# Change Management in Hospitals: A Framework Analysis

Mahdi YOUSEFI<sup>a</sup>, Leila MASHHADI<sup>b</sup>, Ali AKBARISARI<sup>c</sup>, Zahra EBRAHIMI<sup>d1</sup>

<sup>a</sup>Dept. of Health Econ.&Mgmt. Science, Mashhad University of Medical Sciences, Mashhad, Iran

<sup>b</sup>Department of Anesthesia, Lung Diseases Research Center, Mashhad University of Medical Sciences, Mashhad, Iran

<sup>e</sup>Department of Health Management and Economics, Tehran University of Medical Sciences, Tehran, Iran

<sup>d</sup> Human Resource Mgmt., Islamic Azad University of North Tehran Branch, Tehran, Iran

> Abstract. Background: Hospitals are complex organizations that frequently need changes especially in service delivery processes, organizing, human resource management, monitoring and evaluation and technologies. Maintaining and improving productivity is a key requirement in hospital change management. Therefore, we need to develop and expand an appropriate model for management of changes in hospitals; which is the main purpose of this study. Method: A qualitative approach was used to conduct semi-structured interviews in 2019-2020 with 12 expert managers at Mashhad University of Medical Sciences, Mashhad, Iran. A prestructured framework was applied for the data analysis. Results: Four main themes and nine sub-themes were identified as the main phases or stages of the framework that can be used to manage changes that aim to improve efficiency in hospitals. The main themes were problem identification and initial support; studying, designing and planning; participation in implementation; considering executive requirements; and implementation, assessment, feedback and stabilization. Conclusion: Management of changes that aim to improve hospital efficiency requires a practical model that was specifically developed by this study. This model should consider all the key elements that were identified; and should consider the expectations of the key stakeholders and their contribution in implementing the change.

> Keywords. Change management, Productivity, Hospital Administration, Improvement

#### Introduction

The improvement healthcare system will not be possible without some improvements in hospital's performance[1].Improving hospital productivity requires constant changes [2]. In recent years change management has evolved to change management models, processes and plans in order to facilitate the impact of change in organizations [3]. ADKAR change model includes 5 words: awareness, declination, knowledge, ability and reinforcement. As a manager, this tool can be used to identify gaps in the change management process and provide an effective leadership role for its employees [4,5].

<sup>&</sup>lt;sup>1</sup> Corresponding author. Zahra Ebrahimi, PhD student, Faculty of Management, Islamic Azad University, North Tehran Branch, Tehran, Iran; Email: Ebrahimiza.85@gmail.com

The use of change management models as a guiding framework and not as a prescriptive management process is in accordance with the prevailing thinking in the present era about healthcare as complex systems [6]. Research in the United States, studied changing strategies in hospitals which considered the scope of implementation as an important element in making changes. Communication, empowerment and delegation of implementation decisions to the leaders of departments and units are among the success factors in applying change models [7]. The majority of change models used in health and treatment centers are considered to create a framework in order to establish a wide and diverse range of activities and rarely address the resistance issues of the change stakeholders [6-8]. In a recent example of opening a new hospital building in Australia, employee attitudes shifted from appreciation in the early stages of change to frustrations as the development progressed [9]. Nowadays, we have witnessed a paradigm change in the performance of hospitals, that its main concepts express the multilateral management of hospitals and consider them as a social phenomenon that requires a dynamic view and to achieve that there must be change [10]. Hence, the purpose of this study was to develop a suitable model for managing changes in hospitals in order to improve productivity.

#### 1. Methods

The present study with a qualitative approach was conducted in 2019 and 2020 at Mashhad University of Medical Sciences, Mashhad, Iran. This study had 12 participants who had been chosen through purposive sampling. There were some conditions to enter this study which included participating voluntarily in the study, having experience in making at least one change in the modification of the hospital process and acting as a change manager or significant stakeholder who is aware of all the steps in the change process. Face to face interviews have been conducted in the format of semi-structured interviews. According to the type of the study (framework analysis), the interview guide was extracted from the ADKAR model. The primary questions to interview participants included the following: 1. How was the need for change felt or discovered? 2. How was support for change and stakeholder participation done? 3. How is the implementation path of change defined? 4. How has the process of implementation and consolidation of change been? Sampling and data collecting hadn't stopped until obtaining new data from interviews [11]. In this study, the framework analysis method was used to analyze which includes 5 steps: "introduction", "identifying a thematic framework", "Indexing", "Tabulation" and "combine and interpret data or map". This method has been developed particularly to analyze the qualitative data in study policies. At the introduction stage, the researcher absorbs the data by listening to audio files or reading manuscripts. During this process, researchers learn about the key ideas of the frequent contents and start the note taking process. Determining a thematic framework is not an automated process but requires logical thinking and intuition. In order to make change, the ADKAR model was used to design the initial study framework to analyze. The ADKAR model is a five-step framework which helps dealing with change management. This method had been provided by best-selling author and founder of Prosci, Jeffrey Heath [12] (Figure 1).



Figure 1. ADKAR model [12]

Basic thematic framework was discussed by researchers in a number of repetitive sessions. At first, the researcher indexed the transcribed interviews using the ATLAS/ti. V8 software. Then the other authors have discussed the index and the essential arrangements were made. This process has been repeated several times for all interviews. After that, they were compared to the point of view of every different interviewee about each topic by using an analysis chart. The relation between main and alternative contents were also examined. They have used transcribed interviews and in case of need charts were added. Contents were interpreted by using the same process which was explained for indexing. The thematic framework was updated in the analysis process.

# 2. Results

In this study, 12 participants were interviewed. Table 1 shows the demographic information of the participants.

Characteristics	Average ± deviation / number (per)		
Age (years)	$45.2 \pm 6.1$		
Years of work experience	$17 \pm 8.7$		
-	Non-medical PhD	3(25)	
Education	Specialist (medical)	2(17)	
	<b>General Practitioner</b>	3(25)	
	Master of nursing	4(33)	
Gender	female	4(34)	
Marital status	male	8(66)	
	single	0(0)	
	married	12(100)	

Table 1: Characteristics of participants

In total, in the process of framework analysis of the present study, 4 main themes and 9 sub themes were identified (Table 2).

Themes	<b>Sub-themes</b>
Problem identification and the initial request for support	• Identify the issue
	<ul> <li>Identifying key stakeholders and the initial request for support</li> </ul>
Studying, designing and	• Examine the previous related experiences and knowledge
planning	Clarification of modus operandi and study plan

Table 2: Themes related to hospital change management

Participation seeking for •	Information and obtaining the consent of stakeholders	
requirements •	Confirming the executive requirements	
Implementation, assessment,	•	Managing executive challenges
feedback and stabilization	•	Assessment and feedback
	•	Stabilization after implementing changes

## 2.1. Theme 1 – Problem Identification and the Initial Support

## 2.1.1. Sub-Theme 1- Identify the Issue

"...The first question that comes to mind when talking about change is what is about to change and why. In fact, the determining point of the change process is to identify the problem which our change revolves around." (P10)

## 2.1.2. Sub-Theme 2- Identifying Key Stakeholders and the Initial Support

"...Look, when you decide to make a change on a topic or improve a process, there are always individuals at hospitals or universities who legally have the authority, power or inclination to not give you the permission to make a change or improve a process. It might be the opposite. It means that the above-mentioned individuals actually support your change and accelerate the process. Those are the people who must be completely legitimized before everything starts." (P08)

#### 2.2. Theme 2 – Studying, Designing and Planning

#### 2.2.1. Sub-Theme 1- Examine the Previous Related Experiences and Knowledge

"...Sometimes we think we know it all and basically, we refuse to examine the previous experiences about a topic. We mostly think that we are the first person in the universe who wants to improve a process. But in fact, we are not. We need to believe that nothing in the world is with no theoretical background and research experiences." (P04) Heading

#### 2.2.2. Sub-Theme 2-Clarification of Modus Operandi and Study Plan

"...Make things clear about what exactly you want to do. Consider everything in detail, not in general. When senior managers of a hospital or university come up with an idea, we need to think about it and write down the things we are about to do in detail. We need to know what the starting points are and what will be during the process, another participant said." (P10)

## 2.3. Theme 3 – Participation Seeking for Implementation and Executive Requirements

#### 2.3.1. Sub-theme 1- Information and Obtaining the Consent of Stakeholders

"... The success of implemented changes highly depends on the stakeholders of that change. Before implementing, there are people we need to inform, satisfy and clarify.

Sometimes a matron needs to be informed of a change and sometimes this needs to be done through a face-to-face conversation. That's the skill of a change manager." (P11)

# 2.3.2. Sub-theme 2- Confirming the Executive Requirements

"...It doesn't matter how much a change manager focuses on the design process of work and the performing methods, there will still be challenges on its way. Most of these challenges are related to neglecting some of these executive requirements. Therefore, we ought to keep the stakeholders in the loop before everything starts and they need to inform you if there are any obstacles in the implementation process." (P03)

# 2.4. Theme 4 – Implementation, Assessment, Feedback and Stabilization

## 2.4.1. Sub-Theme 1- Managing Executive Challenges

"...If the change manager informed the stakeholders in the previous stages, there wouldn't be any challenges on his/her way in the implementation stage. Indeed, there will always be issues in the name of executive challenges of work which the change manager must make the necessary arrangements for." (P01)

# 2.4.2. Sub-Theme 2- Assessment and Feedback

"...There is always a cycle in the implementation process when talking about change management. By assessing and giving feedback to this cycle, we allow the stakeholders and the study itself to review the process." (P04)

## 2.4.3. Sub-Theme 3- Stabilization after Implementing Changes

"...If changing the stakeholders of a change, particularly the important ones, doesn't affect the process, then we can say that changes are sustainable and they have been implemented perfectly and presented as a positive experience. In other words, stabilization of a change is crucial and it is closely related to persistence of evaluation, feedback and improvement of implementation methods and it is considered as a kind of accommodation." (P05)

## 3. Discussion

According to this study, change management at hospital has 4 main themes which includes: problem identification and the initial request for support, studying, designing and planning, participation seeking for implementation and executive requirements, implementation, assessment, feedback and stabilization. In this study, the ADKAR model was used for framework analysis to change management in hospitals. Problem identification and the initial request for support were one of the main themes identified in this study. This theme is similar to step one of Kelin's reengineering method which includes preparation [14]. In Iranian hospitals, due to the large number of project stakeholders, it is necessary to analyze key stakeholders and prepare those [15]. Another main theme was participation seeking for implementation and executive requirements. These results are similar with a report of hospitals in Australia [16], which shows the importance of stakeholder engagement in the implementation process [17].Regarding the

last theme "Implementation, assessment, feedback and stabilization" it is in line with the refreezing step in Kurt Lewin's change theory [18]. The results of the Rechel et al. study showed that collecting complete information, stakeholder participation, and getting feedback from them about the decisions made had the greatest impact on the managers' decision-making performance [19]. Making changes in Iran's public hospitals and not fully implementing these changes shows the weak performance of managers in this field [20]. In Iran's health system, implementation, assessment and feedback are done to some extent, but due to many changes in the management systems, the stabilization stage rarely happens, and most of the projects remain unfinished despite spending a lot of time and cost. Thus, particular attention should be paid to the change management and sustainability of the change in hospitals to improve productivity. Although the main approach of the participants in this study was change management in government hospitals, apparently the extracted themes of the present study can be used in other nongovernmental hospitals and even other organizations. In order to use the findings of this study for other organizations, the cultural condition and climate of the concerned organization must be taken into account. One of the most important limitations of this study was deficiency of documentation and written organizational memory of individuals or processes that have been reviewed and modified over the years. This limitation caused challenges in identifying the individuals who were process owners and activists as change managers or a key stakeholder.

## 4. Conclusion

Managing change is certainly a challenge but it is not impossible. Linking the potential solutions can lead to improved methods for managing changes, offer new approaches that have not yet been discovered, and provide broader insights on how to use them against an organization that is always changing. An important advantage of the identified themes in the present study is that it's a combination of models related to change management, re-engineering and action research methods. Our finding indicates that the organizational culture of state hospitals in the field of change management requires methods that should have the features of change models, re-engineering models and action research methods.

#### References

- Dixit SK, Sambasivan M. A review of the Australian healthcare system: A policy perspective. SAGE Open Medicine. January 2018. DOI: https://doi.org/10.1177/2050312118769211
- [2] Daniel Branco, Angela M. Wicks & John K. Visich (2017) Using Quality Tools and Methodologies to Improve a Hospital's Quality Position, Hospital Topics, 95:1, 10-17. DOI: https://doi.org/10.1080/00185868.2017.1279514
- [3] Ebrahimipour H, Olyani S, Rezazadeh A, Khorsand Vakilzadeh A, Fazaeli S, Jafari M, et al. Effect of Iran's health system evolution" and" tariff change" based on relative values book on performance of obstetrics and gynecology department: a case study in a big hospital. *The Iranian Journal of Obstetrics, Gynecology and Infertility*. 2017;20(8):15-25.
- [4] Houben M, Caekebeke N, van den Hoogen A, Ringenier M, Tobias T, Jonquiere F, et al. The ADKAR® change management model for farmer profiling with regard to antimicrobial stewardship in livestock production. *Vlaams Diergeneeskundig Tijdschrift*. 2020;89(6):309-14.DOI: https://doi.org/10.21825/vdt.v89i6.17413
- [5] Ali MA, Zafar U, Mahmood A, Nazim M. The power of ADKAR change model in innovative technology acceptance under the moderating effect of culture and open innovation. *LogForum*. 2021;**17**(4).

- [6] Harrison R, Fischer S, Walpola RL, Chauhan A, Babalola T, Mears S, et al. Where Do Models for Change Management, Improvement and Implementation Meet? A Systematic Review of the Applications of Change Management Models in Healthcare. *Journal of healthcare leadership*. 2021;13:85.DOI: https://doi.org/10.2147/JHL.S289176
- [7] Baloh J, Zhu X, Ward MM. Implementing team huddles in small rural hospitals: How does the Kotter model of change apply? *Journal of nursing management*. 2018;26(5):571-8.DOI: https://doi.org/10.1111/jonm.12584
- [8] Choi WS, Park J, Choi JY, Yang JS. Stakeholders' resistance to telemedicine with focus on physicians: utilizing the Delphi technique. *Journal of Telemedicine and Telecare*. 2019 Jul;25(6):378-85.
- [9] Fiorio CV, Gorli M, Verzillo S. Evaluating organizational change in health care: the patient-centered hospital model. *BMC health services research*. 2018 Dec;18(1):1-5.
- [10] Speziale HS, Streubert HJ, Carpenter DR. Qualitative research in nursing: Advancing the humanistic imperative: Lippincott Williams & Wilkins; 2011.
- [11] Rosenbaum D, More E, Steane P. Planned organisational change management: Forward to the past? An exploratory literature review. *Journal of Organizational Change Management*. 2018.
- [12] Zafar F, Naveed K. Organizational Change and Dealing with Employees' Resistance. International Journal of Management Excellence. 2014;2:237.DOI: https://doi.org/10.17722/ijme.v2i3.101
- [13] Rasoulian M, Bazrafshan M, Shabani M. An Algorithm for Reengineering. WSEAS Transactions on Environment and Development. 2013;9(2):104.
- [14] Olyaeemanesh A, Behzadifar M, Mousavinejhad N, Behzadifar M, Heydarvand S, Azari S, Martini M, Bakhtiari A, Luigi Bragazzi N. Iran's Health System Transformation Plan: A SWOT analysis. *Med J Islam Repub Iran*. 2018 May 12;32:39. doi: 10.14196/mjiri.32.39. PMID: 30159290; PMCID: PMC6108248
- [15] Pomare C, Churruca K, Long JC, Ellis LA, Braithwaite J. Organisational change in hospitals: a qualitative case-study of staff perspectives. *BMC health services research*. 2019 Dec;19(1):1-9.
- [16] Jesus TS, Landry MD, Dussault G, Fronteira I. Human resources for health (and rehabilitation): Six Rehab-Workforce Challenges for the century. *Human resources for health*. 2017 Dec;15(1):1-2.
- [17] Saleem S, Sehar S, Afzal M, Jamil A, Gilani SA. Accreditation: Application of Kurt Lewin's Theory on Private Health Care Organizationanl Change. Saudi Journal of Nursing and Health Care. 2019;2:12.
- [18] Rechel, B., Wright, S., & Edwards, N. Investing in hospitals of the future. WHO Regional Office Europe. 2009; 16.
- [19] Delgoshaei B, Asefpour-Vakilian M, Meleki MR, Nasiripour AA. Change management in Iranian hospitals: social factors model. *Alborz University Medical Journal*. 2012 Feb 10;1(1):13-22.