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# THE RELATIONSHIP BETWEEN THE TECHNICAL GOVERNANCE AND CLINICAL GOVERNANCE

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The healthcare system is a complex system in which several heterogeneous and dynamic factors interact.

Those factors include multiple healthcare services, specialized skills of each professional, medical and technical, economic-administrative roles involved, as well as the processes variety, and results to achieve.

All the elements in the system must integrate and coordinate, in order to meet medical assistance needs of the patients and assure them the best achievable treatment.

As in other complex systems, such as aviation, nuclear power plants or military defense systems, accidents and errors can happen even in healthcare



For many years, safety procedures designed for other domains characterized by a more 'mechanical' approach, have been applied to healthcare in which prevails, instead, a 'human' approach, that involves both resources and critical issues.

As a matter of fact, even if behavioral adaptability, dynamism and complexity of interpersonal relationships are essential prerogatives of human resources in the system, at the same time they bring up a critical issue because work dynamics are complex, individual performances variable and, most of all, processes results are not always predictable and reproducible

Therefore it's necessary to conceive specific control patterns of clinical risk, with the aim of preventing errors from occurring and, in case it would happen, keeping down the consequences .

Usually the possibility of an adverse event occurrence depends on the existence of a 'latent condition' arose from decisions made by designers, builders, procedure writers, and top level management.

Such latent conditions may lie dormant within the system for many years before they combine with active failures and local triggers to create an accident opportunity.



In fact an 'active failure', which consist in a human error, an incorrect procedure, a distraction or an accident, is often identified as direct and immediate cause of the adverse event .

However, detecting the 'active failure' doesn't exempt us from researching 'latent conditions', because such contributing factors in the system have to be removed if the aim is to achieve an effective risk control, which means reducing potential error occurrence (*prevention activity*) and contain dangerous consequences of the errors yet occurred (*protection activity*) .

Risk management policies aim for both avoidable errors prevention and potential dangerous effects containment, as well as patient safety assurance, which establish the Clinical Risk Management system.

# Clinical Governance and Risk Management in Healthcare

**Clinical Governance** can be defined as 'the framework through which NHS organizations are accountable for continuously improving the quality of their services and safeguarding high standards of care by creating an environment in which excellence in healthcare will flourish'



Therefore the essential characteristics of the definition above are:

HS organizations responsibility.

Regional Health Service along with all its organisms are responsible for the results achieved as well as the whole performance.

Responsibility is directly linked to transparency and accountability. For this reason the RHS has to make its own results clear and report both successes and failures.

## Quality improvement systems development.

Such development has to play an important role in the daily RHS activities rather than be unrelated and occasional initiatives.

All points above create an organizational environment that develops clinical governance.

Therefore this leads to the constitution of clinical and organizational conditions directed towards a systematic and continuous attention to assistance quality

and the activities:

*effectiveness*, that is the ability of obtaining the best achievable performance regarding the population health;

*efficiency*, that is appropriate and rational use of the resources;

*risk management*, which consists in the ability of detecting, evaluating, correcting errors;



*citizen's opinion*, considered as system ability to take into account opinions, preferences and reports from the people and learn from the latter in order to improve clinical practices;

*training effectiveness*, that is the system ability to develop training programs and grading system of the staff whose results have to be evaluable and monitored;





achievable performance  
health;



the population



efficiency, that is appropriate and rational use of the resources;  
risk management, which consists in the ability of detecting, evaluating, correcting errors;  
citizen's opinion, considered as system ability to take communication effectiveness, that is the ability of developing good communication systems within the organization as well as outside;  
Continuous quality improvement as organization aim as well as ability of identifying and spread innovations and good practices



Clinical Governance plan cannot neglect a systematic staff retraining in all its forms (academic classes, internships and practical demonstrations, continuous individual trainings, national and international conventions), as well as a systematic support of quality culture, benefits to reward staff participation to quality improvement programs and that also reward goals achievement.



A good Clinical Governance system has many advantages in terms of health and economics.





The advantages of good system of clinical governance are numerous and it ends with the recommendations below:





identify a consistent organizational pattern for clinical risk management;

elaborate instructions and guidelines for a consistent detection of the error and error risk in the hospitals;  
promote trainings sessions in order to spread error prevention culture;

promote *near misses* reports;

experiment, at an enterprise level, error reporting methods and instruments as well as data gathering and processing in order to obtain information regarding high risk procedures and error frequency;

periodically monitor and assure informative feedbacks;

start a network constitution to create a national database for gathering data related to patients safety, *also in order to establish an Observatory at a central level...*

define organizational measures and appropriate technologies for avoidable error reduction;

encourage, through adequate experimentations, the development of organizational patterns and innovative technological support in order to improve safety.

Clinical risk' can be defined as the possibility for a patient to be subjected to un involuntary harm or discomfort, due to treatments, and that may cause a longer stay in the hospital, as well as a worsening of the clinical state or even death.



While discussing about Clinical Risk it is necessary to focus on the definition of error and potential harms for the patient.

In the literature it is likely to find many definitions of 'error' and 'adverse event'.

All of them share some essential characteristics: an error is a system lack that affects programmed actions failures; an error is a 'non safe action' or an 'omission' with potentially negative consequences for the result of the patient treatment; an error is a behavior considered as potentially inadequate by those of the same acknowledged experience and expertise, at the moment of the occurrence, regardless of the nature of the consequences for the patient.

Therefore an adverse event is, by its own nature, undesired and not unintentional, dangerous for the patient; an adverse event derived by and error is defined 'preventable'.

In order to identify prevention measures to implement, it is important not only analyzing adverse events, but also analyzing near misses.

In healthcare there two kinds of risks:  
an 'organizational risk' related to technologies,  
production mechanisms of the healthcare  
organization and proportional to system  
complexity, and an 'pure risk' which depends on  
situations that put together encourage adverse  
event occurrence, and it isn't predictable or  
measurable



In the healthcare environment the factors which contribute in defining a 'risk rate' are many, and they can be explained in a schematic way, as here below:

*a) Structural- technical factors*

- hospital and its plant characteristics (design and maintenance)
- environment safety and logistics
- devices and instruments (functioning, maintenance, renewing)
- facilities, networks, digitalizing, automation

References of such factors are to be considered already in planning and construction phase of the buildings, following the most recent acknowledgments of the healthcare building trade and including among the others the old state of the buildings and devices, long distances that have to be crossed while moving patients or materials, the accessibility of service structures.

Particular attention has to be given also to the evaluation, introduction and use on the patient of new devices and technologies from non trained staff .

## *b) organizational and managerial factors and working conditions*

- structure of the organization (roles, responsibility, tasks distributions)
- Policies and human resource management: organization, leadership styles, primes system, supervision and control, trainings and updates, workload and duties (which determine stress and effort)



- organizational communication system
- stakeholders participation
- ergonomic aspects (among which there are: workstation, monitor, alarms, noise, light)
- policies for promoting patient safety: therapeutic and diagnostic guidelines and paths, reporting error systems.

Basing on what is established by management guidelines, the goals of the regional prevention program are the following:

Prompt explorative analysis of the available sources of data for risk and adverse events detection starting from critical areas.

Definition of a markers set.

Development of a monitoring system of critical components in treatments.

Redefining quality standards related to processes and adverse events prevention.

Making operative a monitoring system of medical devices maintenance.

Evaluating current assurance systems and defining how to cover the risk taking into account prevention activities care processes control.

People/users participation through revising the current evaluation system of their claims, and development of effective communication patterns about risk management activities.



**WE MUST LEARN FROM MISTAKES NOT IGNORE THEM**





Safety in hospitals concerns different fields:  
Structures (buildings, plants, fire protection systems,  
etc...).

Regular staff as stated in the law : D.Gls. 81 of 2008.

Biomedical Devices.

Patients.

Biomedical devices quality, safety and reliability are important elements in risk prevention.

Quality control and maintenance systems are standard in some fields (laboratory and radiology), but have less consideration in others (endoscopy, laparoscopy, etc...).

Therefore the expected activities are:

start of a monitoring system of the medical devices.  
Evaluation of the operational state of the safety plans and technical, organizational, procedural and staff protection measures taken in the hospital.  
Evaluation and spreading of safety systems for patient protection in the hospital, whether active or to be developed (e.g. information systems, identifications bracelets, etc...)

Census of management procedures in force for medical devices management.

Defining a minimum regional set of information for devices management.

Evaluation of the state of the art of medical devices management.

Analysis of the situation, existence and contents of risk plans in hospitals.



Creation of a plan for patient safety systems starting from information systems development (patient identification, medicine use).

Communication and Professionality Development

Errors linked to personal factors may be also connected to bad organizational issues. They include lack of systems and workflows that guarantee information passage, lack of communication, negative working atmosphere, unprepared staff, or not used work in teams, excessive workload.

Such factors are somehow organizational and not clearly defined when it comes to operational procedures.

The working method used is inspired also by project management system and is evident in three stages: During the design phase in which, knowing that the projects are becoming more complex, designers (engineers, architects, doctors, nurses - each with their own specialties) must find a synthesis of the various languages spoken in order to meet the time limits imposed, the defined budget and ensure the desired quality.



In the implementation phase, with a constant control by health organization and technical organization to monitor the progress of the project During the activation and management, health organization and technical organization in collaboration for a correct use of the new reality created

And 'quite clear how the technical governance will impose within the health organization.



The management of complex processes of renewal and transformation of health, planning, programming and implementation, requires, a qualitative leap of the instruments of corporate governance transformations that sees the essential involvement of technical professionals in general processes of planning, design, management and reorganization.

In other words, those involved in health care facilities must be able to manage the process on the life cycle of the building, with a dynamic management of assets guaranteeing the functionality and safety of equipment, technologies and buildings and electrical equipment in a "production in a continuous cycle".

In addition, the property management must be global in nature, meaning that it must govern all actions occurring on capital structure, systems and technology

In the hospital system there is several group of actors whose skills are consistent and closely interlinked with one common goal:

ensure patients' expectations by ensuring the proper provision of health services

and this can only happen if the technical governance and clinical governance , together, form a management system of well identified





**working**



**Patient centrality**



***GRAZIE***  
***PER L'ATTENZIONE***



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