HOSPITAL MANAGER MANUAL

FBH
FEDERAÇÃO BRASILEIRA DE HOSPITAIS

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ASSOCIATIONS

AHEAL – Alagoas State Hospitals Association

AHSEB – Bahia State Hospitals and Health Association

AHECE – Ceará State Hospitals Association

AHCES – Association of Hospitals, Clinics and Providers of Services Related to the Health Area of Espírito Santo

AHEG – Goiás State Hospitals Association

AHMG – Minas Gerais State Hospitals Association

AHCSEP – Association of Hospitals and Health Homes of the Pará State

APH – Paraíba State Hospitals Association

AHOPAR – Paraná State Hospitals Association

ANH – Northeastern Hospitals Association

AHERJ – Rio de Janeiro State Hospitals Association

AHORN – Rio Grande do Norte State Hospitals Association

AHRGS – Association of Hospitals and Health of Rio Grande do Sul

AHESC – Santa Catarina State Hospitals Association

AHESP – São Paulo State Hospitals Association

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TOMÁS DUARTE. One of the leading experts in Net Promoter Score and Customer Experience Metrics in Brazil and Latin America. Through its operations, Tracksale has currently impacted more than 100 million consumers with more than 1.250 brands in 09 countries such as Brazil, Argentina, Peru, Chile, Ecuador, Puerto Rico, Mexico, Colombia and the United States.

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INSTITUTIONAL PARTNERS

ABDEH

The Brazilian Association for the Development of the Hospital Building (ABDEH) is an independent, open and multidisciplinary entity, made up of professionals and companies related to the sector, which seeks to contribute to the continuous Brazilian evolution in the health building field, since its conception until its operationalization, and for the appreciation of its importance for the life quality of the society.

With 25 years since its foundation, ABDEH today has more than 700 professionals and more than 50 associated companies, all linked to the architecture, construction and health areas. With 17 regional districts across the four corners of Brazil, it brings together administrators, architects, designers, nurses, engineers, students, physicians and teachers. Its main objective is to offer conditions for improvement, experience exchanges and strengthen the career and training of architecture, engineering and construction professionals working in the health sector.

Emerson da Silva
ABDEH's President

ANS

The National Agency for Supplementary Health (ANS) is the regulatory agency linked to the Ministry of Health (MS) responsible for the health insurance sector in Brazil. Its mission is to promote the defense of the public interest in supplementary health care, regulating the operators of the sector - including its relations with providers and consumers - and contributing to the health actions development in the country.

Founded on January 28th, 2000 by Law No. 9.961, ANS endeavored to organize and systematize data and information, develop standards and define rules for operators, promote control and supervision of the market and safeguard consumers by promoting the public interest in supplementary health care. In this process, the health plan beneficiary protection has always been a priority, as the consumer is the most vulnerable element in the system.

Rodrigo Rodrigues de Aguiar
ANS' Director of Sectorial Development

ONA

The National Accreditation Organization (ONA) is a non-governmental and non-profit organization that certifies the health services quality in Brazil, focusing on patient safety.

ONA is responsible for the development of national health safety and quality standards in Brazil and has an important role in developing content to support evaluators, health professionals, students, accrediting institutions, health care organizations and health services.

About to complete 20 years of operation, ONA has 800 certified institutions and is consolidated as the main methodology for health accreditation in the country. Its methodology has defined standards for 16 different types of health services, such as: hospitals, outpatient clinics, laboratories, emergency care, home care, hemotherapy, nephrology and renal replacement therapy, hyperbaric medicine, cancer care, imaging diagnosis, radiotherapy and nuclear medicine, dental clinics, health care clothing processing, sterilization and reprocessing of materials, diet therapy and manipulation.

Our methodology and standards are recognized by the International Society for Quality in Health Care (ISQua), a partner association of the World Health Organization (WHO), which has representatives from academic institutions and health organizations from over 100 countries.

The objective of our action is to promote a constant process of evaluation and improvement of health services and thus improve the care quality in the country.

Péricles Góes da Cruz
ONA's Technical Superintendent

PRESIDENT'S WORD

QUALIFICATION AND STRENGTHENING OF THE BRAZILIAN HOSPITAL NETWORK

It is with great honor that I present the Hospital Manager Manual of the Brazilian Hospitals Federation (FBH), published under the institutional seal of the National Agency for Supplementary Health (ANS), the National Accreditation Organization (ONA) and the Brazilian Association for Development of the Hospital Building (ABDEH).

With this project led by Viva Comunicação Group and scientifically coordinated by J. Antônio Cirino, that holds Master and PhD degrees in Communication, Professor and Researcher in Health, and Andréa Prestes, Administrator, Coach, Specialist in Hospital Management and Lean Healthcare, Lean Six Sigma Black Belt certified, and by the general coordinator, Viviã de Sousa, journalist and administrator, this Manual was written by 18 nationally renowned authors, associated with the main institutions and companies in the Health Sector, showing the magnitude of the contributions explained in the following pages.

This work is in line with the goals set by FBH: to strengthen and unite the associations in favor of the hospital, and to work strategically to qualify the Health Sector, giving the necessary attention to small and medium-sized establishments which are majority all over Brazil. In addition, it also contributes to achieving representativeness in all states through new associations and greater recognition of FBH's importance among the other entities striving for health improvements in the country.

With 50 years of activity in defense of the interests of health facilities in Brazil, FBH has played a leading role, especially in the last decade. In addition to publishing innovative studies, conducting important industry debates, and rescuing the Brazilian Hospitals Convention (CBH), the Federation created an Internationalization Department, culminating in the organ's return to the International Hospital Federation (IHF) Board, among other advances.

Thus, in a satisfactory fulfillment of our statute, which addresses, in item "C", paragraph V, of Article 3, the focus on hospital managers training in a cyclical educational process, in which those who learn also teach, sharing knowledge with the network, I present to everyone the Hospital Manager Manual, an important theoretical-practical tool to assist in the dissemination of systemic knowledge for management of health units, aiming at the collective improvement of the chain involved in the Health Sector.

Adelvânio Francisco Morato
FBH's President

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PREFACE

TRANSFORMATION IN HOSPITAL MANAGEMENT

"No private institution is of greater public interest than
a private hospital!" (Luiz Aramicy Pinto)

Management is the art of managing standards, processes and people for the improvement and evolution of the hospital sector. This great ability is the main pillar for the development of the whole segment, especially people, organizations, companies, institutions and everything that concerns the health sector.

Running a hospital is the great art of managing a whole structure dedicated to the health system, being the main strategy for organizing the activities that make up this universe, and thus achieving not only the fulfillment of the result, but the satisfaction of the valuable role for which this whole hospital structure was set up: caring for the patient.

Since its inception, the hospital is the place where people are treated and seeks to provide complete multidisciplinary care, healing, prevention and/or treatment to the population. This complex establishment also consists of various areas in order to carry out its activity, with the responsibility to reflect their contributions at each stage. In ancient times, its purpose was more social than therapeutic, promoting care, restoring health, completing the diagnosis and performing treatment limited by the resources, standards and conditions of that time.

The first hospital in South America was the "Santa Casa de Santos", founded in 1543[1], which was managed by nuns and religious people. This organization has undergone several transformations to survive throughout these years and today remains a great reference for hospitals. The evolution is due to the development of hospital management that, until today, leads to the path of learning, applications and implementation of effective management models that are able to survive and accompany every change, transformations and demands for the continuous growth of the collective.

The main objective of this work is to support the development of the hospital manager, considering that the activity itself has undergone changes and is generating new changes in the health sector by itself. To this end, the Brazilian Hospitals Federation (FBH) presents to hospital managers and to every segment of the health area this "Hospital Manager Manual", which is certainly a compendium of the best practices and foundations of this scope, of great use to the current and future managers. From this material, we hope to contribute and guide to a more effective decision-making process that will lead to better performance of the hospitals managed by the ones who read the Manual.

Therefore, the chapters that follow in this material focus on understanding the main themes that are part of this universe and helping the manager to have a clear and strategic vision of the systemic areas that surround his activity.

Today, in Brazil, there are many undergraduate courses aimed at health and hospital administration, which prepare professionals for the market, offering theoretical knowledge during training. This manual complements this by providing a practical, broad and strategic view of the heart of hospital management.

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1 CAMPOS, E. S. **Santa Casa de Misericórdia de Santos**: primeiro hospital fundado no Brasil; sua origem e evolução 1543-1943. São Paulo: Elvino Pocai, 1943.

From this, the FBH is fulfilling what determines its own statute: to act in the training of hospital managers, through a cyclical educational process in which the ones who are learning also teaches, sharing the knowledge with the hospital network. The Federation is committed to acting on the sector's evolution, and in order to do so, we understand that with education being the basis of everything, the manager is in the top of this pyramid, and therefore has a huge responsibility for development of the entire hospital chain.

Therefore, FBH must be participative and active, in which the new practices, allied to the technological development itself, where the digitization of health systems predominates, force a constant behavioral metamorphosis within companies, since those who do not follow and do not adapt will certainly suffer serious economic and financial losses.

The pursuit for learning, training and updating must permeate the guidelines of this noble social function of hospital management, responsible for the patients, professionals, structure and results. For the excellent fulfillment of this function, as well as to assist the activities performed by thousands of hospital managers in our country, FBH has invested in this manual, understanding that it is the area that deserves our care and attention towards the construction of an even more positive scenario, expanding the reach of the results, aiming at the success of the sector.

We have a long and pleasant journey together, to build ways to improve hospital management throughout the country, as well as accompanying the constant transformation that impacts health and, more specifically, the professionals who work in it.

I invite everyone to know the Hospital Manager Manual, written by big names in their respective areas of knowledge, and which is backed by unique institutions for this scenario.

Luiz Aramicy Pinto
FBH General Secretary

INTRODUCTION

EXCELLENCE IN PROJECT MANAGEMENT, PEOPLE AND PROCESSES IN THE HOSPITAL CONTEXT

Andréa Prestes e J. Antônio Cirino

Hospital management is known for its great complexity. Hospital units have a significant range of areas of knowledge necessary for their operation, which must be properly conducted so that health services are optimally offered. The professional who joins the health management area needs to have a systemic look and to devote specific knowledge in administration for the efficient connection of the entire production chain, aiming at obtaining the best possible results.

For Peter Drucker, commonly known as the father of modern management, managers are professionals "who are expected, by virtue of their position or knowledge, and in the normal course of their work, to take decisions that have a significant impact on the overall performance and results."[1] In this sense, the hospital manager should focus its efforts on planning improvements, implementing objectivity actions, evaluating and controlling performance and creating a motivated and profitable environment for the company.

The hospital manager needs to have complete knowledge about the magnitude of the themes and skills needed for his daily work. Despite the emergence of specific training, there is not yet a degree, or even a postgraduation, that can fully teach the necessary knowledge to the daily routine of a leader of all hospital processes, or even partially.

There are many obstacles faced in the hospital manager's daily life. Not least, the hospital is ranked as one of the most complex organizations to manage.[2] In addition to a broad knowledge of management and the health sector, the professional who acts as the leader of a hospital organization faces many challenges, such as:

- Poor comprehension that the hospital is also a company;
- High process variability due to resistance to standardization;
- Restricted care-humanitarian view of some health professionals;
- Many professionals from different areas and academic backgrounds;
- Little focus on the rationality of resource-costs;
- Thinking that, to have quality, one must "spend more" and work harder;
- A huge number of processes;
- Legislation: legal insecurity;
- Defensive medicine: excessive examinations as a form of protection against possible legal actions;
- Medical professional who sometimes does not feel involved in management themes;
- Resistance in measuring and monitoring for results;
- Insufficient funding; Demands: Modernization of the structure/equipment versus new discoveries versus new forms of treatment.
- Demandas: modernização da estrutura/equipamentos *versus* novas descobertas *versus* novas formas de tratamentos.

1 DRUCKER, P. F. **O gestor eficaz**. Rio de Janeiro: LTC, 2011. p. 23.
2 DRUCKER, P. F. **O melhor de Peter Drucker**: o homem, a administração, a sociedade. São Paulo: Nobel, 2002. p. 73.

Despite the large number of daily needs to be solved and the impossibility of a strictly academic formation that can handle this universe called hospital management, we realize that there is a minimally common pattern among most situations that arise for the resolution of this professional. With dedication to learning management from three perspectives, the hospital manager will be able, with greater chance of effectiveness, to solve most of the demands that arise during his journey. This tripod focuses on excellence of hospital management in the following areas: projects, people and processes.

The first is knowing how to manage projects. Initially, all activities related to a health facility should be part of a detailed planning required for proper implementation. In this sense, seeing hospital management as a constant project management will provide the leader with a better organization of the activities inherent to conducting the work, detailing the responsible, the necessary deliverables, as well as the primary resources. Therefore, any insertion of a new process, or hiring people, for example, goes through the planning phase, in order to be successful in introducing a new activity or to welcome newly hired employees, we consider that proper planning is essential towards a good performance in the early stages of any health facility project.

Thinking about hospital management from a project management perspective also provides the opportunity to manage with the structured support of a project office, supporting the senior management, contributing directly to the monitoring of the hospital's portfolio of prospects. By adopting the appropriate methodology and adapting to the reality of each hospital, there may be greater control of the status of the projects proposed, alleviating the load of the hospital manager that is directly concerned with all this information. It is possible that, through a dashboard, one can have a macro view of all the stages, allowing one to look at other aspects that are out of control and then analyze it more attentively. Based on the above, we propose that the project office structure a dashboard to facilitate the analysis of the leader, as well as organize periodic meetings for necessary alignments.

Then, we recommend that the hospital manager be trained to manage people, the second area. For the success of projects and processes, there is no other way than the proper selection of the work team, their respective development, and the establishment of strategies for monitoring the adherence to the competencies required for the positions, as well as their results.

It is evident that this action is shared with all hospital leaders, but the figure of the hospital manager chief, or senior management, should be excellent in this activity. Knowing how to lead your tactical team in an extraordinary way, so that it is possible to reach each of the operational level professionals, is essential to establish an effective chain of command by: a) deploy information; b) request demands; c) measure progress; d) present results.

Finally, the third focus is on process management. So far, we have worked on the projects implementation that occur continuously with each new situation displayed in the unit, the management of people as an essential focus on the deployment and implementation of actions for the success of these projects, and now on the processes that aim at the maintenance of all continuous activities of a hospital.

Process management is defended as the most appropriate to achieve operational excellence, since the unit is focused on: a) knowing its processes - mapping them, in order to know which ones exist and how they work; b) manage - contract them so that their interconnections and necessary agreements can be understood; c) improve - constantly analyze them, through possible contract breaches and opportunities for advancement, enabling the continuous improvement of these processes.

Process management, in this case, also becomes the condensing matrix of project management activity, as it is a process, and people management, which also establishes itself as a continuous activity. In this sense, we can understand that these three dimensions feed one another and contribute to achieving excellence in hospital management.

What drives the gears is the institutional strategic planning. This tool for managing the organization serves as a guide and at the same time guides the hospital's actions. These gears act as drivers for delivering results with excellence, but these practices need to be focused primarily on a larger award. Therefore, the definition / revision of organizational identity becomes the first step for a proper strategic management, knowing well the sense of purpose (mission), the desired situation in the future (vision), the institutional principles (values) and for what (purpose) do what you do in the unit.

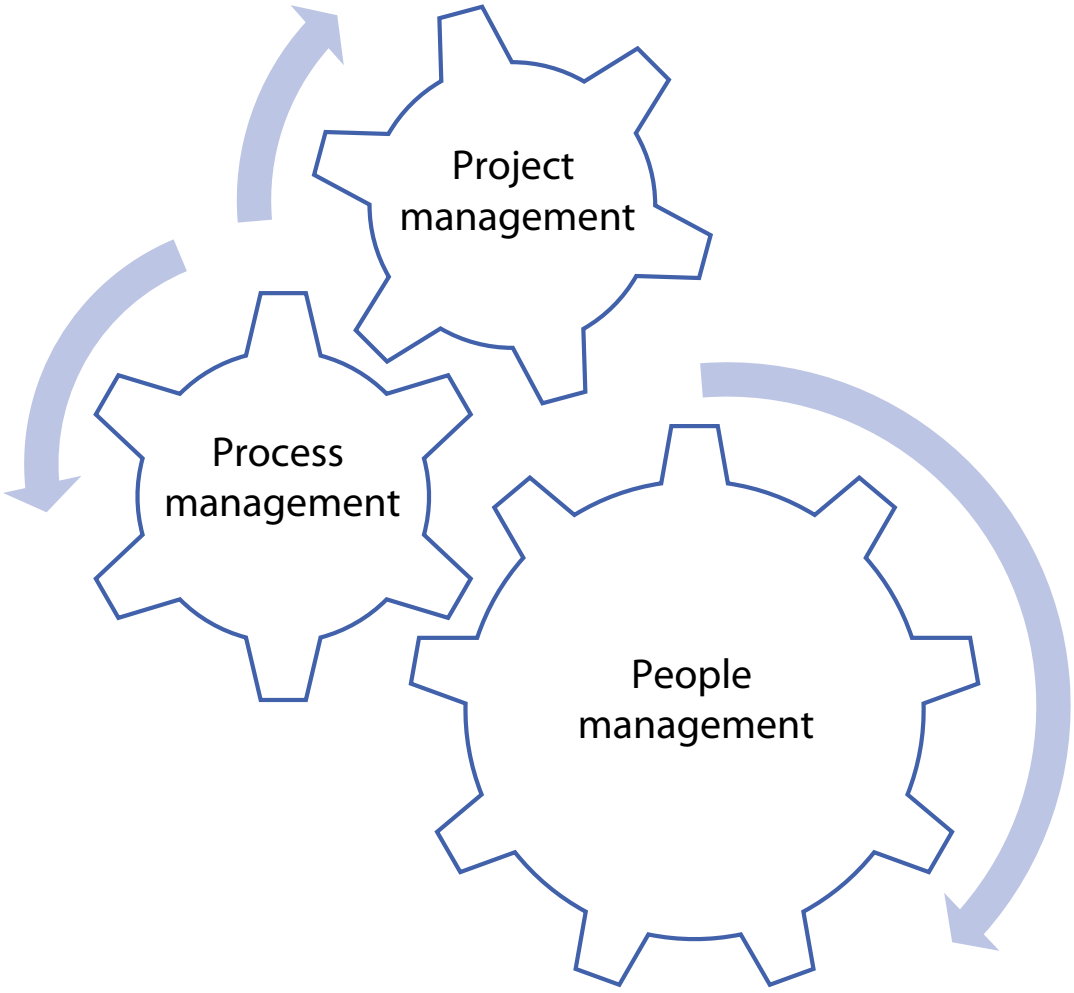

Figure 1 - Gears for hospital management (projects, people and processes)
Prepared by the organizers

Then, it is suggested the use of some tools that can be coupled with the planning in order to understand the micro and the macro environment, thus capturing the main opportunities for the next steps of this health unit. Through this, it will be possible to properly build strategic objectives within the four main perspectives using the wisdom of the Balanced Scorecard (BSC)3 (society; processes; people; sustainability - terms we suggest here to fit the current reality).

That said, it becomes crucial to deploy strategic objectives into achievable goals, relevant indicators and tactical-operational actions that enable the achievement of each of the desired results. It is important to know that this is not just about planning. Each elaborate action needs to be carried out under insightful monitoring of the team assigned to that activity, along with top management, followed by an evaluative study of its actual impacts, so that this wheel can be turned to propose improvements concerning the themes in focus.

All this is only possible if the hospital staff are aware of the magnitude of a strategic planning and how this tool can help the institution grow. The engagement of all involved is possible from the moment they understand the impact of their actions on the hospital evolution and that this fact contributes greatly to the positive transformation of each professional working there, in a continuous and mutual cycle of learning and growth.

In this sense, this Hospital Manager Manual made by Brazilian Hospitals Federation (FBH) appears to present the main systemic areas of knowledge, which are linked, transversally, to excellence in projects, people and processes and the unfolding of the strategic planning of the hospital's unit.

We invite readers to delve into the themes of scenario planning; leadership and people; communication; sustainability; remuneration; accreditation; qualification; information technology; architecture; and patient experience.

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3 KAPLAN, R.; NORTON, D. **A estratégia em ação**: Balanced Scorecard. Rio de Janeiro: Elsevier, 1997.

CHAPTER 1

SCENARIO PLANNINGS IN HOSPITAL ORGANIZATIONS

Elaine Coutinho Marcial

Objectives

- Sensitize the hospital manager to look disruptively at the future and seek to formulate strategies appropriate to this profile;
- Show the importance of the scenario planning methodology for hospital organizations, especially nowadays;
- Present the methodology of scenario plannings.

Planning

If the past belongs to history, the future belongs to strategy. Any organization depends on its ability to develop winning strategies in an ever-changing competitive world in order to stay alive.

The point about the future is that it is not "given", it needs to be built. It is not a predetermined set of irreversible events and situations, but a collective and unpredictable construction, shaped by the strategy of various actors involved in succeeding events.[1]

Looking at the current moment, it is found that environmental uncertainty has become a certainty in the daily life of the information society. Uncertainty is not only present, but increases as this society evolves.[2]

Uncertainty increases as the world has become disruptive, where change is the only certainty. No matter where you look, the most recurring themes are big data, cloud computer, internet of things (IoT), artificial intelligence, extended intelligence, extended reality, robotics, bitcoin and blockchain, autonomous cars, new materials from nano and biotechnology and 3D printing. These disruptive technological advances have been affecting every type of organization and people.[3]

This great technological revolution does not take place isolatedly; it is also present in the social, demographic and environmental fields. Examples include demographic change, especially that of an aging population, a paradigm shift from healing to health care, the empowerment of individuals, new labor relations, climate change, increased migratory flows, water scarcity, the advance of terrorism and cyber attacks.[4]

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1 MARCIAL, E. C. Lançamento do livro "Megatendências mundiais 2030 – O que entidades e personalidades internacionais pensam sobre o futuro do mundo?". **Informação Estratégica Blogspot**, 4 out. 2015. Disponível em: http://elaine-marcial.blogspot.com/2015/10/lancamento-do-livro-megatendencias.html. Acesso em: 9 abr. 2019.

2 MARCIAL, E. C. **Análise estratégica**: estudos de futuro no contexto da inteligência competitiva. 1. ed. Brasília: Thesaurus, 2011.

3 MARCIAL, E. C. Planejamento energético de longo prazo: cenários para apoiar a formulação de políticas públicas no campo da transição energética. **Informação Estratégica Blogspot**, 10 mar. 2019. Disponível em: http://elaine-marcial.blogspot.com/2019/03/planejamento-energetico-de-longo-prazo.html. Acesso em: 9 abr. 2019.

4 *Ibidem.*

All of these big changes will impact any kind of organization and people's lives, and hospital institutions will not be left out of this revolution. The changes will require organizations to adapt quickly so that they can fulfill their purposes, staying alive and preserving their spaces with customers and society. Those who do not break with the past will have no room in the future.

To formulate winning strategies, information becomes indispensable. However, it is not any kind of information that should be used in this process, but information concerning the future.[5]

Although it seems obvious, information about the future has a different characteristic than information about the present. This is because the future has its own characteristics: it is multiple and uncertain; it is unusual; impossible to foresee; it is a construct of our imagination; actors can change their course at all times; and have their course influenced by environmental forces.

In this context, the construction of prospective scenarios is characterized as the best methodology for producing this type of information. This is because the scenarios can cope with the characteristics of the future, taking into account the decisions and actions of the actors, capturing the possible trend breaks and probable disruptions. By constructing various stories about the future, scenarios assume that the future is multiple and uncertain and needs to be built.

As such, scenarios provide the best information about tomorrow to support the decision-making process of strategists in any organization.

It is worth remembering that scenarios deal with qualitative variables, building stories about the future that will shed light over the decision-making process. The future is being studied, not to know what will happen, but to improve decision-making today by deciding which path to take and which bets to make in the present.

It is important to understand the future possibilities that lie ahead so that you can think of disruptive innovations and make the best choices. To do so, it is necessary to have the courage to admit that much of what is done today will be of no use in the future, and that much of tomorrow's needs have not even been imagined.[6]

Assuming that the future is multiple and uncertain and constantly changing, it is necessary that, in addition to constantly monitoring the environment, avoiding surprises and developing blind spots, a revolutionary and disruptive strategy that promotes a break with past paradigms must be developed.[7] In this environment, decision-making becomes a major challenge for today's executives, regardless of the industry in which they operate.

In this chapter we present the methodology of scenario planning formulation and a model of how to build them and the main tools that assist in decision-making and planning in very uncertain environments and that surprises us at all time.[8]

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5 *Ibidem.*

6 MARCIAL, E. C.A palavra de ordem é Disrupção. Sua organização está preparada? **Informação Estratégica Blogspot**, 19 nov. 2017. Disponível em: http://elaine-marcial.blogspot.com/2017/11/a-palavra-de-ordem-e-disrupcao-sua.html. Acesso em: 9 abr. 2019.

7 *Ibidem.*

8 Marcial (2011).

Scenario plannings

Mankind has always wondered what tomorrow will be like. The Egyptians took advantage of the priests, the Greeks of the oracles, and, in the Middle Ages, were the prophets who reigned. From the Renaissance, these superstitions fell to the ground and were replaced by rational and critical thinking. Since the concern for the future was still present, they began to use science to predict the future.[9]

However, forecasting has never been the best way to produce information about the future. In particular, after World War II, they further reduced their ability to assist in decision-making and planning. It is at this time that the first scenario building initiatives emerge. In Europe, the movement was led by Gaston Berger, the philosopher who coined the term "foresight," and in the United States by Hand Corporation, the first organization to use the term "scenario" to describe visions of the future.[10]

In the 1970s, the scenario-planning methodology, which was previously limited to state use, reaches organizations through the success achieved by Shell, an oil company that used this methodology to build winning strategies during the first oil crisis.[11]

Today, the methodology is used around the world by all types of institutions as an essential tool for planning and strategic management in turbulent and uncertain environments.

Although the methodology has been used for more than seven decades, several years have pointed to the lack of strong theoretical roots that support scenario plannings. In addition, the short and long-term impacts of scenario plannings are often not understood.[12,13,14,15,16]

Around the early 2000s, foresight researchers Chermack, Lynham, and Ruona raised the need for the development of the theoretical and conceptual basis for the scenario plannings. This is because the absence of explicit theoretical roots associated with the rapid expansion of its use by organizations led to the formation of a strong community of practice in scenario plannings, which did not have time to reflect on the implications of their interventions on organizations. In addition, the lack of a conceptual basis may lead to the collapse of a practical area, such as the 1970s with strategic planning.[17] Other authors have followed the same path, such as Bishop, Hines and Collins,[18] Amer, Daim and Jetter,[19] Sonk[20] and recently Soares et al.[21]

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9 MARCIAL, E. C.; GRUMBACH, R. J. **Cenários prospectivos**: como construir um futuro melhor. 5. ed. Rio de Janeiro: Editora FGV, 2008.

10 *Ibidem.*

11 *Ibidem.*

12 GEORGANTZAS, N. C.; ACAR, W. **Scenario-driven planning**: learning to manage strategic uncertainty. Westport: Quorum, 1995.

13 RINGLAND, G. **Scenario planning**: managing for the future. New York: John Wiley, 1998.

14 SCHWARTZ, P. **The art of the long view**. New York: Doubleday, 1991.

15 VAN DER HEIJDEN, K. **Scenarios**: the art of strategic conversation. New York: John Wiley, 1997.

16 CHERMACK, T. J.; LYNHAM, S. A.; RUONA, W. E. A. A review of scenario planning literature. **Futures Research Quarterly**, v. 17, n. 2, p. 7-31, 2001.

17 *Ibidem*.

18 BISHOP, P.; HINES, A.; COLLINS, T. The current state of scenario development: an overview of techniques. **Foresight**, v. 9, n. 1, p. 5-25, 2007.

19 AMER, M.; DAIM, T. U.; JETTER, A. A review of scenario planning. **Futures**, v. 46, p. 23-40, 2013.

20 SONK, M. How to justify beliefs about the future: some epistemological remarks. **European Journal of Futures Research**, v. 3, n. 17, 2015.

21 SOARES, S. A. *et al.* **Alcances, limites e antinomias de métodos e técnicas em cenários prospectivos**. Brasília: Ipea, 2019. (Texto para Discussão, n. 2443).

This requires a clear definition accepted by communities of scientific practice. It is often difficult to find a clear definition that captures the true meaning of scenario planning. Admittedly, these are neither predictions nor projections.[22] In this context, Chermack and Lynhan[23] surveyed scenario-based planning definitions. Analyzing more than 20 definitions collected, it can be seen that sometimes they present the definition of the object "scenario" and sometimes of the process "scenario planning".

In short, "scenario planning" refers to the method of strategy formulation through the use of scenario building and analysis.[24] In this process, many stories are imagined about plausible, consistent, and possible alternative futures. In general, they refer to futures that have great uncertainty, and these stories help improve both the planning process and the strategic decision-making process. This process generates personal and organizational learning, which results in the formulation of winning strategies.[25,26,27,28,29,30,31]

Scenario planning allows planners to examine what is likely and what is unlikely, knowing that unlikely elements can determine their success. The process should challenge the conventional wisdom of the organization by focusing attention on how the future may differ from the present. Its purpose is to change current thinking, improving decision-making and organizational performance.[32,33,34,35]

The term "scenarios" has many meanings and ranges from film scripts and vague projections to statistical combinations of uncertainties.[36] It refers to the "set consisting of a coherent description of a future situation and the routing of events that allow passing from the original situation to the future situation".[37] These are stories told about the future - not the real future, but a representation of it. These represent, imaginatively, the description of possible, plausible,

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22 Chermack, Lynhan e Ruona (2001).

23 CHERMACK, T. J.; LYNHAM, S. A. Definitions and outcome variables of scenario planning. **Human Resource Development Review**, v. 1, n. 3, p. 366-383, 2002.

24 *Ibidem.*

25 *Ibidem.*

26 GODET, M. **Creating futures**: scenario planning as a strategic management tool. London: Economic, 2001.

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33 Bawden (1998).

34 ALEXANDER, W.; SERFASS, R. Creating and analyzing your organization's quality future. **Quality Progress**, v. 31, v. 7, p. 31-36, 1998.

35 Chermak e Lynham (2002).

36 Schoemaker (1995).

37 GODET, M.; ROUBELAT, F. Creating the future: the use and misuse of scenarios. **Long Range Planning**, v. 29, n. 2, p. 164-171, 1996.

probable, and challenging futures that are presented through fictional narratives.[38,39,40,41,42]

Scenarios stimulate strategic thinking and communication within organizations. They also improve the internal ability to respond to environmental uncertainties, making the organization more flexible and adaptive.

Scenario Planning Methods

There are a variety of methods that assist in building scenarios. According to Brasdfield et al.,[43] these methods are grouped into three scenario planning schools:

1. Intuitive logic - started by Shell's work in the 1970s, led by Pierre Wack;
2. Probabilistic with modified patterns - incorporates two distinct methods: trend impact analysis, developed by the Future Group, and cross impact analysis, developed by Gordon and Helman in 1966 at the Rand Corporation;
3. And that of the prospective - founded by Michel Godet in the Department of Future Studies of the Societé d'Economie et des Mathématiques Apliquées (Sema), based on the prospective methodology developed by Gaston Berger in the 1950s.

As a way of showing the main steps for conducting a scenario planning process, we present the synthesis model of scenario building methods developed by Marcial.[44]The model was built based on the comparative analysis between three methods: Godet (French school), Schwartz (intuitive school) and Grumbach (probabilistic school).

The synthesis model

The synthesis model is formed by eight steps (figure 1), in which the prospective tools are used according to the needs of the scenarist. This model assists in the construction of a method to be used in any organization or to assist in the evaluation of a scenario construction method to be contracted.

The following steps are summarized by Marcial.[45]

38 Bloom e Menefee (1994).

39 SCHWARTZ, P. **The art of the long view**. New York: Doubleday, 1991.

40 Van der Heijden (1997).

41 FAHEY, L.; RANDALL, R. M. **Learning from the future**: competitive foresight scenarios. New York: John Wiley & Sons, 1998.

42 KAHANE, A. Scenarios for changing the world. *In:* SENGE, P. *et al.* (Eds.). **The dance of change**: the challenges to sustaining momentum in learning organizations. New York: Doubleday, 1999. p. 238-239.

43 BRADFIELD, R. *et al.* The origins and evolution of scenario techniques in long range business planning. **Futures**, v. 37, p. 795-812, 2005. Disponível em: https://www.researchgate.net/profile/George_Cairns2/publication/222813630_The_origins_and_evolution_of_scenario_techniques_in_long_range_business_planning/links/00b49525f0a69d67bc000000/The-origins-and-evolution-of-scenario-techniques-in-long-range-business-planning.pdf. Acesso em: 21 jul. 2017.

44 Marcial (2011).

45 *Ibidem.*

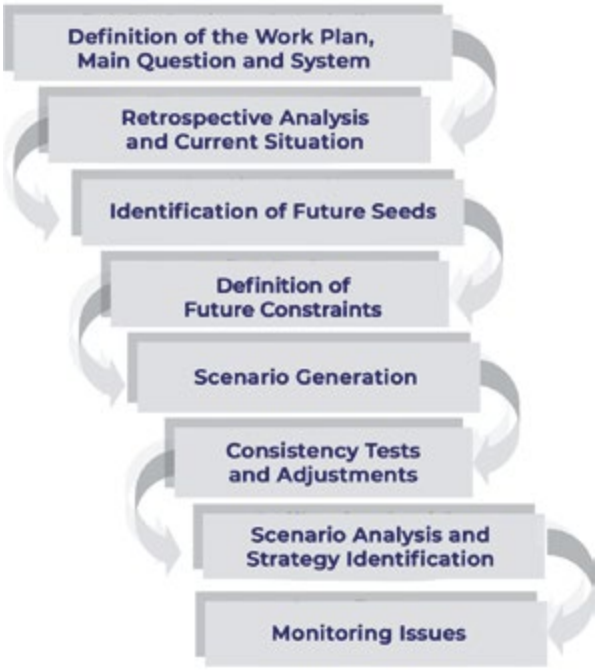

Figure 1 - Synthesis Model
Source: Marcial (2011).

Stage 1 - Definition of the Work Plan, Main Question and System

The first stage in the process is the construction of a work plan defining its scope. In this moment, besides the work plan, the following are defined: the guiding question, also called the main question, its fundamental aspects and the cenarization system.

The guiding question refers to a strategic question that motivated the construction of the scenarios. It is a question about the future that seeks to give specific or deep focus to the scenarios.

At this point, the other elements that will delimit the scenario system are also explained: 1) the purpose of the work - what scenarios will be used and what is the purpose of this construction; 2) time frame - represents the period of time that will be covered by the prospective study, how much time ahead will be set. It may vary depending on the dynamics and evolution of the studied system; 3) place or geographic scope - delimitation of the geographic scope of the theme.

Other important issues need to be defined, such as: 1) who it is intended for - spelling out the recipient or users of the scenarios; 2) the production time frame - when the scenarios should be ready for use in the decision-making and planning processes. It also guides the construction of the work schedule; 3) the necessary resources, including informational resources, since in many cases there is a need to acquire studies and specific reports to shorten the production time.

It is noteworthy that the brainstorming technique, in general, assists in the execution of this stage. According to Martial:[46] "is a process of group work that seeks to generate ideas, linked to a subject or problem, based on established procedures and rules".

Stage 2 - Retrospective Analysis and Current Situation

46 *Ibidem*, p. 247.

At this stage, a bibliographic survey and analysis of the evolution of the themes associated with the main question and its fundamental aspects is performed. During the retrospective analysis, historical recovery of the events related to the guiding question, its fundamental aspects and the cenarization system is elaborated. At this moment, data are collected and the historical and current behavior of the main variables and actors that are part of the cenarization system are described, aiming to justify the identified future seeds.

Stage 3 – Identification of Future Seeds

The seeds of the future [47] emerge from retrospective analysis and the current situation. In general, the brainstorming or brainwrighting technique is used to survey these after the analysis of the previous stage. Therefore, it is necessary to gather experts to identify perceptions about the future. Moreover, after the idea has been generated, it becomes necessary to justify them. Thus, expert consultation is key at this stage, both to help identify and confirm future seeds.

All future seeds raised must be duly justified so that only seeds confirmed within the time frame of the future study can be used for the following stages.

Stage 4 – Definition of Future Constraints

The objective of this stage is to identify the most important variables for the description of the logic of the scenarios and their key actors. They represent those seeds of the future capable of conditioning the possible futures. These are independent variables, with a high degree of uncertainty about the environment, of great importance for the guiding question and with the ability to move the entire system of cenarization, that is, they have high motor skills and low dependence on other system cenarization variables.

There are several methods that contribute to this stage, such as: constructing the ranking of critical uncertainties,[48] constructing the mobility and dependency matrix[49], or constructing events to be subjected to Delphi research and cross-impacts.[50]

Stage 5 – Scenario Generation

The main objectives of this stage are the generation, definition of the plot and the writing of the exploratory scenarios that seek to present the future possibilities related to the main scenario issue. It should be noted that each exploratory scenario built should be able to shed light over our future choices.

The construction of exploratory scenarios requires the use of creative processes and choices using the list of key-uncertainties. This activity gives rise to the definition of the logic of the scenarios, which guides the description of the force-idea or philosophy of each exploratory scenario.

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47 Sementes de futuro são fatos ou sinais existentes no passado e no presente que sinalizam possibilidades de eventos futuros (*ibidem*).

48 Schwartz (1991).

49 GODET, **M. Manual de prospectiva estratégica**: da antecipação a acção. Lisboa: Publicações Dom Quichiote, 1993.

50 Marcial e Grumbach (2008).

There are several methods that help in this stage, such as the construction of orthogonal axes and morphological analysis. Orthogonal axis is, according to Martial,

> the method used by the Global Business Network (GBN) to assist in defining the logic of the scenarios and therefore in generating scenarios. It graphs the critical uncertainties identified on a right-angle axis, representing the total independence between these critical uncertainties.[51]

Morphological analysis is, according to Marcial,[52] the "decomposition of a variable into several elements, identifying the various forms and values that these can assume on the time frame under study". These methods should assist in constructing the force-ideas of each scenario, which will assist in describing the different plots.

For the description of the course of events, the plot must follow a logical sequence, constructed from a future situation to the present. It should also describe the outcome of actions, partnerships and clashes between the actors identified during this period.

Stage 6 - Consistency Tests and Adjustments

The objective of this stage is to ensure the consistency and coherence of the plots concerning the different images built about the future. The main objective is to verify if in each fictional story there is any variable or actor behaving in a way that is not coherent or not consistent with the logic of each scenario, as well as if each scenario, as a whole, is possible, plausible, coherent and consistent. In possession of the described scenarios, it is necessary to check with the experts if:

- Is the plot possible / likely to occur?
- Are cause and effect relationships possible? Are those correct?
- Are the actors mentioned responsible for the results described?
- Are the performance of these actors and their relationships clear?
- Are the ruptures described likely to occur within the written plot?

Based on the improvement guidelines, the final version of the scenarios is written.

Stage 7 - Scenario Analysis and Strategy Identification

This is a key step in every process as it is the time when strategies are formulated. Scenarios are built to shed light over decision-making in the face of a multiple and uncertain future. Thus, after the analysis of all scenarios constructed, it is at this moment that the strategic drivers are defined, including SWOT[53] analysis and definition of strategic objectives and goals.

It is at this stage that the desired and target scenarios are built by the strategic decision maker. Also at this time, contingency plans should be developed due to environmental uncertainty.

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51 Marcial (2011, p. 249).

52 *Ibidem,* p. 245-246.

53 SWOT é o acrônimo dos termos ingleses *strengths* (forças), *weaknesses* (fraquezas), *opportunities* (oportunidades) e *threats* (ameaças).

Stage 8 - Monitoring Issues

As the future is multiple and uncertain, and changes all the time, it is essential to build an environment monitoring system to evaluate and update the scenarios, as well as making adjustments to the strategies. Therefore, it is necessary to propose the monitoring issues and indicators, the periodicity of evaluations and the responsibility of the partners. It is also time to define some specific studies to better understand certain phenomena, as well as the formation of a database with this information.

Considerations

The future is on the agenda of strategists and managers. Managing presupposes planning, the first step of any management process, and to plan with excellence, information about the future is required.

As environmental uncertainty grows, it is necessary to use a methodology that absorbs this uncertainty and shed light over the decision-making process. In this context, scenarios have been presented as the best way to study the future and produce information that serves as input not only for the planning process, but also for management in any type of organization.

Hospital organizations are not immune to the disruptions that today's world presents. To remain competitive, they will have to absorb this new world order as well as disrupt their management environment.

To do so, it will be necessary to be creative, to let go of the present moment and to imagine futures that help in the decision-making process. And as the world changes all the time, this exercise must be permanent, and environmental monitoring must be systematic.

It is noteworthy that the exercise of looking creatively for the future, besides challenging, is a learning process. This does not mean a journey of fiction into the future, but the construction of coherent, consistent and plausible images that can change the way we view the present and lead hospital organization managers to build a promising future.

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Glossary

- **Morphological analysis** – according to Martial,[54] the "decomposition of a variable into several elements, identifying the various forms and values that these can assume on the time frame under study";
- **Brainstorming** – according to Marcial,[55] "a group work process that seeks to generate ideas, linked to a subject or problem, based on established procedures and rules";
- **Brainwritting** – is a creative and simple technique for collecting innovative ideas, when a group of people individually record their ideas on the topic via writing. The ideas are presented, debated and the best ones are selected;
- **Scenarios** – for Godet,[56] scenario is the set formed by the coherent description of a future situation and the course of events that allow one to move from the original to the future situation. These are stories about the future, according to Schwartz;[57]
- **Future conditioners** – represent the most important variables for describing the logic of scenarios and their key actors;
- **Orthogonal axes** – according to Martial, is:

  > the method used by the Global Business Network (GBN) to assist in defining the logic of the scenarios and therefore in the generation of scenarios. It graphs the critical uncertainties identified in a right angle axis, representing the total independence between these critical uncertainties.[58]

- **Cross impacts** – according to Martial and Grumbach, is:

  > the method of reviewing estimated probabilities of future events, based on the impact that the alleged occurrence of one of them causes on the others. The method was proposed by Theodore Gordon and Olaf Helmer in 1966 and has been widely applied in conjunction with other methodologies.[59]

- **Critical uncertainty** – defined by Schwartz, are those variables that represent the most uncertain and most important events related to the "main issue" defined at the beginning of the scenario building process;[60]
- **Scenario logic** – refers to the hypotheses created about future possibilities;
- **Scenario planning** – according to Chermak and Lynham:

  > Scenario-based planning is a process of positing various informed, plausible, and imagined alternative future environments in which decisions about the future can be thrown away for the purpose of changing current thinking, improving decision-making, human learning, organization and performance.[61]

- **Prospective** – defined by Gaston Berger (1958),[62] represents an attitude towards the future:

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54 Marcial (2011, p. 245-246).

55 *Ibidem*, p. 247.

56 GODET, M. **Scenarios and strategic management**. London: Butterworths Scientific, 1987. p. 70.

57 Shwartz (1991).

58 Marcial (2011, p. 249).

59 Marcial e Grumbach (2008).

60 Shwartz (1991).

61 Chermak e Lynham (2002).

62 BERGER, G. **L'Attitude Prospective**. Paris: PUF, 1958. (Prospective Mémoire, n. 1).

> a prospective attitude meant looking ahead, worrying in the long run; look broadly, being careful about interactions; look deeply until one finds the factors and trends that are really important; take risks, because visions of distant horizons can change long-term plans; and take into account mankind, a great agent capable of modifying the future.[63]

- **Guiding question –** refers to a strategic issue that motivated the construction of scenarios. It is a question about the future that seeks to provide specific or deep focus to the scenarios;
- **Seeds of the future –** are facts or signs existing in the past and present that signal possibilities of future events;[64]
- **SWOT** – strengths, weaknesses, opportunities and threats;
- **Trends** – defined by Michel Godet,[65] refer to those events whose perspective of direction and meaning is sufficiently consolidated and visible to admit their permanence in the future period considered.

63 GODET, M.; ROUBELAT, F. Creating the future: the use and misuse of scenarios. **Long Range Planning**, v. 29, n. 2, p. 164-171, 1996.

64 Marcial (2011).

65 Godet (1987).

CHAPTER 2

LEADERSHIP AND PEOPLE

Andréa Prestes

Objectives

- Present the role of leadership as a decisive factor in achieving results for organizations;
- Address the core competencies expected in a leader;
- Expose how the coach leader can bring benefits for the health.

People and organizations

We are in the age of digital transformation, artificial intelligence, big data, algorithms, examples that denote the great technological strength of this millennium. Everything has changed so fast and so intensely that we are unable to measure and realize the impact of these evolutions on humanity. Information flows and spreads as fast as ever before. The new era is known as the 4th Industrial Revolution.[1] With all this modification, companies, regardless of their industry, have been striving to keep up and adapt in order to ensure growth or survival in the market.

When we talk about keeping up with technological developments related to machines, equipment, software, improvements in communication and information, for example, it seems much more tangible and possible, provided the company has financial resources for investment. As we evaluate the managerial aspect, we perceive a dichotomy, since the tools, techniques and methodologies in the organizational scope have not been able to keep pace with technological changes.

We have not noticed significant changes in the way most organizations have handled management, and in particular the conducting of people.

> Today's business strategies and competencies are proving inadequate in light of the rapidly changing global marketplace. Companies are reviewing their strategic positioning, management model and processes, and the market needs well-trained leaders who are capable of undertaking within the organization and promoting corporate reorganization with strategic-operational diagnosis, action plan and execution.[2]

There are managers who still use the assignments of the jobs, which establishes ascension over a group of people, linked to a status of being the one who dictates the rules and demands their fulfillment by the people. In this scenario, the lack of appreciation of the human factor is very likely to occur, causing companies to experience the bitter taste of poor results, stagnation and sometimes bankruptcy. When this happens, many managers wonder why their company experiences difficulties, such as financial constraints, low productivity, as it has invested in software, technology upgrades and even structural adaptations.

In the hospital area, where the business is the provision of services focused on human health care, it is not possible to conceive that there are still managers with the retrograde view that the

1 MAGALDI, S.; NETO J. S. **Gestão do amanhã**. São Paulo: Editora Gente, 2018.

2 DA MATTA, V.; VICTORIA, F. **Executive coaching**. São Paulo: SBCoaching, 2015b. p. 33.

work philosophy should be based on authoritarianism, centralization and rigid hierarchy. This management form may have worked at other times, but it does not hold up well today. What these managers sometimes fail to identify is that they are forgetting to invest in the primary factor: the human. They need to see that the main differential of a hospital is the quality care, the result of the work of the people who are part of it. Yes, when well managed, conducted, influenced and inspired, they are able to create differential and value the hospital business, which is essential for its maintenance and growth in the market.

Those who fail to recognize the importance of proper people management do not understand the need for assembling a good team, they only expect numerical results at the end of the period; unfortunately, they are doomed to failure. According to SBCoaching, team is "a small number of people with complementary skills who are committed to a common purpose, performance goals, and mutually accounted approaches."[3]

The hospital manager needs to understand that it is necessary to seek constant improvement, with methodologies and tools capable of meeting the professionals needs in their teams, regardless of the generation they are part of. This is a very important point to note: current leaders may have on their team people born in the last century, with a background that largely differs from people born in the midst of this technological revolution of the 21st century. They must have the ability to enable the interaction of generations, foster exchanges and a proper environment to mutual development.

Despite the great technological transformation, it is understood that there will always be a need for people, either to perform the programming of machines, to start or even perform maintenance, or an expanded need in health facilities, where the care provided to patient goes through the human factor. We now need to promote the most emerging change: the professional profile of the people who lead organizations. The behavior, knowledge, skills and attitudes desired today differ greatly from what was required in the last century, and even what was required at the beginning of the 21st century.

Currently, it is not enough to have the appropriate skills for the position held. They need to be used to deliver the results set by the company. This means that it is of no use for employees to meet all requirements if they do not "perform" satisfactorily, performing their role in order to add value to the business of the organization.

Challenges for all healthcare professionals, regardless of hierarchical level, are becoming broader, more intense, as only meeting standard hospital protocols is sometimes insufficient. When it comes to leadership, then, what is expected goes far beyond that.

The manager and the leader

To understand what will be contextualized from now on, we need to address the difference between the manager and the leader. Plenty of confusion is made about their meanings. Is the manager also a leader? And does every leader have management skills? We must understand that occupying a position is not enough to be a leader. Many people are left with the summary thinking that in companies there are orders and rules that must be obeyed by everyone, and understand that the role of leadership is to ensure their faithful compliance. This thought, although still present in many institutions, is completely outdated. The differences that distinguish the leader from the manager can be summarized as follows:

3 DA MATTA, V.; VICTORIA, F. **Executive coaching**. São Paulo: SBCoaching, 2015b. p. 255.

MANAGER	LEADER
Handles the status quo	Handles changes
Works on the system	Works for the system
Reacts	Creates opportunities
Controls risks	Searches for opportunities
Reinforces organizational rules	Changes or refines organizational rules
Searches for guidance and then follows and transmit orders	Provide insights and believes in strategic alignment
Controls people to take them in one direction	Motivates people to meet their needs
Coordinates efforts	Inspires achievements and energizes
Provides instructions	Creates self-leaders and delegates power

Table 1 - Comparison between manager and leader

Source:: Executive Coaching Adaption (DA MATTA; VICTORIA, 2015b

Great consultants and thinkers in business and coaching around the world have long addressed the need to understand the differences between manager and leader, especially the role of each figure, in developing or changing organizational culture. The macro role of the manager is to act within the institutional rules and guidelines, in order to enforce what was planned, based on existing processes. According to Peter Drucker, "[...] any knowledgeable worker is a manager if, by virtue of his or her position or knowledge, he is responsible for a contribution that materially affects the performance of the organization [...]".[4]

The leader focuses his energy on developing and engaging people and, through them, striving to achieve organizational results. For James C. Hunter, "leadership is the ability to influence people to work enthusiastically toward the goals identified as being for the common good."[5] This approach is pertinent to conceptual understanding; however, it does not in any way seek to attach greater or lesser importance to the manager or leader. Both have their highlight and relevance in the hospital composition.

Many leaders, especially in smaller or newly created hospitals, need to play both roles: sometimes as a manager, sometimes as a leader. They need to enforce the rules, often without the time to work in advance to convince the team. At other times, they establish actions to stimulate development, through training, detailed guidance, team integration, etc. As in most healthcare institutions this is what happens, we can call him the manager / leader, which eventually encompasses an even more complex function, as he needs to have full knowledge and clarity of what the hospital management body and staff expect from him, considering the whole, without forgetting any of the parts.

The leader understands that proper management of work teams is the right way to achieve the best results. For this to happen faster, more smoothly and effectively, we can say that the process goes through the need to know each team member and their particularities, in order to make the most of the strengths of these individuals, empowering them for the work that needs to be delivered.

In this chapter, we will focus more specifically on management with a focus on leadership,

4 DRUCKER, P. F. **O gestor eficaz**. Rio de Janeiro: LTC, 2011. p. 20.

5 HUNTER, J. C. **O monge e o executivo**. Rio de Janeiro: Sextante, 2004. p. 28.

with the objective of exposing to health management professionals their role in conducting various services in hospital units, composed of varied resources, in which the most important and essential of them is human capital.

Managing people: whose responsibility is it?

With each passing day, running a hospital, growing, or even surviving in the marketplace are important challenges facing hospital managers. Creativity to develop new lines of care, attractive, quality and competitive services is a complex task for healthcare unit leadership. In this challenging scenario, the need for managing adequate numbers of people, well-prepared and well-trained people with knowledge and skills compatible with the goal of bringing the institution to the desired level, is intensified.

Hospital organizations are increasingly realizing that there is no other way to success other than investing in people. It is necessary to have its technology park updated, its processes and adequate physical structure, but it is essential to have a team with differential capable of transforming all available resources into tangible results for the business.

According to Chiavenato,

> To mobilize and make full use of people in their activities, organizations are changing their concepts and changing their management practices. Instead of investing directly in products and services, they are investing in people who understand them and know how to create, develop, produce and improve them. Instead of investing directly in customers, they are investing in the people who serve them and know how to satisfy and delight them. People become the basic element for the success of the business.[6]

In this context, people management has become dynamic and permeates various actors. In the face of everything that involves people and the organization, it is not necessary to think that leadership is far from this process, which is no longer simply a supporting role, to hold the leading role. Hospital leadership has to know the minimum concerning the people who make up the team, what their skills are, how they relate to the work environment, and to create internal conditions so that they can, and want, perform their best.

In the old conception, people had the idea that people management was performed exclusively by a department or service, usually called the Human Resources Department. Hospitals still need to have a structured service that supports the legal character of the institution, but they should not be limited to it.

The understanding is that, in modern people management,[7] the various activities are integrated with each other in order to achieve synergistic and multiplier effects for the organization and its people. Due to the transversality of the necessary actions in the people management area, the role of the manager or person responsible for the organization of human resources service is more of a support to the areas, based on the strategies and institutional policies, which seek to decentralize the actions for the team leaders.

The daily activities involving the control and management of people in the hospital should not

6 CHIAVENATO, I. **Gestão de pessoas**. Rio de Janeiro: Elsevier, 2008. p. 4.

7 *Ibidem*, p. 14.

be centered on a specific sector, but should be shared with institution leaders. It is desirable that the direct leadership maintain permanent contact with its team, providing guidance and feedback, promoting meetings and identifying training needs.

Leadership-focused management

Once we understand that modern management of people in organizations is shared and transversal, where direct leadership plays a key role, we need to understand what it means to be a leader.

The leader has as main role:

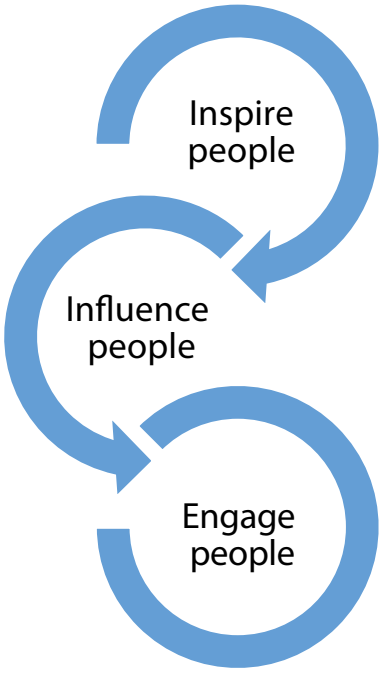

Figure 1 - The role of the leader

Prepared by the chapter's author.

The following are some of the skills we consider essential for hospital leadership:

1. Have a clear vision and understanding: the leader is the best prepared person on the team, with an understanding of the complete hospital setting; has a systemic look - of the whole - without disregarding the parts. It sees what needs to be done and encourages everyone to walk the path towards the goals proposed by the institution;
2. Take responsibility: The leader is always ahead of the demands, bringing to his direct management what concerns him, without any difficulty in taking risks and responsibilities. Can demonstrate to the team that taking responsibility does not mean centralizing decisions or performing operational tasks, but sharing views, listening to peers, discussing possibilities in pursuing a project or solving a problem;
3. Creates a favorable climate: The leader works to create a favorable, harmonious and action-friendly climate, with the emotional and intellectual support to make people feel safe and secure in their tasks.

4. It is resilient: The leader understands that resilience is one of the key skills to have or develop. The resilient leader, even in the toughest of times, is able to remain calm and controlled to support the people on his team. He can use the time of trouble to learn and strengthen, where he will be better prepared for other difficult times. The leader is distinguished by not victimizing himself in hardships, as he focuses his actions on finding solutions to problems and encourages people on his team to walk together;
5. Turn ideas into action: the leader is moved to action. It is the person who, in addition to having an assertive communication to expose their ideas, can organize them in a practical and sequenced manner, so that the people of his team can understand and act accordingly. We know that many have good ideas, based on excellent literatures, methodologies and scripts; however, they fail to implement them. At this point, the effective leader differs greatly by being able to turn ideas into action and, as a result, deliver the results the hospital needs;
6. Shares knowledge: The leader brings together his followers strengths, in terms of technical knowledge, behavior and attitudes, and performs network sharing. We know that the people who make up the teams are usually not equipped with all the necessary skills. This is not a problem when the leader can connect people on the team so that they can complement each other. This is one of the main insights of result-driven leadership, as it understands that it is no use generating internal competition among team members, which leads them to work in isolation. Believes that competition does not generate positive results, but that internal partnership results in mutual growth;
7. Creates the feeling of belonging: the leader can convey to his followers the importance to achieve the institution's results and engages them through the sense of belonging. People on the team perform more when they understand the hospital purpose and their role in this scenario. They generate a purposeful alignment with the company when they realize that their leader values their core competencies more, focuses on them and encourages them, not emphasizing their weaknesses. At this stage of leadership maturity, team members feel safer to expose their difficulties in performing routine tasks and seek more internal support, understanding that the search is for mutual growth: people and organization;
8. Stimulates learning in practice: Within hospital organizations, an effective way to develop people is through teaching and learning when they become participants in the process. The idea is that the employees themselves, who have specific skills to do so, are the coaches of their colleagues - once the networking stage has been overcome - making them the main actors of their own development, with the logic that whoever teaches always learns. This dynamic of interaction between colleagues tends to be very positive, in which the team member who is willing to be part of these learning cycles starts to arouse greater interest in developing the activity as proposed and disseminated to others within standards established and designed to best meet institutional goals and objectives. This possibility exists in any scope and complexity of activities, from the simplest ones we call operational to those considered strategic, such as among company leaders, through benchmarking for the exchange and standardization of methodology in the business. driving teams. It is important to highlight that, in the tactical-operational context, there may be greater resistance from people to take the lead in teaching and learning, because not everyone feels prepared to speak in public, however small the number

of listeners, and even being about a subject of your domain. Restriction must be respected until the leadership can develop this competency with the leader. Another point to be considered in this methodology is that the leadership is not required to actively participate in training. The responsibility of the leader increases in the face of the need to be aware of the potentialities perceived at each moment, and to be able to provide relevant feedback after the events, as it is an opportunity for collective growth;

9. Assertive Feedback: The leader is careful in giving feedback, as he considers the moment to be opportune for the growth of his leadership. The focus on conversation is always to enhancing the strengths and exposing how they contribute to improving the day to day of the hospital. Therefore, the strengths are reinforced and the improvement points are displayed in a respectful, clear, structured manner and, from this, the leader establishes individual development plans for the subordinates;
10. Works with the planning: The leader structures his actions based on systematic planning, through the institutional demands organization and his team, so that he can permeate and interrelate the needs as a whole. Based on the hospital goals and objectives, it develops long, medium and short term actions, establishing daily tasks. Creates outcome indicators for effective monitoring;
11. Manages Time: The leader can identify which tasks need to be prioritized. Choose to solve the hard ones first to avoid procrastination. He has a habit of setting clear priorities and completing important activities in short time. Does not get lost in routine actions. Prioritizes those that strategically lead to the objectives and goals to be achieved.

Developing skills

One of the most fantastic possibilities human beings have is the ability to learn. We can learn whatever we wish. With the investment of time, dedication, focus, training and discipline, we can become good at what we aim for.

There are predispositions that assist in the development of new skills; however, we should not understand as a prerequisite. The idea that, to be a leader, one had to be born a leader, was demystified long ago. That understanding that anyone who wasn't born with the leadership gene could not assertly lead teams was discouraging.

Perhaps the ability to develop oneself is one of the main qualities of a leader. Self-development is the individual's ability to foster his or her own learning and development through a process of reflection, evaluation, and action.[8] It is being able to look outside and realize what others expect from their actions. It can look inside and unqualifiedly evaluate what needs to be improved or learned. The leader is only able to assist his team for personal growth, to encourage people, if the leader is able to exercise this behavior in his own life.

Developing leaders in any organization is not an easy task. In addition to capturing the person with compatible behaviors, skills and attitudes, it is necessary that the company has in its active staff professionals prepared for mentoring, who have, besides the technical-specific knowledge, a broad view of the business. The hospital area, because it has a huge diversity of professions, in view of all that involves the provision of human health care, requires that the leadership be aware of all processes of the care value chain, including the support and administrative areas.

8 DA MATTA, V.; VICTORIA, F. **Career coaching**. São Paulo: SBCoaching, 2015a.

We know that the hospital organization needs a very large services list for its proper functioning. We often say that the hospital is formed by several other companies within it, such as laundry, restaurant, pharmacy, accounting office, laboratory, among others. This reflection is pertinent to assimilate the size of the responsibility and complexity associated with the management of these health units. It is not feasible and rational for managers to expect the market to offer so-called "ready" leaders:

a) No matter how prepared the person is, she is unlikely to come from outside knowing the culture of the hospital that selected her, its way of working, and its particularities;
b) The focus on the training of most health professionals is linked to the specific knowledge of their expertise area, not in tools on management of people.

Most nursing schools, for example, have content intended for teaching about management of people, but they do not yet invest the necessary time to study the subject, in order to make academics apt for leadership. Physical therapists, nutritionists, physicians, pharmacists, biomedicals alike. When these professionals need to lead teams in the hospital area, they sometimes face a lot of difficulty and conflict, even when they have solid training and experience in the specific expertise area.

Hospitals need to recognize this fragility and understand that for most people to deliver good results as leaders, they need to be prepared and developed.

Given the scenario of most hospitals, with existing professionals, what can we do to improve and develop leaders and teams? What is the way?

At first, it is important to understand that there is no fast or short path. We are talking about human development, learning new skills. The trajectory we believe to be sustainable in the long term is a thorough analysis of the institution›s current moment, its goals and strategic objectives, comparing with the delivery capacity of its leaders. From this survey, the human resources management will be able to build, together with the hospital management, a leader development plan, establishing what will be worked on, the deadline, the priorities and the form of monitoring.

The coach leader in the health sector

Personal coaching has existed since the 1960s and was appropriate in the 1990s for the corporate field.[9] It is a process that seeks to increase the positive outcome of individuals, teams and organizations through the use of techniques and tools applied by skilled professionals (coach), in partnership with the client (coachee).

With the need to update management practices, seeking a better use of human capital, aiming at increasing performance, hospitals can rely on the concepts and methodologies used in coaching for the coach leader development.

Coaching is extremely effective for developing and increasing the leader effectiveness, as it acts on the following aspects:[10]

9 Da Matta e Victoria (2015b).

10 *Ibidem*, p. 451.

- The perception of oneself;
- The perception of the other;
- The perception of the team;
- Driving the team to achieve results.

In healthcare institutions, it is important that the leader devotes his or her efforts to optimize resources and create solutions. With this guideline guiding their actions, it will be possible to trace the route for their team development, aiming to reach the maximum potential of each member, in favor of common goals.

A Harvard Business Review survey[11] showed that most teams achieve only 63% of their goals. The main reasons identified by the study are:

- Inadequate resources;
- Communication strategy fails;
- Indefinition of tasks and responsibilities;
- Inefficient organization;
- Problems with weak or missing leadership.

In order for the coach leader to achieve better results, companies and followers need to have what we call 3 Cs:[12] creativity, commitment and capacity (to unite).

1. Creativity: The leader must be creative in setting clear, possible but challenging goals in which the tasks and goals passed on to team members are directly linked to the outcome expected by the hospital. It is through the leader creativity, and his followers, that new ideas appear for the creation or improvement of company services. When people realize that their daily tasks are aligned with institutional goals, they are more encouraged to contribute to the search for innovative solutions. This cycle must be continuous and with constant feedbacks;
2. Commitment: The leader commits to the hospital, the team, and each member:
   2.1 With the hospital: Demonstrates commitment when delivering more than expected, by aligning the team's goals with those of the institution. It guides its actions based on people, processes, systems and tools, aiming at making the most of all available resources. Establishes strategies to ensure profitability, with sustainable vision;
   2.2 With the team: Has the ability to delegate responsibilities and foster opportunities. It acts impartially and rationalizes fair conduct. Stimulates motivation through positive postures. Know and seek to meet the needs of the team and offer feedback;
   2.3 With each member: Recognizes individual strengths and talents, awarding merits to those entitled. Can match skills, tasks and roles appropriately, understand individual needs, and offer challenges tied to development opportunities.

11 *Ibidem*, p. 538.

12 *Ibidem*, p. 545.

3. Capacity to unite: The relationship between team members does not always remain stable. It is precisely in times of tension that the leader must utilize his ability to unite, which can be developed through:

   3.1 Relationship, communication and conflict management skills;
   3.2 Establishment of a relevant team vision through common objectives;
   3.3 Be sincere: it is very valuable and provides recognition when your conduct is honest;
   3.4 Inspire Confidence: People tend to trust the leader who demonstrates consistency between speech and attitudes.

In the next step, after the formation of the coach leader and understanding what the hospital and the team members expect from their actions, it is necessary that the strengthened or developed competences are transformed into practical actions in conducting and developing teams in the day to day labor.

The leadership future

The market is hungry for professionals with leadership skills who can deliver the expected results. Hospitals seek and need professionals capable of achieving the goals and objectives proposed. The leader's primary role is to deliver maximum positive outcomes to the health care facility through people, individual skills and team engagement. Former GE CEO Jack Walch said: "In the future, every leader will be a coach".[13] We understand that the time has come for self-development, for professionals to realize that improvement goes by recognizing which skills need to be worked on. This is the way to achieve high performance and thereby maintaining employability.

Develop yourself, this is the only way. The future has arrived!

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13 *Ibidem*, p. 53.

lucratividade da sua empresa através das pessoas. São Paulo: SBCoaching, 2016.

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Glossary

- **Benchmarking**: process through which one observes, learns and improves and can be applied to any area of organizational activity;
- **CEO**: chief executive officer.
- **Feedback**: response to a particular request or event;
- **GE**: General Electric. It is a multinational conglomerate from New York and headquartered in Boston, Massachusetts, United States;
- **Harvard Business Review**: is a Harvard Business Publishing publication whose main objective is the intelligent reflection on best practices in business management;
- **Performance**: It is a set of characteristics or behavioral capabilities towards results of an individual;
- **Start**: initiate, begin.

CHAPTER 3

COMMUNICATION

J. Antônio Cirino

Objectives

- Support communication for the hospital environment;
- Understand communication as systemic and essential for the strategic management of the health unit;
- Present tools, techniques and metrics for media management and communication flows.

Communication as mediation

Hospital communication was founded[1] as a strand of business communication, included in the perspective of the composite field of communication and health.[2] It is understood that it is still an embryonic subject and needs further scientific research for its development.

We defend the importance of acting in the management of the communication of health facilities due to the origin of hospitals in the country, still in Brazil Colonia,[3] when health care homes were exclusively for those on the verge of death, not acting in prevention and preliminary care, for example. This scenario, which continued for subsequent centuries and is still true in som Brazilian states, has built a complex image for hospitals, causing the current need to re-signify their representations for a new moment in society, focused on the care quality and centered on people.

Another essential aspect is to explain what kind of communication we are addressing here. It is not only the interpersonal (a conversation between people), but the one that is established as a process and result, in order to make our thoughts common to the other,[4] understanding this "other" as any of the hospital's public, either in a conversation, whether in a transmission of information via institutional disclosure, for example. Basically, the communicational states that there is a sender, which has its context and therefore uses codes of interest, transmitting a message through a channel to a receiver, which also has its own context and codes. The latter should provide feedback to the other, fostering a communicational cycle, in which either point may suffer physical or psychological noise.

It is due to this complexity that we guide that hospital communication needs to follow three crucial steps for its implementation:

1. Strategic communication: considering the systemic participation in hospital processes, it is crucial to promote the alignment of this topic through its insertion, from conception to execution and monitoring of institutional strategic planning. From this, strategic objectives

1 CIRINO, J. A. F. **Gestão da comunicação hospitalar**. Curitiba: Appris, 2018.

2 ARAÚJO, I. S.; CARDOSO, J. M. **Comunicação e saúde.** Rio de Janeiro: Editora Fiocruz, 2007.

3 MACHADO, R. *et al.* **Danação da norma**: medicina social e constituição da psiquiatria o Brasil. Rio de Janeiro: Graal, 1978.

4 TEMER, A. C. R. P.; NERY, V. C. A. **Para entender as teorias da comunicação.** Uberlândia: Edufu, 2009.

will be proposed and may effectively have the proper conduct for this activity. The fact is that, at the strategic level, it is necessary to work with visual identity (brand, logo, slogan), generating a strong brand that is coherent with the organizational identity (mission, vision, values and purpose), managing audiences, structuring the communication policy, as well as the possible organizational structure that will act with this theme and, finally, perform duties in alignment with the quality and safety of the patient;

2. Organizational communication: once the strategic definition is completed, we move on to the next step - deploying these guidelines at the tactical and operational levels. The reason for this is, in the first place, to make all the promulgation that was made as an "organizational identity" a reality in the daily practice of each employee. This is possible by utilizing appropriate communication strategies, well-structured media and a commitment to strengthening links between staff and hospital;
3. Institutional communication: only after the perception that there is the desired coherence between the strategy and what the employees undertake every day, resulting in excellent care, can we invest in the hospital's outreach, working with institutional communication to reach external audiences, which can project the image of the health unit. It is at this point that we must correct possible dissonances between who we are and what people think we are, working to be as aligned as possible. While the previous stage aimed to propose internal mechanisms, this one serves as a bridge to reach potential clients, society, supervisory bodies and others that are important for hospital management, either through the proper relationship with the press, or via actions such as advertising and/or propagada, as well as using online social networks, websites, applications, and other forms specifically designed for this purpose.

Considering that we will not always be able to follow the three steps correctly, due to the punctual needs of advancement in some ways, such as the lack of resources, for example, it is suggested that, before the impossibility of doing them sequentially, these are worked in parallel and properly connected. The expected link with each hospital audience potentially depends on this coherent, personalized, and effective communication.

Hospital communication management

Communication has been commonly overlooked among the essential themes for management in health organizations. The consequences of not observing this important aspect of the hospital are noticeable in the strategic, tactical and operational dimensions, resulting in situations of failure among professionals, directly impacting patient care.

We bring, from the beginning, the word "management" to establish the essentiality of providing adequate efforts for the deployment, implementation, monitoring and improvement of communication in health institutions, understanding it as fundamental for each of the processes of care, administrative and support.

We are dedicated, in this part of the chapter, to grant some possible practical ways for the search of greater effectiveness in the communicational web that is established in the hospital, interconnected with its diverse audiences - internal, external and mixed.

Communication policy

An indispensable practice is the institutional definition of the communication policy. In some health units, the writing of this document turns out to be the result of a long walk of failures evidenced in the processes, which lead to the need to declare the communicational stance desired by the management. What we recommend is to anticipate, act proactively, set the expected standard, empower people to behave in this way and follow up on the execution.

According to the National Accreditation Organization (ONA),[5] policies are "general guidelines that express the parameters within which the actions of the institution and its members must develop towards the fulfillment of the mission to achieve the vision". In this sense, the communication policy exists to achieve the objectives outlined in the hospital's strategic planning, taking it from its current location to a new point in the future, achieving the planned improvements.

More specifically, the communication policy aims to "[...] guide the relationship of an organization / institution or company with its stakeholders as a means of promoting its involvement in improving performance[6]. Therefore, the focus of this document is to go beyond the paper. It is not intended simply to demonstrate how to do it, but to be an effective guiding instrument of everyday practices, enabling the correct postures regarding communication.

We recommend, as a minimum structure of this organizational instrument:[7]

- Statement of the hospital's priority publics, serving to prioritize actions and build appropriate channels for this two-way communication flow;
- Definition of the calendar of the permanent disclosures of the unit, providing the standardization of timely themes for each month or occasion;
- Contingency design for when there is the possibility of crisis or if the crisis is already established;
- Promulgation of the official spokesperson and appropriate sources for each topic of interest;
- Mapping of official media and communication channels, detailing their respective objectives and publics;
- Fixing internal and external communication flows, the unit's relationship with the press, communication products and their validation stages, as well as clarifying to employees the correct internal communication supports for each situation;
- Determining the approach / posture of employees communication, enabling the relationship improvement between the team and other audiences, as well as their co-responsibility with the appropriate use of the unit's brand, uniforms, online social networks, photographs / filming etc.

Once this policy is published, it is essential to turn it into action. It is recommended to start with a declaration of the document to the public involved in the communication process and to perform specific training for each inherent theme, providing participants with the conditions to carry out these issues effectively. In addition, it is necessary to include policies as part of introductory training, welcoming new employees, and inserting them in this very logic.

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5 ONA – ORGANIZAÇÃO NACIONAL DE ACREDITAÇÃO. **Manual das organizações prestadoras de serviços de saúde**. São Paulo: ONA, 2018. p. 143.

6 *Ibidem*, p. 141.

7 *Ibidem.*

Audiences

We can sum up stakeholder management with a book that condenses, in a few words, the purpose of this practice: "Os públicos justificam os meios".[8] (Audiences justify the means). To be effective in any action, it is crucial to identify with whom we aim to establish this communication and thus decide the most appropriate way to succeed in this process. Notably, health facilities often communicate with their audiences more often in crisis situations or even to correct problems. Our approach is to reverse this logic, since investing in preventing risks by working with prospective planning requires less human and financial resources.

Therefore, building an institutional image, through a well-defined organizational identity, goes through the knowledge of the current condition of these groups of people that are important to define the strategies that will be developed, aiming at maintaining the position in which the public meet or improve the relationship to another level.

Considering that this is a cyclical activity, that is, it needs a reassessment for continuous improvement, we propose the following actions for each step:[9]

1. Identify: The first step is to know who the hospital's audiences are. This can be accomplished from a reflection of the organization's geographical insertion, its relationships in society, as well as who impacts and is directly impacted by it. From this, it becomes possible to build a general list of these audiences to decide which ones are effectively prioritized for management;
2. Categorize: At this stage, having the audiences list, we need to classify them in at least two criteria: a) by the insertion profile - external or internal; and b) their position on the hospital, demonstrating the current nature / situation of this relationship. – favorable, neutral, unfavorable (or whatever scale they deem most appropriate) and what is the purpose for each audience (from unfavorable to at least neutral; or neutral to favorable, for example);
3. Plan: Now, from the goal set for each audience and the improvement of the relationship with them, we need to plan the strategies that will be undertaken to achieve this result, explaining the actions, means, resources and content to be developed during this cycle (annual or semi-annual) of activities;
4. Execute: make available the planning for each executing agent of the proposed actions, aiming to develop each practice according to the recommendations of form and content already stipulated;
5. Evaluate: choose metrics that are feasible for monitoring the communication effectiveness with these audiences, making it possible to perceive possible improvements to be undertaken during this cycle, or even launch proposals for the new cycle that will be performed next.

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8 MARTINUZZO, J. A. **Os públicos justificam os meios:** mídias customizadas e comunicação organizacional na economia da atenção. São Paulo: Summus, 2014.

9 Sugerimos um instrumento para mapeamento dos públicos e seu respectivo plano de ação na parte "Instrumentalizando e medindo a comunicação", ao final deste capítulo.

After the end of this public's management, we must restart these steps, identifying again which are the most appropriate groups and following the subsequent steps, allowing all communication actions to be associated with the larger objectives of relationship improvement. It is one of the entry ways to deploy tactical-operational actions throughout the year.

Media and communication channels

After mapping the audiences, it also becomes feasible to design what the means and channels of communication will be. The difference between them is: the means, in this case, are ways of sending information to the intended group (institutional website, for example); while channels are structures available to receive information, segmented by audience profile (Customer Service, for example). This is a basic explanation, since both establish complete communication processes, allowing feedback and, at a minimum, interaction between sender and receiver.

Something common between these two structures is the need for planning. We can't develop such important strategic elements without thinking about it, understanding what the goals and alignment of the entire team are with respect to potential content and possible formats. In this first moment, after we have defined with whom we will establish this conversation, the reflection is: how and about what do we want to talk?[10] To this end, we present some notes about the possible and most commonly used means of communication in health facilities:

- Intranet: electronic portal for internal use, exclusively in the hospital network. The focus is to make available key information of interest to employees and top management. Its structure is varied, but currently the blog and / or content portal models have been more common, bringing the news of the institution in daily publications and fixed pages with content such as: institutional - history of the health unit; organizational identity; statistics and results; photo gallery; birthdays; events; calendar; paycheck; time clock; and other interconnected systems, making the intranet the location of the hospital's informational convergence. This medium needs to be attractive and updated more often than others, as access to this page can be done more than once a day, requiring a more agile publication schedule;
- Newspaper / newsletter and institutional magazine: the "little newsletter" or internal newsletter has always been present in organizations. Now, with the new technologies advent, it has migrated to digital platforms, saving financial and environmental resources by making it available through other means, such as intranet and murals, to reduce impressions. Its content will depend on how it will be diagrammed and how many pages it will have, although quick texts and the use of photographs and infographics that complement the experience of the message being conveyed are usually recommended. The logic of the internal newspaper should be the same as that of a city news paper, for example: cover, division into editions / fixed content categories, and space for interaction with contributors such as birthdays, helpful tips, calendar of events, and whichever is most relevant. As for the periodicity, we suggest an analysis on professionals dedicated to this activity: it is better to start with a longer publication

10 Sugerimos um instrumento para mapeamento dos meios e canais de comunicação na parte "Instrumentalizando e medindo a comunicação", ao final deste capítulo.

and then reduce, if possible, than the other way around. Then start at least monthly, and then, if appropriate, change to biweekly; less or more is not worth it. The same guidelines apply to the institutional magazine, which can be considered a more focused medium for external communication, considering its higher cost for production / printing; therefore its periodicity may be longer and with longer lasting themes for circulation;

- Mail-marketing: this is not directly a communication means like the others, which are structured as a media device, but also becomes a way of sending information to targeted audiences through structured / diagrammed email, and it is possible to release various audiovisual contents and the hospital's own newsletter or magazine, for example. Therefore, it becomes an effective form of communication with internal and external groups. Its submission should be moderate, therefore we recommend no more than one mail-marketing per week for each group. This sending, especially from the point of view of individuals, must be done after the permission to include the email to receive materials and always offering the 'unsubscribe' option;
- Alternative Media: in addition to the traditional means of communicating with audiences nowadays, aiming to broaden the communicational experience, we are applying ways to seek the other senses of perception of people who should interact with the information to be transmitted. Whether through message balloons, art exhibits, cafeteria table displays, door, floor and wall stickers, as well as other ways that could be used to transmit the right message to the right person, in a comprehensible way that helps in the communication success;
- Mobile: With the transition of information access from other devices to mobile phones and tablets, the possibility of using applications to transmit information is already a reality for health facilities. Whether focused on the internal audience, external audience or both, we can think of specific strategies to attract groups of people defined as motivation to use an app, so that it is not exclusively an extension of other media (website, intranet, murals) but rather to present innovations that can improve the relationship of this public with the unit, making available, for example, exam results, the possibility of scheduling appointments, visiting guidelines and other issues that are present on hospital websites, but now with greater interactivity;
- Murals: From ancient times, people are used to tell their stories through images, either on the cave wall, as in ancient history, or through physical or digital murals available in health facilities, as now. The great aspect of this medium is to be able to reconcile the content needed to be transmitted to each audience in an attractive way, since after a while, the murals become part of the common space of things we see every day. Therefore, some places have already managed to move to the use of digital murals that allow interaction, with televisions / touchscreen monitors, allowing creative campaigns to be developed, bringing visualization reports and feedback on the effectiveness of that medium. If it is not possible to invest in digital, it is recommended to start the activity with the physical, allowing materials with different layouts that are associated with intranet actions, online social networks or the website, for example, using the QR Code and other ways. Other developments in the same perspective of murals are internal panels at strategic points of the health unit, or even the screensavers used at each computer, as a way to attach educational and guidance content;

- Corporate Radio: In order to disseminate audio content, corporate radio may assume two main formats - a) speakers at strategic points in the hospital; and b) via the webradio-style intranet, which is transmitted only online. Each will have distinct audience profiles and will depend on the objectives pursued by the board of the health unit. Content can be varied, focusing on specific times for live broadcasting of "programs" as well as previously recorded materials that can serve as guidance and health education. The focus of this radio is not, directly, a musical program, but that can happen in specific spaces and times;
- Online social networks: With the many free online social networks available for business use, the hospital will need to define which one it intends to be actively present in. This is something that should be considered strategically, as each social network has a different focus and a content format as well. Each new open space on the Internet will officially require planning and construction of specific materials. The most common today are: YouTube, Facebook, Instagram, Twitter, LinkedIn and WhatsApp. Each with its social function, it is essential to analyze this participation and effectively dedicate hours of the team to manage these instruments. Recalling that each medium requires different format and content, we cannot simply use the same material from each other, as it will inevitably have no effectiveness and dissemination;
- Website: Since the boom in the internet access, it is crucial that health facilities are officially present on the World Wide Web through a website. This portal needs to bring together the main guidelines for hospital clients, as well as services that can expedite and facilitate the hospital clients care, such as scheduling services and delivering results, for example; In addition, the coupling of information, news, results obtained and description of the services offered will enable site visitors to know more about what the hospital proposes. Another potential is, as a portal, to bring together other online social networks, offering the best of each tool to the public;
- Indoor TV: Finally, we bring one more option to communicate with the unit's audiences - indoor television. This TV can have a programming in two formats - informative content made with images and texts or people recording, with videos similar to the usual television. The decision on either format or both will depend on where the televisions will be installed and whether or not it will be possible to make audio or non-audio material available to prevent disruption of assistance flows. Creating a fixed schedule, with boards and programs, will help in organizing this broadcast, focusing on bringing the information that the public of that place is interested in. The material produced here, if educational in nature, can integrate the YouTube channel and IGTV on Instagram, for example, by differentiating the display formats and adapting them to each intended network.

In addition to the media, we must also distinguish the communication channels, presenting their peculiarities:

- Press Office: given the potential interest of media outlets for information on inpatients, interviews with health professionals and coverage of hospital actions / events, it is essential to provide a contact channel between the press and the unit's staff. You need a specific email, landline and cell

phone on call, as demands can appear on any day and time. A good press channel will reinforce the crystallization of a positive image for the hospital;

- Ethical and human resources channels: internally, it is necessary to establish a channel for the ethical information of the councils that make such reports mandatory (for example, medicine and nursing), as well as another specific form for employees to express behavioral issues and relationship in the unit. One dedicated email and phone number is sufficient and, if you wish, add a form for each subject available on the intranet;
- Customer Service: customer service is common in most companies, and is also very useful for the hospital when used with a focus on recording possible customer suggestions for the improvement of processes. This channel should have satisfactory options for receiving information, such as e-mail, suggestion box at receptions and assistance stations, room and telephone service being the main ones. In addition, the customer service can be integrated with a form on the health facility's website and app, when appropriate and feasible, and, when instituted, ensure adequate resources and coherent processes for granting returns;
- Patient safety: Finally, in order to notify adverse events, it is necessary to provide a channel for patient safety to receive these reports from customers and employees. We recommend using a suggestion box and standard form on the intranet, or even using specific software, the first one focused on the external audience and the second on the internal audience, enabling opportunities for improvement to be identified and dealt with correctly, as well as required notifications are successfully undertaken.

Communication flows

In parallel with the construction of the means and channels, it is necessary for the health unit to formalize its communication flows, which we list here as at least three main types: assistance; administrative; and advertising. Here are some guidelines for these definitions and their importance for hospital management:[11]

- Administrative: this is an essential communication flow for administrative routines to be established with standard and rigor. These are decisions ranging from the appropriate documents for standardizing internal information, the use of corporate email and other communication tools, to the meeting format to be adopted. This is extremely important for the alignment of all sectors in the same activity profile, contributing to process quality;
- Assistance: establishing this flow has a special focus on patient safety by improving communication between health professionals, thus meeting one of the basic goals of the National Health Surveillance Agency (Anvisa). The reflection of communication in the care area is to think about the pattern of records in the patient's medical record, how we will approach family members and visitors, when the multidisciplinary team will meet, what is the shift pattern, how to communicate bad news, among other needs evidenced by the team during its performance in health. For the definition of this flow, it is crucial to involve

11 Sugerimos um instrumento para mapeamento desses fluxos de comunicação na parte "Instrumentalizando e medindo a comunicação", ao final deste capítulo.

representatives from all areas and gather suggestions from the hospital to ensure that as many routines as possible are agreed in advance, avoiding miscommunication that can result in damage and dissatisfaction of clients of this health facility;

- Advertising: this is the institutional communication flow, aimed at defining how the hospital discloses its information internally and externally, providing the detailing of the profile of each product generated by the unit, as well as their respective validation steps, ensuring that the information transmitted be appropriate. The reflection in this flow is to think about how the hospital wants to be seen by its public, who can talk in each situation, what kind of material and content are proposed, possible restrictions and scope of these advertisements.

Instrumentalizing and measuring communication

This part of the chapter is devoted to introducing some mapping tools and measurement of hospital communication outcomes. Initially, we proposed a table for the appropriate survey of the audiences and its respective strategies, planning to improve the relationship with each of them.

AUDIENCE	CURRENT SITUATION	DESIRED SITUATION	ACTIONS	FORMAT	CONTENTS	RESOURCES	METRICS
What is the name of the group?	What is the current positioning of this group?	What is the desired positioning after X months? We can include a goal for each audience.	For each group, make a list of actions required.	Answer here what will be the format of this action.	What information will be transmitted through this action?	What will be required for this action?	How do we know we are on the right way?
			Explaining each one over the course of X months in the cycle defined.	Explaining if it will be the construction of a mean or channel, for example.	What do we want to inform the audience?	How much will it be necessary to invest in human and / or financial resources?	Metrics can be set for each action or even for each audience overall.

Table 1 - Audience management plan

Prepared by the author of this chapter.

Then we work with a format adapted to think about the means and communication channels intended to work in the hospital.

MEAN / CHANNEL	GOAL	AUDIENCE	FORMAT	CONTENTS	RESOURCES	METRICS
What is the name of the mean / channel to be projected?	Set a clear purpose of why this mean / channel exists	With who will this mean / channel talk to?	How will it be built and operate on a daily basis?	What information will be sent / received?	What resources are needed for this?	What indicators / metrics are linked to it to assess its effectiveness?

Table 2 - Plan of Communication Channels and Means

Prepared by the author of this chapter.

Concluding the mappings, we demonstrate how to describe the communicational flows thought for the hospital scenario, detailing the areas involved and how it will be instrumentalized.

FLOW TYPE	ACTIVITY	GOALS	INVOLVED	FORMAT	METRICS
Define the Flow type (assistance, administrative or advertising).	For each type, list the activities needed to standardization.	Where do we want to go and what is the goal?	What areas / positions are involved in this process?	What is the default set?	In what way will we know that we are reaching the expected results?

Table 3 - Communication Flow Plan

Prepared by the author of this chapter.

Now, considering the three flow types we have at the hospital level, we suggest at least the following indicators.

For the administrative flow, we propose:

Indicator Name:	Effectiveness rate of organizational communication.
Data to collect:	In a sample way, undertake the collection of the quantity of communications undertaken and what was the level of execution of the activity consistent with the requested.
Recommended data closing frequency:	Monthly.
Calculation Format:	$\frac{\text{Effective Announcements}}{\text{Announcements undertaken}} \times 100.$
Recommendations for goal setting and direction (inversely or directly proportional):	The goal should be planned according to the expected results for the hospital, so we recommend monitoring the first months to propose a goal consistent with the unit's history, challenging and feasible at the same time.
Possible participants in the critical analysis of this data:	Communication industry, board of directors and areas involved in the specific communication of the month analyzed.

Table 4 - Parameterization of indicator for monitoring the effectiveness of organizational communication

Prepared by the author of this chapter.

For the care flow, we suggest:

Indicator Name:	Effective communication protocol adherence rate.
Data to collect:	This indicator must be linked to the effective communication protocol for patient safety. The data to be worked on are event notifications related to communication failures.
Recommended data closing frequency:	Monthly.
Calculation Format:	Adverse Events Not Related to Communication Failures _____ X 100. Total adverse events
Recommendations for goal setting and direction (inversely or directly proportional):	The goal should be planned according to the expected outcomes for the hospital from the patient safety point of view and commonly managed by the Patient Safety Nucleus (Nusp) or the area designated by him. One way is to monitor adherence to the protocol in the early months and, after historical results, to propose a goal that is challenging but at the same time feasible.
Possible participants in the critical analysis of this data:	Patient Safety Nucleus, board of directors and assistance areas involved.

Table 5 - Indicator parameterization for monitoring healthcare communication

Prepared by the author of this chapter.

For the disclosure flow, we recommend:

Indicator Name:	Effectiveness index of institutional disclosure.
Data to collect:	Clipping positive insertions in the press and social networks.
Recommended data closing frequency:	Monthly.
Calculation Format:	Number of positive insertions in the press and social networks _____ Number of releases motivated by the hospital
Recommendations for goal setting and direction (inversely or directly proportional):	The goal should be planned according to the expected results for the hospital, but not less than one, that is, with each release sent by the hospital, at least one positive publication should be achieved.
Possible participants in the critical analysis of this data:	Table 6 - Indicator Parameterization for monitoring the effectiveness of institutional disclosure.

Quadro 6 – Parametrização de indicador para monitoramento da efetividade da divulgação institucional

Prepared by the author of this chapter.

Communicate!

"Communication is essential for caring for people and achieving good results".[12] In this sense, we realize that this is a strategic and therefore systemic area in hospital management. Our main focus, with the communicational actions, is to guide and bond with the audience, as well as to proceed with the adequate transparency of the information to the shareholders and society in general. A health facility is potentially a public interest institution, regardless of its nature, private or philanthropic, for example.

The health and quality reverberate in all social strata, and, therefore, we must take an even more critical view of its management, enabling us to deliver more and more value to clients who seek care in these spaces. The hospital manager who proposes to guarantee excellence in its administration should consider communication as an integral part of the actions, the thread that interconnects them with the audience, as well as the very basis of their executions.

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12 Cirino (2018, p. 21).

p. 1-16, 2016. Disponível em: https://www.reciis.icict.fiocruz.br/index.php/reciis/article/view/1132/pdf1132. Acesso em: 7 mar. 2019.

Glossary

- **Clipping**: "clipping" news or social network publications about the hospital, gathering them and forming a history for analysis of the media image of this unit;
- **Source**: hospital professional qualified to give journalistic interviews about a certain subject;
- **Identity**: the internal definition of what the brand is;
- **Image**: the external perception about the brand;
- **Layouts**: Visual pieces created by the communication team to publicize certain subject / campaign;
- **Spokesperson**: Hospital professional assigned to be the "face" and "voice" of the institution, being the leading figure to participate in press interviews and official events.

CHAPTER 4

SUSTAINABILITY IN HEALTH ORGANIZATIONS

Renata Macedo

Objectives

- Identify the three main aspects of organizational sustainability;
- Provoke reflections on these aspects in the hospital environment;
- Reference tools, initiatives and methodologies related to health sustainability.

Fundaments of organizational sustainability

The concept of sustainability has been widely spread and still little practiced. It is related to the long-term growth of the company, taking into account the well-being of people, the environment preservation and the responsible relationship with the society. In health, how can we talk about sustainability without hospitals being connected to large networks?

From the Latin sustainare (sustain; defend; favor; support; conserve; care) the term "sustainable", officially presented by the United Nations World Commission on Environment and Development (CMMAD), implies the "[...] ability to meet the needs of the present without compromising the ability of future generations to meet their needs".[1]

In the not so distant past, an enterprise could be considered sustainable just because it is economically sound. Released in 1992 by Kaplan and Norton,[2] the Balanced Score Card (BSC) was created as a business performance measurement system and began to consider, in addition to the financial perspective, the perspectives of processes, customer, learning and growth. It then began to consider other stakeholders, other than shareholders.

From 1994 onwards, the Triple Bottom Line (TBL), known as 3 Ps (people, planet and profit), has become widespread and the sustainability concept is expanded to include:

- People - the treatment of the human capital of a company or society;
- Planet - the natural capital of a company or society;
- Profit - the profit, positive economic result of a company.[3]

Launched in 1999, the Sustainability Integrated Guidelines for Management (SIGMA) method extends this idea by offering the concept of protecting and enhancing the five types of capital:[4]

1 CMMAD – COMISSÃO MUNDIAL SOBRE MEIO AMBIENTE E DESENVOLVIMENTO. **Nosso futuro comum**. Rio de Janeiro: FGV, 1988.

2 KAPLAN, S.; NORTON, P.; ROBERT, D. **The Balanced Scorecard**: translating strategy into action. 1st ed. [S.l.]: President and Fellows of Harvard College, 1996. p. 63.

3 ELKINGTON, J. **Triple bottom line revolution: reporting for the third millennium**. Australian CPA, v. 69, p. 75, 1994.

4 BRANDÃO, C. E. L.; SANTOS, H. L. (Coord.). **Guia de Sustentabilidade para as Empresas**. São Paulo: IBGC, 2007.

- Natural - environment;
- Social - social relations and structures;
- Human - people;
- Built - fixed assets;
- Financial - profit and loss, shares, cash, among others.

The five capitals are permeated by the accountabilty principle. For the Brazilian Institute of Corporate Governance (IBGC), the approaches of the TBL and the five capitals are complementary and thus relate:

- Economic and financial result - built and financial capital;
- Environmental - natural capital;
- Social outcome - human and social capital.

According to the National Quality Foundation (FNQ):

> [...] The current challenge for organizations goes beyond pure and simple growth, reaching a model of production and marketing organized in order to continuously reduce the consumption of natural goods and ecosystem services, concurrently conferring competitiveness and longevity. We have already noticed a change in the consumption of goods and services in the society, often led by a change in the behavior of consumers themselves, who are becoming increasingly socially and ecologically responsible.[5]

This is to say that customers are increasingly aware of our stance on sustainable practices. Worrying about social and environmental issues is today a prerequisite for business longevity.

Still according to the FNQ:

> [...] Organizational sustainability is demonstrated by the organization's commitment to respond to the impacts of its decisions and activities on society and the environment, and to contribute to the improvement of life conditions for both present and future generations through an ethical and transparent behavior towards sustainable development.[6]

In 2015, the United Nations (UN), aimed to mitigate and eliminate the negative impacts of human interference on the environment and communities, declared as Sustainable Development Goals (SDGs):

> End poverty in all its forms, everywhere. End hunger, achieve food security, improve nutrition and promote sustainable agriculture. Ensure a healthy life and promote well-being for everyone at all ages. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Achieve gender equality and empower all women and girls. Ensure the availability and sustainable management of water and sanitation for all. Ensure reliable, sustainable, modern and affordable energy access for all. Promote sustained economic growth, inclusive, sustainable, productive employment and decent work for all. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. Reduce inequality within and between countries. Make cities and human settlements inclusive, safe, resilient and sustainable. Ensure sustainable production and consumption patterns. Take urgent action to combat climate change and its impacts. Conservation and

5 FNQ – FUNDAÇÃO NACIONAL DA QUALIDADE. **Guia de Referência da Gestão para Excelência**. São Paulo: FNQ, 2016.

6 *Ibidem.*

> sustainable use of oceans, seas and marine resources for sustainable development. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all, and build effective, responsible and inclusive institutions at all levels. Strengthen the means of implementation and revitalize the global partnership for sustainable development.[7]

Therefore we perceive a global movement for the valuation of sustainability. To walk the path of sustainable development in health facilities, three main aspects must be considered in defining our strategies:

- Economic and financial;
- Environmental;
- Social.

Building sustainable strategies

Economic and Financial Aspects

According to the FNQ,[8] the sustainability financial aspects may include defining and monitoring performance indicators, understanding external issues, cost management, budget management, and fiscal control.

As a result of the risks involved, a growing demand for quality, coupled with a compensation system that calls for change, health services have become increasingly complex and with lower profit margins. Managers are continually challenged to seek efficiency and effectiveness of activities. The search for better results often results in the paradigm that quality and costs are conflicting when, in order to ensure the longevity of organizations, they should coexist.

It turns out that our current financial and economic instability and uncertainty scenario poses the survival challenge, and we are motivated by the short-term syndrome that generally looks back to shareholders and forces the minimization of costs with other stakeholders.

Contrary to what good corporate governance practices propose, sustainability still appears incipient in institutional definitions, in strategy, has little connection with operations, does not guide goals, does not support a compensation / reward systems.[9] In this regard, we need to think of strategies to balance short-term gains with more sustainability-related attitudes.[10]

Every penny invested to start a new project or expansion of activity, whether in new products or services, should pass a careful examination that, in addition to considering the environmental and social issue, should also take into account the organization of the business structure capital. Unless it is an initiative related to the mitigation of risks or the improvement of working conditions

7 ONU – ORGANIZAÇÃO DAS NAÇÕES UNIDAS. **Transformando nosso mundo**: a Agenda 2030 para o Desenvolvimento Sustentável. Tradução do Centro de Informação das Nações Unidas para o Brasil (UNIC Rio). Rio de Janeiro: ONU, 2015. Disponível em: https://nacoesunidas.org/pos2015/agenda2030/. Acesso em: 29 mar. 2019.

8 FNQ (2016).

9 Brandão e Santos (2007).

10 BRANDÃO, C. E. L.; GARZILLO, J. M . F. (Coord.). **Sustentabilidade nos Conselhos de Administração**: práticas de algumas empresas listadas brasileiras. São Paulo: IBGC, 2013.

- which, in the medium and long term, also influences the economic result of the company, an accurate study about the clients' need for this new offer and the cost of capital that will be required for project implementation, whether through the institution's own resources (preferably), partners 'or maintainers' investment, the stock market or banks - for sustainability, the expected economic outcome of this expansion or new activity should at least be equal to the capital cost.

Environmental aspects

The environmental aspects of sustainability includes the prevention and treatment of the business impacts and the institution's engagement with the problems related to the great environmental crisis that the planet is facing. We live the age of man as the greatest agent of change in nature. The problems faced by the environment are many and varied. Therefore, the organizational sustainability concept has become widespread and the adoption of sustainability-oriented practices is increasingly necessary.[11]

Sustainability has become a competitiveness factor for companies. With the changing world, awareness about the planet's boundaries, the natural resources finitude and the impacts of waste generated by human activities is growing. The IBGC says that anyone who anticipates to understand the future of conscious consumption will be ready to act in this new society.[12]

What about us, health care organizations? Are we ready? Fortunately, stakeholders have been demanding a differentiated stance. International discussions have been made about the need to implement safe and sustainable hospital waste management. We are large waste generators and there is a greater proportion of common waste (low-risk and household-like waste) than infectious waste. According to the Global Agenda of Green and Healthy Hospitals, about 75% to 85% of waste generated is considered common waste. The final disposal of the infecting waste is significantly more costly to us. Thus, properly segregating waste is a constant challenge and with considerable financial impacts. Considering that we are effective in segregating common and infective waste, the next challenge becomes the selective waste collection and recycling. How many of us are already engaged in waste recycling?

Selective waste collection at a hospital was motivated by a young physician in her first week of residence. She sent an e-mail warning that "we are co-creators of the future and that each of us has a social responsibility to pursue sustainable and cooperative habits for the health of our nature, which is already heavily damaged by human interventions.".[13] In addition to demonstrating its genuine concern for sustainability, the e-mail advised on the steps to be taken: "I believe that as a large hospital, where so many patients, companions and collaborators coexist, we would be contributing in some way to building a better future. And that thrills me!".[14] From this e-mail, adhering to selective collection happened almost organically.

How many of us are really engaged in environmental issues? What are we doing to use resources rationally and minimize the impact of our waste? How much do we contribute as allies in environmental conservation?

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11 FNQ (2016).

12 Salviatto e Brandão (2009).

13 Arquivo da autora.

14 *Ibidem.*

LEED certification, or Leadership in Energy and Environmental Design, is the main platform used to recognize green buildings. In Brazil, there are 40 hospitals seeking LEED certification and about 15 are already certified. These hospitals are therefore buildings specially prepared for this new society.

Eventually, older hospitals will not have their buildings aligned with attempts to rationalize resource consumption, but much remains to be done. The Global Green Hospitals Agenda has contextualized nine other initiatives, in addition to sustainable and healthy buildings, to stimulate the approach to sustainability in health.

> The Global Green Hospitals Agenda in 2011 proposed ten goals to stimulate the approach to health sustainability: Engaging leaders to prioritize environmental health. Replace hazardous substances with safer alternatives (such as thermometers and blood pressure meters containing mercury, gluraldehyde, among others). Safely reduce, treat and dispose of health care waste. Implement energy efficiency and renewable clean energy generation. Reduce water consumption. Improve transportation strategies for patients and staff. Buy and offer healthy and sustainably grown food. Proper prescription, safe administration, and proper drug destination. Support projects and constructions of green and healthy hospitals. Buy safer and more sustainable products and materials.[15]

Eight years after the agenda, we have seen relative progress on those goals that are unquestionably necessary, invariably achievable, but not yet prioritized in the strategies. Are we safe about the final disposal of waste and obsolete equipment? Are the recomendations related to energy efficiency and water use reduction really considered in the acquisition of new technologies? And finally, how much investment are we planning to make the facility more sustainable?

Social aspects

The social aspects of sustainability reveal the concern with establishing fair actions for workers, partners and society.

According to the FNQ, themes related to these aspects are the prevention and treatment of social impacts, as well as social development.[16]

According to Qmentum:

> Stakeholders of an institution may include governments or other donors, foundations, unions, clients and family members, shareholders, partners or similar organizations, voluntary or interest groups, professional entities and associations, service providers or contracting agencies, reference organizations, and the community as a whole.[17]

According to the IBGC, we often overlook how much "intangible assets make a decisive contribution to the company value formation",[18], to the strengthening or weakening of the brand and, in the long run, how they will affect efficiency, effectiveness, and cost.

In this sense, people management has a prominent place in the race for our organizations longevity. Confucius said over 2,500 years ago that "to become a leader, you must first become a

15 AGENDA Global de Hospitais Verdes e Saudáveis. **Saúde Sem Dano**, [s.d.]. Disponível em: https://saudesemdano.org/america-latina/temas/agenda-global. Acesso em: 29 mar. 2019.

16 FNQ (2016).

17 QMENTUM INTERNATIONAL. **Padrões/governança**. [S.l.]: [s.n.], 2016.

18 Brandão e Santos (2007).

human being." To be sustainable, we need to take care of our employees, so that they take care of their patients, so that we all can take care of society.

The IBGC warns that "[…] individual and cultural resistance can be obstacles in the way of sustainability [,] and actions that seek alignment, understanding and the development of people are crucial to overcoming such resistance".[19]

Studies show that employee experience directly affects customer experience. And is it possible to have sustainability without users having good experiences in our organizations? Reichheld draws attention to the damage customers can do and anything that blocks profitable and sustainable growth, tarnishes the company's reputation, discourages employees and negatively impacts the customer experience is classified as "bad profits". "[...] Detracting clients are not on the corporate balance sheet, but they cost much more than many liabilities that traditional accounting methods carefully reap".[20] In this sense, concern for the employee and customer experience is an important aspect to consider in our strategies.

As a healthcare provider, providing safe, customer and family-centered care is one of the biggest challenges and, in essence, should be our purpose. Managing quality, safety and clinical outcome indicators is part of the strategy of delivering a good experience and ensuring longevity. Understanding how we return patients to the community is needed to understand our social impact.

And when we finally assertively take care of our employees and customers, how much do we cooperate in changing society around us? Are we sufficiently engaged in relation to the major global themes of sustainability? And how much are we engaging all stakeholders on social and environmental responsibility issues?

Tools, initiatives and methodologies related to sustainability

The following tools, initiatives, methodologies and indicators are examples of good practices implemented by institutions committed to sustainability.

19 Brandão e Garzillo (2013).

20 REICHHELDE, F. F. **A pergunta definitiva 2.0**: como as empresas que implementam o Net Promoter Score prosperam em um mundo voltado aos clientes. Tradução de Bruno Alexander e Luiz Otavio Talu. Rio de Janeiro: Elsevier, 2011.

Economic and Financial Aspects

TOOLS, INITIATIVES AND METHODOLOGIES	INDICATORS
• Budget management; • Tax control; • Cash flow management; • Investment plan; • GRI - Global Reporting Initiative (GRI sustainability reporting standards help identify the impacts of the organization's operations on the environment, the economy and civil society); • ABC - Activity Based Costing; • Ethos Indicators (Ethos Institute online membership system that allows self-diagnosis and comparison with other participating companies).	• Revenue growth; • Disallowance ratio (% of net revenue); • Current liquidity (ability to pay off debt); • Budgeted x Executed; • Balance point; • Average period of receipt (days); • Return on Investment (ROI); • Return on Equity (ROE).

Chart 1 - Tools and methodologies related to sustainability: financial aspects

Source: FNQ (2016).

Environmental Aspects

TOOLS, INITIATIVES AND METHODOLOGIES	INDICATORS
• Proactive and active waste management committee; • Replace radiological equipment that uses film and consume large amounts of water with digital systems; • Utilization of image system in medical records; • Reduction of paper use; • Use of biodegradable cleaning products; • Creation of rainwater storage tanks; • Installation of photovoltaic plates for capturing solar energy; • Establish reverse logistics for piles, batteries, equipment and medicines; • Emergency and disaster preparedness plans; • GRI - Global Reporting Initiative; • Ethos indicators; • EMS - Environmental Management System; • LEED certification	• Water consumption in m^3 per patient / day; • Energy consumption in kw / h per patient / day; • Waste generation per patient day (kg).

Table 2 - Tools and methodologies related to sustainability: environmental aspects

Fonte: FNQ (2016).

Social Aspects

TOOLS, INITIATIVES AND METHODOLOGIES	INDICATORS
• Management oriented to clinical outcomes of treatments; • Patient safety management; • People development programs; • Occupational health and accident prevention programs; • Measure customer experience; • GRI - Global Reporting Initiative; • Ethos indicators; • Health certifications; • Access Management.	• Internal Utilization Rate (%); • Absenteeism index (%); • Turnover; • Employee retention rate at 12 months (%); • Net Promoter Score.

Table 3 - Tools and methodologies related to sustainability: social aspects

Fonte: FNQ (2016).

Parameterization of recommended indicators

Economic and financial

INDICATOR NAME	DATA TO BE COLLECTED	PERIODICITY	CALCULATION FORMAT	RECOMMENDATIONS FOR GOAL SETTINGS	POSSIBLE PARTICIPANTS OF CRITICAL ANALYSIS
Revenue Growth (%)	Net Revenue	Annual	Net Revenue Year B / Net Revenue Year A x 100	Review of historical series, current level and benchmark	Finance department and board
Disallowance ratio (% of net revenue)	Net Revenue (R $) Disallowances (R $)	Monthly	Disallowances (R$) / Net Revenue (R$) x 100	Review of historical series, current level and benchmark	Finance department, board of directors and commercial department
Current liquidity	Current assets (R $) Current liabilities (R $)	Annual	Current Assets / Current Liabilities	> than 1; the bigger the better	Finance department and board of directors
Budgeted x Executed	Budget planning	Monthly	Executed Amount / Budgeted Amount	There should be no variation between budgeted and executed. The goal therefore is 1	Finance department, board of directors and managers involved

INDICATOR NAME	DATA TO BE COLLECTED	PERIODICITY	CALCULATION FORMAT	RECOMMENDATIONS FOR GOAL SETTINGS	POSSIBLE PARTICIPANTS OF CRITICAL ANALYSIS
Balance point (%)	Fixed cost. Recipe. Variable cost.	Monthly	[Fixed Cost / ((Revenue - variable cost) / total revenue)] x 100	Review of historical series, current level and benchmark.	Review of historical series, current level and benchmark.
Average period of receipt (days)	Accounts Receivable (R$) Annual billing	Monthly	(Accounts Receivable / Annual Invoicing) x 360	Review of historical series, current level and benchmark	Finance department, board of directors and commercial department
Return on Equity (ROE)	Net Income (R$) Shareholders' equity (R$)	Annual	Net Income / Equity	Review of historical series, current level and benchmark.	Finance department, board of directors and commercial department
Return on Investment (ROI)	Investment Costs	Annual	[(Return on Investment - Investment Cost) / investment cost] x 100	Review of historical series, current level and benchmark.	Finance department, board of directors and managers involved with the investment

Table 4 - Parameterization of recommended economic and financial indicators

Source: Pflaeging (2009).

Environmental

INDICATOR NAME	DATA TO BE COLLECTED	PERIODICITY	CALCULATION FORMAT	RECOMMENDATIONS FOR GOAL SETTINGS	POSSIBLE PARTICIPANTS OF CRITICAL ANALYSIS
Water consumption in m3 per patient / day	m3 water. Patient / day	Monthly	m^3 water consumed / patient / day	Historical series review and benchmark.	Building maintenance manager and board of directors
Energy consumption in kw / h per patient / day	kw / hr Patient / day	Monthly	kw / h consumed / patient / day	Historical series review and benchmark	Building maintenance manager and board of directors
Waste generation per patient / day (kg)	Ordinary waste weight (recyclable and non-recyclable) Infectious waste weight	Monthly	Amount of waste generated / patient / day	Historical series review and benchmark	Hospitality Manager and board of directors

Table 5 - Parameterization of recommended environmental indicators

Source: Indicators gathered by the chapter author.

Social

INDICATOR NAME	DATA TO BE COLLECTED	PERIODICITY	CALCULATION FORMAT	RECOMMENDATIONS FOR GOAL SETTINGS	POSSIBLE PARTICIPANTS OF CRITICAL ANALYSIS
Internal utilization rate (%)	Vacancy Promoted employees	Monthly	Promoted employees / Vacancy x 100	Historical series review and benchmark	Human development manager and board
Absenteeism index (%).	Lost hours Worked hours	Monthly	(Lost hours / hours that should be worked) x 100	Historical series review and benchmark.	Human development manager, board of directors and managers of the areas involved
Turnover	Employees hired Dismissed / fired Total employees	Monthly	[(Employees hired + fired) / 2 / total employees from previous period] x 100	Historical series review and benchmark.	Human development manager, board of directors and managers of the areas involved
Employee retention rate at 12 months (%)	Employees hired	Annual	Employees who completed 12 months of company / total employees hired in the period	Historical series review and benchmark.	Human development manager, board of directors and managers of the areas involved
Net Promoter Score.	Promoter customers Detracting customers Neutral Customers	Monthly	NPS = promoters - detractors / total number of respondents	Zone	Ombudsman, board of directors and managers of the areas involved

Table 6 - Parameterization of recommended social indicators

Source: Indicators gathered by the chapter author.

Considerations

Sustainability encompasses three main aspects: economic-financial, environmental and social, to be considered from the definition of strategies. Maximizing a company's value encompasses both quantitative (cash generation and results) and qualitative (perception and recognition) aspects.

To be recognized as socially engaged institutions, sustainability must go beyond the philosophical aspect of the strategy to finally make up the budget plans. At defining sustainable strategies, we will also need to restructure our processes, measure results and implement improvement cycles.

Sustainable hospitals have a good relationship with their stakeholders. And whenever, motivated by the short-term syndrome, we focus our efforts only on the economic and financial aspects, there is a negative impact to the other aspects and sustainability is compromised.

Sustainability is, therefore, subject to numerous factors and externalities and should be a fundamental concern of the leaders of an institution whose responsibility is to work so that all stakeholders understand that decision-making and action should always seek to add value. This increases the chance of ensuring longevity and institutional success.

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CHAPTER 5

REMUNERATION MODELS IN THE SUPPLEMENTARY HEALTH SECTOR

Rodrigo Rodrigues de Aguiar e Ana Paula Cavalcante

Objectives

- Present the history of the debate and production about remuneration models in the context of the supplementary health sector;
- Systematize the characteristics of the main compensation models;
- Support and instrumentalize the implementation of value-based compensation model.

History and concepts

Brazil is rapidly undergoing a demographic, epidemiological and lifestyle transition that has led to: an increase in the population's life expectancy; the higher prevalence of non-communicable chronic diseases; a diet based on consumption of processed products; and sedentary lifestyle.[1,2] All these factors, coupled with the adoption of increasingly expensive health technologies, impact the way health systems are organized in the world.[3,4,5]

Despite the changes in the population profile, the health care model and the organization of Brazilian supplementary health services did not adapt to the changes, remaining in the same patterns of the mid-twentieth century. The system continues: organized in a disjointed manner, primarily to address acute illnesses that are rapidly resolved; based on medical and hospital care; and with little evaluation of the results. This model displays poor efficience and is expensive.[6,7,8,9]

Hospital care is fundamental in the construction of public health policies and is the object of constant concern by managers, considering the complexity and the existing challenges. How hospitals

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1 MALTA, D. *et al.* Fatores de risco relacionados à carga global de doença do Brasil e Unidades Federadas, 2015. **Revista Brasileira de Epidemiologia**, v. 20, n. 1, p. 217-232, 2017.

2 MARINHO, F. Ministério da Saúde. Secretaria de Vigilância em Saúde. Departamento de Vigilância de Doenças e Agravos não Transmissíveis e Promoção da Saúde. Situação epidemiológica das DCNT no Brasil 2015/2016. *In:* FÓRUM PARA O MONITORAMENTO DO PLANO DE AÇÕES ESTRATÉGICAS PARA O ENFRENTAMENTO DAS DOENÇAS CRÔNICAS NÃO TRANSMISSÍVEIS, 5., 2017. **Anais** [...]. MS, 2017.

3 MENDES, E. V. **Programa Mãe Curitibana**: uma rede de atenção à mulher e à criança em Curitiba, Paraná. Lima: Organización Panamericana de la Salud, 2009. (Estudo de caso).

4 ALMEIDA, P. F.; FAUSTO, M. C. R.; GIOVANELLA, L. Fortalecimento da atenção primária à saúde: estratégia para potencializar a coordenação dos cuidados. **Revista Panamericana de Salud Publica**, v. 29, n. 2, p. 84-95, 2011.

5 OMS – ORGANIZAÇÃO MUNDIAL DA SAÚDE. **Relatório Mundial da Saúde – Financiamento dos Sistemas de Saúde**: o caminho para a cobertura universal. Genebra: OMS, 2010. Disponível em: http://www.who.int/eportuguese/publications/WHR2010.pdf?ua=1. Acesso em: 25 abr. 2019.

6 Mendes (2009).

7 MENDES, E. V. **As redes de atenção à saúde**. Brasília: Organização Pan-Americana da Saúde, 2011. Disponível em: https://www.paho.org/bra/index.php?option=com_docman&view=download&category_slug=servicos-saude-095&alias=1402-as-redes-atencao-a-saude-2a-edicao-2&Itemid=965. Acesso em: 25 abr. 2019.

8 Almeida, Fausto e Giovanella (2011).

9 ALVES, D. C.; UGÁ, M. A. D.; PORTELA, M. C. Promoção da saúde, prevenção de doenças e utilização de serviços: avaliação das ações de uma operadora de plano de saúde brasileira. **Cadernos Saúde Coletiva**, v. 24, n. 2, p. 153-161, 2016.

are remunerated has been the subject of constant debate and has been reformulated in many countries since the 1990s.[10]

The National Policy of Hospital Attention (PNHOSP) of Ministry of Health (MS), when presenting the concept of hospital, draws attention to the fact that they are complex institutions with the use of specific technologies, multiprofessional and interdisciplinary.

It is a consensus that the reformulation of the way in which service providers are paid may contribute to the sustainability of the sector and may be an instrument that induces the quality of health care. Since 2001, the Institute of Medicine (IOM) has recommended that health systems align policies on payment for improving health quality. However, by understanding that changes in complex systems do not occur through taxation, the National Supplementary Health Agency (ANS) has been taking actions to foster and support advances in this theme, particularly in hospital care, such as:

- Working Group on Hospital Compensation (2010-2014);
- External Working Group on Orthoses, Prostheses and Special Materials (GTE OPME) - ANS / Anvisa (from 2015 to 2016);
- Working Group of Remuneration Models (2016 to date).

Working Group on Hospital Compensation

The Working Group on Hospital Compensation was established in 2010, at the request of managers of representative entities in the hospital segment and health insurance operators. The claim was that the ANS would mediate the discussion between these actors, aiming at the elaboration of a new remuneration system for hospitals, in which proposals for structural changes were built, aligned with the sustainability goals of the sector.[11]

From January to June 2010, the first stage of meetings of the Working Group on Hospital Compensation, called the Rio de Janeiro Round, was held new forms of hospital remuneration. Themes such as improved open account, margin migration and managed procedures were addressed.[12]

In 2012, the São Paulo Round, as the second stage of the Working Group meetings became known, reviewed and updated previously prepared work on the improved open account / compact table. The publication with the registration of the São Paulo Round brings concepts and definitions on the subject and presents the details of the improved open account, as well as elements of the margin migration methodology.[13]

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10 MACHADO, C. V. Novos modelos de gerência nos hospitais públicos: as experiências recentes. **Physis**, Rio de Janeiro, v. 11, n. 1, p. 105-197, 2001. Disponível em: http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-73312001000100004&lng=en&nrm=iso. Acesso em: 25 abr. 2019.

11 ANS – AGÊNCIA NACIONAL DE SAÚDE SUPLEMENTAR. Grupo de Trabalho sobre Remuneração dos Hospitais. Rodada do Rio de Janeiro. **Sistemáticas de remuneração dos hospitais que atuam na saúde suplementar**: diretrizes e rumos. Rio de Janeiro: ANS, 2010. Disponível em: http://www.ans.gov.br/images/stories/Particitacao_da_sociedade/2016_gt_opme/grupo5_orteses_proteses_materiais_especiais_rodadarj_2010.pdf. Acesso em: 25 abr. 2019.

12 *Ibidem.*

13 ANS – AGÊNCIA NACIONAL DE SAÚDE SUPLEMENTAR. Grupo de Trabalho sobre Remuneração dos Hospitais. Rodada de São Paulo. **Sistemáticas de remuneração dos hospitais que atuam na saúde suplementar**: conta aberta aprimorada/ tabela compacta. Rio de Janeiro: ANS, 2012a. Disponível em: http://www.ans.gov.br/images/stories/Particitacao_da_sociedade/2016_gt_opme/grupo5_orteses_proteses_materiais_especiais_rodadasp_2012.pdf. Acesso em: 25 abr. 2019.

Also in 2012, the document "Compensation Systematics of Hospitals that Work in Supplementary Health: Managed Procedures" was published.[14] The Working Group on Hospital Compensation indicated that the remuneration of high frequency surgical procedures and low variability of care processes, respecting the specificity of each institution, should be made with prices previously set by the service provider, which was called "managed procedure", defined as a way to establish a global price to concentrate items that make up the procedure, streamlining the operationalization, collection and payment, with the presumption of benefits for hospitals and operators.[15]

External Working Group on Orthoses, Prostheses and Special Materials (GTE OPME) - ANS / Anvisa

Another ANS initiative worth mentioning was the External Working Group on Orthoses, Prostheses and Special Materials (GTE OPME) - ANS / Anvisa. This GTE was structured from the Final Report of the Interinstitutional Working Group on Orthoses, Prosthetics and Special Materials (GTI OPME), which recommended that ANS and Anvisa set up internal Working Groups to coordinate the implementation of the measures proposed by GTI OPME for both agencies.[16]

Among the main discussions of GTE OPME ANS / Anvisa, there is the theme of "Transposition of Tables and Remuneration Models" involving Implantable Medical Devices (IMD). This discussion resulted in the elaboration of the "IMD Guiding Document for the Transposition of Tables", which constituted Annex III of the GTE OPME Final Report,[17] contemplating the guiding principles for the negotiation involving IMD and the survey of the main items to compose the set that will be negotiated, in addition to pointing out the relevant contractual clauses for negotiation between operators and service providers. Besides, it highlights the importance of monitoring the volume of disallowances.

Working Group on Remuneration Models

The Working Group on Remuneration Models was created by ANS on September 14, 2016, within the Innovation Lab of the Sector Development Directorate (LAB-DIDES).[18] The first phase of this Working Group took place between September 2016 and August 2017. Phase 1 was attended by the most diverse representations of the supplementary health sector chain: operators, service providers, pharmaceutical and materials industry, universities, etc. In this first phase, ANS 'role was

14 ANS – AGÊNCIA NACIONAL DE SAÚDE SUPLEMENTAR. Grupo de Trabalho sobre remuneração dos Hospitais. Regras Gerais. **Sistemáticas de remuneração dos hospitais que atuam na saúde suplementar**: procedimentos gerenciados. Rio de Janeiro: ANS, 2012b. Disponível em: http://www.ans.gov.br/images/stories/Particitacao_da_sociedade/2016_gt_opme/grupo5_orteses_proteses_materiais_especiais_regrasgerais2012.pdf. Acesso em: 25 abr. 2019.

15 ANS (2012b).

16 BRASIL. Grupo de Trabalho Interinstitucional sobre Órteses, Próteses e Materiais Especiais. **Relatório Final**. Brasília: GTI OPME, 2015. Disponível em: http://u.saude.gov.br/images/pdf/2015/julho/07/Relatorio-Final-versao-final-6-7-2015.pdf. Acesso em: 25 abr. 2019.

17 ANS – AGÊNCIA NACIONAL DE SAÚDE SUPLEMENTAR. **Relatório final do Grupo de Trabalho Externo de Órteses, Próteses e Materiais Especiais (GTE OPME) ANS/Anvisa**. Rio de Janeiro: ANS; Anvisa, 2016. Disponível em: http://www.ans.gov.br/images/stories/Particitacao_da_sociedade/2016_gt_opme/gt-opme-relatoriointegral.pdf. Acesso em: 25 abr. 2019.

18 BRASIL. Portaria DIDES nº 1, de 26 de fevereiro de 2016. Designa os representantes do Grupo de Trabalho Externo de OPME da ANS/Anvisa – GTE OPME ANS/Anvisa, que tem por finalidade realizar, no âmbito da ANS e Anvisa, o acompanhamento e o gerenciamento da implementação do conjunto de propostas definidas no Relatório Final do GTI-OPME. **Diário Oficial da União**, Brasília, 2016.

essentially to present studies on the main remuneration models, focusing on international experience and a comparison between the models identified abroad and ongoing experiences in Brazil. Internal studies and presentations by national and international guests were also carried out. The main objective was to mark and homogenize knowledge, disseminate information and stimulate debate.[19]

In November 2017, Phase 2 of the Working Group on Remuneration Models began, structured from the discussions that took place during Phase 1. In this second phase, a dynamic was established that would allow the identification of strategies to make feasible the effective implementation of innovative remuneration models, focused on improving health care quality and sustainability in supplementary health.[20]

The first two phases of the Working Group culminated in the publication by ANS of the "Guide to Implementing Value-Based Remuneration Models", launched in March 2019.[21] The publication presents the consolidation of technical aspects related to the main remuneration models. In addition, it presents a range of propositions and guidelines that guide operators and providers to promote the implementation of innovative and alternative remuneration models to volume payment.

Phase 3 is scheduled to begin as early as 2019, in which compensation models will be effectively tested through pilot projects in line with IOM recommendations,[22] when health funding agencies and government agencies should develop a research agenda to identify, test pilot projects and evaluate various options for aligning current remuneration methods to improve the care quality.

Remuneration Model Concept

Although with varying denominations, the concept of "remuneration model" in health is understood as how the financial resource is allocated to the health care provider (for example, fee for service, capitation, global budgeting, prospective remuneration models based on diagnosis related groupings; payment by bundle, etc.).[23] Health care providers may be individual professionals or service providers such as hospitals, clinics, laboratories etc.[24] It is important to highlight the difference between the remuneration model of service providers, which refers to the way the resource is allocated, and the debate about the financial amounts actually paid, either through tables, packages or other forms of payment.

19 ANS – AGÊNCIA NACIONAL DE SAÚDE SUPLEMENTAR. Grupo de Trabalho de Modelos de Remuneração na Saúde Suplementar. **Relatório descritivo**. Rio de Janeiro: ANS, 2019a.

20 *Ibidem.*

21 ANS – AGÊNCIA NACIONAL DE SAÚDE SUPLEMENTAR. **Guia para Implementação de Modelos de Remuneração baseados em Valor**. Rio de Janeiro: ANS, 2019b.

22 IOM – INSTITUTE OF MEDICINE. **Crossing the quality chasm**: a new health system for the 21st Century. Washington: National Academies Press, 2001.

23 AAS, I. H. M. Incentives and financing methods. **Health Policy**, v. 34, p. 205-220,1995.

24 JEGERS, M. *et al.* A typology for provider payment systems in health care. **Health Policy**, v. 60, n. 3, p. 255-273, 2002.

Concepts related to hegemonic remuneration models in the supplementary health sector

Notwithstanding the existence of experiences in the diversification of health remuneration models at the national level and, especially, at the international level, it is also noted in the Brazilian supplementary health sector the predominance of payment for procedure (fee for service) and payment for hospital day (per diem).

Below, the conceptualization of the two currently hegemonic remuneration models will be presented, followed by aspects related to the conceptualization and application of alternative remuneration models to the fee for service.

Payment for procedure (fee for service)

Fee for service is the hegemonic remuneration model for service providers, especially health professionals, and is widely used in the Brazilian private sector.

This form of remuneration presupposes the existence of a table with the value established for each procedure or item used, in which the remuneration is given by the sum of each of these procedures or items used (materials, medications, professional fees, hospital fees and intermediary services, such as complementary examinations). The compensation values of the items are previously established, and payments are made after the services are performed.[25,26,27,28]

Although widely used, the fee for service has been criticized for being characterized by stimulating competition for users and remuneration for the amount of services executed. In addition to inducing excessive execution of procedures by service providers that are not always necessary for the patient, the model also disregards health outcomes and patient experience, as well as favors the variability of clinical practice.[29,30,31,32,33]

Payment for hospital day (per diem)

This model is specifically adopted for the remuneration of hospitalizations, with values being established per patient's day of stay. Commonly the hospital daily includes the "hospitality",

25 UGÁ, M. A. D. Sistemas de alocação de recursos a prestadores de serviços de saúde – a experiência internacional. **Ciência e Saúde Coletiva**, Rio de Janeiro, v. 17, n. 12, p. 3437-3445, 2012. Disponível em: http://www.scielosp.org/pdf/csc/v17n12/28.pdf. Acesso em: 25 abr. 2019.

26 BOACHIE, M. K. *et al.* Healthcare provider – payment mechanisms: a review of literature. **Journal of Behavioural Economics, Finance, Entrepreneurship, Accounting and Transport**, v. 2, n. 2, p. 41-46, 2014. Disponível em: http://pubs.sciepub.com/jbe/2/2/2. Acesso em: 25 abr. 2019.

27 BICHUETTI, J. L.; MERE JR., Y. A. Modelos de remuneração na saúde. **Harvard Business Review Brasil**, p. 58-62, ago. 2016. Disponível em: https://bc.pressmatrix.com/pt-BR/profiles/3c24c670a5ee/editions/28565a058513d802c50f/preview_pages. Acesso em: 25 abr. 2019.

28 MILLER, H. D. **Why value-based payment isn't working, and how to fix it**. Creating a patient-centered payment system to support higher-quality, more affordable health care. 1st ed. Pittsburgh: Center for Healthcare Quality & Payment Reform, 2017.

29 ANDREAZZI, M. **Formas de remuneração de serviços de saúde**. Brasília: Ipea, 2003. (Texto para Discussão, n. 1006).

30 Ugá (2012).

31 Boachie *et al.* (2014).

32 Bichuetti e Mere Jr. (2016).

33 Miller (2017).

depending on whether the patient is in a room, ward or intensive care unit (ICU). It is a model analogous to fee for service, since the daily rate is increased by expenses with materials, medicines, Diagnostic and Therapeutic Support Services (DTSS) and medical fees, remunerated by item and according to production. Thus, it suffers from the same problems of the fee for service, encouraging overuse of procedures, in addition to increasing the number of days of hospitalization and also unnecessary hospitalization.[34,35]

Practical application of alternative remuneration models

Among the elements that may favor the implementation of alternative remuneration models is the consideration of the different perspectives of those who are involved. While providers want freedom to use unrestricted resources and to be compensated for the use of these resources, operators want to cut down on healthcare costs.

The shift from the classic, performance-based remuneration model to a compensation form that considers quality of care as a criterion necessarily leads to a greater or lesser degree of sharing risks between the operator and the healthcare provider. Thus, any changes should be made gradually, considering the characteristics of the system, the context, the new remuneration structure and, especially, the adaptation time needed for all involved.[36,37]

Thus, a change in the remuneration model should enable providers to achieve higher quality as well as provide operators with ways to ensure greater efficiency in resource management.

The main characteristics of alternative remuneration models to fee for service and payment for hospital day will be presented below.

Payment for performance

The payment for performance is characterized by providing compensation adjustment according to the performance of service providers. It is associated with some other specific remuneration model, such as the global budget or capitation and, in some cases, diagnosis related groupings or even the fee for service itself, or, also conforming to other innovative proposals.

Budgeting (global and partial)

Budgeting is the definition of an estimated amount of resources through budget programming, with values typically projected from historical series and negotiated between the paying source and the provider.[38] Budgeting can be of two types: global, involving all the services provided; or partial, which comprise a fraction of the services provided, such as outpatient care, hospital care, pharmaceuticals or health facilities.[39]

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34 Ugá (2012).

35 Boachie *et al.* (2014).

36 *Ibidem.*

37 Miller (2017).

38 VECINA NETO, G. Serviços de assistência direta ao paciente. In: VECINA NETO, G.; MALIK, A. M. **Gestão em saúde**. Rio de Janeiro:
Guanabara Koogan, 2011. p. 209-229.

39 Boachie *et al.* (2014).

Diagnosis related groupings

The diagnosis related groupings was not initially designed for the purpose of composing a remuneration model. It corresponds to a patient classification system, with the objective of subsidizing not only the economic management (cost of hospitalizations), but also the clinical management (clinical profile of the treated cases), constituting groups that are intended to be homogeneous from the point of view of the patient cost and clinical complexity. From this classification, the health service provider is remunerated by treatment, with different values according to the specificities of each case. In addition to the main diagnosis, the diagnosis related groupings consider factors such as comorbidities and complications, patient age and treatment type, taking the prospective model (costs determined independently of "real costs" and length of stay), to be partially retrospective, as it does not exclusively consider the diagnosis.[40,41,42]

Salaried

Salaried work corresponds to the classic remuneration, as a form of compensation for the services provided by the employee, according to the number of hours worked, including the social benefits of the formal employment relationship. Remuneration is independent of the service production. In hospital care, this type of compensation usually occurs for indoor services provided, such as ICUs or emergency rooms, for example.[43]

Shared savings/shared risk

Shared savings / shared risk is a remuneration model in which service providers continue to be paid under the fee for service system, but receive a bonus or penalty if the total spending from the paying source is lower or higher than the amount foreseen by the paying source. For example, if the total spend over a year is less than the estimated budget, the amount saved is shared with the provider, as a whole or partially, as a bonus.[44] There are also other possible forms of risk sharing: downside sharing (where sharing occurs in cases of complications that excessively raise the cost of care) and upside sharing (when the savings generated by the occurrence of less than expected complications are shared).[45]

Bundled payments

Bundled payments link remuneration to multiple providers involved in meeting a particular health condition. Providers therefore have responsibility for the complete treatment cycle of a particular health condition, reinforcing providers' financial and performance responsibility for care episodes.

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40 NORONHA, M. F. *et al*. Potenciais usos dos AP-DRG para discriminar o perfil da assistência de unidades hospitalares. **Caderno de Saúde Pública**, Rio de Janeiro, v. 20, n. 2, p. 242-255, 2004.

41 Ugá (2012).

42 Bichuetti e Mere Jr. (2016).

43 BESSA, R. O. **Análise dos modelos de remuneração médica no setor de saúde suplementar brasileiro**. 2011. Dissertação (Mestrado) – Escola de Administração de Empresas de São Paulo, São Paulo, 2011.

44 Miller (2017).

45 ICOS – INSTITUTO COALIZÃO SAÚDE. **Modelos de Pagamento Baseados em Valor**. São Paulo: ICOS, 2017. Disponível em: http://icos.org.br/wp-content/uploads/2018/02/ICOS-02_02_2018.pdf. Acesso em: 25 abr. 2019.

All of these alternative remuneration models for fee for service can be used individually or in mixed form. Eventually, they may lead to limitations such as underutilization of procedures, selection of healthy patients, early discharge, etc.

There are general behaviors that should be adopted in practical application that seek to minimize the possibility of undesirable effects in the implementation of any remuneration model for service providers, for example:[46,47]

- Adoption of protocols and clinical guidelines based on scientific evidence;
- Monitoring of demographic and epidemiological data of the assisted population;
- Results monitoring through quality and patient safety indicators;
- Contractualisation between operators and service providers that includes clearly defined objectives and goals;
- Systematic assessment of patient experience;
- Use of information systems;
- Integration of the health care network;
- Care coordination;
- Adjustment of payment by risk factors;
- Classification of hospitals according to their complexity and clinical specificities.

Metrics and Tools

Implementing new remuneration models is much more likely to succeed if providers participate voluntarily. Therefore, instead of trying to impose the new remuneration model on change-resistant providers, it makes sense to design the remuneration model in such a way as to try to adopt the following measures:[48]

- Involve the providers in the preparation of the implementation project of the new compensation model;
- Standardize projects and measures but, where possible and necessary, allow some flexibility;
- Allow providers to access operator-verified data regarding the care their patients are receiving;
- Reducing higher financial risks for providers during the initial implementation period of the new compensation model.

Revision of contractual arrangements that create barriers to incorporate new remuneration models

In order to meet the challenge of implementing a new compensation model, it is important that a project be established, structured from the analysis of the specific context and that defines the strategies necessary for its incorporation and monitoring.

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46 Ugá (2012).

47 Miller (2017).

48 MILLER, H. D. **How to create an alternative payment model – executive summary**. Pittsburgh: Center for Healthcare Quality and Payment Reform, 2018. Disponível em: http://www.chqpr.org/downloads/How_to_Create_an_Alternative_Payment_Model_ExecSumm.pdf. Acesso em: 25 abr. 2019.

Despite the specificities of each case, there are some elements that should be generally observed in order to implement a new remuneration model. Table 1 contains a proposed project structure for implementing a remuneration model, detailed in the "Guide for Implementing Value-Based Remuneration Models".[49]

Description of the context from which the project will be proposed	The context involves aspects such as the characteristics of the operator, hospital or other service provider involved and elements present in the relationship between these institutions; of characteristics of the beneficiary portfolio attended at the hospital; and variables related to economic, competitive and assistance aspects.
Identification of problems / barriers related to the current remuneration model	Record of the situation that drew attention to the need to adopt an alternative remuneration model.
Definition of objectives to be achieved	The objectives to be achieved from the implementation of the new remuneration model should be clearly established, based on the problems identified in the current remuneration method. The objectives set will form the basis for the comparative analysis between the different remuneration model alternatives and for the establishment of the parameters from which the strategies for implementation, monitoring and evaluation of the new remuneration model should be designed.
Description of possible alternatives to remuneration models	Description of the alternatives of remuneration models whose characteristics are more adjusted to the identified problems and the achievement of the desired objectives.
Analysis of possible impacts and comparison of remuneration model alternatives	The potential positive and negative impacts of remuneration model alternatives that have remained among the potentially viable options should be described. The purpose of this step is to weigh the advantages and disadvantages of alternative remuneration models and to identify whether they may provide more benefits than the current remuneration model.
Implementation, evaluation and monitoring strategies of the new remuneration model	This stage covers the systematization of the implementation strategies of the remuneration model identified as most appropriate in the previous stage. It is essential that the description of monitoring strategies include indicators capable of measuring health outcomes, as well as assumptions, parameters, hypotheses and sources of information used.1 When performing performance analysis on the indicators, one should identify which factors directly related to the implementation of the new remuneration model had an influence on the result. From the identified results, it can be concluded by the pertinence of maintaining the implementation strategy of the new remuneration model or the need for reorientation.

Chart 1 - Project structure for implementation of new compensation model

Source: Adapted from ANS (2019b). Note: 1 Brazil (2018).

49 ANS (2019b).

Considerations

Health systems should be able to provide quality care in the dimensions of safety, effectiveness, timely access, efficiency, and patient centrality, while providing care that is sensitive to patients' individual preferences, needs, and values.[50] However, current models of hegemonic care and remuneration in the country do not converge with these quality dimensions.

49 ANS (2019b).

50 IOM (2001).

A value-based remuneration model should strike a balance between patient care experience, high-quality clinical outcomes, and appropriate costs, preferably across the care cycle, for health system sustainability.[51]

According to Porter and Teisberg,[51] the health value concept can be summarized in the following formula: value = outcomes / costs. From this perspective, the authors conceptualize health value as the relationship between outcomes that matter to patients (clinical outcomes) and the cost of achieving these outcomes.

One of the factors that contributes to health waste is the demand induced by supply, that is, the use of health services due to the recommendation of the professional, considering the existence of information asymmetry among the actors in the sector.[52]

Several criticisms have been directed at the new remuneration models implemented. Under the rationale of resource rationalization, sometimes, health care operators' spending cuts are established without evaluating the quality of care.

In addition, service providers face some specific quality management problems that are directly affected by remuneration models, such as the difficulty of measuring the impact of quality improvement on hospital financial results and infrastructure challenges faced by hospitals seeking to improve the quality of service delivery. Therefore, initial investments are required to equalize these issues. To be value-based, remuneration models should contribute to achieving better health outcomes at a more affordable cost for both patients and health insurance providers, while avoiding the prospect of simple cost savings.

From this perspective, the sector should prioritize patient-centered remuneration models that ensure the quality of services provided, including monitoring and evaluation of results, as well as strong coordination of care in a sustainable manner.

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51 PORTER, M. E.; TEISBERG, E. O. **Repensando a saúde**: estratégias para melhorar a qualidade e reduzir os custos. Tradução de Cristina Bazan. Porto Alegre: Bookman, 2007.

52 Andreazzi (2003).

remuneração dos hospitais que atuam na saúde suplementar: procedimentos gerenciados. Rio de Janeiro: ANS, 2012b. Disponível em: http://www.ans.gov.br/images/stories/Particitacao_da_sociedade/2016_gt_opme/grupo5_orteses_proteses_materiais_especiais_regrasgerais2012.pdf. Acesso em: 25 abr. 2019.

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Glossary

- **Information asymmetry**: This is a persistent market failure that is the unequal distribution of information among system actors, that is, when one part of the health system has significant information, while the other part does not have enough information to make use of the system properly or sufficiently to meet your actual needs;
- **Implantable Medical Device (IMD)**: Any instrument, device, equipment, software, material, or article, used alone or in combination, introduced into the human body for the purposes of diagnosis, prevention, control, treatment, mitigation or compensation of a disease, injury or disability;
- **Hospitals**: these are complex institutions, with specific technological density, multiprofessional and interdisciplinary character, responsible for assisting users with acute or chronic conditions, presenting potential for instability and complications of their health condition, requiring continuous assistance under hospitalization and actions that include health promotion, disease prevention, diagnosis, treatment and rehabilitation;[53]
- **Margin migration**: reallocation of values / fees paid to hospitals (such as logistics, warehousing, commercialization of medicines or IMDs, for example) for the actual payment of services performed or care provided within the hospital institution.

53 BRASIL. Ministério da Saúde. Secretaria de Atenção à Saúde. Departamento de Atenção Hospitalar e de Urgência. Coordenação-Geral de Atenção Hospitalar. Portaria nº 3.390, de 30 de dezembro de 2013. **Diário Oficial da União**, Brasília, n. 253, 31 dez. 2013. seção 1, p. 54-56.

CHAPTER 6

QUALITY MANAGEMENT AND HOSPITAL ACCREDITATION

Péricles Goés da Cruz e Gilvane Lolato[1]

Objectives

- Present the quality management history and its intersection in the scenario and the complexity of the Brazilian health system;
- Study the fundamental concepts of excellence in management;
- Provide a reflection on the importance of implementing quality management for an accreditation process;
- Explain about accreditation and its practical application in health.

The history of quality management

Talking about and implementing health quality management is not a current issue, but for many and many years, it involves and promotes integration, commitment, improvement of process, waste reduction, among many other advantages. Great names in quality have brought about changes that have caused and continue to impact globally, which are part of the history of quality management, as well as major actions that have influenced results to this present day.

We know that quality started in the industry and consolidated through big names with tools that have been applied ever since.[2]

- The Age of Craftsman (Industrial Revolution);
- Taylor (1900), with the scientific administration;
- Ford (1903-World War I) with the production line;
- Shewhart (1920-WWII), with statistical control;
- Juran, Deming and Ishikawa (1950), with continuous improvement;
- A. Feigenbaum (1960), with total quality control;
- Toyota, Motorola (1960), with Lean Six Sigma to 21st century globalization, strategic management of quality and sustainability.

In health, the history of quality and safety management has also been built over the years.

- 1818 to 1865 - Dr. Ignaz Semmelweis, pioneer with antiseptic procedures;
- 1820-1910 - Florence Nightingale, the lady of the lamp, became known for data collection methods, statistical graphs, hygienic measurements, and mortality studies
- 1913 - The first hospital evaluation initiative was born with Ernest Codman, "The End Result System";

1 Em coautoria com André Ruggiero, Andrea Righi, Cássia Manfredini, Adriana Torres, Camila Deister e Fabiana Rigollo.

2 ONA – ORGANIZAÇÃO NACIONAL DA ACREDITAÇÃO. **Gestão da Qualidade em Saúde**: sua história e grandes mudanças. São Paulo: ONA, 2019. (Série 20 Anos). Disponível em: https://www.ona.org.br/Noticia/695/Serie-20-Anos-E-book-1. Acesso em: 31 mar. 2019.

- 1966 - Avedis Donabedian with the seven pillars of quality: effectiveness, efficacy, efficiency, acceptability, legitimacy, equity and optimization.
- And more recent initiatives such as:
- 1980 - Start of the Institute for Healthcare Improvement (IHI), with the demonstration of quality improvements, organized by Dr. Donald Berwick;
- 1999 - publication of the report book entitled "To Err is Human: Building a Safer Health System" by the United States Institute of Medicine (IOM);
- 1999 - foundation of the National Accreditation Organization (ONA), with responsibility for the development of national health safety and quality standards in Brazil;
- 2001 - Publication of the book "Crossing the Quality Chasm", which reports that failures occur not due to lack of initiatives, but due to deficiencies in the processes;
- 2008 - recommendation of the Safe Surgery checklist by the World Health Organization (WHO);
- 2009 - publication of the International Patient Safety Taxonomy by WHO;
- 2013 - Institution of the National Patient Safety Program (Ordinance No. 529, April 1, 2013), as well as actions for patient safety (RDC No. 36, July 25, 2013) by the Ministry of Health (MS) and by the National Health Surveillance Agency (Anvisa).

The implementation of health quality management plays a major role in bringing about a culture change, from top management to professionals who work directly in the processes. We know that culture change is a slow process and faces some challenges:

- The current scenario and the complexity of health in Brazil;
- The commitment, the development and the valorization of the professionals constantly;
- The implementation of effective changes that present improvements in process results.

The health system scenario and complexity

In 2018, Brazil has approximately 67,000 outpatient units and 7,400 hospitals, 60% of which have less than 50 beds. These hospitals employ about 56% of professionals and account for 67% of all expenses.[3]

Some points related to this complexity would be: the lack of standardization of the processes, which lead to increased costs and unnecessary use of resources, as well as the low utilization of primary health care, which reflects in an inefficient preventive medicine.

The health system complexity overlaps with any other segment and technology as it deals with lives. Therefore, the pursuit of quality and safety becomes a matter of priority. According to Sir Cyril Chantler,[4] "medicine was simple, ineffective and relatively safe. It is now complex, more effective and potentially dangerous".

3 MENDES, E. V. **As redes de atenção à saúde**. Brasília: Organização Pan-Americana da Saúde, 2011.

4 Chantler (1999 *apud* ONA, 2019).

Health quality management

The purpose for the implementation of quality in health organizations is to:

- Develop a patient safety policy;
- Understand the requirements for performance improvement;
- Measure and identify where to improve;
- Systematically identify and understand opportunities for improvement;
- Promote internal cooperation between processes and team members.

The path to quality begins in the pursuit of excellence in leadership. The best leaders with the best resources can drive quality and cost improvements while achieving high performance.

We know that quality deployment has some critical points that we need to pay attention to, such as:

- Leadership;
- People development;
- Communication
- Motivation.

Quality is known to be the property, attribute, or condition of things, processes, or people. On a value scale, quality allows us to evaluate and consequently approve, accept or reject anything. Quality is also the totality of characteristics of an entity (activity, process or product), an organization or a combination of these, which gives it the ability to meet the explicit and implicit needs of customers and other stakeholders

The definition of quality management includes:

- Satisfaction of customer needs and expectations;
- Compliance with specifications;
- Fitness for use;
- Zero defect;
- Do more, better and faster;
- Best cost-benefit ratio;
- Constant improvements.

For Donabedian,[5] quality can be seen as a comprehensive and complex concept consisting of seven pillars:

- Efficacy: result of the care obtained in the best possible situation;
- Effectiveness: result of the care obtained in a real situation;
- Efficiency: comprises the concept of cost. If two measures are equally effective and with efficacy, the most efficient is the least costly;
- Accessibility: how much care adapts to the patients' wishes, expectations and values;
- Legitimacy: acceptability from the point of view of the society or community;

5 DONABEDIAN, A. The seven pillars of quality. **Archives of Pathology & Laboratory Medicine**, v. 114, p. 1115-1118, 1990.

- Optimization: relative care given the cost from the patient's point of view;
- Acceptability (user satisfaction): what is fair or reasonable in the distribution of care and its benefits.

Fundamental concepts of management excellence

In implementing quality management, some concepts need to be taken into consideration. Basically there are eight foundations of excellence that promote the improvement of management:[6]

- Systemic thinking: understanding and addressing interdependent relationships and their effects between the various components that make up the organization, as well as between them and the environment with which they interact;
- Organizational learning and innovation: seeking and reaching new levels of competence for the organization and its workforce, through perception, reflection, assessment and knowledge sharing, promoting an environment conducive to creativity, experimentation and implementation of new ideas capable of generating sustainable gains for stakeholders;
- Transformative leadership: acting in an ethical, inspirational, exemplary and committed to excellence manner, understanding the scenarios and likely trends of the environment and the possible short- and long-term effects on the organization and its stakeholders - mobilizing people in values, principles and objectives of the organization; exploring the potentialities of present cultures; preparing leaders and people; and interacting with stakeholders;
- Stakeholder engagement: Stakeholder pacts and their interrelationships with strategies and processes from a short- and long-term perspective;
- Adaptability: flexibility and ability to change in a timely manner, in response to new stakeholder demands and changes in context;
- Sustainable development: the organization's commitment to respond to the impacts of its decisions and activities on society and the environment, and to contribute to the improvement of living conditions, for both present and future generations, through ethical and transparent behavior;
- Process-oriented: Recognition that the organization is a set of processes that need to be understood from end to end and considered when defining organizational, work and management structures. Processes should be managed to pursue efficiency and efficacy in activities in order to add value to the organization and stakeholders
- Value management: Achieving economic, social and environmental outcomes, as well as outcomes of processes that empower them, at levels of excellence that meet the stakeholders needs and expectations.

6 FNQ – FUNDAÇÃO NACIONAL DA QUALIDADE. **Modelo de Excelência de Gestão**. São Paulo: FNQ, 2014. Disponível em: http://fnq.org.br. Acesso em: 31 mar. 2019.

Health Accreditation

Accreditation is a certification granted by a national or international entity, public or private, to a health service that meets certain previously established standards of quality and safety (of the patient, professionals and the organization as a whole).

It is a management methodology that seeks to fill gaps, remove deficiencies and establish a culture of continuous improvement and excellence in care and management.

Accreditation, far from being merely a qualification certificate, is a mechanism for aligning the most varied services, units and sectors, which put in order and enhance the development and execution of activities, with the consequent improvement of managerial performance and care of health organizations.

When organizations choose to join an accreditation process, they make a choice that includes positive changes:

- In clinical and managerial practice with decreased variable performance;
- In documented processes, in organized institutional policies, facilitating and encouraging interactions between services, units and sectors, fostering synergy between them.

An accreditation program is not directly involved with the expertise of health professionals, but establishes requirements that presuppose a good technical-assistance qualification. It is concerned, therefore, with the conditions under which expertise is exercised - infrastructure and organizational processes that serve health professionals, other health team members, and clients / patients.

Applying the health accreditation process in practice

For the implementationof the accreditation process, it is important to have a culture change in health organizations, where the main objectives are patient safety and continuous process improvement.

Here is a step-by-step step for implementing accreditation in a healthcare organization:

- Initially, it is critical to know what an accreditation certification means and what its organization may represent, as well as subsequent developments;
- Choose a coordinator or responsible for the accreditation process. The coordination will make an action plan that will set a schedule, from the preparation until obtaining the certificate;
- Provide training to service managers on aspects of the accreditation process (multiplier course), as well as tools to facilitate compliance with the requirements of the Accreditation Manual;
- Conduct internal audits that carry out an objective assessment of each area, providing employees with the fundamental elements for the preparation of corrective action plans;
- Structure a basis for systematic monitoring of the implementation of corrective action plans;
- Consider, revise and order the policies and institutional procedures;
- Promote self-assessment a few months before the accreditation visit, when applicable;
- Request an organizational diagnostic visit by an accrediting institution chosen by the organization;

- Monitor the adequacy of non-compliant requirements from the diagnostic visit report;
- When the organization understands that it is adequately prepared for the certification visit, it may then make the necessary referrals for the assessment visit formalization.

There is a usual flow to participate in the accreditation process by the NAO methodology:

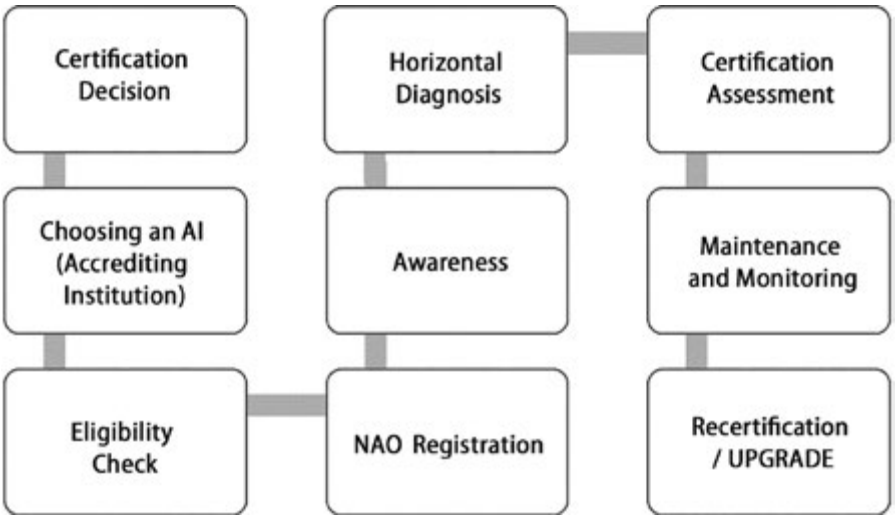

Figure 1 - Flow for NAO Accreditation

Prepared by the chapter authors.

Starting from the decision to adhere to the certification process, hiring an accrediting institution, assessing its eligibility as a health institution, the necessary procedures for enrolling in the NAO system, raising awareness among health unit employees, prior organizational diagnosis, which is optional, and, finally, the evaluation for certification; if it results in one of the levels, maintenance and monitoring as well as possible recertification and level upgrade.

Justifications for the implantation of health accreditation

Health has, over the years, been improving its quality processes, as well as accreditation methodologies are being implemented to strengthen continuous improvement and patient safety. Given this, some points are crucial for the implementation and maintenance of the quality and accreditation process:

- Performance through a management system that is structured on requirements that are recognized as critical to qualified and secure service, resulting in greater efficiency, less waste, comparability, and increased public confidence;
- Management guided by the principles of continuous improvement, as the sector is in constant progress;
- Increased safety for clients / patients, healthcare professionals, organizations as a whole and the wider community, as healthcare is provided in a high-risk environment;
- Rise of the level of quality and safety of health services in the geographical area;

- Understanding that accreditation is an ongoing quality process and not an end in itself;
- Production of positive impact on care;
- Reduction of nosocomial infection rate, decrease of average length of stay;
- Increased customer satisfaction;
- Achieving excellent clinical results that will produce greater attraction for new patients as well as highly qualified professionals and providers;
- Public recognition as a place of excellence.

There are numerous advantages that the accreditation process brings to health organizations, such as:

- Identification of deficiencies and improvement actions;
- Priority setting;
- Process measurement mechanisms;
- Reduction of assistance and administrative risks;
- Competitiveness;
- Training and continuing education of professionals;
- Strengthening of work in the multidisciplinary team;
- Continuous process improvement;
- Work optimization;
- Cost reduction;
- Institutional sustainability;
- Safety of patients and professionals involved;
- Positive effects on health insurance companies

The National Accreditation Organization (NAO)

NAO is a non-governmental, non-profit organization that certifies the health services quality in Brazil, focusing on patient safety. The organization and its methodology are recognized by the International Society for Quality in Health Care (ISQua).

NAO accredits accrediting institutions, which are private law entities authorized by NAO to develop the evaluation process in Health Service Provider Organizations (HSPO). Upon qualification, each of these organizations is now identified as an Accrediting Institution (AI).

The Brazilian Accreditation System (BAS / NAO) is consolidated on a set of health management fundamentals. The fundamentals are expressed through manuals that define standards and requirements in order to promote improvement in health services, enhancing the quality of care in the country. The practices and performance factors of accredited health organizations should demonstrate these fundamentals: NAO accreditation is a voluntary, periodic and reserved evaluation method that seeks quality care through pre-defined standards. It is essentially a continuing education program and never a form of supervision.

NAO has the following manuals:

- Health Service Provider Organizations (HSPO);
- Health Services - Qualification Seal;
- Dental services.

The HSPO Manual is divided into two parts:

- The first part describes the BAS / NAO assessment process and methodology along with the Assessment Standards for the Health Organization Assessment Process. For each type of service evaluated, there are standards with the establishment of rules for eligibility according to the profile of the service provided;
- The second part of the manual presents the standards and requirements required for the evaluation of these services, divided into sections and subsections.

There are sections and subsections where application of the standard is mandatory, regardless of the health organization's characteristic and profile. There are also others according to the characteristics and profile of the health organization and to the evaluation norms.

The mandatory sections and subsections mentioned above should always be visited to look for evidence of compliance with the standards set out in the manual

The requirements mentioned above are classified as:

- Surpass (S): evidence presented exceeds the expected to meet the requirement concerning the quality dimensions and the fundamentals of health management, considering the organization profile;
- Comply (C): evidence presented meets the requirement concerning the quality dimensions and the fundamentals of health management, considering the organization profile;
- Partially comply (PC): evidence presented partially meets the requirement in line with the quality dimensions and the fundamentals of health management, considering the organization profile;
- Non-compliant (NC): evidence presented do not meet the requirement concerning the quality dimensions and the fundamentals of health management, considering the organization profile;
- Do Not Apply (DNA): evidence presented does not meet the requirement or there is no evidence to meet the requirement concerning the quality dimensions and the fundamentals of health management, considering the organization profile. Absence of practices.

For each requirement flagged as non-compliant (NC), a field will necessarily be opened in the Evaluation Report to describe the absence of evidence to meet the requirement, such as punctual or systemic absence. Thus, the identification of punctual or systemic NC is as follows:

- Punctual NC: Failure to meet a punctual requirement that compromises a process, but not the system as a whole;

- Systemic NC: failure to meet a requirement that compromises a process systemically.
- Improvement opportunity:
- Requirements flagged as PC shall contain the Assessment Report, which shall describe the description of improvement opportunities.
- The NAO accreditation levels for HSPO are:
- Accredited (Level I) - certificate valid for two years and maintenance visit every eight months;
- Full Accredited (Level II) - certificate valid for two years and maintenance visit every eight months;
- Accredited with Excellence (Level III) - certificate valid for three years and maintenance visit every year.

Risk management

In order to apply risk management, it is very important to perform process modeling, which serves to understand the functioning of an organization. It consists in the identification, mapping, analysis and possible redesign of processes.

According to ISO 31000 of 2018, a management system is composed by policies, processes and procedures used by an organization to ensure that the necessary tasks are met to achieve its objectives. Risk management is a challenge for health professionals, especially when resources are needed. Resources can range from systems to people, structure, etc.

ISO 31000 verses about planning, implementing, measuring and learning risk management tailored to the reality of the organization. The management system interferes with risk management, taking into account the context, support and leadership. The risks faced by organizations are growing day by day. Some are related to management and others to market change. ISO 31000 also outlines the principles for successful risk management:

1. Senior management's commitment to risk management;
2. Constant review of processes, definition of actions and controls;
3. Open management model with multiple needs and contexts.

Managing risk is based on principles, structure and processes. These components may already exist wholly or partially in the organization; however, a need for adaptation or improvement ought to be analyzed so that risk management is efficient, effective and consistent.

Indicators

According to the National Quality Foundation (FNQ), measuring results systematically and in a structured manner is fundamental for the organization's processes management as well as promoting the culture for excellence. The need to measure process performance through indicators is growing due to the demand from stakeholders in the pursuit of quality, aiding decision-making.

Process indicator definitions may consider:

- The expected outcome / product of the process;
- A scenario that is not displaying good results;
- The strategic objectives;
- A benchmarking visit.

The most important factor is that the indicators need to demonstrate whether the process is achieving the expected result, that is, if the performance is favorable or not.

Critical analysis of indicators

The analysis of an indicator begins since its creation. It is important to make it clear that the indicators apply to all processes in an organization. Data generates information that, when interpreted, provides predictions and / or knowledge that becomes intellectual capital.

Critical analysis should not be a description of numbers or graphs, but an interpretation of the scenario and an identification of the possible factors or causes that may be contributing to the results. From the well-identified causes, it is very important to have a planning and preparation for the action.

Steps to develop good data analysis:

- Express your solution through a goal;
- Analyze possible causes when the result does not achieve the goal (if necessary use tools such as Ishikawa, 5 Whys etc.);
- Generate a possible actions list, taking into account the causes raised;
- Prepare a schedule (make clear the time "today" with "goal achieved")
- Raise resources so that each action can be performed;
- Identify what can go wrong when achieving the goal;
- Think of a way to monitor the action plan progress;
- Assign the tasks to the appropriate teams or individuals;
- Implement the action plan by making information available to stakeholders.

The culture of patient quality and safety

Considering the issues covered in this chapter, hospital managers need to establish a systemic approach to patient quality and safety issues, understanding them as an ongoing activity. This is the constant challenge of deploying and implementing a culture of concern for processes that meet quality requirements and thereby deliver safe patient care. In this context, hospital accreditation becomes a consequence of the journey towards excellence in management.

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CHAPTER 7

QUALIFICATION IN THE SUPPLEMENTARY HEALTH SECTOR

Ana Paula Silva Cavalcante, José Felipe Riani Costa,
Priscilla Brasileiro Constantino e
Rodrigo Rodrigues de Aguiar

Objectives

- To expose the main elements of the National Supplementary Health Agency (ANS) initiatives for the qualification of operators and health service providers;
- Present the main aspects related to the concepts and health quality fundamentals and the care quality improvement;
- Discuss the most common approaches and techniques to improve quality and their fundamental principles..

Concepts and fundamentals

What is considered quality varies over time, along with the advances in health sciences, changes in care practices and sociocultural values. There are different possibilities of defining the term quality in the health context. One of the most widespread is that of the US Institute of Medicine (IOM),[1] according to which quality is the degree to which health services provided to individuals and populations increase the likelihood of the desired outcomes and are consistent with the current professional knowledge.

In the last decades of the twentieth century, there was an intensification of debates about quality in various sectors of the market and society, including the health sector and, more specifically, in hospital care. Different approaches to health quality management and assessment have in common the fact that they consider the organization of health systems as a central issue, given the understanding that the main source of quality failures is not in the people / professionals, but rather in workflows and work processes. In search of competitiveness and efficiency, health organizations are increasingly seeking strategies that enable performance monitoring to achieve improvement in the care quality.

The use of quality methodologies such as certification and accreditation has been much more frequent.[2] Within the scope of its regulatory action, the ANS considers the differences between the concepts of certification and accreditation regarding the scope and goals. Certification is one of the conformity assessment activities that recognizes the excellence of specific technical and process management aspects within an organization. On the other hand, the accreditation activity consists in the assessment and recognition of the organization's technical competence to perform

1 IOM – INSTITUTE OF MEDICINE. **Crossing the quality chasm**: a new health system for the 21st century. Washington: National Academy Press, 2001. p. 244.

2 CARVALHO, C. O. M. *et al.* Qualidade em saúde: conceitos, desafios e perspectivas. **Jornal Brasileiro de Nefrologia**, v. 26, n. 4, p. 216-222, 2004.

specific activities.[3] Although both are based on principles of good management and continuous improvement of patient quality and safety, accreditation is a broader process than certification.

In this sense, the Operator Accreditation Program and the Certification Program of Good Health Care Practices of ANS are examples of established programs as fundamental for the improvement of care quality, since they consider the activities performed by the operators, both in general and in specific,[4,5] and will be discussed further below.

Quality Improvement

The so-called "quality improvement" strategies have gained traction in the last decades of the last century and have been adopted in health projects around the world. The origin of quality improvement was based and inspired on the methods developed in the quality control of industrial production. The ones responsible for developing and adapting these techniques in the 1940s and 1950s include W. Edwards Deming, Joseph Juran, Armand Feigenbaum, Kaoru Ishikawa, and, later, Don Berwick. The most common approaches and techniques for quality improvement share some simple fundamental principles:[6]

- **Data and measurement**: are vital in any attempt to improve performance and quality, as they are needed to assess impact and identify any need for strategy redirection;
- **Understanding the Process**: access to data is critical, but it does not explain by itself why the problem exists. In this sense, a very useful tool is process mapping, recording each step of a specific process, such as the itinerary taken by a patient in the health system;
- **Increased reliability**: the reliability of the system and clinical processes contributes to the reduction of system distortion and waste, reducing the likelihood of errors and damage. Redesign of clinical systems and itineraries may be required;
- **Professional enthusiasm, involvement and engagement**: factors that influence the success of quality improvement initiatives include leadership mobilization and professional engagement. In this sense, it is sometimes necessary, in addition to training and support to professionals, to break traditional hierarchies in order to ensure multidisciplinarity and consideration of different perspectives;
- **Patient involvement and co-creation**: patients, caregivers and family members play an essential role in both designing improvements and monitoring impacts. The fact that they follow the care itinerary in all its length makes their opinions extremely valuable, and often present an unknown perspective for managers and health professionals;

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3 GRUPO SYM. Acreditação e certificação dos serviços de saúde: entenda a diferença. **Meu Consultório**, 2 fev. 2018. Disponível em: https://www.meuconsultorio.com/acreditacao-e-certificacao-dos-servicos-de-saude-entenda-a-diferenca/. Acesso em: 28 abr. 2019.

4 ANS – AGÊNCIA NACIONAL DE SAÚDE SUPLEMENTAR. **Resolução Normativa nº 405, de 9 de maio de 2016**. Brasília: ANS, 2016. Disponível em: http://www.ans.gov.br/component/legislacao/?view=legislacao&task=TextoLei&format=raw&id=MzI0OA==. Acesso em: 28 abr. 2019.

5 Carvalho *et al.* (2004).

6 ICICT – INSTITUTO DE COMUNICAÇÃO E INFORMAÇÃO CIENTÍFICA E TECNOLÓGICA EM SAÚDE; FIOCRUZ – FUNDAÇÃO OSWALDO CRUZ. **Simplificando a melhoria da qualidade**: o que todos devem saber sobre melhoria da qualidade do cuidado de saúde. Rio de Janeiro: ICICT; Fiocruz, 2014.

There are authors who conceptualize systematic quality improvement not only as a theory, but as an administrative science inspired by the foundations of statistics, engineering, psychology and, above all, practice.[7,8]

Nowadays, the idea is that every decision in health should be supported by evaluations, in particular through planning, execution, evaluation and action. These steps should be considered for redirecting knowledge and the next steps from the results of the assessment carried out.[9]

The search for methods and strategies for implementing explicit innovations to improve quality in health, based on formal theories and not only on the personal intuition of managers or professionals, is fundamental to carry out the necessary changes. Besides being a guide for the implementation of any innovation, it allows its evaluation, monitoring and, eventually, reproduction, even with adaptations in other similar projects.[10]

Science-based quality improvement methods can lead to better patient outcomes, better system performance, and improved professional development.[11] Formal theories of health quality improvement, which can be based on various areas of knowledge, contribute to describe and explain the effective implementation of changes in patient care. They demonstrate which factors contribute to a specific innovation implementation.[12]

To implement any improvement, it is essential to follow these steps:[13]

1. Set a goal;
2. Know what you want to improve and why;
3. Establish measures (indicators);
4. Establish criteria for knowing when a change is an improvement towards the goal;
5. Identify the changes;
6. Find opportunities for change, develop it, test it and implement it.

Among the Improvement Model tools, the most used in the sector are:

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7 PORTELA, M. C. *et al.* How to study improvement interventions: a brief overview of possible study types. **British Medical Journal Quality & Safety**, v. 24, n. 5, p. 325-336, 2015. p. 164.

8 CARVALHO *et al.* (2004).

9 CONTRANDIOPOLUS, A.-P. Avaliando a institucionalização da avaliação. **Ciência & Saúde Coletiva**, v. 11, n. 3, p. 705-711, 2006.

10 Portela *et al.* (2015).

11 BATALDEN, P. B.; DAVIDOFF, F. What is "quality improvement" and how can it transform healthcare? **Qual Saf Health Care**, v. 16, p. 2-3, 2007.

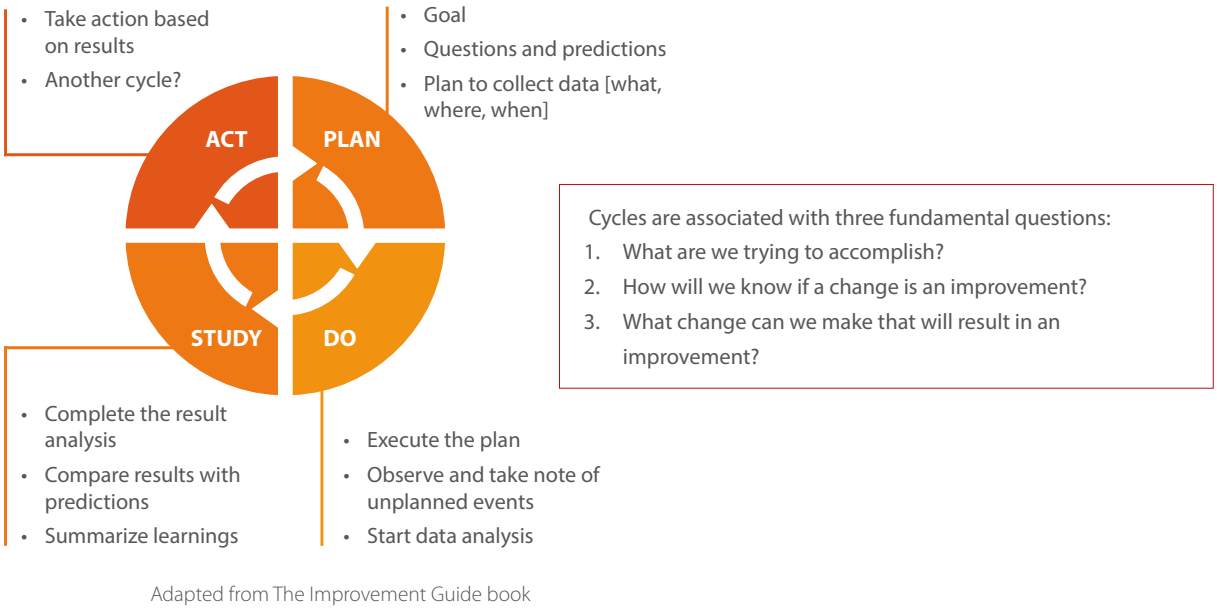
12 GROL, R. *et al.* Theories on implementation of change in healthcare. *In:* GROL, R. *et al.* (Eds.). **Improving patient care**: the implementation of change in healthcare. 2nd ed. Hoboken: John Wiley & Sons, 2013.

13 ANS (2016).

PDSA

The PDSA cycle (plan, do, study and act) is a continuous improvement approach in which changes are tested in small cycles that involve planning, doing, studying and acting, then planning again, and so on.[14] This tool can translate ideas into actions, fostering the learning.[15] Each cycle begins with evolving theories and intentions into knowledge capable of supporting action and producing positive outcomes.[16] The PDSA cycle fosters the cyclical and incremental implementation of changes from testing and adjusting proposals in the local context, enabling the adoption and refinement of what works and discarding/revising what doesn't.[17]

The three issues of the Improvement Model, associated with the PDSA cycle, constitute the structure and roadmap for undertaking improvement projects.[18]



Adapted from The Improvement Guide book

Figure 1 - PDSA Cycle

Source: Adapted from Langley (1996).

Guiding diagram

The guiding diagram is another approach to support the implementation of improvement projects. It is a tool for organizing theories and ideas in an effort to answer the question, "What change can we make that will result in an improvement?".[19]

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14 LANGLEY, G. J. **The improvement guide**: a practical approach to enhancing organizational performance. San Francisco: Jossey-Bass, 1996.

15 LANGLEY, G. J. *et al.* **Modelo de Melhoria**. Tradução de Ademir Petenate. Campinas: Mercado de Letras, 2011.

16 *Ibidem.*

17 Portela *et al.* (2015).

18 Langley (1996).

19 *Ibidem.*

That can be used to present initial theories about which changes could produce the expected results. From the description of these theories, changes can be tested and refined to develop a predictive theory. The guiding diagram should be updated during an improvement process and used to monitor progress towards building an improvement theory.[20]

Figure 2 exemplifies a guiding diagram model for an access improvement project.[21]

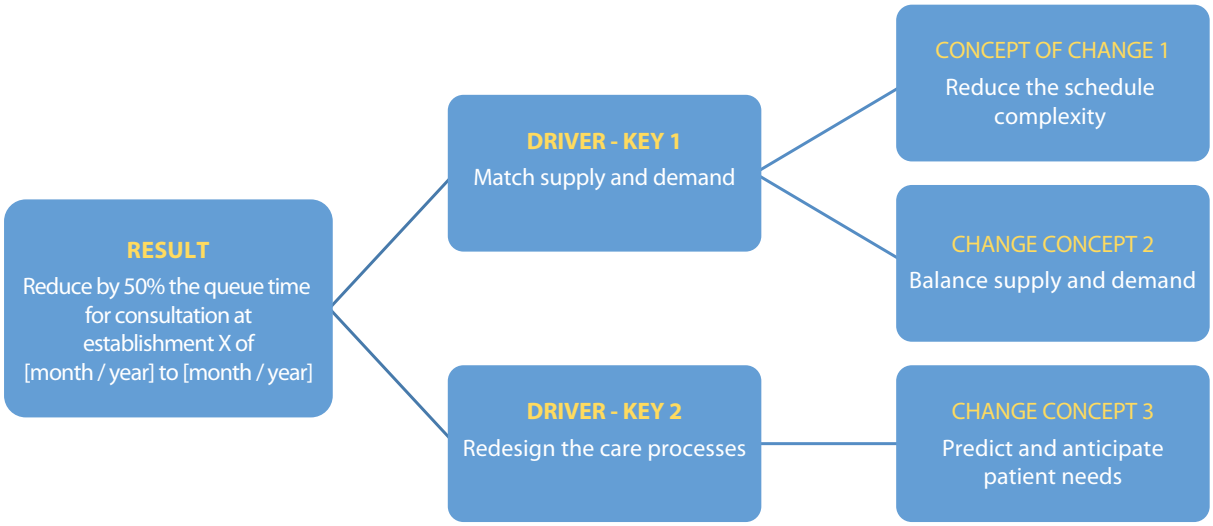

Figure 2 - Guiding Diagram

Source: Adapted from Langley et al. (2011).

Benchmarking

Benchmarking is looking at the way others are doing things and trying to learn new approaches and possibilities. A formal benchmarking process provides a method with some structure for making observations and then use that information for the improvement that is intended to be implemented.[22]

In many cases, the improvement that is sought in one organization has already been accomplished by others. The changes may not exactly match the context of the organization in question, but the goal would be to adapt the successful ideas already used to their particular environment.

Evaluation using indicators

Measurement and data collection are key elements in any attempt to improve performance and quality, and are also needed to assess impact.[23]

20 ANS (2016).

21 Langley *et al.* (2011).

22 ANS (2016).

23 Langley *et al.* (2011).

One of the current approaches to patient quality and safety management is the development of monitoring indicator systems to compare institutions, identify problems and situations for improvement, and control the effect of eventual interventions. Indicator monitoring can be defined as a planned and systematic activity to identify problems or situations that should be studied in depth or intervened to improve some aspect or process. It can be a gateway to the dynamics of improvement cycles and an inevitable component of quality design and planning activities.[24]

ANS Initiatives for the Qualification of Supplementary Health Sector

The ANS, over the last years, has been promoting and stimulating implementation of initiatives for the qualification of the supplementary health sector. In this sense, it has sought to foster strategies that promote the health care qualification, developing actions aimed at both operators and health service providers.

1. Qualification of private health insurance providers

ANS has some strategies specifically aimed at qualifying private health plan operators, with emphasis on the Operator Qualification Program / Supplementary Health Performance Index (SHPI) and Operator Accreditation and Certification, which will be addressed soon.

Operator Qualification Program / Supplementary Health Performance Index

Among the strategies aimed at operators, the Operator Qualification Program, established in 2004, involves the mandatory assessment through the SHPI, calculated from indicators defined by the ANS. The SHPI ranges from 0 to 1, and each operator receives a score that fits it into a range in ascending order by performance.

The Operators Accreditation Program was instituted in 2011, is voluntary and has good practice standards established by ANS and verified by independent accrediting entities. It is in process of reformulation. In April 2019, the program had 54 accredited medical-hospital operators, covering about 25% of health plan beneficiaries.[25]

Operator Accreditation and Certification

Within the scope of its regulatory action, ANS considers the existence of differences between the concepts of certification and accreditation regarding scope and objectives, as certification recognizes the excellence of specific technical and management aspects within an organization, while accreditation involves the assessment and recognition of the technical competence to carry out specific activities of the organization as a whole.[26] While both are based on principles of good

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24 *Ibidem.*

25 ANS – AGÊNCIA NACIONAL DE SAÚDE SUPLEMENTAR. **Acreditação de operadoras**. Brasília: ANS, [s.d.]a. Disponível em: http://www.ans.gov.br/planos-de-saude-e-operadoras/informacoes-e-avaliacoes-de-operadoras/acreditacao-de-operadoras. Acesso em: 28 abr. 2019.

26 Grupo SYM (2018).

management and continuous improvement of patient quality and safety, accreditation is a broader process when compared to certification.

In this sense, the Operator Accreditation Program and the Certification Program of Good Health Care Practices of ANS are examples of established programs as fundamental for the care quality improvement, since these consider the activities performed by the operators, both general as well as specific.[27,28]

In December 2018, ANS created the Certification Program of Good Health Practice for Health Plan Operators, and launched the first certification under the program: the Primary Health Care Certification (PHC), as way of inducing coordination of health care, having PHC as the main gateway and organizational axis of the health care network in supplementary health.

2. Qualification of health care providers

Among the initiatives developed by ANS, aimed specifically at providers, it is worth mentioning the Qualification Program of Health Service Providers (QUALISS), which seeks to stimulate the qualification of hospitals, clinics, laboratories and health professionals, in addition to increasing availability an quality of the information from service providers, reducing information asymmetry. The program objective is to increase the evaluation power and choice of health plan beneficiaries and society in general, as well as induce qualification of supplementary health service providers. QUALISS was established in 2011, divided into two scopes: the Provider Qualification Disclosure Program and the Provider Quality Monitoring Program. In May 2016, ANS reformulated QUALISS, establishing rules that streamline the entry of hospitals, diagnostic services and health professionals into the program and unifying existing standards.[29]

The QUALISS Program consists specifically in establishing qualifying attributes relevant to the improvement of the quality of care offered by health care providers; in assessing the qualification of these providers; and in disclosing the qualifying attributes. Service providers participation in the program is voluntary and is done through QUALISS participating entities, which can be consulted on the ANS Portal.[30]

The Health Service Provider Quality Monitoring Program (PM-QUAILISS) is part of the QUALISS Program and is an example of the use of indicators to assess the quality of the providers, especially hospitals. The PM-QUALISS consists of a set of quality indicators that seek to evaluate providers in various aspects concerning care.[31] Participation is voluntary and the objective is to stimulate the quality and dissemination of information about the sector's performance, having as public target: society in general; beneficiaries, seeking to expand their choices; service providers seeking to foster initiatives and strategies to improve performance; and health plan operators, seeking a better qualification of their healthcare networks.

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27 ANS (2016).

28 Carvalho *et al.* (2004).

29 ANS – AGÊNCIA NACIONAL DE SAÚDE SUPLEMENTAR. **QUALISS – Programa de Qualificação dos Prestadores de Serviços de Saúde**. Brasília: ANS, [s.d.]b. Disponível em: http://www.ans.gov.br/prestadores/qualiss-programa-de-qualificacao-dos-prestadores-de-servicos-de-saude. Acesso em: 28 abr. 2019.

30 *Ibidem*.

31 ANS (2016).

The indicators selected for PM-QUALISS will initially be implemented in a small number of participating hospitals, as recommended by the Improvement Model, and in a second phase, the program will be expanded to a larger number of hospitals.

Quality improvement programs targeting private health plan operators in conjunction with health care providers

Among the actions developed by ANS, with the participation of both operators and health service providers, it is worth highlighting the following quality induction programs, based on the methodology of quality improvement:

- Adequate Childbirth Project: with the objective to supporting the implementation of actions to qualify childbirth and birth care, promoting the reduction of cesarean interventions without clinical indication and the risks associated;
- Elderly Welfare Project: with the objective to improve the quality and coordination of care provided from the system's entrance door and along the care line: reception, integrated care center, geriatric outpatient care, short-term complex care and long-term care;
- OncoRede Project: with the objective to establishing a new care model for cancer patients, proposing a set of integrated actions capable of reorganizing, stimulating integration and improving the cancer care services provision in the sector.

Considerations

Quality failures in health care, especially in a complex structure such as a hospital, are usually due to systemic imperfections rather than individual errors. Difficulties commonly occur due to problems in the complex interactions established in the health care process.[32] Thus, it is urgent for hospital organizations to seek qualification, increasing the likelihood of successful health care delivery and mitigating risks, failures and the occurrence of adverse events.

Problems related to poor quality result in high financial and social costs. International studies indicate that prevention of adverse events, for example, results in a more favorable cost / benefit ratio.

According to the health-related infections program of the Chilean Ministry of Health, for every $1 invested in prevention of health-related infections, $ 7.46 is recovered.[33] In the United States, a study with data from 1990 to 2008 from the Medicare and Medicaid programs indicate that a $120 million investment in prevention of central venous catheter-associated infections resulted in a savings of $ 1.380 billion.[34]

32 Carvalho *et al.* (2004).

33 BRIGNOLE, M. O. **Programa IAAS**. Santiago: Ministério da Saúde do Chile, [s.d.].

34 SCOTT, R. D. *et al.* CDC central-line bloodstream infection prevention efforts produced net benefits of at least $640 million during 1990-2008. **Health Affairs**, v. 33, n. 6, p. 1040-1047, 2014.

Thus, different quality assessment and management methodologies in health can contribute to health organizations achieving greater quality and safety of their actions, as well as favoring their positioning, competitiveness and sustainability. To achieve positive changes in health care, approaches that use appropriate tools are required.[35]

Finally, for a quality improvement project to be successful, it is worth highlighting the importance of context and the engagement of all stakeholders, including the senior management of the institution.

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CHAPTER 8

INFORMATION TECHNOLOGY

Valmir de Oliveira Júnior

Objectives

- Address the fundamentals of Information Technology (IT) in health;
- Disclose the IT benefits to institutions and patients of the sector;
- Show how IT is strategic for hospital management;
- Present the possible evolution of IT adoption with a hospital case;
- Discuss the digital health future.

From billing to healthcare - how IT evolved and became strategic in hospitals

Having a management focused on the person's health care, obtaining support for clinical decision, humanizing patient care, focusing on the clinical outcome, are some values that guide the Information Technology (IT) application in the health sector. These were not always the principles behind the implementation of information management systems at hospitals, whether public or private. When the potential of IT began to be perceived by health institutions in the early 1980s, its application was a priority in the billing area. At that time, the objective was to streamline the invoicing process of medical bills, which until then were calculated, coded and typed on specific forms for submission to the competent bodies, such as the National Institute of Social Security Medical Assistance (INAMPS), Funrural, and others.

With the implementation of information systems in the area, even if disintegrated from the other sectors of the institution, besides agility in the medical bills processing, the manager had reports hat indicated the values of global revenue, revenue per specialty, medical productivity and revenue by clinic.

Thus, prioritizing the financial part and giving less importance to the clinical-care part, where all the content required for the production of revenues was available for years on paper, the institutions and their managers were acquiring a culture of innovation and incorporating technologies. Gradually, then, other sectors received the same attention and went through the automation process. Examples are the patient care, supply chain, financial, and accounting sectors.

However, those who relied solely on technological tools to achieve the automation goals did not worry about the need for systematization, planning, mapping and organization of processes and that posed some problems.

The lack of standardization in data collection and the use of different software in the departments of the same institution were (in many cases still are) factual situations in hospitals that initiated the digital transformation without planning and systematization. The practice reflects the lack of integration, inconsistency of data and performance indicators, and financial loss, even with the adoption of IT.

The risk of disallowance, quite common in this sector, is an example that, in health, it is not enough to worry only about the digitalization of processes. The quality of the information is fundamental.

The disallowance is the refusal by the operator to pay procedures performed by service providers, due to differences in complying with the promised. Certain steps are essential to avoid them. Data discrimination needed to be collected in patient care to justify acceptable service and consistent with the contracts established between hospital and operator, clarification of contract rules and standardization of charging are some of them.

Steps like these are fundamental to the proper function of the operation, but they do not exclude the use of systems. On the contrary, they complement them. It is the intelligent medical management system that, following the parameterized principles, ensures automated and controlled processes by creating alerts that avoid common errors, such as incorrect data filling, need for prior authorization, justification for performing a certain procedure or improper charges. According to Sergio Miranda, Professor of Medical Informatics at the State University of Rio de Janeiro (UERJ),

> The healthcare area has been characterized by a slow process of incorporating modern information technologies. However, the complexity of healthcare activities and the recognition of quality and control gains from information systems have led to the often poorly planned computerization of activities. Deepening computerization and integrating information systems into the country's health system has the potential to produce a quality leap in overall system management and health care for the population.[1]

Despite all the digital health advancement in recent decades, cost management is still a challenge in the industry. The reasons are many. In part, this is because good hospital accounting management requires not only looking at costs, but also the provision of supplies, medicines, and other factors that are essential to care. Managers must have the exact knowledge of the demand, buy smart and avoid situations such as lack of essential service item or material loss due to expiration date - both factors detrimental to the proper functioning of the hospital and patient care.

Given this and other contexts, there was an incentive (or need) for technological expansion at the administrative level within a hospital. The same management system that controls the accounts is now working through other features such as intelligent management hospital inventory, for example, integrating pharmacy processes into the purchasing department. Supplied daily with data generated during patient care, the system automatically predicts what to buy, when and how much. Improvements in these backoffice processes, which have a direct impact on quality of care, have also made IT an essential factor in patient safety.

According to the World Health Organization (WHO),[2] patient safety is the reduction to the minimum risk possible of unnecessary harm to the health care of the individual, and the minimum acceptable corresponds to what is feasible in the light of knowledge, resources and context against the risk of non-treatment or other treatment.

The main concerns regarding patient safety are related to the incidence of errors. Being considered one of the most common, errors in medication administration can range from mild

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1 FREIRE, S. M. Sigilo das informações. *In:* MONTINE, J.; CASTRO, A. J. W. (Orgs.). **Regulação & Saúde – documentos técnicos de apoio ao Fórum de Saúde Suplementar de 2003**. Rio de Janeiro: Ministério da Saúde, 2004. p. 340.

2 NETO, A. A. Riscos assistenciais hospitalares: questão humana e econômica. *In:* ALLGAYER, C. J. (Org.). **Gestão e Saúde – temas contemporâneos abordados por especialistas do setor**. Porto Alegre: Editora IAHCS, 2011. p. 119-120.

adverse events to death. Situations like these completely change the way management perceives care or vice versa. They also make the importance of integrating technology support into the entire healthcare institution even stronger.

As noted by Hospital Management psychiatrist Antônio Quinto Neto,[3] what seemed to be an unsurpassable chasm in the physician-manager relationship is narrowed with the necessary cooperation in view of the possibility of economic- financial risk and damage to patient care.

> The historic separation of responsibilities between managers and physicians - the first involved in financial and operational matters; the second, with the quality of care and patient safety - no longer meets current healthcare issues [...]. The patients / clients needs and the technical-scientific development, surprisingly, are contributing to the fact that managers and physicians, facing the increasing complexity - both in management and care terms -, realize the interdependence of their activities and corresponding benefit that both can gain if they operate in a cohesive and integrated manner. [...]physicians shyly recognize that efforts to monitor care quality and patient safety are beyond their capabilities, while managers preceive the need to gain the understanding that the complexity of health services requires data and consistent information, both managerial and assistance, that allows management consistent with current demands.[4]

Thus, a software can help manage drug supplies and also provide intelligent management to the clinical pharmacy and make one of the most crucial phases in the care process, which is releasing drugs based on prescription, as safely as possible.

With IT, the prescription evaluation in the hospital pharmacy is done through systems that, in addition to informing which items should be evaluated and released, control batches and medicine expiration dates. They also automatically alert physicians and pharmacists of drug interactions at the time of prescription, observing the time to take the medicament, overdoses and underdoses, allergic reactions, etc.

A technology that is gaining strength due to the aid, safety and digital advancement it provides to healthcare is the Electronic Patient Record (PEP). This solution brings together, in the same digital environment, clinical information of all patient care and allows the physician to prepare the prescription electronically and intelligently, viewing the history of previous care / referrals and being aware of the fields that have mandatory data entry. Thus, among the many benefits it brings to health institutions, industry professionals and, especially, patients, is the circuit of medicines.

Since it monitors all operations from prescription to bedside checking with the help of a mobile device that reads barcodes, the PEP enables one to check whether the medication that arrived at the patient is the same prescribed by the physician and send by the pharmacy at the correct dosage and times. This represents safety assurance at all levels.

Clinical protocols are also another example of PEP-associated instruments for enhancing safety and reducing the risk of errors and adverse events. Inserted in the care routine, they serve as important support in the decision-making process of the physician. Because these are evidence-based studies of all procedures that have proven effective, they promote the standardization of management and treatment types, and help the clinician to define what to adopt given the patient's clinical condition.

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3 *Ibidem*, p. 116-117.

4 *Ibidem*, p. 115-116.

However, it is noteworthy that technology is available for support, not limitation. Therefore, clinical protocols should not exclude other methods and knowledge of the professional. In addition, beyond the care context, it can also support the processes managementof the hospital.

The digitalization of all data circulating in the institution in an Enterprise Resource Planning (ERP) management system facilitates the cross-checking of information, conduct analysis in the healthcare area and also serves as a parameter for hospital management to locate and resolve any bottlenecks, promoting efficiency and quality in service delivery.

Solutions such as Business Intelligence (BI), which allow you to collect, organize, analyze and monitor data, have the ability to transform information into analytical management reports and dashboards, with indicators that guide clinical governance, helping the hospital manager to set scenarios, foresee challenges, identify opportunities for care improvement and even better manage costs, as there are indicators that displays the forecast of the expenses.

As explained, a good IT-based process systematization and complete planning provides a systemic and integrated view of the hospital environment, which simplifies situational awareness, facilitates the vision of scenarios that can be corrected, and increases operational efficiency. However, disproportionately to the immense benefits achieved, this is scarcely practiced in Brazilian healthcare institutions, although it is inadmissible to consider IT as a mere supportive role nowadays, given such a highly strategic role.

It is important to stress that information systems leverage the care and operational processes effectiveness; that these tools provide automation and process management; whereas technological innovations favor mobility and productivity; and that IT solutions provide analytical insight for strategic management, provided they are implemented with systematization and planning.

Due to the need for rapid advancement of digital health worldwide, there are associations that encourage the adoption of IT by assessing technology maturity in institutions and support for clinical governance strategy. The Healthcare Information and Management Systems Society (HIMSS) is one of them and can be considered the most influential worldwide. The status of a digital hospital has already arrived in Brazil and, fortunately, has driven the segment in its quest to eliminate paper, promote digital transformation and ensure a positive patient experience.

The evolution to the digital hospital

The model advocated by the HIMSS, by the gains it provides to institutions, professionals and people who use health services, gradually leaves behind the aspect of trend and gains practical space in Brazilian entities that intend to remain competitive and active.

In short, to achieve digital hospital status that represents the highest level of IT adoption in a healthcare facility, five approaches are required: digitization of both patient and hospital management information, support clinical decision, information exchange and complex reporting capabilities, and full use of hospital management and diagnostic medicine solutions such as ERP, PEP and Picture Archiving and Communication System (PACS).

In other words and according to what has been exposed so far, the digital hospital deployment project is not just about automating data and functions through IT. There needs to be complete structural change in order to improve care, information recording and, always, patient safety.

Failure to understand the complexity and breadth of this project, as well as its focus on making the medical and administrative experience more practical and improving the patient's well-being,

means moving toward errors that will undermine the necessary evolution. Examples include: inadequately sizing the infrastructure needed to support all transformation and integration between areas; understand the project as a mere digitization of processes and documents; disregard the importance of training multidisciplinary teams and knowledge multipliers. Beyond this scope, there are some guidelines in the implementation of a digital hospital.

PEP's adoption is a key factor in providing automated, unified patient information, replacing manual records that often contain inconsistent and unreadable data. With the ease of access to the history of care, the solution also significantly enhances clinical effectiveness. However, as Sergio Miranda Freire ponders,[5] the systematic collection of personal and institutional data presents a substantial compromise regarding the privacy loss and the leakage risk. Thus, principles of ethics and structure must be among the care, management, social and scientific needs to require information availability and maintaining confidentiality:

> State-of-the-art computer, telecommunication, and software technology enables the construction of information systems that minimize the risk of security breach and, if they occur, to be detectable and to verify those responsible for the breach. However, the issue of data privacy and confidentiality is not a purely technical issue, as it requires the establishment of a policy that defines what data should be protected, at what level, who can access it, what operations each user can perform on the data, where it can be transferred, how long it will be available for, and who determines who can access the data.[6]

Going beyond integrity, privacy, confidentiality and encompassing other technical standards inherent to the system such as user identification authentication, auditing, software certification and backup, having an appropriate infrastructure makes a huge difference. Data center and full Wi-Fi network are paramount for communication between all equipment in data transmission; no-breaks and generators make systems available all the time with uninterrupted accessibility; frequent backups ensure data protection. Together with a trained team, offering 24/7 support, all this apparatus supports digital operation and information security.

Given these technical standards in the use of computerized systems for storing and handling digital medical records, another gain linked to PEP is the fact that it does not require physical space for storing printed documents. With the implementation of digital certification, which validates the signature in order to ensure authenticity to documents, paper record is eliminated once and for all. While the economy with inputs, printing and space is undisputed, the benefits of a paperless hospital go beyond that perspective.

Reducing risks and costs or even eliminating these altogether. In addition to controlling the distribution of medicines, as already mentioned, computerization helps sectors of a hospital not to incur in waste. According to the Good Practice Guide to Avoid Health Waste,[7] frauds and abuses are among the main categories. Simulation and prescription of contraindicated treatments are quite common. Excessive treatments are also impactful practices, and its abuse can be minimized through structured data in a system.

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5 Freire (2004, p. 340-341).

6 *Ibidem*, p. 362.

7 FENASAÚDE – FEDERAÇÃO NACIONAL DE SAÚDE SUPLEMENTAR. **Guia de Boas Práticas para Evitar Desperdícios na Saúde**. Rio de Janeiro: FenaSaúde, 2018. p. 25.

> Typical waste examples: postpone medical discharge to increase hospital stay and ensure bed occupancy; indicate more expensive treatments when cheaper ones deliver the same outcome; request unnecessary exams, such as tomography and magnetic resonance imaging, in which Brazil appears in statistics as one of the world leaders (in Supplementary Health); request more procedures than necessary for surgery; use more materials and OPME than is needed for the procedure or surgery.[8]

No less important than the items already discussed above for achieving the maximum stage of HIMSS certification is the concept of interoperability. To talk about health interoperability is to think about the ability of different information systems to integrate with the objective of communicating and exchanging data. For this to happen, it is necessary to define language standards and protocols, so that the shared information is accessed by different health professionals, in different units, regardless of system or software provider.

With interoperability, there is a reshaping in the way healthcare is provided. For physicians, the availability of complete medical histories allow them to relate new diagnoses based on old ones, to make a thorough study of the case to be treated, and thus support the decision on the best treatment. The availability of this medical history influences patient safety. For example, if a person was allergic to a particular formula, this would be one of the first data to be checked in the medical record.

Financially, interoperability can also help save resources because, in many cases, routine exams are redone as the patient changes health facilities. Without interoperability, this patient's history of care cannot be accessed, and repetition implies avoidable expenses.

In Latin America, the first digital hospital is from Brazil

Unimed Recife III Hospital entered in the health history in 2016 due to an unprecedented achievement in Latin America. The institution, located in Recife-PE, was the first to obtain the digital hospital certificate. Granted by HIMSS, this recognition, which attests to the achievement of the highest level of clinical IT throughout the institution, was the result of two years of work in partnership with MV, a company that specializes in the development of health management systems. At the time, the hospital had 202 beds, 260 physicians and an annual average of 11.000 hospitalizations, 13.000 surgeries and 88.000 emergency room visits.

With the main objective of ensuring higher quality care, the adoption of solutions developed by the supplier company was the pillar for the Hospital Unimed Recife III to be the first with this status among Latin American countries. In addition to being historical, this achievement was impacting on the economy. Health facility records show that while investing in a digital hospital project is a major challenge, the financial return is not only guaranteed but easily recovered. Numbers raised by the institution showed reduction in expenses five times higher than the amount of R$ 1.3 million that was invested.

Among the initiatives that had a major impact on the project, some were aimed at improving the clinical pharmacy. The closed-loop administration system, with 95% of double-checked bedside medications, automatic recording in the electronic medical record of everything infused into the patient, integration of the pharmacy with the multidisciplinary team, and dispensing of drugs

8 *Ibidem*, p. 26.

from the separation and identification (by patient name, bed number and time of administration) ensured greater control over the process, reduced incidence of errors and, in a few months, savings of R$ 820,000.

The patients flow within the institution has also changed, with the insertion of new system-managed clinical care protocols, allowing better medical procedures management, with more accurate diagnoses and more assertive treatments. This resulted in a reduction in patients' average length of stay and expenses equivalent to R$ 1.2 million, as automatic alerts started to assist medical staff in this management.

Concerning the maximum integration of all departments of Hospital Unimed Recife III for access to structured data used in BI solutions and the clinical audit process to follow up the entire patient care line, there was a contribution in increasing de-hospitalization ratio and a decrease of R$ 4.2 million in costs.

Availability of interoperability with other systems, access to decision-support dashboards, and the storage of information from a variety of medical devices in the electronic medical record also reduced costs for paper, personnel and physical space.

Regarding the infrastructure to support the entire project, a data center with communication and data replication backup adopted as a disaster recovery procedure keeps the unit 100% active and secure. In addition, if the systems go down, the hospital also has offline medical records and crisis machines that take action to provide data already stored and allow new information to be inserted in the patient care history, present in the MV system.

The (present) future of digital health

New clinical governance practices are consolidating more strongly and creating environments for hospital excellence in order to thrive even more, with technologically provided solutions. This chapter has therefore set out to expose the economic, social and institutional benefits of adopting IT in hospitals, the advancement of digital health in Brazil, a success story in the country that drives other industry organizations to seek a new level in terms of digital hospital, as well as reinforcing the need for integration between management, care and strategy in the health context. As mentioned earlier, while digital transformation is slow in health, society and the entire industry are facing a path that has no turning back.

The most recent discussion in Brazil is about telemedicine. Patients increasingly crave agility and mobility. Lawsuits are under discussion to make this practice a broad and viable alternative for all who need health care. Technological resources exist for this and some interesting applications are already being adopted.

According to neuroscientist and medical informatics expert Renato Sabbatini,[9] the teleconsultation between physicians is an example. Also called a second opinion, it allows two or more professionals to discuss each other's case with a patient, which is often difficult to solve. Teleradiology, which consists of remote diagnosis from access to digital imaging, is another initiative that has worked. However, the largest possible application for telemedicine is the management

9 NETO, A. A. Riscos assistenciais hospitalares: questão humana e econômica. *In:* ALLGAYER, C. J. (Org.). **Gestão e Saúde – temas contemporâneos abordados por especialistas do setor**. Porto Alegre: Editora IAHCS, 2011. p. 1.

of chronic diseases. For Sabbatini, "here comes the figure of the 'virtual caregiver'. It's about using modern digital technology and computer and mobile phone networks to perform automated, interconnected patient tracking".[10]

There are studies that the telemedicine can greatly increase the efficiency of the healthcare system. And this improvement would be the result of actions provided by the use of IT to provide services that optimize care, providing better access and reducing costs and time.

However, more than available and accessible technologies, a regulation is required in Brazil that ensures ethics, technique and legality to the practice of telemedicine so that physicians feel comfortable in broadening horizons in patient care. This is already true in many countries with positive results. So it can't be any different here.

Other technological innovations have also been gaining ground when we talk about the future of health. Big data, artificial intelligence, cloud computing and the Internet of Things (IoT) are trends already present in the individual routine of many people that allow us to predict the direction of this sector based on patient empowerment - being the co-author of health care - and in predictive medicine - which must transform the role of hospitals by shifting their focus from the disease to, in fact, take care of human health and quality of life in a personalized way. Amazingly, this is much cheaper for healthcare institutions, safer for the patient and advantageous for the entire industry.

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SABBATINNI, R. M. E. **Telemedicina via celular**: a nova revolução. [S.l.]: [s.d.]. Disponível em: http://www.sabbatini.com/renato/papers/ArtigoTelemedicinaValorEconomico.pdf. Acesso em: 2 abr. 2019.

10 *Ibidem*, p. 2.

Glossary

- Electronic Patient Record (PEP): a digital medical record system that records and stores patient data;
- Enterprise Resource Planning (ERP): management system that integrates information and processes of an organization in the same digital environment;
- Business Intelligence (BI): solution that allows one to collect, organize, analyze and monitor data;
- Dashboards: gather and organize indicators and metrics for easy viewing of situations and monitoring scenarios;
- Healthcare Information and Management Systems Society (HIMSS): the largest health informatics association in the world;
- Picture Archiving and Communication System (PACS): technology that stores medical images and ensures convenient access to the radiologist;
- Interoperability: ability of one system to communicate with another transparently;
- Telemedicine: technology-based distance medical care;
- Predictive medicine: identification of possible health risks of the individual through previously available clinical information..

CHAPTER 9

ARCHITECTURE AND HEALTH[1]

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Objectives

- Contextualize health spaces in Brazil and focus on human comfort;
- Present the Physical-Functional Master Plan as an important tool for planning a health facility;
- Contribute to the coating material choice for health environments;
- Discuss the architecture and the hospital of the future through humanization and welcoming;
- Underpin architecture and engineering for infection control.

Health spaces in Brazil

The space where health care activities are carried out is one of the most complex in the world, whether due to the daily and uninterrupted operation, the large number of people who circulate, the high-tech equipment required, the need for complex facilities to meet legal requirements and mainly because it is directly linked to human health.

The patient is a being who needs care, his family member is in a fragile moment and health professionals have very intense work routines. The health environment must be prepared to alleviate suffering, provide recovery of patients' health, promote well-being, welcome and ensure safety throughout the chain to which it relates.

The elaboration of projects for the construction of healthcare establishments is a complex process that must, invariably, satisfy a significant diversity of technical criteria and physical-functional compatibility, as well as, of course, the safety of care processes related to the patient.

The solution design, in addition to meeting the health technology demands, regional geographical characteristics and flexibility of spaces determined by the epidemiological variables must also include, with fundamental relevance, user satisfaction through environmental comfort

Human comfort in healthcare environments[2]

Studies on aspects of human comfort have shown that unfavorable conditions, such as excess or absence of heat, humidity, ventilation and air renewal, constant loud noises and inadequate lighting conditions can represent a major source of stress in the development of professional activities. For each of the environmental variables (light, weather, noise, odors) there are specific characteristics that are more or less facilitating.

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1 Organizado por Claudia Miguez.

2 Redigido por Fábio Bitencourt.

In buildings for health services, where critical and stressful situations involving interpersonal relationships and individuals with some degree of physical and / or mental distress often occur, the environmental factors that define comfort conditions (acoustic, visual, hygrothermal and ergonomic) assume significant responsibilities during the development of the architectural design.

The dimensions defined by the various laws that shape and determine the construction of the space for health services are established under comfort standards that have privileged health professionals and scientific factors, much more than the evaluation of the aspects of sensitivity and user comfort.

On the other hand, measures to achieve a balance between the formal determinations of existing regulations and technical regulations, combined with environmental, social and cultural diversity, represent some of the strategies that the National Health Surveillance Agency (Anvisa) has sought to implement, for example, RDC No. 50 of February 21st, 2002.[3] In 2014, Anvisa published the Manual of Environmental Comfort in Health Care Establishments, as an important contribution to the study of the comfort, ergonomics and accessibility application in buildings for health services.[4]

This is a time when professionals and specialists in comfort and health environments can contribute to criticism and regional experiences in the midst of Brazil's environmental and climate diversity.

Figure 1 - Schematic representation of the environmental factors that make up the perception of human comfort

Source: Bitencourt (2014)

Unlike feelings of discomfort, environmental comfort is not an easily measurable perception. The result of the harmony of various conditions - hygrothermal, acoustic, visual, olfactory, air quality, among others - can also provide the integration of man (user) in the environment, enabling the optimization of its performance. The origin of the term "comfort" is explained by the verb "to confort" from the Latin confortare, and has the same origin as "strenght"; bringing strength meant comforting. In the book "La Casa: historia de un idea", Canadian architect Witold Rybczynski makes an important reference to the term:

3 ANVISA – AGÊNCIA NACIONAL DE VIGILÂNCIA SANITÁRIA. **Resolução da Diretoria Colegiada (RDC) nº 50, de 21 de fevereiro de 2002**. Normas para projetos físicos de estabelecimentos assistenciais de saúde. Brasília: Anvisa, 2002.

4 BITENCOURT, F. (Org.). **Conforto ambiental em estabelecimentos assistenciais de saúde**. Brasília: Anvisa, 2014.

> The emergence of the word "comfort" in the context of domestic well-being is also of more than lexicographic interest. There are other English words with the same meaning - for example, cozy, but they were originated later. The first use of the word "comfort" to indicate a level of domestic pleasure is not documented until the 18th century.[5]

A multidimensional aspect of the comfort function is presented by Keith Slater, defining it as "a pleasurable state of physiological, physical and psychological harmony between human and environment".[6] When it comes to health environments, hospital buildings and their contribution to environmental sustainability, the most immediate approach refers to the unfeasibility of adequacy and physical-functional compatibility. However, considering existing buildings and new health facility designs, much remains to be done in this process of conceptual and design adjustments and innovations.

The design of the project solution, in addition to meeting the demands of health technology, regional geographical characteristics and the flexibility of spaces determined by epidemiological variables, must also contemplate, with fundamental relevance, user satisfaction through environmental comfort in its various aspects: visual, hygrothermal, acoustic, luminal, olfactory and ergonomic.

The projects and programs with actions that favor the humanization of care in health environments have been increasing in Brazil, in particular, and widely in many countries, as a result of the work and demands of this concept of the patient's relationship with health professionals and the hospital environment.

It is also relevant to consider the recommendation of the World Health Organization (WHO) on the need to study the environmental factors that are responsible for the Sick Building Syndrome (SBS). This syndrome is characterized as a set of diseases or illnesses (headache, asthenia, poor concentration and work performance, dryness of skin and mucous membranes, burning eyes, continuous coughs and others) that appear during the stay inside certain buildings.

Romano Del Nord, researcher, architect and professor at the Universitá de Firenze, Italy, published in 2006 the research on "Environment and perceptual-sensory factors", which presents comfort as capable of producing relevant results for the humanization of healthcare:[7]

- Promote the reduction of stress and fatigue of health professionals and improve the care effectiveness;
- Improve patient safety;
- Reduce patient stress and increase the possibility of clinical success;
- Promote general improvement in the quality of care delivery.

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5 RYBCZYNSKI, W. **La casa**: historia de una idea. San Sebastian: Editorial Nerea, 2009. p. 33.

6 Slater (*apud* LINDEN, J. **Ergonomia e design**: prazer, conforto e risco no uso dos produtos. Porto Alegre: Editora UniRitter, 2007. p. 70).

7 NORD, R. D. **Lo stress ambientale nel progetto dell'ospedale pediatrico**: indirizzi tecnici e suggestioni architettoniche. Milano: Motta Architettura, 2006. p. 102.

Figura 2 – O paisagismo como experiência ativa (Hospital Rede SARAH, arquiteto Lelé)

Fonte: Rede SARAH de Hospitais (2019).

Figure 3 – Landscaping as a passive experience (Garden of the Arts Hospital - painting)

Source: Van Gogh Museum, Netherlands (2019).

The architect Del Nord[8] emphasizes that green spaces should also provide the patient with psychological support that enables them to adapt to the environment, helping to cope with the stress from illness, depression and the stimuli absence, and act as their own stimulus during the hospitalization. Del Nord highlights the humanization value of the environment that Roger Ulrich's theory of "Gardens of Support"[9,10] evidence by presenting the following reference frameworks for the use of landscape solutions:

8 *Ibidem.*

9 *Supportive gardens* é uma referência conceitual elaborada como parte da arquitetura baseada em evidências para ambientes de saúde, segundo ULRICH, R. S. Effects of healthcare environmental design on medical outcomes. *In:* DILANI, A. (Ed.). **Design & Health**. Stockholm: Svensk Byggtjänst, 2001. p. 56.

10 ULRICH, R. S. **Health benefits of gardens in hospitals**. Texas: Center for Health Systems and Design, 2002. Disponível em: http://www.greenplantsforgreenbuildings.org/attachments/contentmanagers/25/HealthSettingsUlrich.pdf. Acesso em: 17 maio 2017.

1. Active experience - refers to physical rehabilitation, leisure and learning;
2. Passive experience - refers to relaxation and observation.

In 2018, at a recent meeting held from 3rd to 7th September in Curitiba, during the VIII Congress promoted by the Brazilian Association for the Development of the Hospital Building (ABDEH), it was evidenced that the needs of human comfort cannot be solved only with sophisticated high-tech apparatus.[11] This approach should give priority to the application of sustainable development policies that favor the natural conditions that each region and environment can offer and that can be exploited.

Master Plan: a planning legacy for tomorrow's managers[12]

What will the physical infrastructure of health facilities look like in 2050? When we ask about the future, we often think of science fiction movies, high-tech equipment and robots, many robots. Well, the future has already begun for many of these buildings around the world, the scenery of which resembles what we draw in our minds. Telemedicine, nanotechnology, big data and robots, from surgery to laboratory, from nursing to cleaning, in all areas that can be automated.

What new things can still come up, and how can we - and more specifically our physical facilities - prepare to welcome all the transformation that will come? Flexibility, resilience and sustainability are key words for the future of healthcare buildings. Awareness and sensitivity are precious assets in the face of this plethora of innovations that promote a transformation in the way we take care of health. Sustainable and conscientious planning is the big answer for our establishments to be directed towards changes. The legacy of planning is the fruit of dialogue and sensitivity, and that is the best legacy for tomorrow's managers.

We know that the dynamics of the hospital building are unceasing, that a hospital without new constructions is ill, but how can we forward this planning of physical facilities as a continuous, future-oriented process, without losing sight of its systemic nature, in perfect analogy to human body and the holistic look that integrative medicine proposes to the patient?

First and foremost, it is critical that every manager keep in mind that physical space interferes with the quality of care processes and can affect patient experience, employee satisfaction, and organization outcomes. Salutogenic architecture, evidence-based design, environmental psychology and neuroarchitecture are some of the concepts that address the role of physical space in promoting health and well-being. In parallel, there is the list of normative parameters of physical and functional health planning. In addition to these, market trends, costs and constant technological updating. Thus, the spatial organization of these buildings presupposes a preparation that goes beyond the simple formal and programmatic composition and requires specific and comprehensive knowledge, imposing on the architect a central role in providing technical support to managers.

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11 MIGUEZ, C. Q. (Org.). Os espaços de saúde nos cenários do amanhã: integração humana e tecnológica no ambiente construído. *In:* CONGRESSO BRASILEIRO PARA O DESENVOLVIMENTO DO EDIFÍCIO HOSPITALAR, 2018, Curitiba. **Anais** [...]. Curitiba: ABDEH, 2018.

12 Redigido por Jonas Badermann de Lemos e Bianca Breyer Cardoso.

The Physical-Functional Master Plan is the main tool for planning a health facility by proposing its macro-organization in space and time. In its development, it involves the administrative, financial, operational and assistance sectors, having the architect as a promoter of reflection on the future of the physical structure.

There are many possible approaches to drawing up the Master Plan of an existing hospital, for example. Generally speaking, they all involve a diagnostic phase, which may be preceded by analysis, and a prognostic phase, which may be succeeded by the final proposal, as shown below.

The first stage of development of the Master Plan is the general analysis of the institution so that its reason for being clearly defined. Who we are? What are we dedicated to? Who are our customers? How we do? How do we differentiate ourselves? What is our role in the care network? Where do we go in the future? These questions help the understanding of institutional purposes and suggest elements to materialize them in the final proposal.

This stage also includes a global and integrated view of all the elements that affect the operation of a hospital and the political, legal, economic, socio-cultural and technological scenarios that influence its management.

Thorough analysis serves to guide discussions, decisions, programmatic needs, implementation phases and future extensions and reforms, consolidating the Master Plan as a guideline for the whole management through a control and evaluation system that facilitates their own reorientation and mirrors the dynamism of the institution itself.

In the case of an existing establishment, the second step seeks to analyze the physical structure, which culminates in the diagnosis. Starting with urban insertion, it considers aspects of mobility and access, user displacement and nature of flows, in order to provide adequate accessibility. The surrounding environmental conditions and the interface with neighbors are also analyzed in order to identify privileged visuals, insolation and ventilation conditions, presence of green areas and pre-existing centralities. Finally, observe the insertion in the urban landscape and if the image is compatible with its mission.

From the architectural point of view, the diagnosis analyzes: circulatory organization (access, control and flows); supply and distribution; contiguity between the units and their functional relationships, aspects of flexibility and obsolescence of the building; and humanization aspects. It is also recommended to analyze ongoing projects and implementation impacts. Finally, it is essential to understand how the processes practiced condition the architectural plan and the extent to which spatial reorganization should delineate new processes, in line with the best practices and the institution's care proposal.

The infrastructure diagnosis verifies the state of conservation and obsolescence of water, sanitary, electrical, logic, fire-fighting, air-conditioning and exhaustion installations, medical gases, effluent and waste treatment. Such analysis should include maintenance and preventive routines. Finally, the diagnosis should compare the normative requirements and the existing situation, pointing out possible points of conflict. In this regard, it is essential to consider the installed capacity, which interferes with production and, as a rule, is impacted by the regularization of areas, flows and equipment.

The prognostic phase outlines the strategies for structuring the Master Plan, listing conceptual, assistential, functional and technological guidelines. The conceptual guidelines serve as a guiding thread for the projects of the different units, which are carried out at different times but must be aligned with institutional precepts. It addresses the guiding principles of the architectural conception, its aesthetic dimension, the desired ambience, the stimuli that it intends to promote through space and the characteristics to ensure readability, security, accessibility and unity, materializing the identity and character of the brand.

As for the care guidelines, they include the care policy and aspects related to the quality and effectiveness of the processes, as well as the safety, comfort and well-being of patients and collaborators. Listed here are also the areas of practice in which one wants to act as a reference and all the desired certifications and accreditations.

The functional guidelines define the circulatory scheme, expansion lines and areas for expansion, guiding future interventions. They determine the services that are required for the operation of the hospital and those to be incorporated as strategic planning. In addition, by verifying the management model, the number of employees, the attributions and the listing of activities, according to RDC No. 50, it establish the program of needs.

The technological guidelines drive the acquisition of new technologies, conceived from the point of view of space and necessary infrastructure, considering the biomedical equipment, its spatial and installation characteristics. Here, the aspects of energy efficiency, economic and environmental sustainability, from installation to maintenance, are contemplated.

The last stage presents the Master Plan as a product of this process and results in a three-dimensional model, with expansion areas, plant zoning and synthesis report. It is essential to highlight the image of the future to indicate where to go and the steps to the goal outlined.

In general terms, the whole process is guided by the contemporary perspective of the health scenario, which goes beyond the architectural and urbanistic issues and encompasses society's approach to the concept of health, as well as care, technological and administrative aspects that impact the management and the planning of a health care establishment.

The transparency of the process, which culminates in the visualization of the Master Plan, also acts as a stimulus and excitement for those involved with the institutional mission, as it allows us to glimpse the spirit of the organization to which they are committed, leading them towards the same purpose, searching for the concretization of the future desired. Along the way, directions can be reviewed, the route can also be recalculated, but defining the destination you want to reach is the first task on this so-called future journey.

Healthcare coatings: application of vinyl floor[13]

The choice of floor, wall and ceiling coatings plays an important role in ensuring the good quality and hygienic, acoustic and lighting performance of the environment built. In addition to helping control hospital infection, the materials must be sustainable and contribute to reducing the thermal load of the building.

Vinyl flooring is increasingly being used for floor applications and, when compared, in these applications, with competing materials such as wood, metals and ceramics, has a better cost-benefit ratio, besides having advantages in terms of such as flame retardant behavior, weathering resistance, thermal and acoustic insulation, ease of installation, low maintenance requirements and excellent workmanship and aesthetics.

The so-called vinyl floors are composed of a polymer, the polyvinyl chloride (PVC) which, due to its various applications, is one of the most consumed plastics in the world, being present in various commercial and industrial segments, such as packaging, shoes, health and construction. The use of PVC makes an important contribution to the quality, safety and cost of construction industry, and these are reasons for its success in buildings around the world, more specifically in countries of Europe and the United States, as well as in Brazil. It has its own versatility that helps meet current, modern and future design needs. Besides being fundamental in new works, it plays an important role in renovations, replacing conventional materials, and also in the decoration of new and old environments. It has been applied in the production of flooring that is widely used in health facilities, due to its good suitability to the conditions required by these environments.

PVC compounds, depending on their formulation, have excellent properties such as: transparency; brightness; impermeability; high impact resistance; low density (1.4 kg / dm3); good resistance against fungi, bacteria, insects and rodents; good thermal, electrical and acoustic insulation; impermeability to gases and liquids; weather resistance (sun, rain, wind and marine humidity); durability; flame spread resistance; and ability to acquire different colors by incorporating pigments. In addition, PVC products can be manufactured by the most varied molding processes (injection, extrusion, calendering and flattening), with low energy consumption and is also recyclable.[14,15]

In Brazil, Anvisa classifies the internal environments of a health establishment as to the possibility of transmission of infections, in critical, semi-critical and non-critical areas. Critical and semi-critical areas are those in which there are patients who are submitted to any kind of medical procedure, while in non-critical areas there are no patients.[16]

Interest in the use of this type of floor is increasing among Brazilian architects and builders, since the state-of-the-art technology and contemporary design allow, besides the advantages already mentioned, high thermoacoustic performance and the possibility of being used as electrical conductors in critical areas, especially those found in hospitals. In addition, manufacturing companies are increasingly making different finishings and patterns available for specific applications. National and international regulators approve projects, procedures and, above all, the materials to be used in these environments. The most

13 Redigido por Claudia Miguez.

14 RABELLO, M. S. **Aditivação de polímeros**. São Paulo: Artliber Editora, 2000.

15 NUNES, L. R.; RODOLFO JR., A.; ORMANJI, W. **Tecnologia do PVC**. 2. ed. rev. e ampl. São Paulo: ProEditores; Braskem, 2006.

16 Anvisa (2002).

relevant factors for this approval are: safety, non-toxicity, innocuousness, asepsis, long useful life, non-slip effect and, ultimately, affordable price. PVC, internationally, has the approval of government agencies from countries with stringent health legislation, such as Germany, the United States, and Great Britain.

Vinyl flooring is easy to install and can be found commercially on blankets and plates. The blankets are better suited to critical areas because they allow a more tight surface with welded joints in place, and the plates, because they have more joints, are better suited for use in semi-critical and non-critical areas.

Figure 4 - Vinyl Floors Applied in Healthcare Areas

Source: Personal collection of the author of this chapter. Paulo Niemeyer State Brain Institute (RJ) - operating room and circulation operating room.

Choosing a floor type for a healthcare facility is vitally important for maintaining the cleanliness of the environment, contributing to the control of hospital infection conditions and patient comfort, as there should not be many joints for the accumulation of waste and cause vibration and noise on stretchers or carts. It must be resistant to abrasion and to impact, as well as it must be designed to withstand the use of disinfection chemicals.[17]

Vinyl blankets are the most used and most suitable because they allow monolithic pieces with a smaller number of joints, combined with the other advantages of ease of asepsis, being good thermal and acoustic insulators and presenting good aesthetics, with different patterns and colors.

From the point of view of energy consumption, this material can be considered to have a good environmental performance, as its production is one of the most energy efficient, and, once separated from other plastics, can be reprocessed by using practically all recycling processes: mechanical, chemical or energetic.

The PVC products acceptability for construction applications depends on their ability to withstand deterioration of its properties over time, particularly aesthetics and mechanics. For floors, an important property is the abrasion resistance, which in PVC is usually small. Thus, the plastic, to have good abrasion resistance, must be composed and processed with suitable additives. Among the additives employed in PVC formulations, some deserve special attention as they may be toxic. These factors make clear the concern both with the substitution of these additives with other materials that cannot be extracted from the polymeric matrix or with low toxicity, as well as with the reduction of the emission of toxic chlorinated compounds.[18]

Devido à tendência de humanização dos ambientes de saúde, arquitetos têm procurado materiais que cumpram todas estas exigências e ainda apresentem padrões de acabamento final decorativo, com *design* e um resultado final mais acolhedor.

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17 BICALHO, F. C. **A arquitetura e a engenharia no controle de infecção**. 2. reimp. Rio de Janeiro: Editora Rio Books, 2017.

18 INSTITUTO DO PVC. **Contribuição do PVC para o desenvolvimento sustentável**. São Paulo: Instituto do PVC, 2003.

Due to the humanization trend of healthcare environments, architects have been looking for materials that meet all these requirements and still have decorative patterns, design and a more welcoming final result.

Bringing all these properties together is a real challenge, and PVC flooring has been chosen for its versatility; increasingly common in health buildings. However, due to the formulation of its compound with additive that can be harmful to health, if not consciously used, it requires greater commitment of the PVC production chain to meet these criteria.

The current requirement to ensure greater sustainability for the environment places architecture and engineering professionals, whose role is to specify the material to be employed in a health care facility, as agents that ensure greater sustainability for their works and projects. The product to be specified must have its origin and life cycle well documented, and decision-making should be based on factors of its production, such as the efforts that are made by companies to tailor their products, thus ensuring greater sustainability to the planet.

The architecture and the hospital of the future: humanization and reception in health environments[19]

Current hospital projects are concerned with their functionality, structuring their spaces based on the activities developed there and the establishment of ideal flows for their performance. However, they prioritize medical and nursing protocols and do not always turn their attention to the patients' psychological and comfort needs. The challenge of hospital architecture is to provide these spaces of welcome and familiarity, adding to the medical practice a sense of security and reliability, aiming at the rapid restoration and minimization of the patient suffering, the institution's primary purpose.

The new approach to hospital deployment, which we call humanization, can be seen from the founding of Planetree, a nonprofit organization established in California, United States, in 1978, by a patient dissatisfied with the impersonal treatment she underwent during her hospitalization. These concepts are part of the care trend that combines appropriate emotional support with quality medical care, called Patient Centered Care. The dissemination of the principles advocated by Planetree, which today is a certification for hospitals, meets the growing interest in applying the parameters of Patient Centered Care, which focuses on issues related to the environment in which this care is provided.

At first, these concepts can only be considered as an increase in the quality of care, which is effectively sought in these times of total quality. However, there are quantitative studies that emphasize the design of more humanized environments and endowed with environmental comfort, to hasten the cure and discharge of patients. The design of the new hospital rises above the other determinants, solidly based on the patient's figure and the translation of his rights and aspirations.

The American architect Jain Malkin[20] advocates an Evidence-Based Design (EBD), pointing out results of operational efficiency and productivity for the healthcare area. The architect break down the basis for establishing evidence-based design in some requirements, which she describes as follows:

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19 Redigido por Elza Maria Alves Costeira.

20 MALKIN, J. **The business case for creating a healing environment in business briefing**: hospital engineering & facilities management. London: World Market Research Centre; International Federation of Hospital Engineering, 2003.

- Eliminate stressful environmental factors such as noise, lack of privacy, excessive lighting, poor indoor air quality;
- Connect the patient with nature through panoramic windows, indoor gardens, aquariums, architectural elements;
- Offer options for individual control including privacy versus social environment, light control, choice of ambient music, seating position options, silence and quiet versus "active" waiting areas;
- Provide socializing opportunities with seating arrangements that promote privacy for family group meetings, family accommodations and caregivers in inpatient settings;
- Promote "positive" entertainment activities such as interactive art, aquariums, internet connection, background music, accessibility to videos that have comforting and appropriate images and sounds;
- Promote environments that lead to feelings of peace, hope, reflection, spiritual connection, relaxation, humor and well-being.

The hospital's architectural designs of the future implement agility in the healing process, facilitating technological incorporation and environmental comfort, establishing spaces that translate the new approach to care, centered on the patient and their physical, psychological and spiritual well-being. The presented concepts can be consolidated in six recommendations[21], pointing towards this new approach:

- **Welcome** the patient by providing the unit with access spaces - the "entrance doors" - of environmental comfort, information provision, convenient signage, flow facilitation, cozy waiting rooms, facilities such as telephone communication, cafeteria, special areas for children and agility in access to occurrences of high severity or complexity;
- **Computerize** the establishments, adding to the project the premises for an adequate distribution of logical network, scaled and flexible enough to reach all sectors, with emphasis on emergency access, nursing posts, telemedicine rooms, surgical centers, imaging services and laboratory, and also foreseeing its future expansion, focusing on the distance medical care;
- **Promote** the health of the population through the integration of various prevention programs, providing spaces for health education and the development of training, coexistence, didactics and qualification of physicians, nurses, attendants and users;
- **Flexibilize** the conception of the physical structure of the unit, endowing its design with attributes for its future expansion, incorporation of technology, reforms and adjustments, design modulation, flow rationalization, adequate service sectorization, careful analysis of the architectural program and correct establishment of the profile;
- **Humanize** the environment, incorporating environmental comfort items capable of minimizing stressors and focusing on the patient's wishes, aspirations and needs and their integration with nature, respect for their individuality and physical, psychological, social and spiritual health.
- **Compatibilize** technology, environmental comfort and agility of flows, with careful choice of

21 COSTEIRA, E. M. A. **Hospitais de emergência da cidade do Rio de Janeiro**: uma nova abordagem para a eficiência do ambiente construído. 2003. Dissertação (Mestrado) – Universidade Federal do Rio de Janeiro, Rio de Janeiro, 2003.

materials, building systems, modulations, durability, safety and ease of maintenance, adding concepts of prevention and control of hospital infection and biosecurity, and providing establishments with potential to achieve many years of use.

From the application of the presented concepts in the design of new hospitals, we can hope on health care environments built with a focus towards the future and the integral care of the population, placing the individual in the center of the projectual attention and resizing the spaces to achieve the true mission of hospital units, to provide comfort for the ill and the promote the health of individuals.

Infection Control Architecture and Engineering[22]

In many hospitals and health services in Brazil and even abroad, many errors can be identified, as well as a significant amount of money lost, in order to combat possible patient infections, products and materials contamination.

These errors stem from the use of outdated concepts and solutions used 20 or 30 years ago, such as dual circulation and exclusive elevators for "dirty and clean" materials, citing just two examples that burden construction and condemn homeowners to invest a large sum of resources to maintain the building unnecessarily for rest of their lives. As an example, the transportation of clothes that, once well packaged in transported cars with lid, can be moved by the same elevator at predefined times for transportation, so that there is no crossing of clean clothes with dirty clothes.

No building or equipment prevents an individual from acquiring infections. It is now known that many of the infections are endogenous rather than exogenous, as we have thought for some time, that is, we can get infection from ourselves if the procedures are not done correctly. Infection is also acquired through the use of poorly disinfected or poorly sterilized materials, or even poor sanitation, especially from the hands of the care team. The building, the equipment, the environments themselves have a secondary contribution to this problem, but certainly if they are not correct, may even worsen the situation.

Given these facts, it is noted that the fight for infection control in health services can find a strong ally in architecture and engineering. There are several techniques that architects and engineers can adopt in order to contribute to the reduction of infection rates in Health Care Establishments (HCE). Environment zoning in critical, semi-critical and non-critical areas, physical barriers between environments, air contamination control, correct workflows and the careful choice of finishing materials are some techniques that, combined with medical and nursing procedures, contribute to place the infection rates within acceptable ranges.

It is incorrect to think that infection in health services can be controlled just by joining sophisticated equipment and some architectural techniques. There is no point in posessing these equipments and a beautiful building if the care team is not aware of their functions and don't know how to use these spaces and equipment correctly. Infection levels in health services will only reach acceptable levels if there is a combination of staff care procedures and architectural and engineering solutions. The mais focus will always be to minimize risks or prevent them when there is a chance.

22 Redigido por Flávio Bicalho.

The procedures performed by professionals dealing directly with patient care are certainly more important than the physical infrastructure for infection control. This is not intended to minimize the work of architects and engineers, but it is certainly no use having a washbasin if people do not wash their hands. The job of architects and engineers in this case is to correctly specify the washbasin, the faucet, the soap holder and the paper bin and to put them in the right place. However, if the care team is unaware that hand hygiene is one of the most effective acts of infection control, the correct work and equipment will be of no use.

Some given solutions greatly harm professionals working in healthcare environments. A clear example concerns air quality control. An air-conditioning system is an excellent ally for keeping the environment clean and free of suspended particles and microorganisms. We understand it to be essential in many environments, such as in the areas of parenteral nutrition preparation, laundry, operating room, organ banks, etc; however, it is often poorly designed and maintained.

Another commonly encountered problem is incorrect flows, determined by a lack of knowledge of what the activities of the projected hospital unit are and how they are being done. If you have to choose between a hospital with only reasonable infrastructure, but a really active infection control committee, and another with an excellent infrastructure, but without correct staff action on infection control, surely the first one becomes a better option.

Because infection control is heavily dependent on procedures, architectural and engineering solutions contribute only partially to infection control, considering the physical characteristics of HCEs that assist in strategies against infection transmission.

Some concepts are basic for architects and engineers to understand this issue of infection in health services and thus better design the facilities. Perhaps the most important concept that architects and engineers need to understand is that contained in Anvisa Resolution, RDC No. 50/2002:

> The best prevention of health care infection is to treat contaminated elements at the source; transport of contaminated material, if packaged with the proper technique, can be carried out through any environment and cross with sterile or patient material without any risk.[23]

Professional architects and engineers often do not master concepts that can be extremely useful in HCE projects. One is to understand that most materials used in procedures within a hospital are not sterile and that there are stages of varying purity before sterility is achieved. Understanding this, it is clear that the rigor with which we treat these materials varies according to the degree of purity they posess. This reflects in the construction of the spaces. Inside a Sterile Material Center (SMC), for example, some objects are extremely dirty, others have already been decontaminated and only a few will be sterilized.

It should be noted, therefore, that for the maintenance of a sterilized material, it cannot have contact with anything; otherwise it would lose sterility.

Knowledge of these aspects helps in losing the fear of dealing with some taboos that do not add value to the project and the work, but can lead to many unnecessary expenses and inconvenience without effective infection control.

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23 Anvisa (2002).

Considerations

The scenario presented gives us a broad view of the challenging mission of architecture in designing health spaces. We are moving faster and faster towards a technological specialization that transforms relationships and work processes and the urgent need to ensure a healthier and more sustainable planet.

Designing a health environment is a responsibility that requires professionals to constantly update and understand the entire process involved. Their participation should be effective in the planning process from conception to operation.

Therefore, we can have spaces that are better suited to the needs of its users and ensure the important contribution of the environments built to the health of the individual, not only in the healing process but also in its maintenance.

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CHAPTER 10

PATIENT EXPERIENCE

Tomás Duarte

Objectives

- Reflect on the customer experience in health;
- Present possible metrics to measure customer satisfaction;
- Discuss about the patient's journey.

Expectation Management

The highest expectations in a company-client relationship come from the health segment. The greater the good, the higher our expectation as customers. And in health facilities, we handle the most valuable good of all: people's lives and well-being. Most of the time, no one goes to the hospital because they want to, that is, the origin, the starting point of the client and patient journey is born through an unwanted fact: "I have a health problem and I need support". There are exceptions such as checkup routines, aesthetic procedures, etc. Yet everything is born from the patient needs.

The logic of consuming products and services in health is the opposite, because it is not born of a desire to meet the customer's personal satisfaction. What's more, it can often come trigger traumatic, urgent moments of total discomfort. Through this context, we realize that the emotional burden on the health experience is as large as possible. The higher the expectation, the greater the importance of meeting them.

Vulnerability and fragility trigger the need to offer an even more differentiated patient experience than traditional companies. These conditions may give rise to various emotions, such as sadness, indignation, anger, feeling of incapacity, anxiety, frustration, discouragement, relief, exhaustion, worry, among others. This mix of emotions requires the service provider to have a range of behaviors, processes, and principles to provide the best possible care for the patient.

Living this intense experience without full support, there is nothing more correct and appropriate than providing care like every human being would like to be treated, through a genuine concern to help. It was from the need to treat people in the best way possible that the term humanized care was born.

Traditionally, in Brazil, we offer very bad experiences. A study conducted by Tracksale.co in 2017,[1] evaluated feedbacks from more than 70 million Brazilian consumers, and found that the main justifications of detracting customers were the low level of service, mainly due to the lack of sympathy, empathy (put yourself in the customer's place), warmth and presence of apathy. Companies that have done differently to tackle these points get great results on their Net Promoter Score (NPS). The better the service, the higher the NPS and the lower the negative opinions on social networks and sites like Reclame Aqui. This was the case of one of the leading diagnostic medicine laboratories: through a culture focused on good care and dealing with NPS detracting clients, it was able to reduce its digital complaints on the aforementioned channels by more than 30% (data from the relationship team of the laboratory).

1 Banco de dados do autor.

How to offer a humanized care?

Appropriate care, with human connections, goes through the clear perception of pain (in the broad sense of the client's journey) and the delivery of comfort, safety and confidence to people who want health. "It will be all right, remain calm, we are here to help you whenever you need"; This type of "magic" word is a typical example of customer-centered care. Eliminating any kind of friction or speaking in the "wrong tone" can prevent the beginning of a traumatic care.

Realize that all hospital staff members influence the customer experience, that is why experience design is so important. From the developer who made the hospital website or application, which works perfectly well or has frequent problems, generating negative perceptions, through outsourced parking staff; by the reception, which will generate the first impressions; by the screening team, who can direct the patient correctly or mistakenly; the technological integration between the health plan and the hospital, which can become bureaucratic or fluid in the registration and authorization of the procedure; through the cafeteria, which offers a cold or delicious snack, reaching one of the main points of the customer's journey: the moment of truth, which is the actual medical care. Since the consultation takes place privately, it is a mystery to evaluate its quality and efficiency, as many clients chose not to share their positive or negative impressions clearly.

To highlight the patient assessment, which until then was considered an enigma for most companies, NPS emerged,[2] through which it is possible to determine behaviors that are detrimental to the company's health and sustainability, such as actions that tarnish the brand reputation and verb-based practices of coercing, ignoring and abusing the customer.

Humanized care should be part of the hospital culture, but how to root such an important value in the daily lives of health professionals? Culture, in the strict sense of the word, consists of the customs, frequent practices, knowledge, beliefs, regulated norms, ethical norms, and habits of a group of people. Therefore, the cultural aspect in the corporate world is no different. Positive culture can be developed through well-defined strategies such as:

- • Education and knowledge: through frequent training, knowledge tests, practical simulations, dynamics, workshops, learning immersions and benchmarking, certifications of professionals in courses in Brazil and abroad;
- • Periodic Customer Experience Committees: in a major hospital network, a reference in Brazil, one of the most effective strategies was the implementation of the (weekly) periodic committee focused on discussing NPS and customer experience through a multi-lingual team. The network has become a hit case after evolving over 20 points in NPS in a span of just eight months. The strategy of having a periodic committee helps in team engagement, in simplifying communication between areas, in increasing the sense of urgency, and in bringing leaders closer to management. Since they are decision makers, all evolutionary actions end up becoming faster;
- • Leadership Examples: one of the great lessons of Disney's leadership principles taught through the Disney Institute is that leaders must always lead by example, as their behavior

2 REICHHELD, F. F. The one number you need to grow. **Harvard Business Review**, 2003. Disponível em: https://hbr.org/2003/12/the-one-number-you-need-to-grow. Acesso em: 13 abr. 2019.

inspires all other employees, positively and negatively. If a leadership mishandles a customer publicly or, upon seeing trash on the floor, does not take any proactive action to remedy that situation, by observing this behavior, it is clear that others on the team may be negatively influenced by these acts. Therefore, leaders should set the best example possible and involve the team to truly ensure the evolution of the customer experience through appropriate behaviors that are compatible with those of good leaders;

- Leadership accessibility: one of the major organizational failures in companies is the inaccessibility of leadership for customers and employees. This demonstrates bureaucracy and a lack of genuine interest in the service work. Being with the team and customers every day makes all the difference. Hospital directors should frequently visit beds, listen to clients, stop by the front desk, follow up on care, feel every step of the journey;
- Engagement and Sense of Urgency: one of hospitals' successful techniques for continually engaging teams is to post live customer reviews on TVs (or screens) in the hospital administration; some tools have a dashboard to display on screens. This increases the sense of urgency as customer reviews are presented in real time. Another technique is to post occasional compliments to team members on internal walls and murals, as well as to use internal communication tools and applications such as chat groups, etc. The good example encourages positive practices and people who are repeatedly praised should be valued and invited to share their knowledge and skills with the rest of the team;
- Desired purposes, values and behaviors: exposing the vision, mission and values on the walls and emphasizing that the company prioritizes humanized service is not enough. We need to evaluate whether all processes and teams are aligned with the company's purpose, which is more than vision; it's about the reason for existing and ensuring that the company will change the world in some way. In this sense, revisiting all processes, from hospitality to financial, legal to medical care, is a healthy practice. It is an intense and continuous work, stimulated by the leaders and frequently triggered: a vision (in the mindset sense). Clear values help define who will continue on the boat, who will leave and who will be promoted;
- Well-implemented metrics: in professional management, decisions are based on metrics. Well-implemented customer experience-focused metrics such as NPS make it easy and secure for decision- making. Some questions are important in the meantime: are we measuring customer experience correctly? Do we have statistically valid samples? Are we avoiding customer research fatigue? Are customer feedback generating inputs for areas to improve their delivery? In some scenarios we found that related processes to the Voice of Customer (VoC) were often inefficient and thus did not generate buy-in for teams;
- Matching customer experience results to team bonuses: a demonstration of the maturity level of some companies is the action of correlating team bonuses with customer experience results, leading to greater engagement of all team members, as they can also be paid for treating customers well. More importantly, this strategy should not be a priority; It is a secondary strategy. This alone will not guarantee the evolution of the indicators. Cultural implementation should be the primary strategy. Traditionally, NPS represents 20% to 40% weight in the basket of useful indicators for team compensation through bonuses and profit sharing.

Through these non-exhaustive strategies, there will certainly be an evolution in customer experience with a direction towards humanized care. An extra alternative is to hire people who can handle people, the so-called "people's person". We're talking about individuals who love serving customers; they will ensure much desired humanized care.

Humanization Policy

One of the gains for the patient's experience came when the Ministry of Health (MS) implemented the National Humanization Policy in 2013. Also known as HumanizaSUS, it aims to:

> Encourage communication between managers, workers and users to build collective processes of coping with power, work and affect relationships that often produce dehumanizing attitudes and practices that inhibit the autonomy and co-responsibility of health professionals in their work and users when performing the care.[3]

In practice, the interest is to consolidate and make effective the principles of the Unified Health System (SUS) in the daily care and management practices, besides qualifying the Brazilian public health. The principles that guide the project are transversality; the inseparability between attention and management; and the protagonism, co-responsibility and autonomy of the subjects and collectives.

In addition to these principles, its guidelines confirm the need and importance of health care and assistance in the following areas: reception; participatory management and co-management; ambience; expanded and shared clinic; appreciation of the worker; and defense of users' rights.

In this sense, in addition to the hospital manager's own efforts, public policies reinforce the need for humanized care in the public or private sphere.

Empathy in health

The term empathy went through moments when there was a widespread commotion for brands to offer more empathic care, that is, prompting service professionals to always put themselves in the customer's shoes. "Would you like to be treated the way you are treating?" This technique usually bears good fruit, but in health there may be exceptions, since the client's pain is a strictly subjective condition, only he knows what is going on. This was evident in conversations with several health professionals, who reported using empathic arguments that sometimes ended up not performing as desired, because when the professional mentioned that he understood the pain the client was feeling, he received the counterargument that no one would know the pain he was going through. Thus, extra care must be taken when using empathy in health, understanding this field as distinct from others.

As mentioned above, the expectation in the health segment is extremely high and, when fed falsely, will certainly result in a major misconception. Being transparent and sincere will bring long-term benefits.

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3 BRASIL. **HumanizaSUS – Política Nacional de Humanização**. 1. ed. Brasília: MS, 2013. Disponível em: http://bvsms.saude.gov.br/bvs/publicacoes/politica_nacional_humanizacao_pnh_folheto.pdf. Acesso em: 10 abr. 2019.

In 2017, Bain & Company[4] conducted an in-depth study with 18 hospitals, assessing the NPS of over 14,000 patients, providing insight into the patient experience in the industry. Among other findings, waiting time is the main pain for clients who have had frustrating experiences (detractors) in the care of Brazilian hospitals. Reducing waiting times requires a high investment, after all, in addition to redoing all infrastructure such as reception, acquiring new technologies for queue management and customer registration, it may also be necessary to expand the clinical staff and increase the medical service availability (a chronic problem in Brazil).

One short-term, cost-effective way out is to devise strategies for making wait times more responsive. But how to relativize the waiting time? For each persona (customer segment) a strategy must be created. What do your customers normally do to pass the time? What kind of entertainment do you enjoy? Books? Watching series on Netflix? For kids, games and videos on Playkids? A live classical song to reassure the hospital at peak time? A magic show? An affordable, ultra-speed Wi-Fi internet? The latter will also help the company to obtain customer data for future communications and service quality monitoring. If you, the hospital manager, do not have enough budget to make structural changes to ensure queue time reduction, try to create time-relativity strategies and it will surprise your patients, as it is rare to see initiatives like this in the health sector.

Customer Experience Metrics in Healthcare

There are many ways to measure patient experience. Traditionally, hospitals have used, and some still use, the satisfaction survey model, most often via paper and with the support of an interviewer, or via telephone. At the end of a day at the hospital, he was given a sheet with several questions, where the patient could take more than 15 minutes to answer. With the media evolution to digital channels, these more invasive and research-fatigued models were losing strength, as the digital strategy brought much more comfort, speed, results assertiveness and in real time.

Most paper questionnaires use two methodologies: Customer Satisfaction Index (CSI), which requires a score from 0 to 10, for example; and the Likert scale, which allows to evaluate, in a research, agreement or disagreement levels. The fact is that this research model generated a lot of friction, after all the patient just wanted to go home after a service, and did not want to spend his precious time answering a series of questions that interested only the hospital. Moreover, with too many questions, the respondent often enters the "automatic mode" of response, marking all answers with the same intensity, generating a fragile data, not useful to the company.

The NPS[5] customer loyalty indicator fit like a glove in health due to its simplicity, fit for digital channels and bringing extremely rich insights into patient experience and satisfaction. Called "The Ultimate Question," the metric is based on two questions: "how much would you recommend Hospital X to a friend or family member"; and "what are the reasons for your grade Y?" The adherence of this model to health brings impressive results, with high engagement by respondents, generating response rates higher than the minimum levels for statistical validity. In practice, we are talking about response

4 FIORENTINO, G. *et al.* **Satisfação do paciente nos hospitais privados brasileiros**. São Paulo: Bain&Company, [s.d.]. Disponível em: https://www.bain.com/contentassets/9e46222b008c4784849eff749166a4af/bain_brief_brochura_hospitais_nps_sao_paulo.pdf. Acesso em: 13 abr. 2019.

5 REICHHELD, F. F. The one number you need to grow. **Harvard Business Review**, 2003. Disponível em: https://hbr.org/2003/12/the-one-number-you-need-to-grow. Acesso em: 13 abr. 2019.

rates that often exceed 35% and can reach 50% response rate in surveys, with the minimum target for statistical validity being 20%.

It is important to say that there are two modalities of SPN: relational and transactional. The first aims to evaluate the entire customer experience along its journey; The second aims to evaluate some specific point of the customer journey. Let's go to the examples:

- Relational NPS Example: "On a scale from 0 to 10, how much would you recommend Hospital Y to a friend or family member? Leave your comment.";
- Transactional NPS Example: "On a scale from 0 to 10, how much would you recommend the hospital lab service to any friends or family? Leave your comment".

The big difference with NPS is measuring customer loyalty through the brand recommendation index, since customers don't recommend something bad to the people they like. NPS was widely adopted by the health segment in Brazil and other countries. It allowed the data to be triggered at a faster rate and perform the dealings with the customers.

Customer survey

HCAHPS[6] – Consumer Assessment for Hospital Services and Related Systems - is a patient satisfaction survey required by Centers for Medicare and Medicaid Services (CMS) for all hospitals in the United States. The survey is for hospitalized adult patients, excluding psychiatric patients. This methodology requires a lot of data compilation work and, because it has many questions, ends up generating research fatigue with customers who usually want fast approaches, which is the downside of HCAHPS. Nevertheless, the research and its results are important for several reasons. This becomes the patient's voice - which gives the hospital the ability to perceive the client's view of the care provided. Search results are publicly reported on the internet for everyone to see. For this reason, they directly affect hospitals that neglect patients.

This methodology uses inputs based on the frequency of contexts experienced by clients through their experience, for example: "how often did you find clean hospital bathrooms?". This way, the customer will respond to indices ranging from high frequency to low frequency. HCAHPS is used as the portrait of a longer period, such as semester or year, and is not intended for dynamic, real-time use such as NPS.

Customer Effort

The customer effort index[7] was born in 2016 through a publication on the Harvard Business Review (HBR) portal, demonstrating that companies often tried to delight customers, which required a lot of effort. It is better to try to reduce the client's effort to have a more fluid experience than to offer a bureaucratic and frictional experience, and to try to make up for it in the end with the enchantment strategy. The central question is how easy it is to comply with any step

6 CMS – CENTERS FOR MEDICARE & MEDICAID SERVICES. **HCAHPS**: patients' perspectives of care survey. Baltimore: CMS, 2017, Disponível em: https://www.cms.gov/Medicare/Quality-Initiatives-patient-assessment-instruments/hospitalqualityinits/hospitalhcahps.html. Acesso em: 13 abr. 2019.

7 DIXON, M.; FREEMAN, K.; TOMAN, N. Stop trying to delight your customers. **Harvard Business Review**, 2010. Disponível em: https://hbr.org/2010/07/stop-trying-to-delight-your-customers. Acesso em: 13 abr. 2019.

within the company, which is used to assign the customer effort index. From this, the responding consumer may agree or disagree with the statement, in the same model as the Likert scale. This methodology generates a transactional customer experience metric about a specific point during the customer journey.

There are other methodologies and metrics for assessing a patient's experience, such as ratings, reviews, thumbs up / thumbs down, queue time, cure rate, etc. We chose to share the top three, but others are also valid knowledge.

Technology x Humanized Care

Nowadays, countless startups and companies, scientists, professionals and inventors are working to create new products, services and tools for the evolving customer experience in the healthcare industry. Tools such as online exam and appointment scheduling, digital medical records, hospital check-in, attendance confirmation, queue time, automated health plan validation, digital publication of exam results, digital measurement of client satisfaction, help in the simplification of day-to-day operation of hospitals; therefore, implementing these should be part of the short-term strategic planning.

Other disruptive technological innovations such as human organ 3D printing, nanobiology and complex disease prediction will revolutionize health in the coming years. To monitor these new technologies is to be aligned with the future.

Technology is increasingly replacing some activities. Business processes are becoming self-serving and many traditional professions are disappearing.

For health is no different; exams, appointments and other specific jobs in the segment are being replaced by machines. As a result, these processes have become much faster and more efficient, as a well-programmed machine is less susceptible to failures than human work, allowing the customer more time with useful and enjoyable tasks. On the other hand, technology may eventually fail. This is where humanized service, aligned with the values of the brand, will ensure the success of the relationship between company and customer.

In the professional field, understanding the validity period of the area in which you work may be useful in determining the future of your career. Creative, strategic works that demand a lot of intelligence, as well as those that use intellectual property, will hardly be replaced by machines, because they need the human factor for its natural condition. These are the ones that have major barriers in a clash of technology versus humanized care.

Patient's journey

In the same study cited by Bain & Company, it was evident that queue times for medical care is the main reason for patient dissatisfaction. Below is a number of words from the study that prove this information, showing dissatisfaction with the wait.

Figure 1 - detractor word cloud

Source: Bain & Company.

In addition to reducing waiting times, what can hospitals do to improve the patient experience? Bain found that the potential for the creation of client promoters was at the point of the so-called post-hospital client journey, where there is follow-up and guidance for the patient to continue his treatment and care after discharge. It is important to understand the feelings in each moment of the client's experience within the hospital and what actions are necessary to ensure that there are good emotions and perceptions across all stages.

Memorable emotions

Nowadays, customer loyalty goes through the memory that the brand leaves in the memory. A reasonable experience does not allow emotional connections to be made to the point that the customer remembers a fact or some action of the company. Creating actions that will be remembered is a way to encourage loyalty. Each hospital sets its strategy creatively. St. Luke's Hospital, Kansas, has dressed newborn babies as superheroes, surprising parents and thrilling them with such a magical moment.[8]

Cancer patients, for example, lack humanized care. Strategies such as bringing children and family members to common commitments, such as movies and parks, fulfill this humanization task. This was the case with the children of the Association of Friends of Children with Cancer (AACC) and their

8 BEBÊS prematuros viram super heróis em hospital e surpreendem os pais. **Pais&Filhos**, 24 dez. 2018. Disponível em: https://paisefilhos.uol.com.br/pfnoinsta/bebes-prematuros-viram-super-herois-em-hospital-e-surpreendem-os-pais/. Acesso em: 10 abr. 2019.

families, who had a free and exclusive movie screening at the mall.[9]

In this sense, the patient's journey goes through many painful moments, and seeking ways to comfort and reduce these periods causes customer satisfaction. This is how a renowned diagnostic medicine laboratory in the country built a successful case: it used virtual reality to reduce pain at the time of children vaccination, who traditionally have vaccine trauma. During the vaccination, children were offered virtual reality glasses, and from this moment, a story of animation began. At the exact moment of the injection, a character would apply a fire shield to his arm, reducing the perception of pain that the procedure entails.[10]

The measurement for decision

The metrics presented here only make sense if they are used for strategic decision-making and when deployed into tactical-operational levels. It's no use managing patient expectations and then not using that information to build solid, well-structured improvement plans.

True positive changes in the patient's journey will only be undertaken once the priority is to enable the most enchanting experience possible within each person's perspective. This is achieved when the health facility is willing to listen and analyze the feelings of its clients, opening up to a continuous learning process through data obtained from research.

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9 AQUINO, B. Crianças com câncer e familiares ganham sessão gratuita no cinema. **Correio do Estado**, 5 set. 2018. Disponível em: https://www.correiodoestado.com.br/arte-e-cultura/criancas-com-cancer-e-familiares-ganham-sessao-gratuita-no-cinema/335837/. Acesso em: 10 abr. 2019.

10 PARDINI, H. Realidade virtual transforma a experiência da vacinação infantil. **YouTube**, 4 maio 2017. Disponível em: https://youtu.be/P9JwAH0298w. Acesso em: 10 abr. 2019.

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CONSIDERATIONS

THE HOSPITAL MANAGER WITH SYSTEMIC VISION

Andréa Prestes e J. Antônio Cirino

Systemic vision sounds like some superhero power, doesn't it? This essential competence expected from hospital managers is not a gift that was born with them or can be acquired overnight. Because it is a competence, we understand that it can be developed with each year of experience, dedication and study of these professionals. Systemic thinking goes through understanding that there are several answers to the same, and sometimes contradictory, question. Some have a sharper perception, but that does not mean that they hold the great analytical vision that is desired for the leader of health processes. However, a systemic view is not enough for the hospital manager, he needs to know what to do and what attitudes to take with what he perceives in the macro scope of the institution.

Throughout each chapter, the readers were able to perceive a series of highlighted notes, focusing on composing our own notion of the necessary knowledge to facilitate the work of the hospital manager. This manual is not intended to cover all the hospital management issues, but to shed light on those we think are essential. The first word, in scenario planning, is disruptive. A term that has been widely used in many areas, but what does it mean in health? Be a leader who breaks the line, seeking appropriate solutions to each of the transformations in which the scenario engenders? It goes further, as it is proactive thinking, and no longer reactive to what goes on outside. The hospital's organizational "universe" needs to be commanded by a professional who can be alert to external signals and anticipate events to minimize their potential impacts and dominate the situation.

Then, when approached about leadership and people, it became clear the need for the hospital manager not only to be effective for himself, through his self-development. He must be a coach who inspires, influences and engages his team. He must understand that people are the resource that permeates all areas and dimensions of the health organization, being the living heritage, through the intellectual capital produced there and indispensable for the achievement of good results. The hospital manager role is not just about training people, but developing them, providing the conditions relevant to the performance of their activities, as well as providing useful space for them to innovate. It was in the chapter on communication that we highlighted it as an essential area for hospital management, considering that it provides mediation between the human beings who work and are cared for in this institution. The leader of health processes needs to develop its communication strategies, proposing tools that are feasible for proper monitoring and interconnection of the various audiences involved in the hospital. Thus, it becomes possible to realize that, in order to obtain positive results from the proposed actions, it is essential that the communication between the parties is worked out. When it comes to thinking about "tomorrow," it was not just to act on future plans, but mainly to make the existence of the days after today viable. In the sustainability chapter we glimpse the in-depth look required of the hospital professional about the impacts of this institution. It is necessary to go beyond "mitigating" risks, moving to prospective and innovative actions by proposing new ways to do the same, with the best use of environmental, financial and human resources, essential to the hospital's longevity.

In the meantime, the proper remuneration of hospital institutions is a separate challenge for the hospital manager to make this innovative management profile a reality. The perspective considered in the chapter on the theme addresses the core remuneration model that focuses on providing the hospital's financial sustainability, based on a balance between the service offered and the return on value.

From this fertile ground the quality management seed is born, with the aim of providing excellent processes that result in patient safety. While the hospital manager can implement the quality culture as a driving force that unites and drives all other activities towards continuous improvement, the pursuit of hospital accreditation will be a plausible consequence, rewarding the institution with the results obtained and, at the same time, including it in an endless movement, without pause, of positive changes.

In the chapter concerning qualification for the improvement, we understand that the movement to increase safety and quality in health services has been promoting and stimulating the implementation of strategies and the adoption of good practices in the supplementary health sector, involving both health care providers and operators.

Continuing, the information technology discussion made it possible to reveal another face that the hospital manager must polish frequently: the use of technological tools to assist management. Undoubtedly, faced with a number of areas to work on and considering the amount of information they generate, it becomes imperative - but not impossible - to manage everything. That is why management software helps you grasp everything, composing dashboards that tell you what the aircraft commander (hospital) needs to know in real time. The manager must then also be "digital," not just his processes and technologies. He need to focus on the computerization of feasible management support activities, thereby facilitating and improving the day-to-day work and that of his staff.

In addition to the digital infrastructure, the physical structure needs to be adequate for employees and patients, favoring the execution of health care and the well-being for everyone. Thinking about the spaces and knowing how to manage projects of this nature is part of the health professional's task, given the constant updating of the relevant architectural legislation and, even more, the reappropriations and modifications necessary during the use of the hospital. Acting in the spaces is more than managing the physical part, it is structuring it so that human beings can live in the best possible way in these places. Finally, reflecting on the patient's journey and having the empathy to put himself in the clients' shoes, thinking and rethinking ways to make care even better, seals some of the main characteristics we list for the hospital manager concerning the systemic vision. Knowing what patients treated at the hospital think about the unit they manage and whether they would recommend it to friends and family makes it possible to understand where the bottlenecks and improvement opportunities lie in order to deliver even more value to clients.

We brought, through the chapters presented in this manual, a provocation about the need for the broad and generic, but not superficial, knowledge, necessary for the professional working in the hospital management area. The approach and content of the themes were intended to encourage these professionals to seek vertical knowledge of the subjects, not being restricted to the one presented here. We are in the age of knowledge, of rapid and constant transformation, in which self-development plays a key role in achieving good results.

Those who continually challenge themselves in the pursuit of new and best practices will be more likely to maintain their employability and positive outcomes for the hospitals they manage.

We thank everyone who accompanied us during this manual. There were ten chapters that had the involvement and direct commitment of more than 18 authors, resulting in 192 pages of the most current and necessary for hospital management.

We would be grateful to receive your feedback and suggestions for future projects in the email: **fbh@fbh.com.br.**

FBH AND THE FEDERATES

FBH

A HISTORY OF FIGHTS FOR IMPROVEMENT IN THE HEALTH SECTOR OF THE COUNTRY

The Brazilian Hospitals Federation (FBH) is a non-profit associative entity that has represented the Brazilian hospital sector for over 50 years.

Member of the Health Chamber of the National Agency for Supplementary Health (ANS), with constant presence at the National Health Surveillance Agency (Anvisa) and the Ministry of Health (MS), FBH participates in the main decisions of the sector, fighting for better working conditions for the companies it represents and for the quality of services provided by the private health network.

Currently, one of the main focuses of the Federation is the fight to mitigate the financial crisis that affects a significant portion of private hospitals affiliated to the Unified Health System (SUS), including charities and specialized clinics, such as nephrology.

The SUS procedure table did not have a readjustment between 1994 and 1999, which resulted in a great gap that was never compensated.

The FBH's proposal is to strengthen the institutional position of hospitals regarding the negotiations of the private health network with the government and health plan operators, with the purpose of promoting a recovery plan by updating the amounts paid to the health units covenant to SUS and the supplementary system.

Another major struggle tackled by the Federation is the reduction of the tax burden in the Health Sector, considered one of the highest in the Brazilian economy by tax studies, including double taxation on some taxes.

The tax burden imposed on the sector is the subject of constant debate of the FBH with the public power and the National Congress. The FBH proposes the exemption of some taxes that affect the revenue to reduce the charges, thus improving the negotiation of the adjustment of SUS tables and health plans.

HISTORIC

A trajectory of struggles

FBH, one of the largest representatives of the country's private health network, has helped to write the history of Brazilian public assistance over the past 50 years.

The Federation and its state associations act in defense of clinics, hospitals and outpatient clinics, representing today more than 4,000 units responsible for 62% of SUS care and 100% of the supplementary system, meeting the care needs of the population in locations where there are no public hospitals.

Growth and modernization

In this trajectory, FBH has turned adversities into achievements and today it is guided by the permanent goal of qualifying public assistance, always based on ethics, justice and the idea that health is really a right for everyone.

Quality first

The National Accreditation Organization (NAO), established by the FBH's initiative, sponsorship and incentive, is the first national entity to create a quality program, attest credibility and encourage the improvement of institutions that offer health services throughout the country, by accreditation programs, which permanently evaluate the quality of health services in the country. This was another important step in FBH history.

The creation of courses for the qualification of professionals from private institutions, using the structures of its affiliates, is a constant investment of FBH, with the permanent purpose of qualifying the Brazilian hospital sector.

FEDERATES

Alagoas State Hospitals Association

The Alagoas State Hospitals Association (AHEAL) was founded on May 31st, 1974 in a memorable meeting held at the headquarters of the Society of Medicine of Alagoas in the city of Maceió, capital of the Alagoas state.

The AHEAL was formed from the beginning with the purpose of bringing together the hospitals of Alagoas state, with a view to promoting and improving the cultural and scientific medicine focusing on the country's development and effective social welfare factor of our community.

It is up to the entity to represent the hospitals associated with the FBH, to support the legitimate interests of its affiliates, as well as to organize congresses, courses, seminars and conferences, effectively providing the continuity of its guiding principles for the full development of hospitals in Alagoas.

Currently, AHEAL consists of 16 associated hospitals, totaling over 1.847 beds. The Association remains vigilant and attentive to the health policy in the country, in line with the actions promoted by FBH, in order to promote the constant updating of its members, paying attention to the technical-scientific advances in medicine and the quality of health services.

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Bahia State Hospitals and Health Services Association

Bahia State Hospitals and Health Services Association is a non-profit or economic civil association, founded on October 20th, 1965. Today, in the state, there are 635 hospitals and 14.186 beds.

Since its inception almost 50 years ago, AHSEB has been committed to: permanently contributing to the orientation of associates with a view to the quality of the health sector in Bahia state; to appear as a procedural substitute in the defense of the interests of its members in the judicial or administrative sphere; represent associates before authorities, professional associations, public or private institutions and the general public, in defense of their interests, rights and reputation.

The purpose of the Association is to approximate hospitals, clinics and other establishments in the area, stimulating the exchange of information, making AHSEB a reference for the Health Sector, in the search for solving problems involving private health area in the state. Through partnerships with important and reputable entities - Salvador University (Unifa-cs), Federal University of Bahia (UFBA), Northern University of Paraná (Unopar) and Brazilian Micro and Small Business Support Service (Sebrae) -, AHSEB achieves excellence in continuing education.

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Ceará State Hospitals Association

Ceará State Hospitals Association (AHECE) was created in 1967, a non-profit organization that seeks to defend the interests of its members (hospitals and clinics) and also those who provide services to SUS, as well as the supplementary health chain (operators, insurers, cooperatives and self-management tellers).

The Ceará state has 277 hospitals and 8.816 beds. The entity also acts with the Executive, Legislative and Judiciary powers, promoting congresses and courses aiming at the constant improvement of the political-administrative management of its associates.

The Association currently operates in its own headquarters acquired in August 2007, with the Covenant Department covering hospitals and imaging clinics and the Legal Department.

It is worth being associated, because only then the benefits derived from the entity's work in defense of the Health Sector will be achieved.

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Espírito Santo Health Hospitals, Clinics and Service Providers Association

Espírito Santo Health Hospitals, Clinics and Service Providers Association (AHCES), together with the Union of Health Services Establishments of the State of Espírito Santo (SINDHES), are the only legal representatives of the economic category in the Espírito Santo area, bringing together over 3.000 companies in the state. The Association is responsible for defending the collective or individual rights and interests of the category, including legal, technical and administrative matters.

The Association history began on December 10th, 1970, in Vitória-ES, with an assembly between representatives of hospitals, clinics, nursing homes and laboratories of the philanthropic and private network installed in the state. At the time, the first board of directors of AHCES was elected, chaired by Dr. Herwan Wanderley.

From the beginning, there was the participation and support of companies from all over the state, which saw in the Association a democratic and important space for negotiations and discussions of the sector. Since then, AHCES's trajectory has been marked by the defense of the collective interests of affiliated health institutions, allied to modernization, resoluteness and quality in the provision of services to the Espírito Santo population.

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Goiás State Hospitals Association

Goiás State Hospitals Association (AHEG) was founded on August 6th, 1968, being formed for the purpose of defining and orienting hospital policies and standards of its members, aiming at quality, rationalization, improvement in care and treatment, the establishment of rules for interpersonal and interdepartmental relationships in hospitals, and the maintenance of technical-operational and market research bodies. The Association represents the sector in a state that includes 435 hospitals and 11.394 hospital beds.

AHEG also aims to maintain cultural activities, such as: directed events, study exchange, publications, courses, training and representation of its members before the public authorities, class entities and the general public, always subordinated to their interests, their defense and their rights.

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Minas Gerais Hospitals Association

Due to the need for leadership in the medical and hospital area, Minas Gerais Hospitals Association (AHMG) was founded on December 9th, 1956.

Due to Belo Horizonte growth and to the increasing arrival of illness from the interior of the state, the supply of hospital beds in the capital no longer supported the demand. These facts, added to the nationalization of care services, motivated the emergence of new hospital organizations. Today the state has 677 hospitals and 32.015 beds.

To represent them there was the Hospitals' Union. However, due to the strictness of the specific legislation, the union could not act with the desired freedom with the Social Security entities. In view of this, it was unanimous to welcome the founding of AHMG.

Structured on the principles of medical ethics, AHMG was a department of the Medical Association of Minas Gerais, but soon became autonomous, given the need for broad autonomy and independence of action.

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Pará State Hospitals and Healthcare Association

Pará State Hospitals and Healthcare Association (AHCSEP) was founded on January 27th, 1977 with the aim of doing effective work for the hospital and nursing home class. There are 239 hospitals with 8.443 beds throughout the state.

The first board had Fernando Guimarães as president, Carlos Costa de Oliveira as vice president, Joaquim Alcides Queiroz as 1st secretary, Sérgio Vasconcelos Paiva as 2nd Secretary, Fernando Jordão de Souza as 1st Treasurer and Victor Moutinho da Conceição as 2nd Treasurer. On February 16, 2001, AHCSEP was merged into the Union of Health Services Establishments of the State of Pará (Sindesspa).

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Paraibana Association of Hospitals (APH)

Founded on July 26th, 1968, its vision is to act with excellence in health care, promoting the search for the improvement of services offered by associated institutions with the aim of providing society with access to a quality, humanized and high resolution medicine. Through the work done by APH, the associates are represented with public agencies and agreements for any and every negotiatios of institutional nature. The state has 153 hospitals and 3.143 hospital beds, and the Association is working to continuously strengthen the sector.

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Paraná State Hospitals Association

The Association was born under the necessity of strengthening the political actions and technological updating and knowledge, complementing the attributions of the Union of Hospitals (Sindipar) and, later, of the Federation of Hospitals and Health Services Establishments of the State of Paraná (FEHOSPAR). The state has 502 hospitals and 20,181 beds. The Association also represents the promotion of exchanges between members to share experiences and knowledge, aiming at improving the standard of the service and reducing operating costs.

In 2016, AHOPAR celebrated its 43rd anniversary. The story began to be constructed in March 1973, when 16 representatives of Curitiba›s main hospital institutions met in consecutive assemblies to form a non-profit organization that, as a FBH›s arm, could give more political voice in the defense of interests of the private hospital sector, complementing the actions inherent to the union of the category, the Sindipar. AHOPAR›s trajectory presents great achievements that deserve to celebrate its leaders and associates.

In the early 1990s, the Association engaged in major national and state movements. It participated in the Parliamentary Health Front creation, the enhancement of public and supplementary health services and the reduction of taxes, including the Municipal Services Tax (ISS) and the URV lawsuit, which represents an important financial recovery to the network affiliated to the SUS. AHOPAR supported the Paranaense Institute of Hospital Accreditation (IPASS) creation and placed great emphasis on knowledge dissemination through courses, congresses and meetings.

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Northeastern Hospitals Association

Northeastern Hospitals Association (ANH) was founded on July 13rd, 1967 and works with associates to defend the interests of the sector, promoting scientific administration through courses, seminars and congresses to develop and improve hospital management. Strives for improvement in the conditions of hospital, medical and outpatient services. The state nowadays has 20.181 hospital beds and 250 hospitals.

It was designed by psychiatrist Luiz Inacio de Andrade Lima and founded in Recife with the partnership of Professor Waldemir Miranda and physicians Avelar de Castro Loureiro, Savio Vieira, João Marques de Sá and Tomé Dias.

The paths taken by the Association have always been of many struggles in defense of hospitals, especially those located in the inner cities that constantly faced the most diverse demands made by the State Health Department and the Municipal Health Secretariats.

Pernambuco state representative, which has one of the largest health centers in the country, ANH has the role of defending the interests of these establishments and strengthening regional leadership. A region that has more than 400 hospitals and 8.000 beds and generates more than 107.000 jobs, Pernambuco is one of the most sought locations for health care, due to technology, adequate infrastructure and advanced health facilities.

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Rio de Janeiro State Hospitals Association

Rio de Janeiro State Hospitals Association (AHERJ) is a private, non-profit civil society whose purpose is to gather, coordinate and defend the interests and objectives of health care units, whether hospitals, nursing homes, clinics, sanatoriums and other outpatient units, as well as complementary services for diagnostic and treatment, private or public, established in Rio de Janeiro state. The state has 504 hospitals and 21.091 beds.

In 1969, the Duque de Caxias Care Hospital (NADUC) was created, formed by a group of hospitals in that municipality. In 1971 NADUC was transformed into AHERJ. In 1972, November, the definitive Board of Directors formed by the founders of AHERJ was formed. In 1975, with the merger of Rio de Janeiro state with Guanabara state, by FBH's decision, AHERJ was officially recognized as the only representative resulting from the union of the two states.

In 2002, AHERJ, through the Niterói and São Gonçalo Regional, played a key role in rescuing the Niterói and São Gonçalo Hospital, Clinic and Health Care Union, promoting legal, economic, and communication advice. AHERJ reformed its bylaws in 2015 to form a new board of directors, with an executive vice president and the Ophthalmology Department.

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Rio Grande do Norte State Hospitals Association

Rio Grande do Norte State Hospitals Association (AHORN) was founded in 1973 to represent the state hospital sector, which has 2.336 beds and 107 hospitals. The paths taken by the Association in its trajectory of representativeness and struggles in defense of hospitals were marked by struggles and achievements.

Presidents' succession line: Paulo Santiago Henriques Bittencourt was the first AHORN president, reelected for five consecutive terms, from 1973 to 1983. Founding member, participated in the bylaws drafting committee and had a vote of honour proposed at the General Assembly; Severino Lopes da Silva, AHORN second president reelected for five consecutive terms from 1983 to 1993; Ricardo Bittencourt, AHORN third president, reelected for five consecutive terms from 1993 to 2003; Carlos Alexandre A. Garcia, AHORN fourth president, elected in 2003 and who served until 2005; Elson Sousa Miranda, AHORN fifth president, elected in 2005 and serving in office until 2008. The Association experienced a retirement moment, returning to its activities in 2013, with Élson Sousa Miranda serving as president for 13 years.

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Rio Grande do Sul Hospitals and Healthcare Association

The night of January 23rd, 1969 was a milestone for the health of the state. At a meeting at Hospital Moinhos de Vento, representatives of 14 institutions in Porto Alegre, Canoas, Caxias do Sul and Bento Gonçalves founded two entities that have since been indispensable in defending the interests of the category. The state today has 341 hospitals and 25.001 beds.

In almost five decades there were numerous advances and achievements, achieved with much commitment and unity of the entities of the state.

During the 1970s, the Association emphatically claimed policies favorable to the hospital network with national authorities and leaders, with presidents Geisel, Médici and Figueiredo. In the second run, chaired by Lauro Schuck, the Association moved to a second headquarters, located in a gallery (called Champs Élysees) in the Moinhos de Vento neighborhood.

AHRGS is currently developing a new communications and action plan to strengthen its membership base and offer more services to its maintainers.

Affiliated to the FBH since its foundation, came from AHRGS the former president of the FBH, the physician Angel Antonio Gomez Del Arroyo, and the also physician and former vice president for various managements, Lauro Schuck. AHRGS presidents were the hospital administrator Hélio Henriques (1969-1971), the physician Lauro Schuck (1971-1981), the physician Vicente Passos Maia Filho (1981-1982), the accountant Ilso Menegás (1982-1987, 1995-1998 and 2005-2010), the physician Paulo Schuller Maciel (1987-1989 and 1998-2005) and the physician Claudio Allgayer (1989-1995 and 2010-present).

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Santa Catarina State Hospitals Association

The Association was founded on August 31st, 1963, with the mission of representing the interests of the Santa Catarina hospital network. The state has 254 hospitals and 11.879 beds.

In January 1975 the headquarters of the entity was acquired, being expanded in 1983, with the acquisition of new adjoining rooms, giving conditions for the accomplishment of its activities. Since 1980, AHESC has decentralized its activities by creating seven regional centers, which were renamed Regional Hospital Administrative Council (CARH), and in 2009, as a result of strategic planning, were renamed AHESC Regional, divided into the following regions: Greater Florianópolis Regional, North and Northeast Regional, South Regional, Mountain Regional, Midwest Regional, Western Regional and Valleys Regional.

The entity's objectives are: to define and guide the hospital policy in the state; promote the development of hospital care; establish operating rules aimed at the integration of medical services; represent associates and defend their interests, rights and reputations; promote the development of scientific administration through courses and seminars in the various areas of interest of the hospital class; disclose and enforce the Code of Ethics of the Hospital Administrator and other professionals associated.

In August 1995, the entity had an important reinforcement in carrying out the activities inherent to health. The Federation of Hospitals and Health Services Establishments of the State of Santa Catarina (FEHOESC) creation only added to AHESC's efforts, consolidating the partnership in May 1996, with the union of the two entities in the same work environment, at the AHESC office.

In 2010, AHESC and FEHOESC joined forces and acquired a new, broader and more adequate headquarters to develop activities and better serve their associates. AHESC currently represents 105 associated hospitals, totaling over 8.365 beds.

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São Paulo State Hospitals Association

On June 7th, 1965, the Hospitals Association was created to provide services to the Social Security, presided at the time by Livio Amato. Two years after its founding, on August 7th, 1967, the entity was renamed the São Paulo State Hospitals Association and its president was Pierpaolo Gerbini.

The state today has 1.059 hospitals and 66.479 hospital beds. AHESP has the great mission of representing the largest health center in the country and acting to defend the interests of the hospital sector. It works to establish policies in the hospital management area, encouraging the adoption of good practices, aimed at quality care, patient safety and preserving the sustainability of the sector. Facilitates and assists the relationship of hospitals with the market and the regulatory body. Represents its members before public and private institutions. It promotes studies, research and events to improve the technical and administrative staff of members, as well as exchanges between members and institutions in the area of health care. Defends the common legal and economic interests of its members.

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