. Those challenges will be the focus of this thesis. Interviews will be conducted to investigate more about those challenges and to present some analysis for those interviews, which later on can be utilized as a base of knowledge, for any health organizations plan to apply change management.

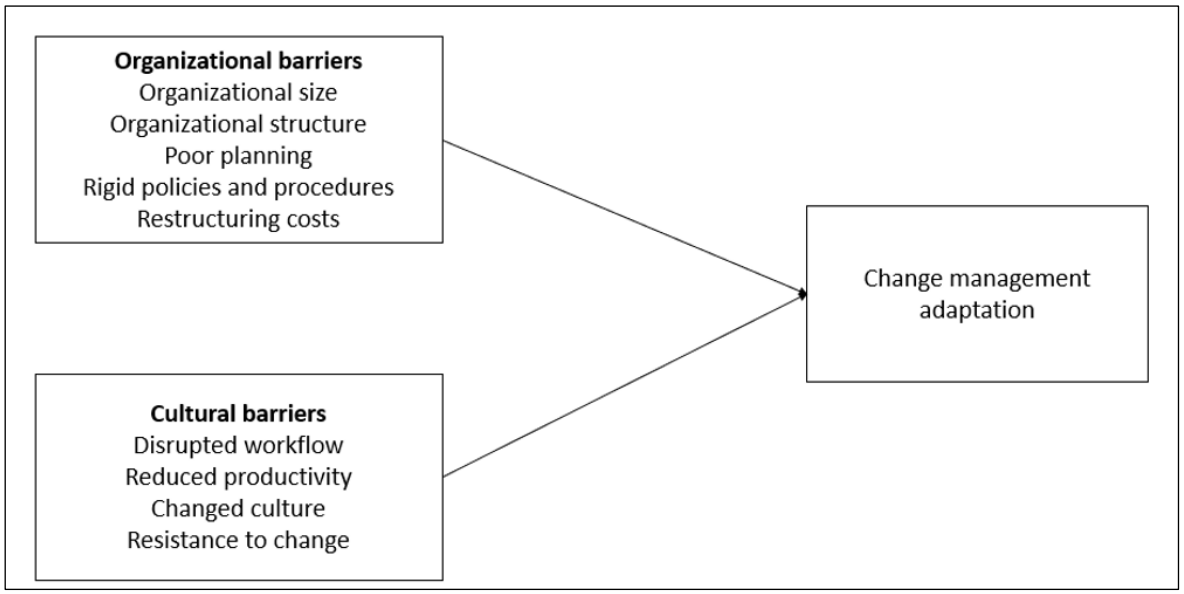

Figure 6. Change Management Adaptation Barriers (Renukappa et al., 2022).

3.3 Healthcare Change Management Barriers and Challenges

The implantation of new management and strategies within the healthcare system faces plenty of challenges and barriers, so it is important to present in brief the most common and crucial ones, which will have a major effect on any futuristic change that occurs within any medical organization. While it is worth mentioning, that the execution of change management is directly associated with the usage of new technologies and smart healthcare systems,

as a result, most of the current challenges are related in some way or another to new technologies, the rest will be related to culture and planning. In the Renukappa et al., (2022) review, plenty of challenges and barriers related to the implementation of new and smart healthcare strategies were mentioned, however, in this section the major ones will be introduced and discussed in brief which are as follows, disrupted workflows and reduced productivity, change culture, organizational size, organizational structure, poor planning, rigid policies and procedures, resistance to change, and finally costs.

3.3.1 Disrupted Workflows and Reduced Productivity

Any new management and technology deployment is accompanied by disruptions before, during, and following adoption. This is especially true when it comes to implementing clever healthcare tactics. Before deployment, a significant amount of time must pass for end users to receive the necessary training and skill levels to operate the new systems. The time away from clinical duties required for this training lowers organizational productivity. Additionally, it takes a while for a company to fully implement smart healthcare practices, which implies that productivity will be poor while acceptance occurs (Borries et al., 2019).

Papa et al., (2020) emphasized that the new smart healthcare methods are incorporated into the organization's procedures, and there are also disturbances to regular workflows and processes. This lengthy process of change and disruption lowers the productivity of healthcare provider organizations as a whole. Following implementation, productivity declines as end users adjust to the new tactics and any workflow modifications, as well as when they suffer other initial obstacles.

3.3.2 Change Culture

Razmak et al., (2018) stated that the degree to which a healthcare provider organization is willing to encourage, exhibit good effect, and be open to changing its decision-making process to accommodate change is referred to as its "change culture." Adopting smart healthcare strategies successfully requires a culture shift.

According to Kooij et al., (2018) Adopting new techniques in healthcare management is severely limited by the innovation-averse principles that characterize hospitals. The numerous competing important stakeholders in the health sector, each of whom demands that their ideas be heard and taken into consideration, are the main cause of this culture. If any stakeholder group feels left out, this inevitably slows down or prevents the adoption process altogether. Moreover, the adoption of smart healthcare techniques also has an impact on key processes used by healthcare providers, which are frequently unclear and challenging to modify. This results in job modifications and additional duties for employees. End users are frequently alarmed by changes to their routines or duties, which breed opposition to the change and foster an innovation-averse culture in healthcare service organizations.

In addition, the healthcare industry handles life's most significant elements. These kinds of changes used to be caused by mistakes and errors, which might have disastrous effects or even result in fatalities in the healthcare industry. A significant obstacle to the adoption of new techniques in healthcare management is the change-averse organizational culture that some healthcare providers and professionals have unintentionally created as a result of their unpleasant prior experiences (Kooij et al., 2018).

3.3.3 Organisational Size

Smaller healthcare organizations have fewer staff members and smaller finances than larger healthcare organizations. This implies that smaller healthcare provider organizations are unable to supply the critical financial, human, and technical resources that new techniques in healthcare management adoption projects require. These resources are all necessary for the adoption of smart healthcare techniques. Smaller healthcare providers are prevented from implementing smart healthcare strategies by a lack of funding, which makes it difficult for them to test and modify new techniques in healthcare management in the early phases of adoption and to cover maintenance expenses thereafter (Faber et al., 2017).

3.3.4 Organisational Structure

Sligo et al., (2017) mentioned that the Organisational structures of healthcare providers are non-linear and dynamic. Moreover, Organisations that provide healthcare services frequently have a large number of departments, and each department typically has unique management, policies, and approaches to setting priorities. Most organizations that provide healthcare services are multi-professional and have two levels of hierarchy that include management and clinicians. Clinicians frequently have a great degree of autonomy and decentralized decision-making, in contrast to managers. This results in a complex organizational structure with multiple levels and, occasionally, the integration of additional related groups with varying finances and agendas. Due to difficulties arising from multi-stakeholder viewpoints, conflicts between commitments, and power imbalance, this complexity slows down or even prevents the adoption of smart healthcare because it is difficult to come to a consensus or make a decision.

The adoption of new techniques in healthcare management is significantly influenced by the structure of organizations. Decision-making within a company is determined by its organizational structure. The adoption of new techniques in healthcare management is negatively impacted by organizational structures that encourage centralized top management decision-making since they eliminate end users' accountability and creativity, who are the ones who will utilize the strategies regularly. Due to this constraint, top management may make poor judgments, such as choosing intelligent healthcare techniques that conflict with or don't support existing processes, because they neglected to involve end users who possess the necessary expertise or knowledge. Consequently, end-user resistance emerges from a mismatch between existing routines and intelligent healthcare techniques. Therefore, end-user resistance is a major obstacle to the successful implementation of new healthcare management methods, and it is caused by a centralized top-management organizational structure (Faber et al., 2017).

3.3.5 Poor Planning

According to Mileski et al., (2017), poor planning is a barrier to the effective deployment of new healthcare management methods. It is crucial to make sure the change strategy is in line with the organization's broader vision and goals, just like with any other attempt to implement a change inside a company. When implementing smart healthcare, some healthcare organizations make mistakes in their planning, which causes the adoption to be out of step with the organization's vision and goals. Furthermore, insufficient planning may lead to unreasonable adoption deadlines or the scheduling of the change during busy or peak periods, which may be disastrous for the organization since it prevents the successful

implementation of smart healthcare management techniques at the designated time.

3.3.6 Rigid Policies and Procedures

Tian et al., (2019) stated that there is still a lot of space for growth, and a lot of new obstacles are appearing as new management technologies and issues arise. For instance, the authors claimed that the absence of macro guidelines in smart healthcare results in confusing development goals and, eventually, resource waste. Furthermore, data integrity needs to be improved at medical institutions because there are inconsistent standards among companies and locations.

The adoption of new management is not supported by the majority of the healthcare system's current policies, practices, and regulations. These policies and regulations from the past need to be changed because they were created to support manual and paper-based healthcare. It is challenging to enhance security and facilitate the integration of smart healthcare management systems with current workflows in the absence of these adjustments. However, obtaining the necessary approval to change laws and rules in the healthcare industry may be an exhausting procedure that takes years. It is difficult enough for healthcare provider organizations to adopt intelligent healthcare strategies because of this time-consuming and difficult process (Nguyen et al., 2015).

3.3.7 Resistance to Change

According to the study made by de Grood et al., (2016), the implementation of new smart healthcare strategies presents a risk to end users' independence over processes or procedures associated with their specific knowledge and expertise. For instance, this can occur when clinicians diagnose patients

before meeting with them, potentially leading to bias and resistance among clinicians to adopt smart healthcare strategies. In other cases, users of smart healthcare techniques report receiving more calls, emails, and appointments—especially in the early phases of adoption—which increases the workload for physicians.

Gaining clinical time is one advantage of using new smart healthcare strategies, but users often view this as new healthcare strategies taking their jobs. This could lead to their termination, which makes them resistant to accepting it. End users' resistance to using smart healthcare is a result of inadequate communication and involvement from upper management, which has left them afraid of change and unaware of the advantages such programs bring (Mileski et al., 2017).

3.3.8 Costs

The implementation of new healthcare management is associated with the usage of new technologies. Where any cutting-edge technology solution has a high cost of adoption. Adopting smart healthcare techniques comes with several expenditures, such as infrastructure, the cost of purchasing gear and software, implementation expenses, and continuing maintenance costs. Certain smart healthcare-related technologies are still in the experimental phase and need substantial money to be updated and maintained. The majority of healthcare providers have been discouraged from using intelligent healthcare management solutions because of the high initial adoption cost. Insufficient financial resources restrict healthcare practitioners from implementing smart healthcare practices, starting with the costly acquisition of necessary technology and software. Money is a big issue, particularly in the healthcare industry because most governments don't set aside significant sums of money or offer financial incentives (Gagnon et al., 2016).

Adopting new healthcare management and strategies comes with a price tag that includes continuing operating, maintenance, and training expenses that continue long after the initial adoption is over. If financing is available for implementing smart healthcare practices, it is frequently restricted, provisional, and only covers the start-up expenses without taking maintenance, sustainability, or training costs into account. Additional financing is required to cover follow-up and continuous training costs, which help users accept the potential of smart healthcare. End users receive less first-line assistance, maintenance, and training when there is insufficient financing. When healthcare providers already have a limited budget, these large recurring expenses sometimes discourage them from implementing cost-effective healthcare practices (Alami et al., 2017).

4 Research Methodology

In this chapter, the main stages of the research methodically applied to this thesis are presented and discussed in brief. The main stages for this thesis are as follows, the first stage will discuss the nature of the research in general. The second stage will present and focus on the nature of research for the business and management one and what are its basic characteristics. The third stage will illustrate the basic research process that will be applied to the thesis. The fourth stage will be about the designing of the conducted research and what techniques will be utilized. The fifth stage will introduce the research method. And finally, the description of interview execution.

4.1 The Nature of the Research

According to (Saunders et al., 2012) research is more than simply going through a few books or articles, speaking with a few people, or asking questions, even though it frequently includes gathering information. Although gathering data might be a step in the research process, it won't be considered research if it isn't done methodically, independently, and especially with a specific goal in mind. In many reports, the second of these is standard. Data are gathered, maybe from multiple sources, and then compiled into a single document with a list of the data's sources. Nevertheless, the gathered data is not interpreted. Once more, gathering information from many sources could be a step in the research process, but it is not research without interpretation. Lastly, the word "research" can be employed to draw attention to a product or idea and imply that others should trust it. When you enquire about the specifics of the study method in these situations, they are either cautious or unhelpful.

4.2 The Nature of Business and Management Research

Easterby-Smith et al., (2002) stated that three factors come together to create management and business as a unique area of study which are as follows: First, how researchers and managers alike use knowledge from various fields; second, the reality that managers are often busy and strong individuals. As a result, they are unlikely to grant access to research unless they recognize benefits to their own lives or businesses; also, the research must have some real-world application. Finally, this means it either needs to contain the potential for taking some type of action or needs to take care of the practical impact of the findings.

Business and management research must address corporate difficulties and real-world managing challenges in addition to producing discoveries that increase knowledge and comprehension. Moreover, the goal and setting of your research project can vary greatly within these parameters of knowledge advancement, business problem solving, managerial problem resolution, and the advancement of the common good. Your goal for certain research assignments can be to comprehend and describe the effects of something, like a specific policy. You can conduct this study inside a specific organization and, based on your findings, recommend suitable action. You might want to look into how other organizations do things differently for future study projects (Saunders et al., 2012). Figure 7 illustrates a basic comparison between the basic and applied research for business or management problems.

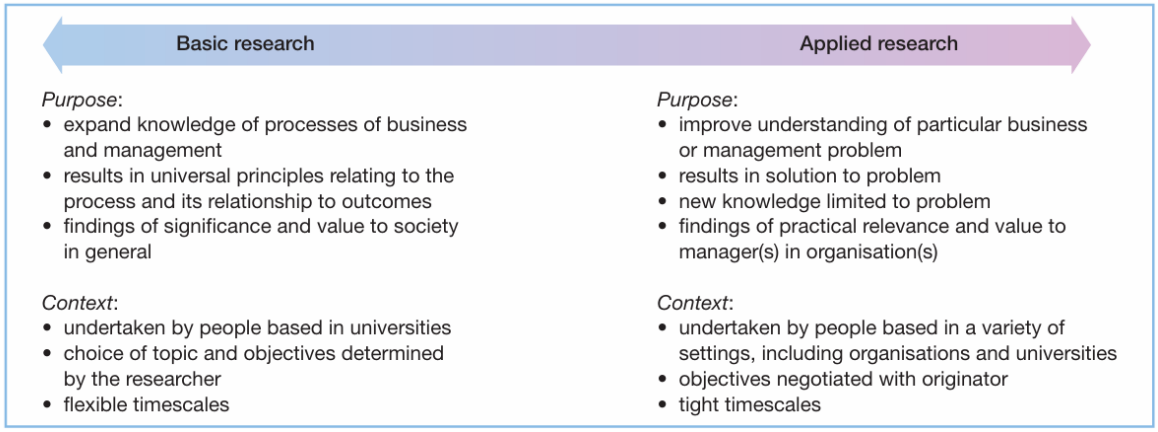

Figure 7. Basic and Applied research for business or management problems (Saunders et al., 2012).

4.3 The Reacrh Process

The majority of research textbooks describe research as a multi-phase procedure that you must keep to start and finish your task. Although the exact number of steps varies, they often involve developing and defining a topic, examining existing literature, planning the study, gathering and analyzing data, and writing up the findings. Most of these characterize the research process as a set of steps that you must go through, even though they provide justified instances. The logical and simple nature of the research process may also be implied by the articles you have read. Unfortunately, this is rarely the case and reality is easier, with occasionally seemingly brilliant ideas turning out to be irrelevant. Although it is often seen that research proceeds through the aforementioned stages sequentially, this is not likely to be the case. In practice, you will most likely go over each step more than once. You must consider the related problems and hone your concepts each time you go back to a stage. Additionally, as some textbooks emphasize, you will need to think about access and ethical issues as you go along (Saunders et al., 2012).

4.4 Research Design

The framework of this thesis consists of two parts, the first part is conducting interviews about the topic of identification and the associated challenges for the application of change management within the health and medical sector with three different interviewees in three different departments within a health organization (XYZ), which is a fundamental starting point for this thesis. The first interviewee will be mentioned in the thesis findings and quoting as A, the second interviewee as B, and the third interviewee as C. The interview target is to examine the interviewee's knowledge about the topic and after identifying the topic for them, know their perspectives regarding the topic and discuss more about the challenges associated with applying the change management to any health organization. The second part is conducting a literature review about the challenges and trying to combine those collected challenges from the previous literature reviews with the analyzed data from the conducted interviews, to have a wider picture and more clarification about those challenges, by hearing from the real persons in the field.

There are two main methods for research data analysis, which are compared in Figure 8, the first is qualitative data analysis and the second is quantitative data analysis. Qualitative data analysis is usually applied to small sample sizes, typically less than 20. The data collection methods for qualitative research could be interviews, observational research, or focus groups. There are two main data types for qualitative research: behavioral patterns and natural language. In quantitative research, the data is usually analyzed by identifying patterns in participant behaviors and responses. Finally, the data is presented by showing the original quotes or videos (Yilmaz, 2013).

On the other hand, quantitative data analysis is usually applied to large samples, typically more than 100. The data collection methods are surveys or

online web capture. The data type in quantitative research is numeric, and it can be analyzed using numerical methods and statistical analysis. Finally, in quantitative data research, the data can be presented in tables, charts, or graphs (Yilmaz, 2013).

However, due to the limitation of time, only three interviews were conducted, and as a result, a qualitative data analysis will be conducted and the obtained analysis will be combined with the data collected from the literature reviews.

	Qualitative Research	Quantitative Research
Sample Sizes	• Small (typically < 20)	• Large (typically ≥ 100
Data Collection Methods	• 1:1 Interviews • Observational Research • Focus Group	• Surveys • Online-Web Capture
Data Types	• Behavior patterns • Natural language	• Numeric
How Data Is Analyzed	• Identifying patterns in participant behaviors and responses	• Using numerical methods and statistical analysis
How Data Is Presented	• Original quotes, videos	• Tables, charts and graphs

Figure 8. The Difference Between Qualitative & Quantitative Research Execution.

4.5 Research Method

The main method for the research was conducting a structured theme interview and interviewees were selected based on their area of management to represent most employees. In this thesis, the interviews are regarded as primary and qualitative research. The goal of qualitative research is to use participant experiences and viewpoints in order to clarify events. In total three employees were invited to participate in the interviews.

The interviews were conducted at one of the hospitals, that belong to the XYZ group, which is one of the largest medical and health organizations in the Gulf

region, where more than 12000 employees work. The organization has more than 10 hospitals and more than 50 specialized clinics in the Gulf region.

The first interview was conducted with the Health Group (XYZ) CEO, who in our situation can represent the management level in a health or medical organization. At this level, the topic identification was easy, as it is common for the management to hear and discuss the change in management all the time, moreover, the discussion about the challenges associated with the adaption of those managements was from real-life situations and experience.

The second interview was conducted with one of the department managers. The selected manager was the head of the pediatric department in the Health Group (XYZ) because I am working in this department and have direct contact with the challenges associated with this department, and how we within the department try to tackle those challenges and find some answers for the new proposed changes from the management. What was obvious during this interview, was that the level of knowledge about the topic and the challenges associated with the change application was less than 50% compared to the level of knowledge within the management level. This for sure, increases the importance of the need for more identification at the second managerial level, most of them are more on the practical side and more focused on the operational part.

The third and last interview was conducted with the head of the nursing team in the pediatric department in the Health Group (XYZ), who can be considered in our study as a representative of the auxiliary personnel within the organization. From the conducted interview, it was obvious that the level of knowledge about the topic was almost zero, as this level of employees is not familiar with this kind of managerial staff. However, when we discussed more about the challenges, it was obvious that the knowledge challenges for the

new measure or changes needed from them were known and already some of those challenges were presented in their everyday tasks. The learned lesson from this third interview is that the need for more identification and courses for this level of employees is very important, as they play the most important role in this change within the organization. Moreover, they represent more than 50% of the employees within the organization.

4.6 Execution of the Interviews

The interviews were executed in person by interviewing every person one by one. The interviews were executed in October 2024 in the hospital meeting room in the Gulf region. At the interview time, each interviewee had the time to read the questions and had a brief about the topic and reason behind the selection of the topic and general clarification about the data and the names to be anonymous. All interviewees had read the information and they had a sense of the overall picture of why the interview was arranged.

Before the interview, it was clarified which company was meant by the reference "Group XYZ" and that the term "team" referred to the team of each team leader. Every interviewee was informed that the interviews would be conducted in either Arabic or English, that they would be anonymous, and that they would be recorded if they agreed. Every interviewee consented to the recording, and each team leader was independently updated on the recording's progress before it began or ended. The interviews were held in the conference room and the interviews lasted between 30 minutes to 1 hour each. The interviews were arranged within one week.

5 Empirical Findings

In this chapter, the analysis of the data obtained from the interviews will be divided into two main categories, the first one is associated with organizational barriers such as organizational size, organizational structure, poor planning, rigid policies and procedures, and restructuring costs. The second main category is associated with cultural barriers such as disrupted workflow, reduced productivity, changed culture, and resistance to change. Overall, eight main challenges will be presented and discussed. The analysis of the data will be combined with more data from the literature review to add more credibility to the results obtained and to have a wider overview of the topic, which can be used as a base for more and wider research and analysis in the future.

5.1 Research Findings about Healthcare Change Management Barriers and Challenges

In this section, the research findings associated with each challenge will be presented and discussed in brief, while mentioning some quotes from the conducted interviews.

5.1.1 Disrupted Workflows and Reduced Productivity

Disruptions occur before, during, and after acceptance of any new management and technology implementation. This is particularly true when it comes to putting smart healthcare strategies into practice. There must be a considerable amount of time before deployment for end users to acquire the skills and training required to use the new systems. Organizational productivity is lowered by the time away from clinical responsibilities needed for this training. Furthermore, it takes time for a business to fully adopt smart healthcare practices, meaning that until adoption takes place, productivity will

be low. According to interviewee A, “The presence of new techniques or measures to our operating management model will for sure face some challenges at the beginning such as the disruption of workflows and reduced productivity as learning new measures will require some time for the whole staff to learn and to adapt in their daily tasks”.

5.1.2 Change Culture

Hospitals' innovation-averse culture significantly restricts the adoption of new methods in healthcare management. This culture is a direct result of the many competing significant stakeholders in the health industry, all of whom want their ideas to be heard and taken into consideration. If any stakeholder group feels excluded, the adoption process will unavoidably be slowed down or stopped completely. Furthermore, essential procedures that healthcare professionals utilize are affected by the implementation of smart healthcare solutions. These processes are often confusing and difficult to change. As a result, workers' jobs are changed and they are given more responsibilities. Changes to end users' routines or responsibilities often cause them to get concerned, which leads to resistance to the change and creates an innovation-averse culture in healthcare systems. According to interviewee B, “In each department, we have many members with different backgrounds and cultures, where it is very challenging to impose any new measures without making sure it will be suitable to all the stakeholders otherwise, the execution will face challenges”.

5.1.3 Organizational Size

Compared to larger healthcare institutions, smaller healthcare organizations employ fewer people and have smaller budgets. This suggests that the essential financial, human, and technical resources needed for novel

approaches in healthcare management adoption projects cannot be provided by smaller healthcare provider organizations. All of these resources are essential for the implementation of intelligent healthcare practices. Lack of money inhibits smaller healthcare providers from adopting smart healthcare methods, making it hard for them to test and adjust new healthcare management techniques in the early stages of adoption and to pay for maintenance costs afterward. According to interviewee A, “There is no doubt that the size of the organization matters in any change management process, in our case, the larger the team or the department the more challenges we will face, especially if the department members have different educational background between the medical team, the nursing team and the supporting teams, every part of the department will require special attention and applying their special requirement to ensure that the change management are applied correctly”.

5.1.4 Organizational Structure

The majority of healthcare service providers are multi-professional organizations with two tiers of hierarchy: clinicians and managers. Unlike managers, clinicians often have a high level of autonomy and decentralized decision-making. This leads to a multi-level, complex organizational structure and, sometimes, the incorporation of other relevant organizations with different budgets and goals. This complexity slows down or even stops the adoption of smart healthcare because it is hard to reach an agreement or make a decision due to issues coming from multiple stakeholder opinions, conflicts between commitments, and power imbalance. According to interviewee C, “We usually do and follow the instruction from the management and from the doctors, the issue that we can handle the clinical matters perfectly, but the new measures or process from the management

sometimes is more difficult to us to apply as it's far away from our education or area of expertise".

5.1.5 Poor Planning

Some healthcare organizations make planning mistakes when implementing smart healthcare, which results in adoption that is inconsistent with the organization's vision and objectives. Inadequate planning can also result in unnecessary adoption dates or the change being scheduled during busy or peak times, which can be terrible for the organization because it makes it impossible to successfully apply smart healthcare management approaches at the appointed time. According to interviewee A, "We tried to ensure that our plans for the change management to be executed exactly as the management vision, however, one of the most challenging issues while planning is the choice of the right time, as the medical sector can't have a week or month off to apply the changes or the plans, so usually we have to do that while the facility is running, so that's our major concern for the planning to avoid bad results".

5.1.6 Rigid Policies and Procedures

Most of the current policies, practices, and laws in the healthcare system do not promote the implementation of new management. Because they were designed to support manual and paper-based healthcare, these outdated policies and regulations must be revised. Without these changes, it is difficult to improve security and make it easier to integrate smart healthcare management systems with existing operations. However, it can take years and be a taxing process to get the required clearance to alter laws and regulations in the healthcare sector. Adopting intelligent healthcare initiatives is already a challenging and time-consuming process for healthcare service

organizations. According to interviewee A, “The medical sector interacts with different policies, practices, and laws which we have to follow in each country we have worked in, and this change and update all the time, so we have to adhere with those policies all the time and for sure our change management procedure, otherwise there will violate those policies, which might cause huge penalties and may affect our reputation”.

5.1.7 Resistance to Change

The independence of end users over procedures or processes related to their particular knowledge and skills is in danger when new smart healthcare methods are implemented. This might happen, for example, when doctors diagnose patients before seeing them, which may cause disadvantage and resistance on the part of doctors to use intelligent healthcare practices. In other instances, the workload for doctors is increased as a result of smart healthcare practices, as users report receiving more calls, emails, and appointments, particularly in the early stages of adoption. According to interviewee B, “It is not easy for us to follow the latest protocols for our clinical tasks that change all the time and at the same time follow new management system. This will be a challenge for us to balance between those two variables, however, regarding the changes associated with policies or the laws, we are forced to learn and follow, but the other changes sometimes face resistance from elder doctors and nurses, as their ability to accept change in their routine is not easy”.

5.1.8 Costs

The cost of implementing new healthcare management and strategies includes ongoing maintenance, training, and operating costs that persist long after the initial adoption is complete. If funding for the adoption of smart

healthcare practices is available, it is usually limited, provisional, and only covers the initial costs without accounting for training, sustainability, or maintenance costs. To assist users, and embrace the possibilities of smart healthcare, follow-up and ongoing training expenses must be covered by additional funding. According to interviewee A, “The most challenging part for the change management after planning and choosing the right time is the cost. The application of new measures or changes in most cases will be associated with major costs for the equipment, the facilities, the courses and time wasted on the learning process, besides the side effects of the risk of affecting our customer services, which might cause damage to our reputation”.

6 Discussion

After applying change management to any healthcare organization, it is important to apply new techniques and measures to make sure it is performing well, however, it is essential to find ways to improve that change by applying several measures. In this section, Priya Rana, (2024) Article, the main seven ways to enhance healthcare change management were presented, which are as follows, give leaders more careful permission to fulfill their sponsor roles, enhance the work environment to increase engagement and retention, adjust for saturation and weariness, include staff meetings on change competency in routine tasks, link change to the organization's goals, establish a network of change agents, and finally integrate change management into the delivery of healthcare.

6.1.1 Give leaders more careful permission to fulfill their sponsor roles

Just the pace of work in the healthcare industry puts a lot of strain on leaders these days. We need to provide them with the tools they need to carry out their sponsorship position in a way that seems valuable and doable without adding to their already full plate. When we incorporate discussions about change management into meetings that are previously planned, leaders not only complete tasks, but change management also becomes a standard component of their work (Priya Rana, 2024).

6.1.2 Enhance the work environment to increase engagement and preservation

The patient or client always comes first in the healthcare industry. However, as businesses, we must take a different approach and prioritize our workers. If they are to give their all at work and deliver high-quality healthcare, they must feel appreciated and cared for. By concentrating on the employee

experience, we may promote a desire for significant and occasionally challenging changes across the entire organization. However, the way a company handles change as a whole enhances the employee experience, which also helps with the retention problems that healthcare organizations across the globe are currently facing. (Priya Rana, 2024).

6.1.3 Adjust for saturation and weariness

Too many changes are wearing everybody out, not just leaders in healthcare and change supporters. The healthcare sector is becoming more and more saturated with change, which is significantly affecting front-line staff. Having an enterprise emphasis is helpful in this situation. Intersections are created by an enterprise emphasis that is hidden by project-only change management. It helps you gain an in-depth understanding of changes and shows you how each modification in your portfolio interacts, overlaps, and even collides with the others. Your organization can begin developing change capability in a variety of ways. Making that space allows you to begin to perceive the larger picture in an informal way (Priya Rana, 2024).

6.1.4 Include staff meetings on change competency in routine tasks

When interacting with healthcare personnel who need to accept change, it is imperative to recognize the significance of time. They already have a full schedule of taking care of patients and clients while maintaining safety. There is never enough time to complete everything that has to be done, much less find time to attempt and enhance methods by working differently. However, there is momentum for change in the healthcare industry because ineffective routines worsen the issue. To overcome this dilemma, we must actively link changes and change competencies to regular work (Priya Rana, 2024).

6.1.5 Link change to the organization's goals

In the field of healthcare, the purpose is strongly connected. This dedication is apparent everywhere, whether you work in patient-facing care, the front office, or the back office. Therefore, it is essential to always tie change to purpose when discussing it. When a manager or executive sponsor announces a change, staff members ask, "What are you talking about, and how is it going to improve my ability to do my job for my patients?" right away. It will be as if they are unable to hear you if you do not have that message (Priya Rana, 2024).

6.1.6 Establish a network of change agents

Deploying any enterprise-wide strategy or change locally requires assistance. Creating a network of change agents or ambassadors will assist you in promoting and implementing the changes in various workplaces, medical facilities, geographical areas, etc. It is also possible for busy managers to carry out their important tasks during change by utilizing key influencers as change champions. In change management, the interval between involvement and delivery is crucial. Furthermore, as was already noted, people will feel more in control of how the change will affect them if you can involve them in the process of creating and designing solutions (Priya Rana, 2024).

You may assist your healthcare organization by creating a network of change agents by accelerating the implementation of systemic improvements in healthcare to increase the range and reach of reforms, and make the most of people and resources, boosting communication inside a medical facility or healthcare system, and align the goals of change across the board in the organization, developing the ability to manage change in individuals performing a variety of tasks within the company, establishing credibility and trust for change management, particularly in the wake of unsuccessful

previous attempts, and finally boosting worker morale and willingness to contribute in the change (Priya Rana, 2024).

6.1.7 Integrate change management into the delivery of healthcare

Organizations must consider change beyond programs or initiatives since it is now an inherent part of the healthcare industry. Individuals are handling several projects at once. To connect to a larger goal and the organization's general direction, people must get together, participate, and benefit from each other's insights. This involves establishing an efficient enterprise change management (ECM) strategy and developing change capabilities across the entire organization. ECM focuses on developing people's talents and competencies at all organizational levels so that changes that are implemented annually can be implemented more successfully. Every change the organization implements is more successful as change management techniques get established and centralized, and your practice as a whole gets better (Priya Rana, 2024).

7 The Conclusion

It is impossible to create a universally applicable change management plan, especially in a specialized field such as healthcare. Nevertheless, one will benefit from using the aforementioned techniques, strategies, and resources regardless of the division or industry you operate in. Moreover, a guarantee that intended results are realized and that disruptions to regular business operations are kept to a minimum when change is managed effectively. However, as mentioned earlier, the healthcare sector is very important and has a significant effect on the economy and society, and its management paradigm was affected dramatically after the occurrence of the COVID-19 pandemic, which provided the window for more improvements and changes in the management system and advancing the usage of new techniques and measures within the healthcare management to match with the presented challenges.

In the thesis, the main challenges associated with change management in the health and medical sector were presented and discussed in brief. Those challenges were also investigated with the interview with three main persons, who represent the main elements of any medical organization, and their observations and notes were recorded and presented while quoting the most important parts of their replies about the challenges.

Overall, the notes about the disrupted workflow and reduced productivity were some of the main concerns of the management and the clinical teams, as the proposal of new measures or techniques might require more time for adapting or learning, which might cause a delay in the doing of daily activity. The second challenge was the change of culture, which may represent a challenge in a multi-diverse organization with different levels of employees

who come from different cultures and different backgrounds, which might be a challenge to apply change management.

The notes about the third challenge (the organizational size) were as follows, the larger the organization, the larger the challenges. There is no doubt that a bigger organization will require more planning and resources to apply the change management, and this change will be associated with different layers of employees and the need for coordination with all these layers will require a huge effort. The fourth challenge was the organizational structure, as it is known, the medical organizational structure is very complicated as it has multiple layers of employees starting from the management side to the clinical side, where it is not easy to handle all those matters with all those stakeholders.

The notes about the fifth challenge (poor planning), were as follows, as mentioned earlier in the review and the finding about poor planning, as it plays a vital role in change management in the medical sector. The planning and time selection for the change management execution is very important, as in the medical sector, the medical originations cannot be shut down for a long time, however, the change management shall be done while the organization is fully operational, which represents a major challenge to the management. The sixth challenge is associated with the rigid policies and procedures, where the medical organization needs to follow the state or the country's policies, laws, and regulations, while at the same time, the new change management shall adhere to those matters otherwise, the violation of those policies or laws will cause huge damage for the organization reputation.

Several challenges are associated with resistance to change, as discussed earlier in the findings about this point, the change is not easy, especially for the clinical sector, where they focus more on the clinical part, while are not

interested in the managerial matters, especially the elder doctors and the nursing teams. Finally, the notes about the final challenge, which is the cost are as follows, cost always plays a vital role in the change management process as the change will be associated with many costs for the new systems, the courses, and the time wasted for learning and adopting the new techniques or measures, in our opinion the cost is the most crucial elements for executing the change management after planning and following the policies and procedures.

In conclusion, in this thesis, a quick review and study of the main healthcare management strategies, theories, and models, were presented showing how the usage of those techniques can help in the new management scheme in the medical sector. On the other hand, the implementation of a new management system will for sure face several challenges and barriers, especially during the beginning, and when applying new and smart technologies, those challenges and barriers were presented and discussed in brief, showing how those challenges could disrupt the operation of change management within the healthcare organizations.

7.1 Implication

The thesis's main focus was on change management in the health and medical sector in particular, which focused on the main challenges associated with the execution of change. The main research question was investigating, how those challenges can affect and how the staff can navigate to achieve the change purpose without violating or affecting the organization's performance. The execution of change management is usually associated with many challenges, however, in the medical sector those challenges are more than usual, due to the sensitivity of the organization itself. The research tried to present the main challenges and the main results retrieved from the interviews conducted with

the main elements of the organization, to use the collected information as a base that will help in the process of change management within the organization. The selection of the major challenges was based on the literature review analysis that emphasized the effect of those challenges on the change management process.

7.2 Limitation

The research is subject to several limitations, which affect the depth and applicability of its findings. Firstly, the study's geographical focus on the Gulf region does not represent the full spectrum of the health and medical care sector, limiting the external validity of the results. Moreover, the population number and diversity in the Gulf region are not high, which might not give an accurate indication of the results. Finally, the conducted interviews were applied to three interviewees, even though they represent the main elements of the organizations, but the limited number reduces the credibility and validity of the obtained result, however, in the next research more samples can be applied and for more regions, where there will be more diversity.

7.3 Future Research

The thesis research focused only on the Gulf region with a limited number of samples. Moreover, the thesis focused only on change management without concentrating on the usage of new technologies how it can affect change management, and how it can increase the resilience of the futuristic healthcare management scheme to face and tackle all upcoming challenges. This might be the start of the next step after this research.

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Appendices

Interview Questions

Background information and general questions

- Name of the interviewee:
- Interviewee's position and department:
- Job description:
- Duration of employment:

Organizational Barriers

Organizational Size

- How does the size of your hospital influence its ability to implement change management?
- Were there any financial, human, or technical issues during the implementation process?

Organizational Structure

- Can you describe how the department's organizational structure influences change management adaptation? (*if they are not sure what to answer, you can bring them the example of unique management, policies, and approaches to setting priorities*)

Planning

- How did the quality of planning impact the success of change management in your hospital?
- Were that any deadline prolonging or poor scheduling that influenced the adaption of change management? Can you describe it?

Rigid Policies and Procedures

- Did policies, practices, and regulations create barriers to effective change management adaption? If so, what was the impact?
- Have there been cases when policies had to be updated to accommodate a change initiative? What was the outcome?

Restructuring Costs

- How do financial considerations related to restructuring impact your hospital's willingness to pursue change?
- What have been the major costs of adaptation for your hospital/department/organization?

Cultural Barriers

Disrupted Workflow

- How did the adaption of change management impact the workflow in your unit/hospital/organization?
- Was there any resistance among employees regarding the workflow caused by the change management? If so, can you share an example?

Reduced Productivity

- How does the change management influence the productivity of your unit/hospital/firm?
- Have you observed any techniques that helped to mitigate productivity loss, if there were any?

Changed Culture

- How did the changing culture in your organization/unit/hospital impact the adaptation of new change management?

- Can you provide an example of a change culture that either positively or negatively influenced the change management?

Resistance to Change

- Were you confronted with the resistance of employees to adapt to the change management? If so, can you describe the main factors that influenced this?

General Questions

- What do you consider the most challenging in adaptation of change management?

- What recommendations would you have for the hospitals needed to adapt the change management?
- Finally, would you like to add something regarding the topic we just discussed?