GLOBAL CLINICAL ENGINEERING ALLIANCE™

TECHNOLOGY SNAPSHOTS

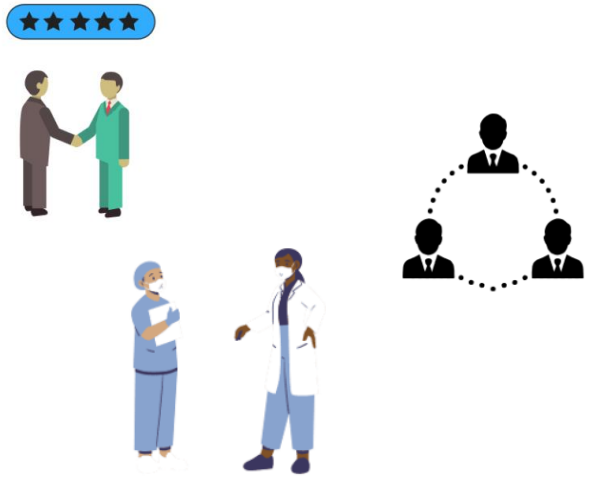
Quality as a safe strategy for Clinical Engineering

Ana Carolina Silveira

CONCEPTS: “Quality”

From the Latin “qualitas”, the word “quality” has the subjective concept that is linked to attributes, values, needs, perceptions, results and excellence that directly involves customer satisfaction. Quality, according to ISO (International Standardization Organization), is the adequacy and conformity of the requirements that the standard itself and customers have established. In other words, quality is the level of perfection of a process, service or product delivered by your Institution.

The organization reaches such a level of excellence that it meets the needs of patients/clients and exceeds their expectations.



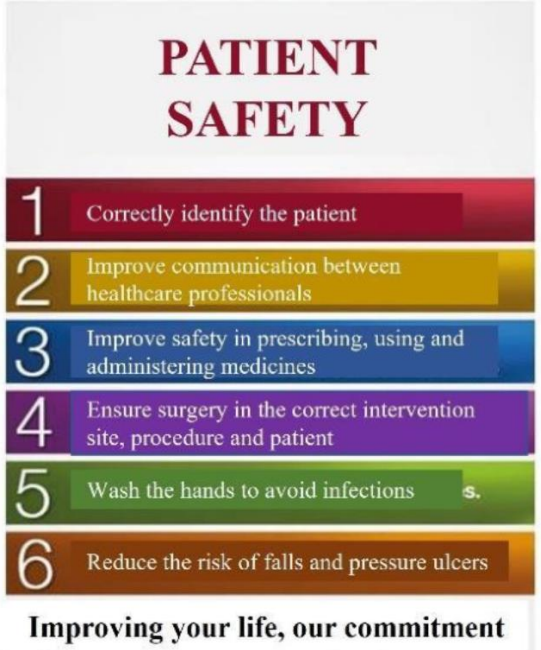
CONCEPTS: “Safety”

Safety refers to potential risks and unintended results which can be avoided or minimized (ONA).

The World Health Organization (WHO) defines the concept of Patient Safety as reducing the risk of unnecessary harm associated with healthcare to an acceptable minimum.

The word safety has several meanings, depending on your point of view.

In general terms, it is a set of measures that aims to protect risks, dangers or losses to people or things (Wikipedia).



CONCEPTS: Clinical Engineer

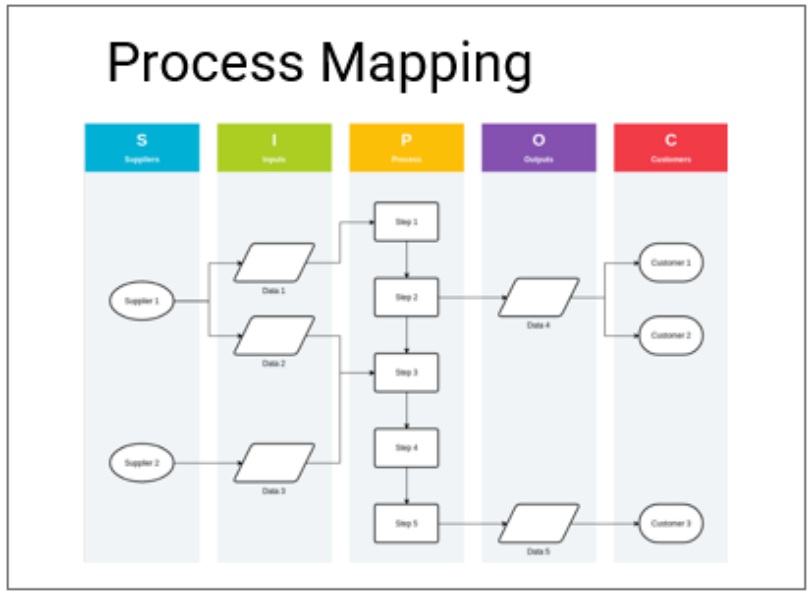
As defined by the American College of Clinical Engineering (ACCE), “The Clinical Engineer is a professional who applies and develops engineering knowledge and management practices to health technologies, to improve patient care”. (3)

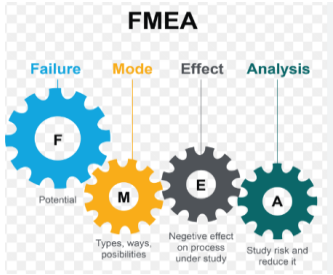
The Brazilian Association of Clinical Engineering (ABECLIN) defines: “Clinical Engineer is the professional who applies engineering techniques to the management of healthcare equipment with the focus on ensuring the traceability, usability, quality, efficacy, effectiveness, safety and performance of this equipment, with the objective of promoting patient safety. (3)

GOING BACK TO THE TOPIC OF THE PRESENTATION…

“Quality as a safe strategy for Clinical Engineering”

Quality management directions





Risk Matrix		Consequence				
		Insignificant	Minor	Moderate	Major	Severe
Likelihood	Almost Certain	Medium	High	Very High	Very High	Very High
	Likely	Medium	High	High	Very High	Very High
	Possible	Low	Medium	High	High	Very High
	Unlikely	Low	Low	Medium	Medium	High
	Rare	Low	Low	Low	Low	Medium

Indicators

The 7 pillars of Quality:

Doctor Avedis Donabedian is considered one of the forerunners of quality in healthcare.
He was the one who created the seven pillars of quality that healthcare management must pay attention to in order to guarantee excellence in the services provided to patients:

Efficacy;
Efficiency;
Effectiveness;
Optimization;
Acceptability;
Legitimacy;
Equity.

The 7 pillars of Quality:

Efficacy:

Efficacy consists of doing something that must be done, but in the best possible way for the present moment.

Do the best with the existing conditions.

The 7 pillars of Quality:

Efficiency:

Efficiency is directly related to cost.

Example: Imagine two institutions that perform the same procedure, such as an obstetric appointment, but in one of them there is an ultrasound device available that makes the patient's journey a little faster. Thus, although both institutions are effective for the result — checking the baby and maternal health — the first one is more efficient because it does the same thing in less time.

The 7 pillars of Quality:

Effectiveness:

Being effective is basically being able to achieve your goal.
Effectiveness is directly related to the result.
When a leader is effective, they drive their team to achieve the organization's goals as well as their own.
In this way, an effective leader will certainly be able to make professionals more effective and better prepared to face challenges.
In short, being effective is doing what needs to be done. If you take a medicine to get rid of a headache and it achieves this goal, that medicine can be said to be effective.

Effectiveness is the ability to produce and maintain an effect.

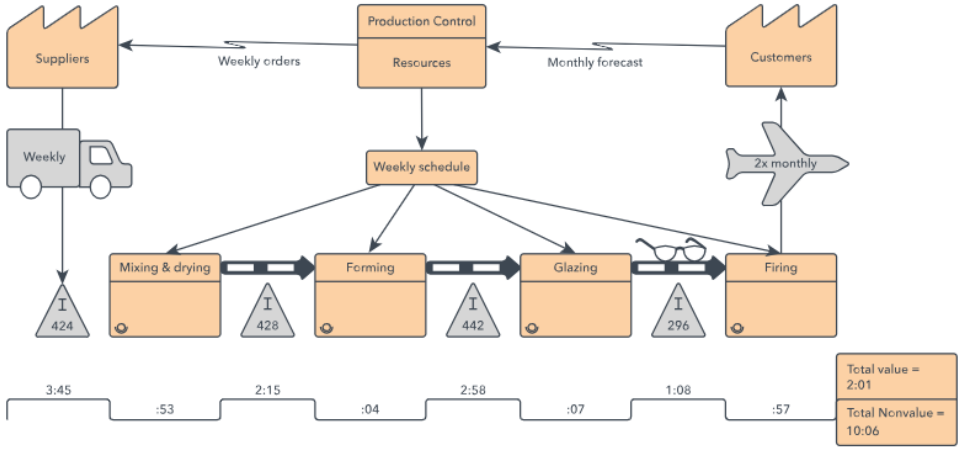
For an institution to maintain the desirable effects, it needs to invest in process mapping, which will help to understand the points of failure in order to correct them.

The 7 pillars of Quality:

Optimization:

Saving time spent on unnecessary activities and maximizing time spent on what is really important is the principle of optimization.

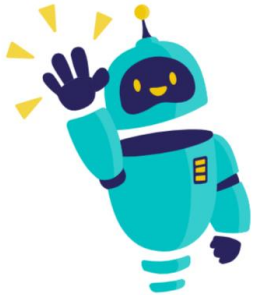
Value Stream Map (VSM)



The 7 pillars of Quality:

Acceptability:

Characteristic or status of what is acceptable; quality of what can be accepted; admissibility. This pillar concerns the patient's autonomy and their own expectations about care.



The 7 pillars of Quality:

Legitimacy:

Legitimacy is achieved when the quality of the service makes the institution become a reference for both its workers and society as a whole.

The 7 pillars of Quality:

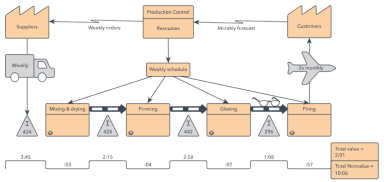
Equity:

It concerns the maintenance of quality in the provision of care for all individuals, without distinction of race, creed or socioeconomic status.

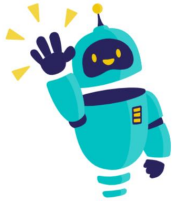
Equity consists in the adaptation of the existing rule to the concrete situation, observing the criteria of justice. It can be said, then, that equity adapts the rule to a specific case, in order to make it fairer.

Efficacy

Efficiency



Optimization

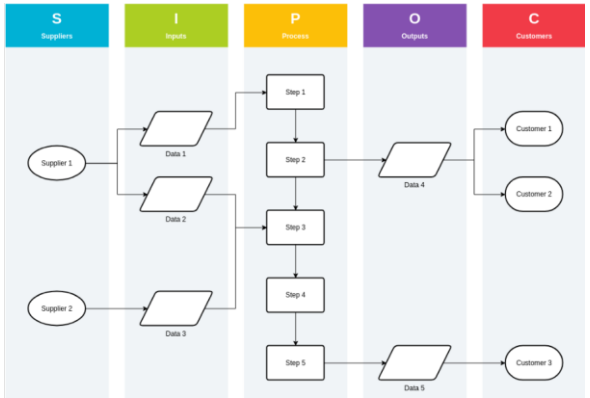


Acceptability

Legitimacy

Equity

Effectiveness



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Patient Security

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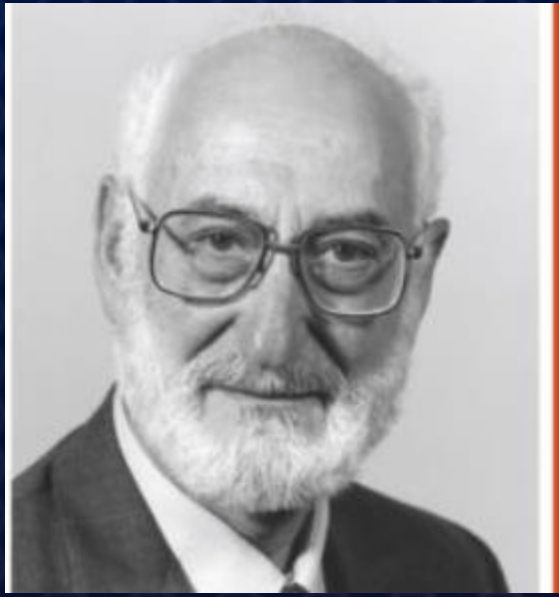

"The secret of quality is love."

Prof. Avedis Donabedian

7 Enero 1919 – 9 Noviembre 2000

AVEDIS DONABEDIAN FUNDACIÓN

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Thank you!

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