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THE ERRO IN HEALTH-CARE ORGANIZATIONS

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Resumo

Nas organizações de saúde, como em qualquer organização, ocorrem incidentes. O presente trabalho procura analisar os incidentes enquanto sintomas de disfuncionamentos e/ou falhas do sistema, recorrendo para a sua detecção aos instrumentos HFMEA e Stream Analysis, complementando o diagnóstico com avaliação do modelo de gestão, estilo de liderança e funcionamento do trabalho em equipa, no sentido de criar um modelo para "Diagnóstico e Intervenção nas Organizações de Saúde", que privilegie o diálogo, o empenhamento, os compromisso, a aprendizagem e a responsabilidade, como ferramentas fundamentais da segurança e fiabilidade, necessárias à mudança organizacional que se impõe.

Palavras-chave:

Diagnóstico e Intervenção, Incidentes, Trajectória da Doença, Segurança e Fiabilidade.

Abstract

Health-care organizations, as in any organization, incidents or errors will likely occur. The present work looks to analyze theses so called incidents as symptoms of dysfunctions and/or failures within the organizational system, utilizing for this effect instruments such as HFMEA and Stream Analysis, also complementing the diagnosis will be an evaluation of the management model, style of leadership and functioning of the work team, in the direction to create a "Health-Care Organization Diagnosis and Intervention" model, that privilege dialogue, engagement, commitment, learning and responsibility, as basic tools for safety and reliability, necessary for the needed organizational change.

Key-Words:

Diagnosis and Intervention, Incidents, Illness Trajectory, Safety and Reliability.

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1. Introduction

Healthcare Organizations (HO) distinguish themselves from other organizations due in part to their very specific mission, and the extended know-how and inter-dependency of its professionals, based on these two factors we can state that HO in general require a very specific managerial model.

Thus the need of such fundamental components such as: feedback, professional compensation, cultural transparency and innovation, client focus (client in this case are the patients themselves) and finally a strong leadership that is universally recognized throughout the organization and its members.

Utilizing the most relevant literate pertaining to organizational dynamics, as well as a concern with the development of the role of human resources in line with quality and competitiveness of organizations, but also the meaning of organizational culture, the dynamics of the errors within health-care and its influence on the implementation of a culture of safety and security, concluding with a methodical approach.

2.: Formulation of the objectives and problem

The underlying problem that is presented in this work, is the result of recognizing the inevitable occurrence of incidents within health-organizations and also the necessity of the measures that need to be taken to allow identification of the Core problems that originate those same incidents, thus focusing on a diagnostic perspective by utilizing and analyzing the Healthcare Failure Mode and Effect Analysis (HFMEA) and Stream Analysis instruments.

The diagnostic study will determine the correction or elimination of dysfunctions that are detected, by utilizing application that will provide corrective actions and/or improvements, therefore assuming a very important part in the development of the organization.

Furthermore, in order to enrich that diagnosis, in both objectivity and clarity the study will refer to a set of methodological tools that allow answers to questions such as:

- Type of management culture prevalent in the organization.
- Existence or not of a strong team culture within the organization.
- Motivation of employees of the organization in carrying out their work.
- Type of commitment prevalent within the organization.
- Strategies of conflict resolution used by most employees of the organization.
- Major incidents occurring in the organization, its effects and their causes.
- Actions to be taken to make the management of the organization not only more effective/efficient, but rather more concerned with the safety and reliability.

In this sense, the chapters are structured so that, from **Chapter 3** to **Chapter 6**, is made up of mostly the theoretical framework of the generic model presented in **Chapter 7**, "Health-Care Diagnosis and Intervention".

Thus, in **Chapter 3** - Health organizations as professional bureaucracies proceed to the characterization of the HO, demonstrating the presence of different cultures and how they influence the organizational process.

In Chapter 4 - The Health Care as complex organizational systems, it emphasizes the importance of organizational systems such as HO-oriented reliability.

In Chapter 5 - Management model in health organizations focuses on the analysis of the fundamental tools for building a model of management of the HO.

In Chapter 6 - Organizational culture highlights the importance of organizational culture in shaping the security and reliability.

In conclusion (**Chapter 8**) underscore the most important aspects that characterize this work.

3.: The Health-care Organization as Bureaucracies

According to the organizational configurations model of MINZBERG each organization can consist of a maximum of six basic yet fundamental parts:

- Strategic Apex (top management)
- Middle Line (middle management)
- Technostructure (analysts that design systems, standardize processes, etc)
- Operating Core (operations, operational processes)
- Support Staff (support outside of operating workflow)
- Ideology (halo of beliefs and traditions; norms, values, culture)

MINZBERG considers that the structure of an organization is the result of the sum between the frameworks used by an organization to divide its function into various task as well as the resources needed to execute and coordinate those various tasks, thus there can only be six valid coordinating mechanisms:

- Direct supervision (typical for entrepreneurial organizations)
- Standardization of work (typical for machine organizations)
- Standardization of skills (typical for professional organizations)
- Standardization of outputs (typical for diversified organizations)
- Mutual Adjustment (typical for innovative organizations)
- Standardization of norms (typical for missionary organizations)

Utilizing MINZBERG coordinating mechanisms, it is possible to determine that Health-care organizations follow the Standardization of skills mechanism, not only due to the standardized services they provide that are largely supported by the staffs know-how but also due to the complexity involved in undertaking any activity, thus the need for a direct control of the processes (Operating Core). Therefore such organizations tend to adopt a more Standardization of skills approach when it comes to a coordination mechanism, thus allowing the organization the ability of a centralize and decentralize coordination, which in turn gives rise to organizational configuration similar to a Professional Organization (Professional Bureaucracy).

Health-care professionals without any previous definition actively work in areas determined by their own skill. As stated by MARTINS (2004), the staff coordinates between themselves without foreign initiative, in accordance with the task they are confronted with, the prime example is the task of patient care (both fiscally and mentally), thus the high level of communication between all parties involved in the various steps of the patients care will became a primary factor in the determining organizational efficiency.

The standardization of the skills also bring forth a stronger reassessment of an executable and mutual co-operational system, due to the simple fact that the standardization which itself is a by-product of the integration (professional as well as social) of the staff within the organization. Thus the focal element of a functioning organization is the ability to partake in the development of its workers know-how (NUNES, 1994).

NUNES also points out that the importance that, normally the staff have a high degree of independence in their work, and that they have a very reduce number of managers when it comes to their position within the organizational hierarchy, and due to its strong training it almost completely excuses the need of a Technostructure, the only exception being the Support Staff, whose staff tends to be numerous in such a way, that it gives place to a horizontal and vertical decentralization. This context of accented autonomy on the part of the Operating Core, which coexists with the group that guarantees the logistic support, thus this kind of environment favours the emergency of two parallel hierarchies: a democratic one in which all the operational staff fits in to it; and the other an autocratic one primarily aimed at the support staff.

The health-care organizations are characterized, thus far, as having a predominantly strong Operating Core while also having a very weekend Technostructure (ZABADA, 1998), MARTINS (2004) states that this is one of the obstacles that hinders the development of systems of quality control within hospitals, due to the simple fact that for the development of norms for the implement of certification of the quality, there is a need to have a very strong Technostructure, as well as a coherent and strong hierarchical line.

The author also states that the difference that exist in the logistic that corresponds to the Operating Core and the Support Staff, will probably o result in conflict within the organization. The hierarchic line interrupts the hierarchic flow between Strategic Apex and the Operating Core, thus debilitating the Administration rendering it unable to execute its ability to direct those responsible for the medical services, limiting its services to simple "relationship" with the responsible parties, while the administration of the logistic services, technostructure and all other functions are handled by the medical personal as well as the nursing staff, including all the negative consequences in terms of organizational management, this differentiation explains the dichotomy between the quality of health care and the sometimes inferior level of management that assures the execution of these services. These so called differences, can be imputed into the organizational model and subsequently used to access the health of an organization, as stated by NUNES (1994), thus these models present a certain level of difficulty when integrating distinct variables, which have complex relations and in many cases are loosely connected, thus rendering the development of appropriate strategies for its management difficult.

For ORTON and WEICK, the concept of loosely coupled systems is a result of the situational state of the interactions between the various elements within an organization, keeping however, its capacity of self-determination. These authors identify and categorize the causes of loosely coupled systems into three factors: the inability to determine the statuesque, the fractured nature of the external environment as well as the internal environment, pointing to forms to compensate for such imperfect connection: leadership, focusing attention and the sharing of values.

In NUNES (1994) perspective these situations are very much present in current health-care organizations. Utilizing FOMBRUM (1986) concept, in which it states that the social structure of any organization is composed of three dimensions in which condition the social and individual organization: The infrastructure, sociostructure and superstructure, the author also relates the presence of an internal dynamisms within then the infrastructure itself (the coexisting of distinct technological fields, the proper capacity to deal with the technology at hand and the interdependence of the varies professionals do to the high variability of the same technologies). The constant fragmentation of the internal environment is due in part to the fact that at a

sociostructure level the professional staff's maintain their autonomy, as well as the strong cultural differentiation and the differentiation of identities within the superstructure. While external fragmentation is caused due to, complex forces (*pathology)* as well as contradictory expectations (ex: cares and services that are expected by the client as well as the reductions of costs of the policies for patient care).

Still, according to same author, a way to compensate for the imperfect connections within the health-care organizations is a focus that centres on the concept of a system where the user is able to be guided by the system which in turn utilizes permanent set of information for any specific context that might arise as well as not being subjected to direct control. As for leadership, it will have a difficult role to play, on one hand is the need to increase the effort of coordinating the tasks that are involved with running health organizations and on the other hand is the necessity of a continuing independence of the organizations professionals as well as transforming the values of staff.

4.: Health-care Organizations as Complex Organizational System

As stated by MARTINS (2004), health-care organizations present a high degree of complexity in their work as well as a high degree of technology that is involved, thus can be characterizes as having a very high degree of interdependence between men and machines, can ultimately lead to the creation of favourable conditions in which errors may occur, in which case it is important to establish that the factor of reliability of the system, as one of the many dimension of the management as well as an important element of change within these same organizations.

As with any case of High Reliability Organizations, even when face with constant unexpected situations, it still manages to keep a very high degree of reliability in its performance, this capacity to manage the unexpected is something that one can claim is an important factor for the health-care organizations.

As is stated by MARTINS: "The reliability of a organization is developed through a number of processes specifically aimed at increasing the capacity within an organization to anticipate and take note of unforeseen events". MARTINS also cites WEICK (1999, 2001), five processes that induce a High Reliability Organization (HRO), that is the structure of the diagnosis for a high reliability organization must have the follow five characteristics : Preoccupation with failure, reluctance to simplify interpretations, sensitivity to operations, commitment to resilience, as well as deference to expertise.

Thus the following dynamics represent a structure with an aim of creating a HRO:

Strategy: Anticipate the unexpected	
Processes	Procedures
Preoccupation with failure	Develop well-defined systems for reporting. Encourage upstream reporting of near and actual failures of all kinds.

Strategy: Contain the unexpected	
Processes	Procedures
Commitment to Resilience	Capacity to not be disabled by errors or crises, by mobilizing into informal, ad hoc networks and

			engage in "expert" problem solving.
Reluctance to simplify interpretations	Summaries influence decisions. Reluctance to discard information because it's this information that may be required to predict, and thereby prevent, loss.		
Sensitivity to operations	The need to create and rely on highly informed front line operators and encourage them to report on their experiences. As Weick points out that "people who refuse to speak up out of fear enact a system that knows less than it needs to know to remain effective."	Deference to expertise	Senior managers defer to the expertise of those with the greatest knowledge and expertise of a problem, irrespective of certification, formal degree or hierarchy. Thus empowering those on the front line.

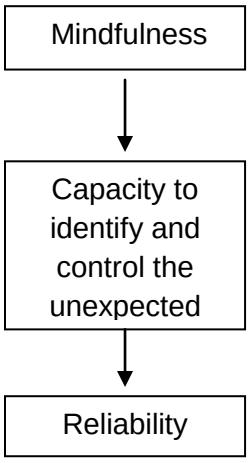

Figure 1 –The process for creating a High Reliability Organization

Thus MARTINS justifies the relevance of this model, by presenting three main dimensions:

• "The human dimension, health-care errors provoke, immense suffering or event death, should an error arise.

• The political dimension, that is, for the implicit commitment and the allegiance of the organizations of health to its mission to serve it through the concentration of the management in its customers/citizens.

• The ethical dimension, we owe the victims of health-care errors. All the necessary effort to be able to firmly say to these people: It will not happen again."

5: A Management Model in Health-care Organizations

The error as a periphery of the system

Like many organization in existence, health-care organizations are involved in extremely high risk activities. The adverse consequents pertaining to the treatment and not of the illness of itself, can have serious implications in the patients, these implications can also bring about the death of said patient.

When dealing with health issues, it is important to note that any negative events and/or errors must be prevented, detected and limited, in order to prevent the rise of serious errors. Everything that is able to be perceived and determined needs to become easily focused for planning, automation and computerization. Incapacity to manage that which is unexpected in ones daily activity is what contributes to the emergence of the errors that if are encountered in the organizational matrix.

Thus the error in itself translates to a disjointing between the organization and its surrounding environment (RASMUSSEN, 1994). In the case of the health-care organizations the challenge arises in its capacity of facing said incidents, that is to say all the events that maybe produce in an unexpected and unanticipated way, modifying the normal functioning of the production system, and for which the system itself does not have any means of auto-regulation. Thus said set of incidents, in which there is a lack of capacity to surpass them, represents the periphery of the system (MARTINS, 2004) thus any and all activity with the precise aim of minimizing the effects that these errors may cause, will translate into diminishing this periphery, with the direct consequent of widening of the "borders", that limit the organizations capacity of intervening in the system, thus making it more efficient.

In Martins perspective, the author considers that, the analysis of these incidents assumes an important role, acting as warning seines to their nature, that is, these incidents can be perceived as the visible part of an iceberg, which in turn can identify the potential underlying structural causes within the different dimensions of the organizational system. The manner to detect these said incidents is established in the illness trajectory (STRAUSS, 1977).

The illness trajectory

The term "trajectory" was coined to refer not only to the physiological unfolding of a patient's disease but to the total organization of work done over that course of illness plus the impact on those involved with that work and its organization, the various kinds of work done in managing the course of the illness and in handling the interrelationships involved in that task can be referred to as "trajectory work".

Thus, Understanding the process by sequences of time, by sequences of emotional events or by sequences of physiological changes or by sequences of social interactions with meaningful individuals are all possibilities. But because each selection is only one possibility, it would consequently be an artificial representation super-imposed on the trajectory to serve some particular purpose - like accounting for medical staff and nursing staff and their effective use of time or researching the progression of an illness or treatment program or nursing care strategy. These are artificial re-creations of the trajectory in the sense that they are creations to serve some observer's particular purpose. Any one view of the trajectory - and there may be an infinite variety of possible views - is one representation which has to be recognized in its own terms as that one possible view. But because that one view can be claimed, does not invalidate any other possible view nor render that particular selection as any more valid than any other except according to the terms in which it has been recognized.

Thus, the illness trajectory is primarily characterized for the sequence of tasks expected and sometimes routine, but still subject to multiple and unexpected contingencies which are subject to a variety of events that occur primarily in the case of contemporary chronic diseases, as well as the fact that the subject of a disease is not inert, which tent to react differently, condition throughout the various stages the specific types of trajectory.

In this way, the study of the trajectory it not only estimates an anticipated contingencies belonging not only to the illness or the patient, but sometimes also belonging to the organization so as to better control them. Thus management of illness trajectories must

be entered on anticipating and controlling the various contingencies that may occur in an unexpected and/or unknown way.

Thus considering the trajectory in the light of a process of management, will require the use of HFMEA (Healthcare Failure Mode and Effect Analysis) instrument, which was developed for the NCPS (National Centre will be Patient Safety) and adapted for the JCAHO (Joint Commission on Accreditation of Healthcare Organizations), as method to evaluate the incidents that occur in one definitive process (trajectory).

The HFMEA analysis will need the following methodology to be realized:

1 - Detailed examination of the process, with complete identification of all its phases;

2 - Identification of the imperfections that are a result of the performance of the functions;

3 – Detection of every consequence that may arise from each imperfection;

4 - Identification of the supposed causes;

5 - Evaluation of the degree of seriousness for each one of the effects;

6 - Evaluation of each imperfection in terms of its probability or frequency of occurrence;

7 - Decision based on the most critical factors,

8 - Evaluation of the impact of these decisions in the processes.

According to MARTINS (2004), the HFMEA instrument will allow a “Single Loop” analysis of the imperfections or errors within the processes itself, in other words it will permit the detection of any weak points thus permitting the optimization of the entire process, without questioning the values, assumptions and policies that led to such actions in the first place.

For the same author, the "Double Loop" analysis, is a much more exhausting analysis in terms of the organization itself questioning the values, assumptions and policies that led to the actions in the first place within an organizational context, and thru this questioning demand change within the different dimension in which the system is currently acting in, for this the Stream Analysis model (PORRAS, 1987) becomes a valuable resource of data.

Stream Analysis

The Stream Analysis model structures an organization into four basic dimensions: the formal dimension or organizational arrangements (objectives, procedures, norms), social factors (culture, attitudes, motivational levels, conflict), technology (abilities, technology) the physical setting (physical space, ambient conditions of work, conditions). It is also important to note that the mission, environment as well as the organizational process are in constant evolution. As stated by MARTINS (2004), "design of the Formal Organization, the Social Factors, the Technology and the Physical Factors will lead to the consolidation of an organization's mission and vision".

The vision of any organization is the sum of its objectives, in other words what it is aiming to reach. The organisational vision focuses primarily on what the organization considers to be the desirable future, where the circumstances differ/better than the current reality; it does not focus on the way the organization tries to attain such a future. While the vision is the core of an organization, the mission describes the "how" an organization progresses. Due to constant change of the environment, the organizational mission needs to suffer continuous and progressive changes, thus a continuum need for an ever adapting strategy to face and adapt to new circumstances.

Starting from the collection of information on these components, the Stream Analysis is a methodology to diagnose the dysfunctions within an organization and plan, as well as implement and monitor the necessary changes, in other words it provides a tool to carry out the most effective change pertaining to the betterment of organizational effectiveness utilizing the following phases: diagnosis, intervention/ plan for change and monitoring/monitoring all the action that are taken.

Stream Analysis - Diagnostic

This analysis aims to identify the problems, by identifying their cause-effect relationships, which in turn cause dysfunctions within the organization, by utilizing to the following procedures:

- Training a Change Management Team: chosen from among the heads of the main core of the organization, as well as being responsible for leading all phases of the change process.
- Gathering of information: in a systematic manner by the agent of change, using interviews, questionnaires, direct observation and document analysis.
- Categorization of the problems: made at each stream, once completed the data gathering and problem identification.
- Identification of the interrelationships between the various problems: achieved by detecting the cause-effect relationships of these problems, with the aim of identifying the various problems, mainly core problems, those whose existence directly or indirectly generate other problems.
- Problem analysis: through the perception of the problems stream, from where and how it first manifest to the consequences of its existence.

Stream Analysis – Intervention (Plan for Change)

Corresponds to the development of an action plan for the implementation of certain factors that will permit change, within a determine set of time, thus leading to a desired state.

Stream Analysis – Monitoring

Encompasses the monitoring of the intervention process by verifying that there is no gap between what is planned and what is realized.

Stream Diagnostic Chart

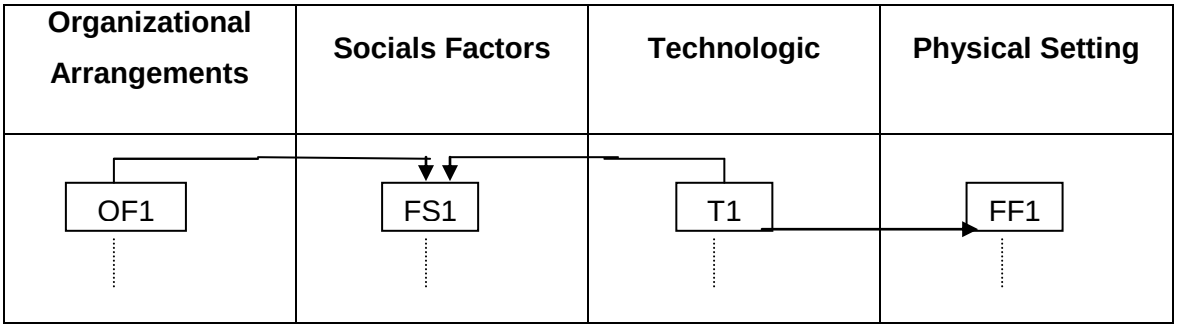

Figure 2 – Stream diagnostic chart

Explicative Notes:

- Each incident recorded is represented in a box
- FS1 – Is a Recorded Incident, that is a cause (represented by the arrow that enters the box) which is an effect (represented by the arrow that is leaving the box) of the recorded T1 incident.
- Incidents that directly or indirectly generate other incidents are considered core problems (represented by arrows pointing outwards) EX: OF1; T1.
- Incidents that are a direct or indirect result of other incidents (symptoms) are represented by arrows pointing inwards. EX: FS1, FF1.

As stated by Martins (2004): "*the analysis of the Stream Diagnostic Chart clearly revels the visible part of incidents – the symptoms - recorded in the daily observation of the functioning of an organization. Based on these symptoms and building a chain of major incidents, it becomes possible to uncover the core problems, factors affecting organizational effectiveness, and other symptoms and incidents along the streams"*

Risk Management in Health-care Organizations

The need to reduce the number of errors is the basic principle on which rests the great challenge faced by health-care organizations in terms of quality. Recent studies have shown that one in ten patients is affected by preventable problems and adverse effects related to health-care treatment, and in a context where there is a great variation among

the individuals that provide such care, cannot posse the sole justification that the different characteristics of patients is to blame for any and all problems.

Considering the number of errors and variance in health-care, the application of basic principles of management is still essential, which in turn explains the specific need of creating a transparent and measurable patient care process. However, there are different mechanisms that prevent their effective enforcement, including the fact that health-care professionals often feel threatened, due to their notion that transparency can often times lead to less autonomy, the complexity and differences in each case constitute a challenge to the methods used in its assessment and management.

Clinical risk management in health-care organizations is primarily aimed at not only the prevention and management of medical error, but also all adverse events within the system, in other words by utilizing a methodology that is based on detecting events it will seek to improve clinical safety and consequently achieve the objective of improving the quality of the system.

It is therefore necessary to find a process that involves in a constructive manner both the managers and health-care professionals. In this field, it is to note as a good example, the Clinical Governance which is used in the United Kingdom, representing a new initiative to ensure and promote standards for the standard National Health Service (NHS), which include the risk so that adverse events are rapidly detected, investigated and taken care of, thus allowing a rapid dissemination of good practices that should be followed.

Clinical governance corresponds to a process of accountability of the units providing health-care, the continued improvement of the quality of their services as well as safeguarding the high standards of quality. It involves all members of the team in involved in health-care as well as the recognition of each for their contribution to the quality of services. It involves the joint effort of the entire team to identify situations in which improvement could be made, due to constant searching for the right solutions. This means accountability for services provided as well as the need to provide information to the service users.

As is stated by Martins (2004): "An examination of the various contributions that are emerging seem to say that there is a broad consensus to consider, as a major purpose of

management, to refocus the health-care organizations to their users, customers, citizens ... ", by following the same authors reasoning, it can be said that it is a concentration on the user (patient focused care), management of the illness trajectory as well as the subsequent risk management, posses enough credentials to be considered fundamental tools in building a model for managing health-care organizations.

The primary aim of risk management is the reduction of any incidence that my lead or result of accidents and errors, through safer practices as well as more secure work systems, giving an additional awareness among professionals that all the steps of providing health-care will generate a certain level of risk to a patient safety.

In this regard, adverse events, incidents and near miss errors should be reported systematically and also be part of a well structured and controlled program of risk management for patient safety, involving the creation of a culture is which does not focus on a sense of blame when facing quality services, due to the simple fact that blame does permit an approach that will allow for the identification of all underlying risk factors.

Patient safety cannot be considered the sole responsibility of one profession (nurses, doctors, etc). Errors can result from several factors, such as problems from clinical practices, poor training and professional development, equipment failures and deficiencies within infrastructures, organizations and operation systems.

6.: Organizational Culture

Patient Safety and Organizational Culture

Patient safety care begins with the top management and should extend to every health-care professional within the organization. A positive environment promotes excellence in health-care services. The high standards of care as well as the high levels of trust within professionals are consequences when there is non-punitive environment within the health-care organization. Just because there is non-punitive environment does not mean that individuals are deprived of responsibility and are never punished for their mistakes. In truth it means that the error is seen as an opportunity for improvement and the causes of the problems are intended to be reviewed and revised to best implement such care. An analysis of the causes that are at the root of the problem can indicate where it is recorded and as it happens, thus leading to a much more positive outcome. When there is an open and honest communication when reporting errors and potential problems, it creates a window of opportunity in which to repair the system, with positive consequences on patient safety.

Traditionally in health-care organizations, the culture of punishment represents the dominant professional culture. Thus, should an error occur the culprit is immediately punished a situation such as this will adversely affect the system itself. There are studies that prove the fact that accusing someone who has committed a mistake does not determine a reduction of errors, instead it stimulates the feeling of guilt, thus creating an environment that favors repetition of the same errors, due to the prolific omission of reports (as a way to avoid punishment), leads to an increased in the difficulty in finding solutions to said problems. Since the occurrence of errors can not be avoid completely, health-care organizations should aim to develop a learning culture (not punitive) that focus its concerns on information and analysis of errors and other adverse events that may occur.

Organizational culture emerges, as is described by Martins (2004): *"... as the structuring element as well as fundamental for safety and reliability."*

Organizational Culture in Health-care Organizations

With regards to health-care organizations, it can be said that it is characterized by a strong corporate culture based on teamwork as well as open to participation by employees. There is a constant concern in generating a pleasant working environment so that the well-being created contributes to the employee satisfaction, with positive ramifications in the interaction with patients, which in itself requires a lot form the professionals.

According to Nunes (1994), health organizations are "primarily focus on internal aspects, with little concern with either attaining objectives or adapting to the outside environment" and there also seems to be a major difficulty in such organizations in creating a "strong" culture, particularly with regard to the clear sharing of values throughout the organization. Based on the current literature on this subject, health-care organizations in essence head towards an internal culture orientation. Some factors that contribute to an almost exclusively internal approach, is due to the lack of data gathering instruments that make it possible to identify the organization area of affect as well as know the market and future possibilities for development CREMADEZ (1992, cit. by MARTINS, 2004).

Since organizational culture is a manifestation of internalized assumptions, understandings that are shared by all individuals in an organization, expressed in many ways as values, beliefs, attitudes, behaviors and goals of an organization, it establishes an identity and provides a vital link between individuals of an organization and their corresponding task, therefore it can be regarded as the strongest determinant for success or failure an organization has as well as the fact that it cannot be static, but a byproduct of a dynamic interactions between the various elements of an organization. Hence we conclude that a culture of reliable patient care is a result of an organizational effort to move all its cultural elements towards the goal of safety.

The culture of reliable patient care must be considered as a fundamental dimension of organizational culture, primarily focusing in improving and enhancing safe and secure practices, this translates into a response to the specific needs of institutions where potential risks to health-care professionals may arise.

Thus identifying opportunities to improve should be developed as well as implement strategies for change. Following measures that allow for the determination of the effectiveness of the improvements that are implemented as well as promote continuing professional evaluation, taking into account not only the established safety goals for the client / patient but the possibility for new improvement opportunities. Success comes through a clear organizational commitment to safety. Thus, the primary components for such a safety infrastructure will consist of a safety leader, a safety committee, an improvement in safety process/event that will permit a quick information and response from the system and finally creating and maintaining of training programs.

Research on patient safety tends to focus on the adverse events in order to prevent them from occurring. From this arise various important issues that begin at the first report of an incident and extend to the perception of the importance of safety as well as the meaning of a culture reliability and safety itself.

Organizational culture is based on assumptions that influence individuals to manage the unexpected (the foundation for reliability) and according to WEICK (2001) this type of culture is a merger of various different types of cultures:

- **Reporting Culture**

In a reporting culture, professionals are encouraged to report errors, incidents and near-misses, so as to be able to understand how they came to be. A reporting culture has its own gestation time as well as never taking place without involvement from all levels within the organization.

The willingness of workers to report depends on their belief that management will support and reward reporting and that discipline occurs based on risk-taking, it is also important to note that there needs to be is a clear line between acceptable and unacceptable behavior workers.

There is a need to design a communication system that is able to learn from any mistakes that may occur, due to the fact that voluntary reporting of such cases provide information leading to an improvement in patient safety. However, due to the overwhelming feeling of "guilt and shame" that maybe present in the system, not all

incidents are reported, but, as mentioned before they are often just the "tip of the iceberg."

Communication needs to be structured process based on mutual reciprocation of information, in other words the understanding of information both given and received as well able to transmit the thoughts, feelings and ideas of the user. A well-planned internal communication is essential for the prosperity sub-sequential success of any organization.

The reporting of errors is the first step in the process leading to its reduction and consequent improvement of quality. It deserves special attention when it comes to the analysis and understanding of what the causes of errors are, in order to be developed learning systems that improve patient safety. This analysis examines the adverse events that are reported so as to better understand where, how and why the system failed as well as the circumstances surrounding it. The analysis of critical incidents, even if they have been unsuccessful, will lead to a better understand of the conditions that may led to errors or the risk of making errors, but also indicates the factors that contributed to it. The return communication and dissemination of information leading to awareness and understanding of the errors that occur in the system will contribute to an improvement in the organizational structure, since the knowledge and dissemination of errors results in creating ways that will permit the reduction or eliminating of them. Organizations and health-care professionals should be encouraged to voluntary participate in reporting of errors, being aware that the culture itself represents an important component of the organizations commitment to patient safety and system reliability.

- **Just Culture**

Design a safety culture based on a just environment, where the teams of health-care professionals are encouraged, confronted and rewarded by their efforts in reporting safety and error reports.

In a fair and just environment, workers understand that they can discuss or report errors without fear of being punished or subjected to management reprisals, assuming that if

such reprisals come to be, it is because there are known and valid arguments that justify them.

In a just culture, workers are able to establish as well as differentiate the meaning between what is acceptable behavior and constitutes as unacceptable behavior. A just culture does not accept negligence or intentional violations of established rules and standards.

- **Flexible Culture**

A flexible culture adapts to the continuous requirements of change. A flexible culture is mainly based on two key aspects: a rapid communication and high competence of human resources.

The fluidity of information relates to the "organizational design", the lower the hierarchical level of an organization, the faster the communication flows. Also the more decentralized the decision-making capacity of the organization is the more flexible is shown in the face of change, by taking advantage of front line staff expertise. An organization that owns the decision focused exclusively in the top of its hierarchy can not reap the benefits of any security or reliability measures resulting from organizational good practice due to a flexible culture.

- **Learning Culture**

A learning culture is based on the use of the advantage gained through the combination of the reporting, just and flexibility, enabling individuals to improve their professional performance and also adopt the new procedures distributed by a fair and timely manner, and finally analyze which in turn leads to a sustained improvement of the organization.

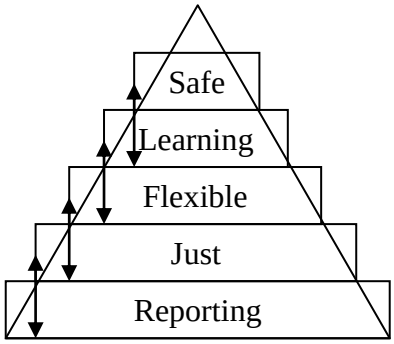

Figure 3: Components of a safety culture

Explicative Notes

Reporting

Any safety information system depends crucially on the willing participation of the workforce, the people in direct contact with the hazards. To achieve this, it is necessary to engineer a *reporting culture*—an organization in which people are prepared to report their errors and near-misses.

Just

What is needed is a *just culture*, an atmosphere of trust in which people are encouraged, even rewarded, for providing essential safety-related information—but in which they are also clear about where the line must be drawn between acceptable and unacceptable behavior.

Flexible

A *flexible culture* takes a number of forms, but in many cases it involves shifting from the conventional hierarchical mode to a flatter professional structure, where control passes to task experts on the spot, and then reverts back to the traditional bureaucratic mode once the emergency has passed.

Learning

An organization must possess a *learning culture*—the willingness and the competence to draw the right conclusions from its safety information system,

> and the will to implement major reforms when their need is indicated. . . In most important respects, an informed culture *is* a safety culture.

Thus any health-care organization needs to follow the following steps if it wishes to attain a safer and reliable organization:

- Nonpunitive: reporters do not fear punishment as a result of reporting
- Confidential: identities of reporter, patient, institution are never revealed to a third party
- Independent: reporting is independent of any authority who has the power to discipline the reporter
- Expert analysis: reports are analyzed by those who have the knowledge to recognize underlying system causes of error
- Timely: reports are analyzed promptly and recommendations disseminated rapidly
- Systems-oriented: recommendations focus on systems not individuals
- Responsive: those receiving reports are capable of disseminating recommendations

7.: Health-care Diagnostic and Intervention Model

Due to the challenges that Healthcare Organizations now face (particularly in Portugal), we will highlight the focus on safety and reliability of an organizational, due to the relevance of three key areas:

- The social aspect, not only because the common citizen has the right to enjoy health-care, but above all else he possesses the right to be protected against suffering or even death that is a direct result of an error in providing such care.

- On a political aspect, the spending resources on health-care is seen as a key investment in the development of a countries human capital (only a healthy population can induce growth and development in a society), thus leading health-care organizations to achieve its mission by focusing its management on the public (customers, clients or patients), due to the simple fact that the organization existence is legitimized by them.

- The moral aspect, which deals with ethical issues that arise due to medical errors in relation to victims and their families.

On the other hand, Health-care organizations, particularly in Portugal face two of important obstacles. One is related to the organizations environment (external perspective) and the other obstacle emerging from within the organization itself. The first, in addition to incorporating the definition of the Vision/Mission of the organization, will also influence the development of the necessary strategy for its continued existence. In the second case, it is reflected in the result of the continuous adjustment to the organizational environment.

Thus, the increase aging population, increasing levels of demand from stakeholders, the financial constraints of the system, permanent technological sophistication, can be viewed as challenges that may open a window of opportunity to boost interest in

reliable patient care, or pose a new threat in which whose effects must be eliminated or reduced, thus requiring the organization to put effort so as to adapt to new situation.

Among the internal challenges the organization will face as well as the effort of adaptation that will bring about maximizations of its strengths as well as minimization of its weaknesses by addressing areas of potential development. In this case, it will come down to two crucial factors: the resources used in providing health-care and the performance obtained thru this service.

On the resource front what is needed is deep and analysis of all organizational processes, it needs to be sufficiently detailed so as to allow a thorough comprehension of all components existent within the organization.

With regard to the factor of performance, what is required is the use of dedicated indicators that will help to distinguish good quality performance from poor quality performance, thereby permitting the analysis of the level of effectiveness existent within the organization itself. The level of desired organizational effectiveness will be more easily achieved if all of its organizational processes are designed and implemented in a much more integrated manner. Thus the path an organization needs to follow is directly defined by the organizational strategy, which will define the direction of the changes that will need to be implemented so as to better adapt to the environment.

Methodology

Utilizing MARTINS (2004), the model for "Diagnosis and Intervention in Health Care" unfolds into various stages such as: diagnosis and intervention, corresponding to the graphical representation in Figure 4, which includes a set of methodological tools that, not only provide an integrated view of the entire organization it also enhances the process of identifying and resolving inefficiencies.

Diagnostic Phase

The current model is based on three important dimensions:

- The Strategic Vision
- Processes
- Results

The Strategic Vision

The environment determines the organization's mission, which in turn determines the reason for the continued existence of the organization. To achieve its mission the organization needs to continually create new strategies as well as generating new organizational practices that will enable the organization to change and adapt constantly as it faces new realities. The vision can be summarized as the ability to manage this change in parallel with that continuity.

The Strategy as a means to put into practice the strategic vision should and needs to be defined by the organization itself, in order to achieve a coherent design process so that it may reach the desired level of organizational effectiveness.

Processes

In order to verify the occurrence of any dysfunctions within the organization as well as determine the causes that gave rise to such problem, there is a need to resort to the integrative model Stream Analysis, which in addition to providing information about the organizational set-up it also reflects how the interaction between the organization and its environment affect positively or negatively the individual behavior.

To complement the organizational diagnosis, there is a need to utilizing the following tools where each one delivers a precise diagnostic aspect, so as to be able ascertain a more precise and objective diagnostic: *Healthcare Failure Mode and Effect Analysis* (HFMEA), Organizational Work & Design, Organizational Culture and finally the analysis of the different Styles Management as well as the use of Strategies for Conflict Resolution and Commitment.

The HFMEA reveal the existence of constraints in workflow as well as its impact in terms of severity and frequency, finding solutions and ranking them in terms of optimization process. In other words it is a prospective assessment that identifies and improves steps in a work process thereby reasonably ensuring a safe and clinically desirable outcome, it has a systematic approach so as to able to identify and prevent product and process problems before they occur.

The Diagnosis of Work Organization and Design provides indicators for an assessment of potential motivation as well as strategic functions of the organization, as well as the degree satisfaction and motivation held by the organizations employees. The instrument created by HACKMAN and OLDHAM (1975), the Job Diagnostic Survey (JDS) will serve as a tool to measure the level of motivation of the organizations employees by quantifying five important damnations (skill variety, task identity, task significance, autonomy and feedback). HACKMAN and OLDHAM's model proposes that attention to five job design characteristics produce three critical psychological states (experienced meaningfulness of the work, experienced responsibility for outcomes of the work, and knowledge of the actual results of the work activities) which increase the likelihood of positive personal and work outcomes, especially from employees with a high growth-need strength, including: high internal work motivation, high quality performance, high satisfaction with the work, and low absenteeism and turnover.

Diagnosis of Organizational Culture and Management Style, will serve to identify whether there are subcultures within the organization, if there exists a convergence of management style practiced thruout the organization as well as verify and asses the types of leadership within the services.

Conflict Resolution Strategies (THOMAS & KILMANN 1976), involving five different resolution styles (collaborative, accommodating, compromising, competitive and avoiding), in dealing with any conflict that may arise within the organization.

1. **Accommodation**, there is a certain self-sacrifice for the party that adopts this strategy, by minimizing the differences as well as overstating the points of agreement, seeking to satisfy the objectives of the other party.
2. **Competitive**, refers to the adoption of a win-lose strategy, as a result of this priority is given in achieving the objectives of one party over the interests of the other party. Thus should two or more groups adopt such a strategy it will generate likely generate an impasse in negotiations due to the rigidity that involves in the sole pursuit of one's objectives making it difficult to find a joint solution.
3. **Avoidance,** is characterized by one party taking a stance of denying or evading the existing problem. In some cases functions as a dilatory means of conflict resolution to a later time, while in other cases it signifies a "tactical retreat" from an unfavorable position.
4. **Compromise**, is materialized through having a third party analyze and help in achieving a solution to the conflict. Adopting this strategy, the warring parties forgo the fulfillment of some of their interests.
5. **Collaboration**, work together to find a mutually beneficial solution. While THOMAS&KILMAN view collaboration as the only win-win solution to conflict it is often times impossible to undertake due to time issues as well as when there does not exist a preexistence basis of trust, respect or communication among participants.

The Commitment model (Annex 2), in its three scales (normative, affective and continuance), expresses the form of connection employees have with the organization itself.

- ***Affective Commitment***: is defined as the employee's positive emotional attachment to the organization. An employee who is affectively committed strongly identifies with the goals of the organization and desires to remain a part of the organization.

- ***Continuance Commitment***: The individual commits to the organization because he/she perceives high costs of losing organizational membership be it economic (such as pension accruals), social (friendship ties with co-workers) or both.
- ***Normative Commitment***: The individual commits to and remains with an organization because of feelings of obligation.

The effects of combing all these elements must necessarily be reflected in the results of the organization, in other words organizational effectiveness.

As health-care is significantly different from other kinds of goods and services, the "final" a product of health-care service is its effect on the health of the individual that the service is being provided for, but it needs to be said that this effect is something that is likely to exist even before the service is provided, even so, it is still a difficult to measure to ascertain.

One approach is the assessment of the quality provided to the client/patient, thus letting him ascertain the level of quality of the health-care service. By making use of the SERVQUAL/GAP instrument (Annex 1) it is possible to attain a more precise measure of the functional quality of a service.

Results

The measuring of Organizational Effectiveness will follow the methodology based on (MARTINS 2004), which focuses on the analysis of four main dimensions (organizational sustainability, economic efficiency, the value of people and organizational legitimacy), each one stem primarily from the mission and vision of the organization.

- Organization sustainability - the organization's ability to adapt to the ever changing environment, thus maintaining long-term sustainability, it is evaluated using the following criteria: the quality of product/service, competitiveness and profit.

- Economic efficiency - is the ratio of the care services, health services provided by the organization (output) and the resources that are used (input), measured by the criteria: productivity and resource management.

- The value of people - reflects the way in which employees of the organization are valued: involvement (interest in the work and the organization), working environment (experience within the organization), performance (efficiency in the organization), competence (new or improvement of existing competence) and health and safety (working conditions).

- Organizational Legitimacy – in regards to the relations established with external groups (partners, customers, regulators and community) in order to gain their appreciation and support, measured by the extent of satisfaction of these stakeholders.

Intervention Phase

Once the characterization of the healthcare organization in terms of organizational effectiveness is completed, the next phases will primarily consist of a planning and preparation to face the change so as to be able to develop a framework for organizational reliability.

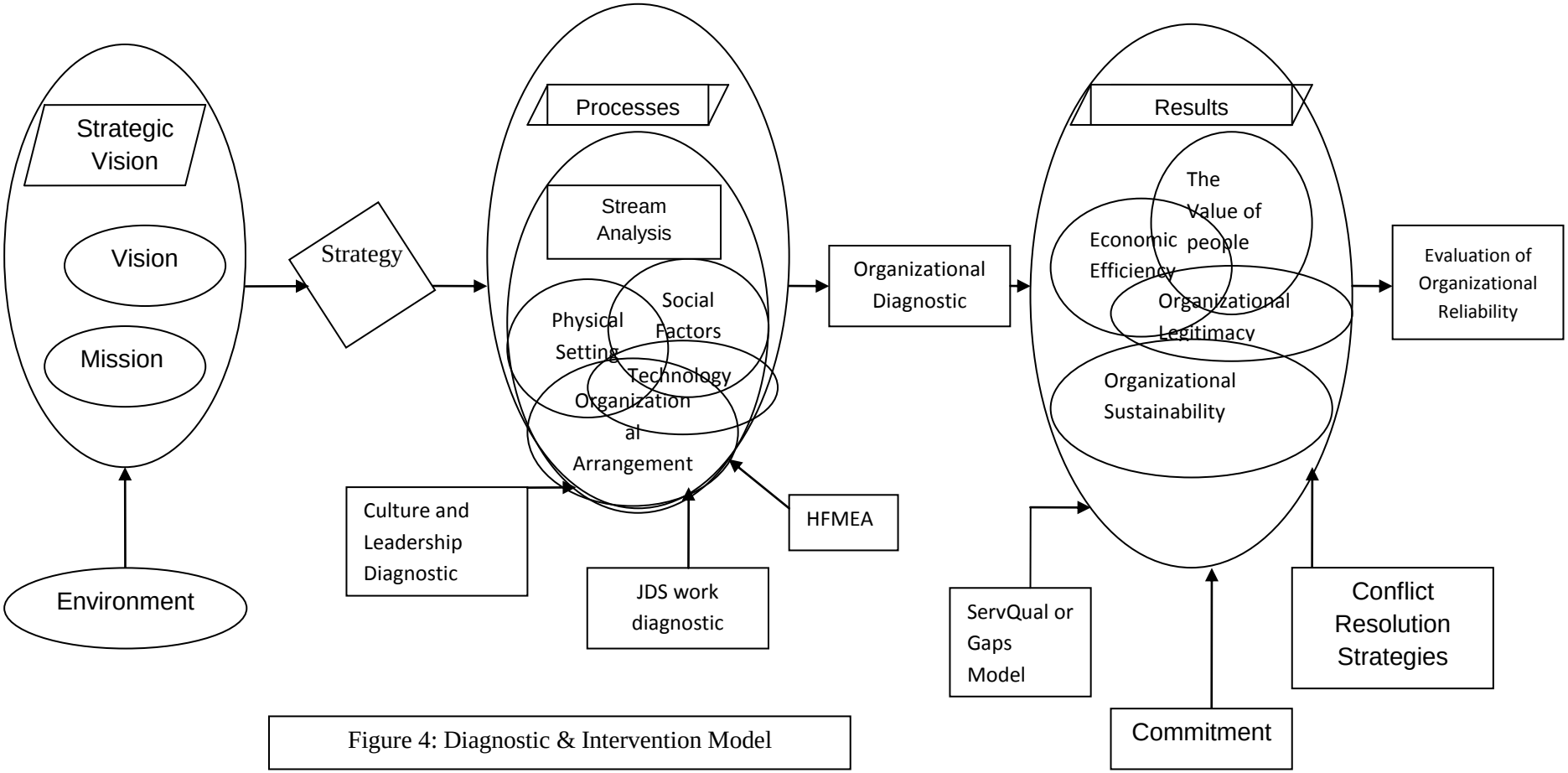

Figure 4: Diagnostic & Intervention Model

Planning and Preparation for Change

An important point in health-care organizations is the fact that professionals who provide health-care services, while having different expertise and skills associated with differences in status, training and standards that may hinder communication and shared understanding, work as a interdisciplinary team while in the process of their work. It is also important to note that these professionals consider a fundamental objective that of focusing on the quality of their service, thus it is of particular importance the need to improve the functioning of team work in the processes of providing health-care.

The strengthening of team work is the basis for the MedTeams approach, which details the functioning of teams that are providing care as well as instrumental in the development of a structured system that is based on five dimensions, thus assessing the organization's aim at reducing the risk of medical error. This translates into a set of skills to be seized by the team to optimize the performance of their work, this processes involves changes within the organization, primarily in the coordination and communication departments. Teamwork is the keystone of individual performance, opening a window of opportunity for not only professional but personal growth as well, not just because of the new knowledge that is acquired, but also performance improvement due to team work that they are involved.

Such an approach, that is able to combine a multidimensional scale of performance with de various management practices, can be considered as an alternative to one-dimensional view of organizational performance that focuses more on efficiency than on reliability, that it is dominant in the current development of health-care organizations, particularly in Portugal (MARTINS 2004)

The Medtem is based on RISSER, 1999, it is structured into five dimensions. For this author there are five skills common to all successful teams and subsequently the team effectiveness is measured by the level of a team's performance in each of these areas. Thus MedTeams considers that the following five dimensions represent the core of a team:

- Maintain team structure and climate
- Plan and problem solve
- Communicate with the team

- Manage workload
- Improve team skills

Maintain team structure and climate

This dimension defines the Core Team in the context in which it operates. It examines the team leader, the rules imposed on the team and activities to cultivate a good working environment, including the ability to manage differences within the team.

Plan and problem solve

This dimension answers the team's ability to engage in planning and decision making action. Examines the concept of error and lets each team member give their input, as a safeguard against medical error.

Communicate with the team

This dimension examines the quality of information exchanged within the team, and the level of reciprocity of the team in giving and receiving important information as well as responds to the need to communicate decisions and actions to be taken within the team.

Manage workload

This dimension answers the importance of management of labor as a means of stress reduction and avoidance of errors. It introduces strategies for managing the work load, including secondary triage, prioritization and tasks assistance.

Improve team skills

This dimension refers to the ability of staff to monitor and review its overall performance, assess the quality of their work and improve the work process. It responds to the fundamental need for the team remained current in their technical skills and team coordination to better perform their individual obligations in order to optimize teamwork.

Each of these dimensions includes a set of procedures (Figure 5) so that, when assessed, they will work as a means of diagnosis to prevent the occurrence of failures that would jeopardize the quality of teamwork.

Team Dimensions	Teamwork Actions
Maintain Team Structure and Climate	• Establish the leader • Assemble the team • Designate roles and responsibilities • Communicate essential team information • Acknowledge the contributions of team members to team performance • Demonstrate mutual respect in all communication • Hold each other accountable for team outcomes • Address professional concerns directly • Resolve conflicts constructively
Plan and Problem Solve	• Engage team members in planning • Identify and communicate existing protocols to be used or develop a plan • Engage team members in decision making • Alert the team to potential biases and errors • Report slips, lapses, and mistakes to the team • Cross-monitor team member actions • Advocate and assert a position or corrective action • Apply the Two-Challenge Rule
Communicate With the Team	• Request and provide situation awareness updates to team members • Use standard terminology in all team communications • Use the check-back system to verify information transfer

	• Call out critical information during emergent events • Systematically hand off responsibility during team transitions • Communicate decisions and actions to team members
Manage Workload	• Integrate individual assessments of patient needs • Re-plan patient care in response to overall caseload of team • Prioritize tasks for individual patients • Balance workload within the team • Offer assistance for task overload in others • Request assistance for task overload • Constructively use periods of low workload
Improve Team Skills	• Conduct Shift Reviews • Conduct Event Reviews • Engage in situational teaching and learning with the team • Engage in peer coaching with team members • Participate in formal case conferences that include teamwork considerations • Address contributions to teamwork in individual performance appraisals

Figure 5 – Check-list of key team work action (MedTeams)

For an effective implementation of this system, there is a need to change old attitudes and beliefs, namely:

Attitudes / Beliefs	Old	New
Human Performance	I am perfect	Humans are fallible
Care Delivery	I work alone	I work with others
Error Origin	Individual caregiver failure	Teamwork failure
Peer Monitoring	Monitoring offends me	Monitoring protects me and patients
Skill Requirements	Client skills	Clinical skill &team coordination skill

Figure 6 – Changing attitudes and beliefs.(MedTeams)

Moreover, the teamwork also has a direct influence on the change of a significant number of traditional work patterns, such as:

FROM:	To:
Single Focus: Clinical Skill	Dual Focus: Clinical and Team Skills
Individual Performance	Team Performance
Reactive Practice	Proactive Practice
Uninformed Decision Making	Informed Decision Making
Loose Concept of Teamwork	Clear Concept of Teamwork
Work Overload	Managed Workload
Having Information	Sharing Information
Self Advocacy	Mutual Support
Minimizing Errors	Improving Quality
Self Improvement	Team Improvement

Figure 7 – Impact of change within a team work system (MedTems)

A study by MedTeams in ten hospitals gave credibility to the Team Coordination Principles: Decrease of 80% of observed medical error in emergency services, significant improvement in care, as a measured by how well patients were prepared for admission to the services as well as the degree of satisfaction expressed by the care that was given.

Plan

While it should be recognized that for any plan to implement change in health-care organizations is determined by a prior diagnosis of the organizations situation, in this case, we will try to focus on one aspect such as the Emergency Services unit, not only because by their nature are areas of great risk, but also because the constraints in the fact that current methodologies are not in line with existing national policies, or organizational policies or the dominant thought among health professionals and even other groups, it is assumed that the implementation of the such a change plan can take place as a pioneering experience of these units.

Planning a change in a health organization, means at first sight, learn how to deal with the impact of change on all those involved in the process: employees, clients / patients, care / services as well as working partnership and stakeholders.

In order to have a clear idea of what will be necessary to lead the change process, one needs to take into account the issues that will be facing in the seven phases, that usually characterized the planning process:

Phase 1 - What do we want done?

Something innovative in improving the functioning of the team work through the implementation of the system MedTeams, which translated into a set of skills to be seized by the team to optimize performance of their work, and because the process involves changes within the organization, good coordination and communication are needed, all service employees need to understand the objectives of change as well as be prepared for it.

Phase 2 - What is the best way to do it?

The validation of the MedTeams system by a study conducted in ten hospitals, it is considered appropriate for the process of change. However, for its implementation there is the need for all the parties involved to not only have a good understanding of what is at stake, but also prepare to fully play their roles. Hence, it is essential to ensure that everyone has a clear understanding of the process, and the preparation of a plan that is

clear each of these roles, assured the delegation of tasks and developed a communication strategy together are the points to be to the agenda of the meeting carrying out with senior staff.

Phase 3 - What needs to be done?

Another important point to consider in terms of agenda, involves KNOWLEDGE that senior employees have of their own roles and aspects within the health-care organization, as well as assuming responsibility which are deemed fundamentally important when assessing the situation, it is also important to ensure the ability of employees to anticipate what will happen as well as any and all problems that may arise, they will require a clear internalization of the implementation process by establishing agreed targets.

Thus, this phase includes tasks to three levels of performance:

1-Tasks that relate to all:

- Obtain the cooperation of participants to extend the universe of planning.
- Review the work of the structure, in order to take advantage of any worthwhile experience, which to some extent can act as a way to make people not to forget something that may be lost during the change process.
- Minimize, to the extent possible, the anxieties generated by the change.
- Establish a strategy to communicate to all those involved in change, the opportunity to become familiar with the planning and the requirements that this imposes on them.
- Anticipate possible risk factors.
- Anticipate likely changes in behavior of the service users, resulting from new opportunities created by the shift towards the most listening.
- Think of the needs of service users and their families that do not have Portuguese as their primary language.

2 - Tasks relating to employees:

- Approach the unions to discuss the planned changes to the duties of employees and their working practices.
- Assess the capabilities of employees in the new stations, and if necessary carry out the corresponding training.
- Review the work routines of partners and compare them with the changes that ate inherent in change.

3 - Tasks that relate to the responsibility to implement the change:

- Monitor implementation of change and effectiveness of their planning.
- Plan the timing for the extension of planning.
- Develop a strategy for shifting information to the guardianship of the current situation and anticipated problems.
- Continued upgrading to develop new capabilities.

Phase 4 – What order?

Primary activities

1. Creating a dynamic group that includes different specialists in various areas. That will oversee the entire process
2. Delegation of all the tasks.
3. Establish dates to analyze the progress that has been made and if the goals established have been reached. Establish by-monthly meeting.
4. Maintain the flow of information to primary stockholders as well as throout the organization. Establish by-monthly meetings.
5. Establish a training regiment to implement the new processes established by the dynamic group, as well as inform them on the entire process.
6. Establishing the Team.

   6.1 Review primary benchmarks that have been established

   6.2. Establish the team's competences

   6.3. Maintain Team Structure and Climate

6.4. Execute agreed upon work processes

6.5. Plan and Problem Solve

6.6. Communicate With the Team

7. Establish evaluation processes as analysis obtained feedback

Phase 5 - What resources are needed?

Categorize the resources in terms of the needs of change. For reasons of commitment and strategies for conflict resolution to be adopted by the team as well as taking into account the current context in which they develop working relationships at the national level, the team should be comprised of professionals under the individual employment contracts. This phase will assesses the costs of implementing change, in that, in addition to the personnel, it also takes into account the costs of facilities, equipment, support services and administration.

Phase 6 - Review?

Monitoring the change process will help assess the current status of progress, determining whether or not adjustments are need to what was originally planned.

Phase 7 – Who dos what where?

Corresponds to the team implementation phase primarily the definition of competence, etc., its extension in time as long as it is considers necessary for development.

Change Management

The final phase of change, following the stage to gauge the improvements resulting from the intervention carried out, looking at the same time to identify constraints and new areas of development, which will again be determine by the use of diagnostic instruments, generating, thus a continuous process (cycle) of Diagnosis and Intervention in Health Organizations

8.: Conclusion

The present work aims to realize a more theoretical approach in the management of HO, by building a generic model for "Health-Care Diagnosis and Intervention", utilizing the most relevant literature on the problem.

The focus on the user, together with a continuous quality improvement should be an ongoing concern of the HO management. Firstly, it is users who utilize the services that in turn establish the organizations image. This image in turn is embodied in all professionals who come into direct contact with the users (frontline staff), thus the quality of service they receive from them will be present in all other services they are provide.

Being an essential premise, that is the inevitability of dysfunction within any organization, particular the case of health organizations, the error analysis should focus on the failings of the system, rather than on placing the blame on individuals. In a sense, it becomes extremely relevant the contribution of FRAGATA & MARTINS (2004), in arguing that the reliability and quality of a medical organization reside primarily in the know how to deal with their mistakes, minimizing their consequences and learning to prevent them.

Therefore it is with this perspective that guides in the conception of the model above, which highlights the need to engage in a dialogue (internal communication), in commitment, compromise, learning, accountability and utilizing them as tools not only essential for the effectiveness of work within the team, but also a fundamental part of an organizational change that is needed.

The management of HO, in the particular case of the Emergency Services Units must therefore be based on teamwork practices listed, which, themselves where implemented by MedTeams and proven to be an example of success.

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ANNEXES

Annex 1.:

GAPS MODEL/SERVQUAL

Clients

Instruções: Pense no tipo de organização de saúde com a qual se sentiria satisfeito. Se entende que, em relação ao que pensa, uma característica *não é essencial* para considerar como excelente uma organização de saúde, faça um círculo em redor de 1. Se pensa que uma característica é *absolutamente essencial* para considerar como excelente organização de saúde, faça um círculo em redor de 7.

	Fortemente em desacordo						Fortemente de acordo
1. As organizações de saúde excelentes têm equipas de aparência moderna.	1	2	3	4	5	6	7
2. As instalações físicas das organizações de saúde excelentes são visivelmente atractivas.	1	2	3	4	5	6	7
3. Os colaboradores das organizações de saúde excelentes têm uma aparência agradável.	1	2	3	4	5	6	7
4. Numa organização de saúde excelente, os elementos materiais relacionados com o serviço são visivelmente atractivos.	1	2	3	4	5	6	7
5. As organizações de saúde excelentes, quando se comprometem em fazer algo em certo tempo, fazem-no.	1	2	3	4	5	6	7
6. Quando um cliente tem um problema, as organizações de saúde excelentes mostram um interesse sincero em solucioná-lo.	1	2	3	4	5	6	7
7. As organizações de saúde excelentes realizam bem o serviço à primeira vez.	1	2	3	4	5	6	7
8. As organizações de saúde excelentes concluem o serviço no tempo prometido.	1	2	3	4	5	6	7
9. As organizações de saúde excelentes insistem em manter registos isentos de erros.	1	2	3	4	5	6	7
10. Numa organização de saúde excelente, os colaboradores comunicam aos utentes quando se concluirá a realização do serviço.	1	2	3	4	5	6	7
11. Numa organização de saúde excelente, os colaboradores oferecem um serviço rápido aos seus utentes.	1	2	3	4	5	6	7
12. Numa organização de saúde excelente, os colaboradores estão sempre dispostos a ajudar os utentes.	1	2	3	4	5	6	7
13. Numa organização de saúde excelente, os colaboradores nunca estão demasiado ocupados para responder às perguntas dos utentes.	1	2	3	4	5	6	7

14. O comportamento dos colaboradores das organização de saúde excelentes transmite confiança aos seus utentes.	1	2	3	4	5	6	7
15. Os utentes das organizações de saúde excelentes sentem-se seguros nas suas transacções com a organização.	1	2	3	4	5	6	7
16. Numa organização de saúde excelente, os colaboradores são sempre amáveis com os utentes.	1	2	3	4	5	6	7
17. Numa organização de saúde excelente, os colaboradores têm conhecimentos suficientes para responder às perguntas dos utentes.	1	2	3	4	5	6	7
18. As organização de saúde excelentes dão aos seus utentes uma atenção individualizada.	1	2	3	4	5	6	7
19. As organizações de saúde excelentes têm horários de trabalho convenientes para todos os seus utentes.	1	2	3	4	5	6	7
20. Uma organização de saúde excelente tem colaboradores que oferecem uma atenção personalizada aos seus utentes.	1	2	3	4	5	6	7
21. As organizações de saúde excelentes preocupam-se com os melhores interesses dos seus utentes.	1	2	3	4	5	6	7
22. Os colaboradores das organizações de saúde excelentes compreendem as necessidades específicas dos seus utentes.	1	2	3	4	5	6	7

Instruções: Na lista que aparece em seguida incluímos cinco características que correspondem a organizações de saúde e os serviços que oferecem. Gostaríamos de conhecer que nível de importância atribui a cada uma dessas características quando avalia a qualidade do serviço de uma organização de saúde. Distribua um total de 100 pontos entre as cinco características *de acordo com a importância que tem para si cada característica* (quanto mais importante seja para si uma característica, mais pontos lhe atribuirá). Assegure-se de que os pontos que atribuiu às cinco características somam 100 pontos.

1. Aparência das instalações físicas, equipas, pessoal e material de comunicação que utiliza uma organização de saúde.	_____pontos
2. Capacidade de uma organização de saúde para realizar o serviço prometido de forma segura e precisa.	_____pontos
3. Disposição de uma organização de saúde para ajudar os utentes e dar-lhes um serviço rápido.	_____pontos
4. Conhecimentos e tratamento amável dos colaboradores de uma organização de saúde e a sua capacidade para transmitir um sentimento de fé e confiança.	_____pontos
5. Cuidado, atenção individualizada que uma organização de saúde dá aos seus utentes.	_____pontos
TOTAL de pontos atribuídos	**100 pontos**

Das cinco características assinaladas previamente *qual é a mais importante* para si? (Indique o número da característica)	_____
Que característica é a *segunda* mais importante?	_____
Qual a característica *menos importante*?	_____

Instruções: O seguinte grupo de declarações refere-se ao seu pensamento sobre uma organização de saúde. Para cada declaração indique até que ponto considera que a organização de saúde, possui as características descritas em cada declaração. Também, neste caso, faça um círculo em volta do número 1, significando que está fortemente em desacordo com a organização de saúde que tenha essa característica e marcar o número 7, significando que está fortemente de acordo com a declaração.

	Fortemente em desacordo						Fortemente de acordo
1. As equipas da organização de saúde têm a aparência de serem modernas.	1	2	3	4	5	6	7
2. As instalações físicas da organização de saúde são visualmente atractivas.	1	2	3	4	5	6	7
3. Os colaboradores da organização de saúde têm uma aparência agradável.	1	2	3	4	5	6	7
4. Os materiais relacionados com o serviço que utiliza a organização de saúde são visivelmente atractivos.	1	2	3	4	5	6	7
5. Quando na organização de saúde prometem fazer algo em certo tempo, fazem-no.	1	2	3	4	5	6	7
6. Quando você tem um problema, na organização de saúde mostram um interesse sincero em soluciona-lo.	1	2	3	4	5	6	7
7. Na organização de saúde realizam bem o serviço à primeira vez.	1	2	3	4	5	6	7
8. Na organização de saúde concluem o serviço no tempo prometido.	1	2	3	4	5	6	7
9. Na organização de saúde insistem em manter registos isentos de erros.	1	2	3	4	5	6	7
10. Na organização de saúde os colaboradores informam com precisão os seus utentes quando se concluirá cada serviço.	1	2	3	4	5	6	7
11. Os colaboradores da organização de saúde servem-no com rapidez.	1	2	3	4	5	6	7
12. Os colaboradores da organização de saúde mostram-se sempre dispostos a ajudar.	1	2	3	4	5	6	7
13. Os colaboradores organização de saúde nunca estão demasiado ocupados para responder às suas perguntas.	1	2	3	4	5	6	7
14. O comportamento dos colaboradores da organização de saúde transmite confiança.	1	2	3	4	5	6	7
15. Sente-se seguro nas suas transacções com organização de saúde.	1	2	3	4	5	6	7

16. Os colaboradores organização de saúde são sempre amáveis consigo.	1	2	3	4	5	6	7
17. Os colaboradores da organização de saúde têm conhecimentos suficientes para responder às perguntas que lhes faz.	1	2	3	4	5	6	7
18. Na organização de saúde dão-lhe uma atenção individualizada.	1	2	3	4	5	6	7
19. Na organização de saúde têm horários de trabalho convenientes para todos os seus utentes.	1	2	3	4	5	6	7
20. Os colaboradores da organização de saúde dão-lhe uma atenção personalizada.	1	2	3	4	5	6	7
21. Na organização de saúde preocupam-se com os melhores interesses.	1	2	3	4	5	6	7
22. Os colaboradores da organização de saúde compreendem as necessidades.	1	2	3	4	5	6	7

Annex 2.:

***Table 1** – Affective, Continuance and Normative Commitment Scales*

Affective Commitment Scale Items	1. I would be very happy to spend the rest of my career in this organization. 2. I enjoy discussing my organization with people outside of it. 3. I really feel as if this organization‘s problems are my own. 4. I think I could easily become as attached to another organization as I am to this one. 5. I do not feel like “part of the family at my organization. 6. I do not feel “emotionally attached” to this organization. 7. This organization has a great deal of personal meaning for me. 8. I do not feel a strong sense of belonging to my organization.
Continuance Commitment Scale Items	1. I am not afraid of what might happen if I quit my job without having another one lined up. 2. It would be very hard for me to leave my organization right now, even if I wanted to. 3. Too much of my life would be disrupted if I decided I wanted to leave my organization right now. 4. It wouldn’t be too costly for me to leave my organization in the near future. 5. Right now, staying with my organization is a matter of necessity as much as desire. 6. I believe that I have too few options to consider leaving this organization. 7. One of the few negative consequences of leaving this organization would be scarcity of available alternatives. 8. One of the major reasons I continue to work for this organization is that leaving would require considerable personal sacrifice; another organization may not may the overall benefits I have here. 9. If I had not already put so much of myself into this organization, I might consider working elsewhere.

Normative Commitment Scale Items	1. I do not feel any obligation to remain with my current employer. 2. Even if it were to my advantage, I do not feel it would be right to leave my organization now. 3. I would feel guilty if I left my organization now. 4. This organization deserves my loyalty 5. I would not leave my organization right now because I have a sense of obligation to the people in it. 6. I owe a great deal to my organization.