OVERVIEW of QUALITY POLICIES in HEALTHCARE in EUROPE

for partners of MediTec Project
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CEESTAHC, DG SANCO, ISO/ITA, EFQM CoP, ESQH, WHO

ISQua

EFQM

Total Quality Management

ISO 9000:2000

5 S: Seiri, Seiton, Seiso, Seiketsu, Skitshuke
Structuralization, Systematization, Sanitation, Standardization, Self-discipline

Existing system of quality management

BASICS of ISQua ACCREDITATION STANDARDS

CLIENT ORIENTED, RESPECT of RIGHTS (EFQM)

- **RESPONSIBILITY of PROVIDER for HC QUALITY, MONITORING and CONTINUOUS IMPROVEMENT (EFQM)**

- **OPTIMAL RESOURCE USE (EFQM)**

- **RISK MANAGEMENT (EFQM)**

- **CLEAR PROCESS MANAGEMENT (EFQM)**

- **ALL ACTIVITIES INCLUDED in STRATEGIC PLANNING (EFQM)**

- **CONTACT WITH CARE PROVIDERS (EFQM)**

FUNDAMENTAL QUESTIONS FOR QUALITY

➢ Who is the customer ?

➢ What are the customers needs and expectations ?

Quality Definitions

• Juran : Fitness for use

• ISO: Quality is the totality of features and characteristics of a product or service that bear on its ability to satisfy **STATED** OR **IMPLIED** needs.

• Crosby: Conformance to requirements.

• Taguchi: Non-Quality = Deviation from a set target value of a product function.

• Quality of a product or service is its ability to satisfy the needs and expectations of the Customers.

HEALTHCARE COMPLEXITY
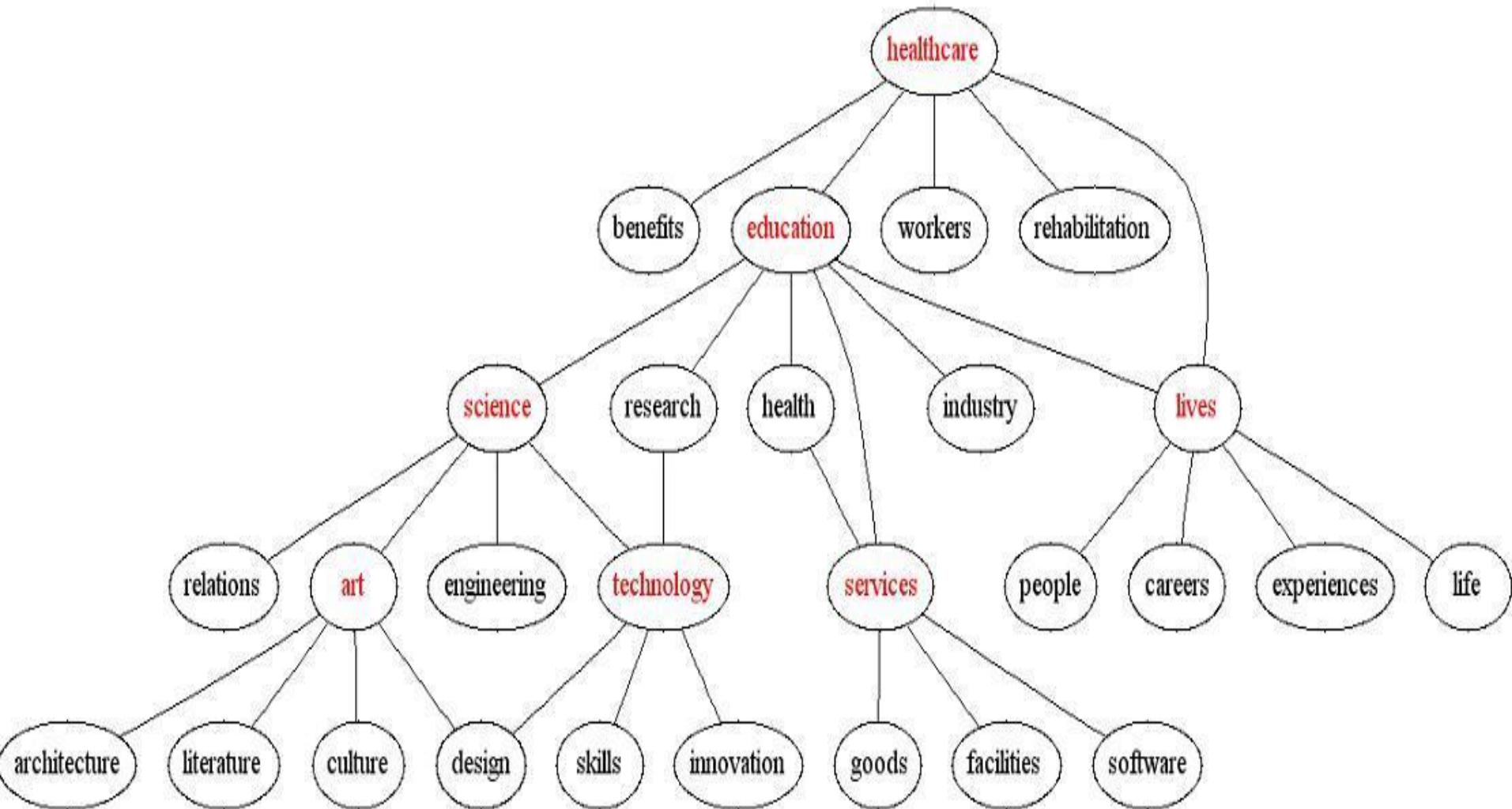
Definition of terms

QUALITY per se is a fuzzy term and as such cannot be exactly measured. We are able to measure it's elements. This is the reason for quality **decomposition** into elements, usually referred to as STANDARDS. Each standard reflects an element of provided care.
STANDARD (Fr.,Eng.) is a level of efficiency accepted by professionals with respect to available resources. Synonymous is NORM (Lat.). If a standard is immeasurable, it can be further decomposed into standard related CRITERIA. Criteria must be measurable.

● **CRITERION** is the level of achievement of the STANDARD. Each criterion must be exactly defined, to enable evaluation if it has or has not been fulfilled.
● **AUDIT** is a single measurement of quality somewhere between a criterion and a standard. It has a retrospective or concurrent character.

Definition of terms

● **INDICATOR** of quality is a "signal" used for comparing numerical data originating in various places or time spans. Indicators find their use in monitoring, evaluating and in quality comparison.

● **GUIDELINE** is a recommended process of decision between possible variants. Synonymous with a treatment pathways. It is formed by protocols, standards and criteria. It has a prospective character.

● **PROTOCOL** is an authoritative pathway of care without possible variations.

Quality health care targets to maximize patient health benefits and the expected benefits in all phases of the process of care must be higher than the cost of care.

BASIC QUALITY in HC BUILDING BLOCKS

1. Systems Thinking
2. EBM
3. HTA
4. Standards, guidelines, pathways
5. Performance Measurement & Benchmarking
6. QM models/systems focused on HC

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COUNCIL of EUROPE recommendation

Recommendation Rec(2001)13
of the Committee of Ministers to member states
on developing a methodology for drawing up guidelines
on best medical practices

*(Adopted by the Committee of Ministers on 10 October 2001
at the 768th meeting of the Ministers' Deputies)*

The resolution states that health policies and systems should be based on best available evidence and that incorporated in guidelines. The guidelines may support national decisions on prioritization of needs based on ethical, social and financial issues, structural differences of health care systems and variations in epidemiology and health data. Not purely for cost containment or rationing purposes. Recommendations recognizese the fact that guidelines on best medical practices are developed in variable ways in a complex environment .

FACTS

- The November 1999 report of the Institute of Medicine, entitled „To Err Is Human: Building A Safer Health System", indicated that as many as 44,000 to 98,000 people die in US hospitals each year as the result of medical errors.

- Even using the lower estimate, this would make medical errors the eighth leading cause of death in US—higher than motor vehicle accidents (43,458), breast cancer (42,297), or AIDS (16,516).

- The Report to the President on Medical Errors was issued in February 2000. For more information on medical errors, go www.ahrq.gov/qual/errorsix.htm.

FACTS hospital services

Do more harm than good

Do more good than harm

Of unknown effect

J.A. Muir Gray, Director of Research and Development, NHS Executive, Anglia and Oxford Region.

„Evidence-Based Healthcare"

NEGATIVE TRENDS

- Multitasking

- Overload

- Scare from blame

BASIC BUILDING BLOCKS

BUILDING BLOCKS

EBM

Definition

"Evidence-based Medicine is the conscientious, explicit and judicious use of current best evidence in making decision about the care of individual patients"
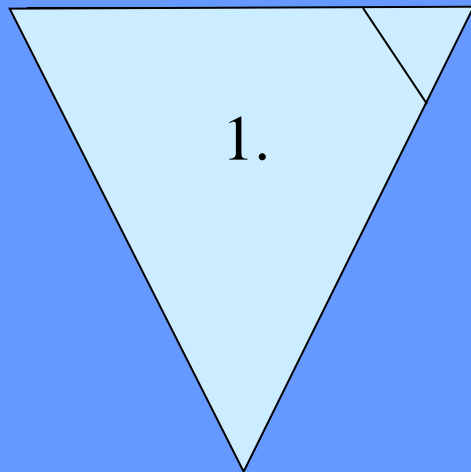
David Sackett BMJ 1996

EVIDENCE

Level of Evidence	Evidence Source
Ia	meta-analysis from randomised controlled studies
Ib	single randomised controlled study
IIa	non- randomised controlled study
IIb	quasi-experimental study
III	non-experimental descriptive study
IV	expert opinion, consensus conference
V	case report

Cook, Chest 1992

From evidence generation to clinical application

Patient's circumstances

Evidence

5.

Patient's wishes

Generation of evidence from research

4.

3.

2.

1.

Applying policy

Making clinical decisions

Evidence synthesis

Forming clinical policy

Haines / Donald 1998

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EBM - GUIDELINES - PATHWAYS

[The Cochrane Database of Systematic Reviews](): The Cochrane Collaboration group: http ://www.cochrane.org/
Guidelines:
http://www.g-i-n.net/

National Guideline Clearinghouse^{TM} (NGC)
[http://www.guideline.gov]() (Agency for Healthcare Research and Quality - AHRQ) .

HEALTH TECHNOLOGY ASSESSMENT

HTA
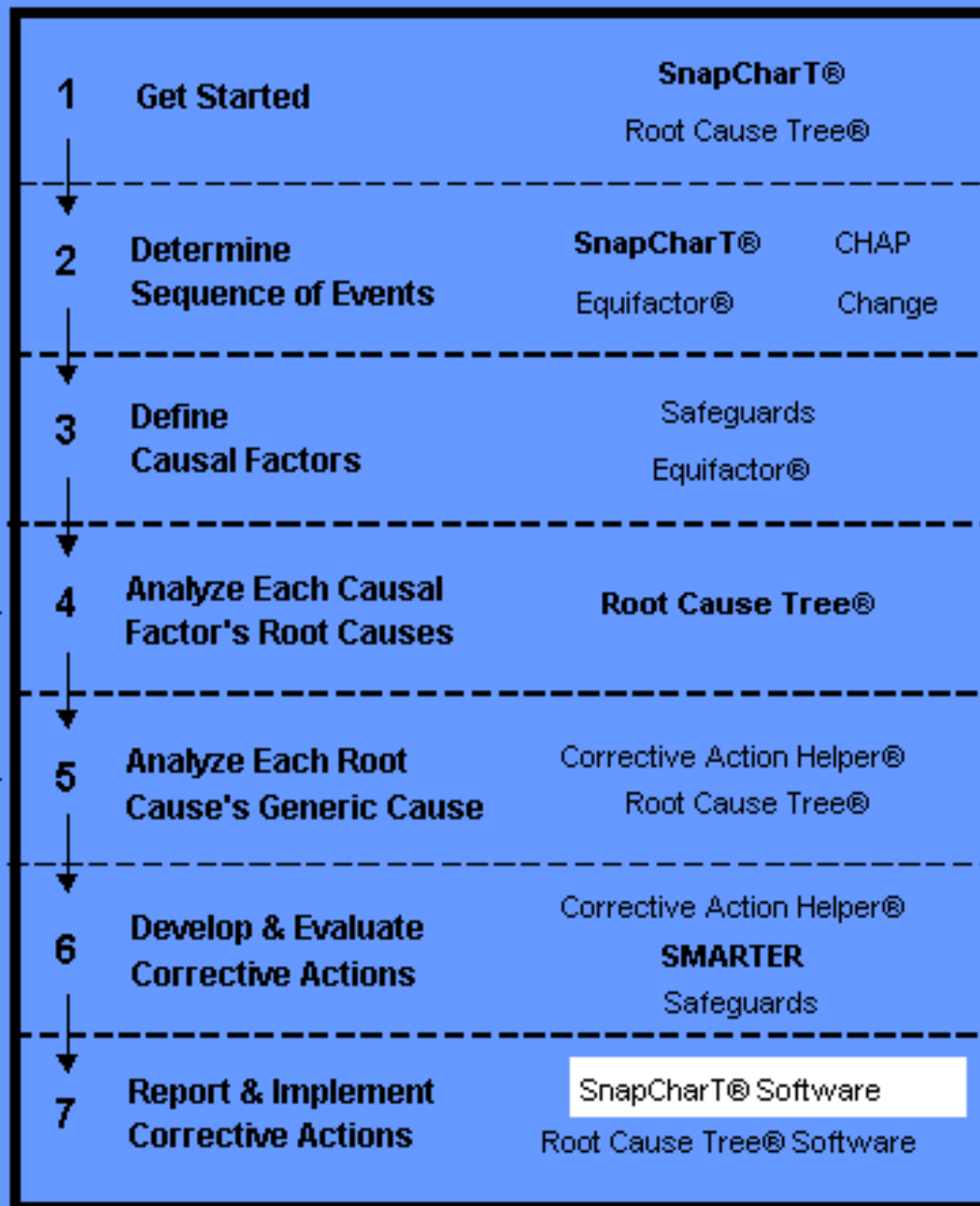
ROOT CAUSE ANALYSIS

(RCA)

(FMEA)

What Happened? →

Why did it happen?
(proximate cause) →

Why did that happen?
(examine processes) →

Why did that happen?
(underlying systems) →

1	**Get Started**	**SnapCharT®**	
		Root Cause Tree®	
2	**Determine Sequence of Events**	**SnapCharT®**	CHAP
		Equifactor®	Change
3	**Define Causal Factors**	Safeguards	
		Equifactor®	
4	**Analyze Each Causal Factor's Root Causes**	**Root Cause Tree®**	
5	**Analyze Each Root Cause's Generic Cause**	Corrective Action Helper®	
		Root Cause Tree®	
6	**Develop & Evaluate Corrective Actions**	Corrective Action Helper®	
		SMARTER	
		Safeguards	
7	**Report & Implement Corrective Actions**	SnapCharT® Software	
		Root Cause Tree® Software	

http://www.taproot.com/pages/jcaho/JCAHO.htm

5S

Donabedian identified three ways to measure quality:

Process › **Structure** › **Outcome**

- **Process of care** – a set of activities that go on within and between practicioners and patients.
- **Structure** – stable characteristics of the providers of care, of the tools and resources they have at their disposal, and of the physical and organizational settings in which increases they work.
- **Outcome** – a change in patient´s current and future health status that can be attributed to antecendent healthcare.

- By creating and implementing a certain quality management system in a health care organisation the task of work on improvement does not begin or end. The following slides show an example of a „systems aproach" to quality management development in a health care organization.

THIS APROACH IS REFERRED TO AS 5S

- A good basis of healthcare service improvement is the 5S (Ho, 1995) method.

- It is based on continuous assurance of order, system structure and cleanliness of the workplace as a pre-condition (basic conditions) for enabling a high level of providing healthcare services:

5 S

in healthcare organizations

Seiri, Seiton, Seiso, Seiketsu, Shitshuke Structuralization, Systematization, Sanitation, Standardization, Self-discipline,

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Seiri	Seiton	Seiso	Seiketsu	Skitshuke
Structuralization	**Systematizing**	**Sanitation**	**Standardization**	**Self-discipline**

Structuralization

- As a means od separating needed things from un-needed – is a complete new sphere called **RESOLVING MANAGEMENT.**

- It is targeted at collation (sorting) and organizing infromation. The ability to dispose (throw out), keep the necessary and obtain new things is a key priority for the 5S method.

- The general aproach can be shortened to a key rule

  „Keep just one thing, but the „best" one"

Systematization

When using the systematization aproach it is necessary to focus innitially on the question **why the finding and storing (archiving) of a thing (tool, drug, document) takes so long.** The proposed solution to this problem must be acceptable especially to those people, which use the thing often, but it must be acceptable also to those, that use the thing sporadically.

Methodology (cook-book) of implementing 5S method into a health care organization:

- Evaluation of the situation of the work environment and deciding to use the 5S method.
- First training: Explaining the principles of the 5S and a visit to the working areas.
- Second trainig: Brainstorming the tasks of 5S and creation of a plan for 5S implementation.
- Re-Structuralization: The core of restructuralization lies in separatiing things necessary for the work to be done from things un-necessary for the job and the storage (keeping) of the needed things in the right (appropriate) places.
- Systematization: Essentially lies in improving the effectiveness of how quickly the needed things can be accessed (reached) and put back to their designated place.
- Sanitation – keeping the place clean. Sanitation in the organization „must be a thing of everyone" starting with the director and anding with the porter at the front door. The idea (especially in Japan) is, that by keeping your working environment clean and tidy assures a clear state of your mind.
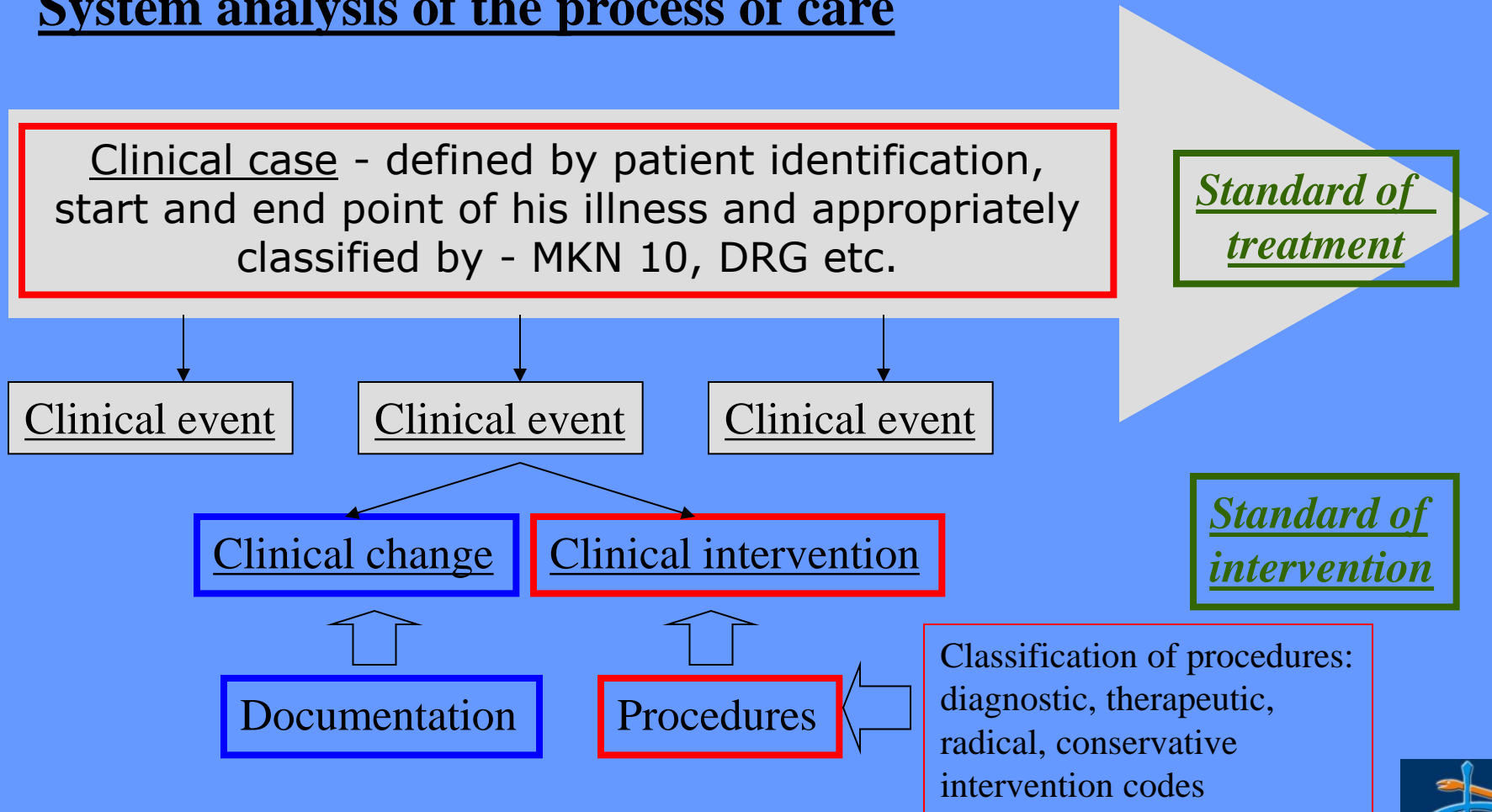
- Standardization: The basic principle of standardization is the achievment of a certain improvement to use it as an EXAMPLE that is to be systematically followed (adherred to). This realtes to structuralization, systematization and sanitation. **It is NECESSARY that the adhearance (following) of the examples must be clearly seen.**

- Selfdiscipline: The cultivation of selfdiscipline in the 5S method puts emphasis on **creation of habbits of improvement and keeping of the organization, tidiness and cleanliness of the workspace**. Selfdiscipline then guarantees the functionality of the whole healthcare organization.

- Audit in 5S. According to pre-designed and agreed forms a group of independent auditors trained in the methodology of a 5S audit performs an audit of the workplaces involved in the 5S program. They pick a „WINNER", evaluate the curent state of achievement and propose areas of improvement for the next „round" of the competition.

- Ceremonial anouncement of the winner of the 5S „competition" and disclosure of further targets and plans of the „competition".

Forms of standards derived from process of care

System analysis of the process of care

Clinical case - defined by patient identification, start and end point of his illness and appropriately classified by - MKN 10, DRG etc.

Standard of treatment

Clinical event   Clinical event   Clinical event

Clinical change   Clinical intervention

Standard of intervention

Documentation   Procedures

Classification of procedures: diagnostic, therapeutic, radical, conservative intervention codes

Models from abroad

- **Institutions**
  - **JCAHO Joint Commission on Accreditation of Healthcare Organizations**
  - **HCFA Health Care Financing Administration**
  - **ABHC Association for Benchmarking Health Care**
- **Projects**
  - **HCUP (QIs) Healthcare Cost and Utilization Project (Quality Indicators)**
  - **CPMs project Clinical Performance Measures Project**
  - **ORYX Outcomes Measurement – "the next evolution in accreditation"**
- **6 criteria and 13 attributes for PMS (ORYX)**
- **Main aims – outcomes v.s. costs, CQI, effectiveness**

ICT – from data to concepts

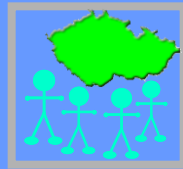- **Data**
- **Information**
- **Knowledge**
- **Concepts**

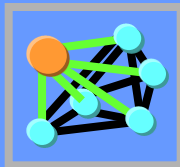- **Learning / Modelling**

Information is not enough

Robust database allows aggregation
L.Dušek (CBA MU Brno, 2004)

HTA in oncology

Regionally aggregated data / Time trends

Prevalence Incidence

Mortality

Risk stratification of patients

Achievable/ achieved results

Cost-benefit evaluation

Heterogeneity within diagnostic groups

Aggregated therapeutic data

Aggregated financial demands

Outstanding situations

Spectrum of patients treated

Therapeutic procedures

Key technologies

Results of therapeutic episodes

Overall results

Specific diagnostic markers

Therapeutic strategy

Procedures Medication + costs

Toxicity events Complications Risk events

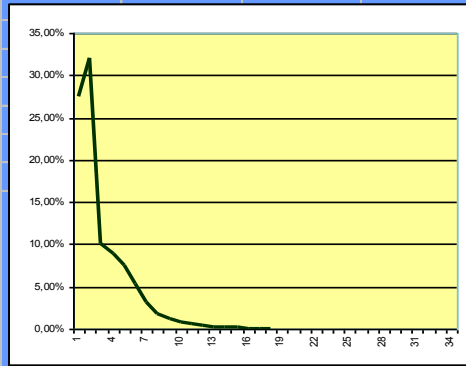Laboratory data

Subjective evaluation, QL

MINIMUM IDENTIFICATION
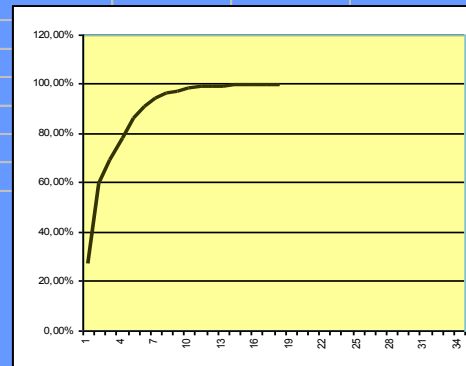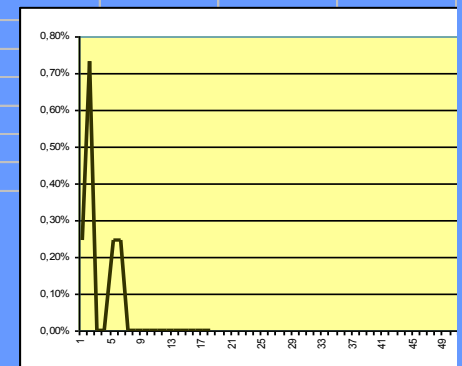
LONGITUDINAL CLINICAL RECORDS

RESULTS

Process analysis

APE													

cost curve — cost increment — IC ratio

	DAY	1	2	3	4	5	6	7	8	9	10	11	12
	CNT	410	410	408	408	398	317	170	107	63	50	30	19
39,38%	HOTEL	445 Kč	866 Kč	844 Kč	820 Kč	751 Kč	648 Kč	688 Kč	665 Kč	754 Kč	671 Kč	680 Kč	764 Kč
35,57%	PROCEDURES	1 897 Kč	1 791 Kč	242 Kč	178 Kč	131 Kč	185 Kč	177 Kč	110 Kč	177 Kč	148 Kč	273 Kč	155 Kč
3,48%	EXTRA MATERIAL	58 Kč	101 Kč	94 Kč	76 Kč	61 Kč	30 Kč	27 Kč	36 Kč	13 Kč	13 Kč	35 Kč	52 Kč
21,57%	OT	1 112 Kč	1 347 Kč	110 Kč	62 Kč	45 Kč	26 Kč	74 Kč	25 Kč	92 Kč	66 Kč	83 Kč	87 Kč
	COST ratio	27,41%	32,04%	10,02%	8,82%	7,49%	5,36%	3,13%	1,70%	1,24%	0,86%	0,61%	0,38%
	COST INCREMENT	27,41%	59,45%	69,47%	78,29%	85,78%	91,14%	94,27%	95,97%	97,21%	98,07%	98,68%	99,06%
	ICU	0,24%	0,73%	0,00%	0,00%	0,24%	0,24%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
	OT	35,61%	49,27%	4,63%	2,44%	1,71%	0,73%	1,22%	0,24%	0,49%	0,49%	0,24%	0,24%
	END of STAY ratio	0,00%	0,24%	0,00%	1,95%	19,51%	35,85%	15,37%	10,73%	3,17%	4,88%	2,68%	0,73%
	DISCHARGE ratio	0,00%	0,24%	0,00%	1,95%	19,27%	35,85%	15,37%	10,73%	3,17%	4,88%	2,68%	0,73%
	DEATH ratio	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
	TRANS ratio	0,00%	0,00%	0,00%	0,00%	0,24%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%
SPACIALTY		708	501	501	501	708	708	708	708	501	708	501	708
CNT ratio		27,817%	16,515%	4,536%	4,138%	7,038%	2,549%	11,377%	4,211%	30,909%	17,073%	37,143%	27,273%
POINTS ratio		58,093%	34,817%	22,715%	17,091%	24,675%	13,520%	31,332%	14,873%	36,702%	33,560%	32,110%	43,464%
		501											
		27,057%											
		34,792%											

Interpretation
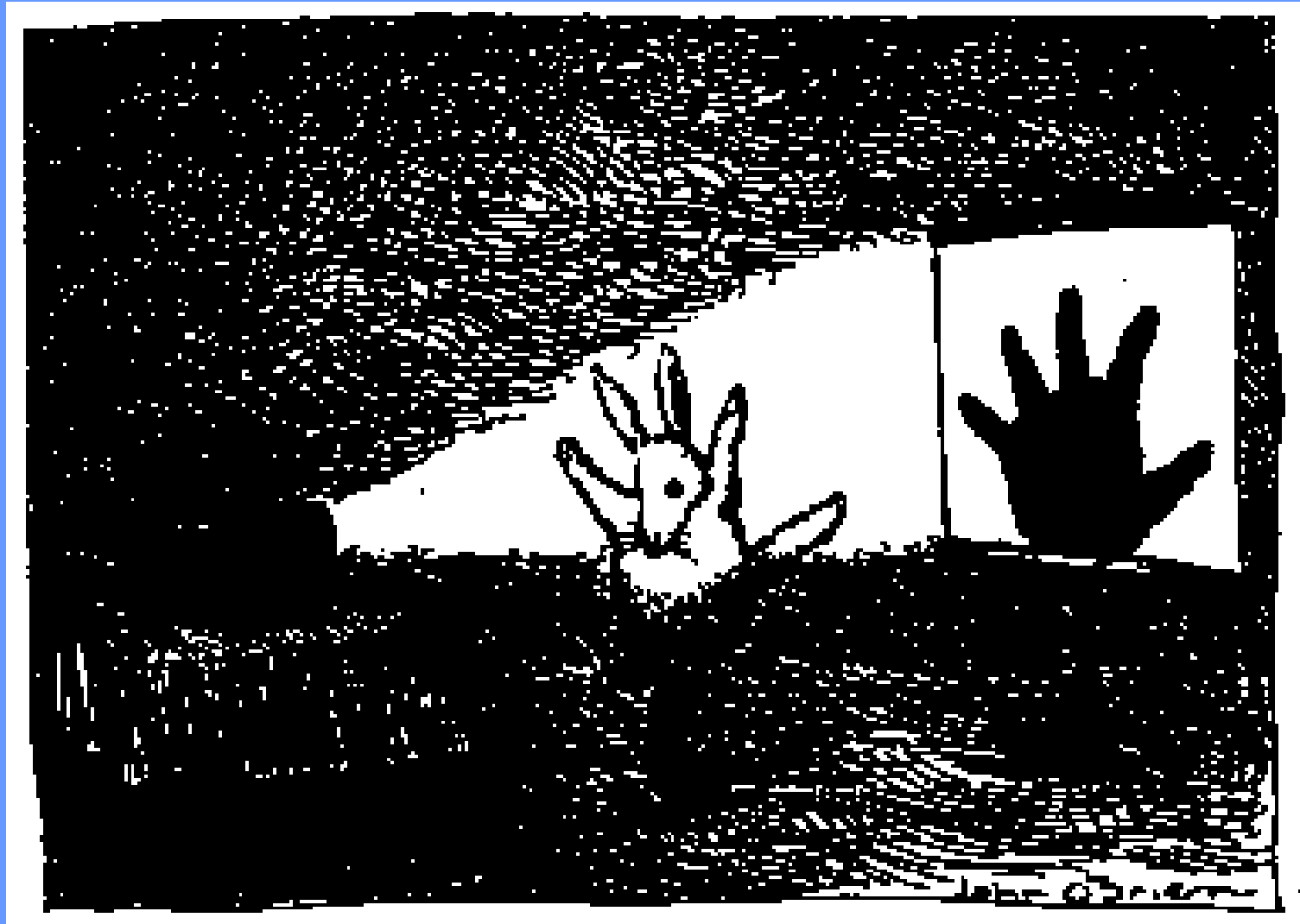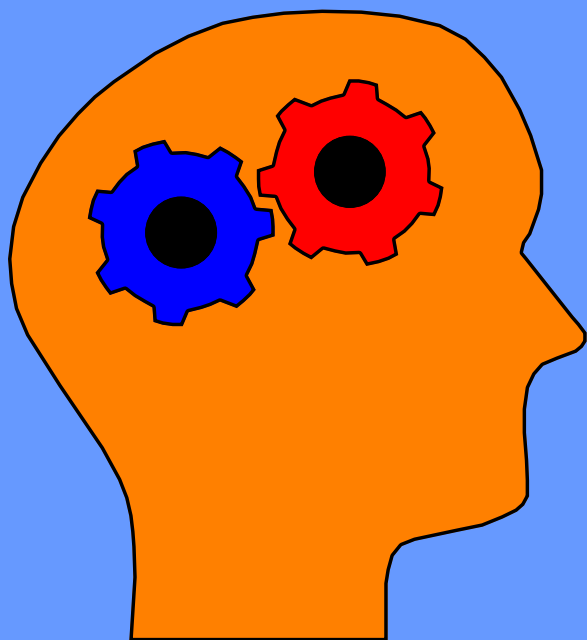
ICT is no substitute for "COMMON SENSE"

AUDIT

AUDIT vs. SELF-ASSESSMENT

Audit

- Conformance with Standards & Norms
- Corrective actions in weak areas
- Conducted by Third party or Specialist
- Sample examination
- Examinations of Tangible Elements
- The Scope is Conformance with the Standard
- The nature is Historical
- The auditors are looking for non conformances and errors

Self-Assessment

- Comparison with a model
- Improvement areas and strengths identification
- Conducted by internal resources (sometimes using facilitators)
- Covers the entire company and it is in-depth assessment
- Tangible & intangible elements
- The scope is Improvements
- The history and future is examined

MODELS DEVELOPMENT

1940   Japan started to rebuild economy.

1951   Japan created the Deming Prize, The first Quality
            Management Award.

1987   USA, they created the Malcolm Baldrige National
                         Quality Award (MBNQA)

1988   14 leading European companies decided to create
the
            European Foundation for Quality Management
            (EFQM) (i.a. Philips,Ericson,British Telecom,VW).

1992   Rank Xerox Limited, the first winner.
EFQM   Membership currently 625+

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EFQM improved model
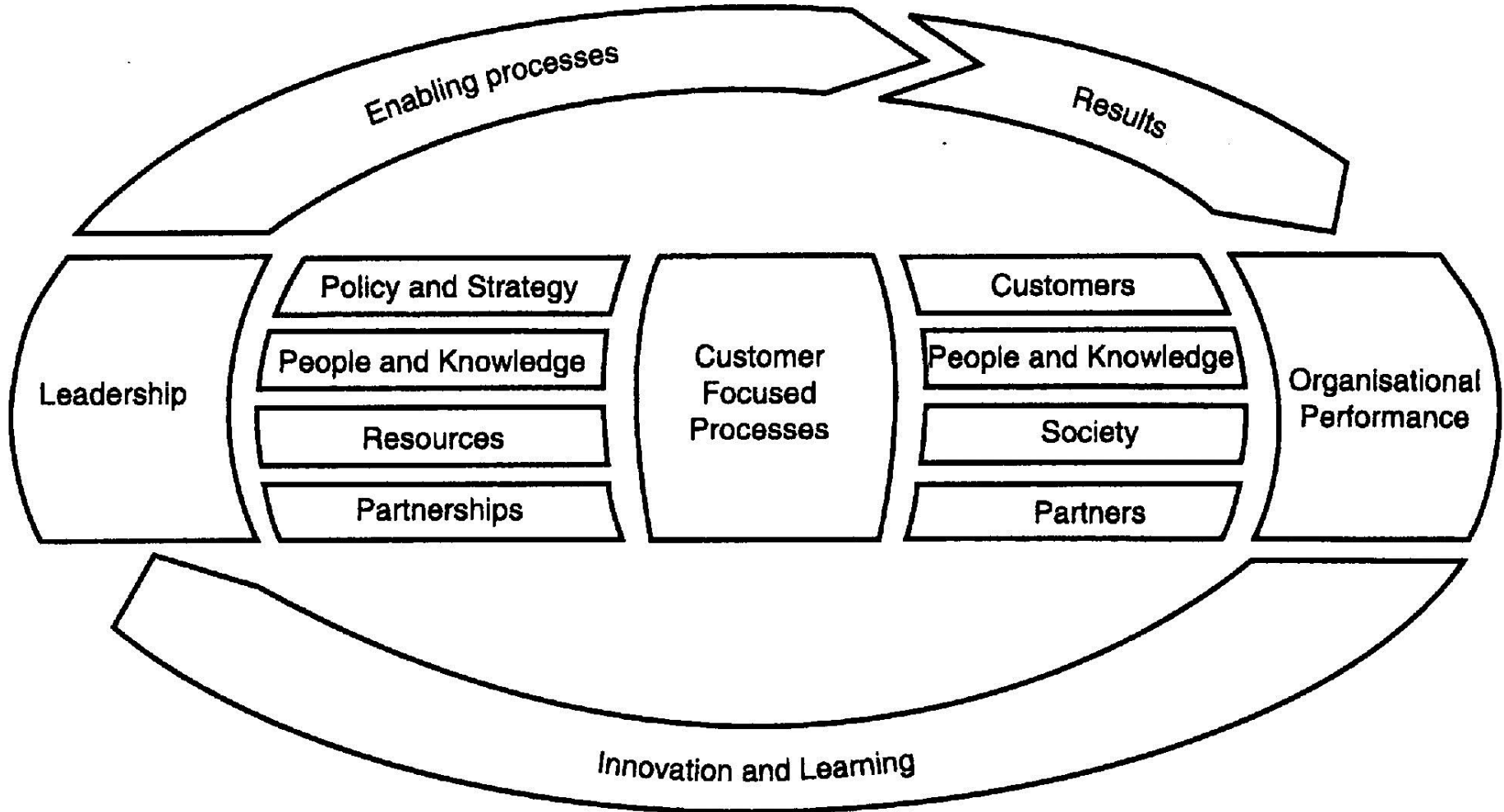
Self-assessment principle

- **Standard self-assessment leading to the self-assessment report elaboration**

There is a need of engaging an extensive amount of capacity prior to it's elaboration, but it is necessary for the participation in the European Quality Award.

- **Self-assessment based on scoring**

There are few questions relating to individual criteria, the RADAR method is used for assessment based on a very simple IT. Benefits: time saving, results used as a base for benchmarking (in the case of internal benchmarking it is mainly comparison in time).

SELF ASSESSMENT METHODS

➢ **Award Simulation**

➢ **Pro-forma Approach**

➢ **Matrix Approach**

➢ **Workshop Approach**

➢ **Questionnaire Approach**
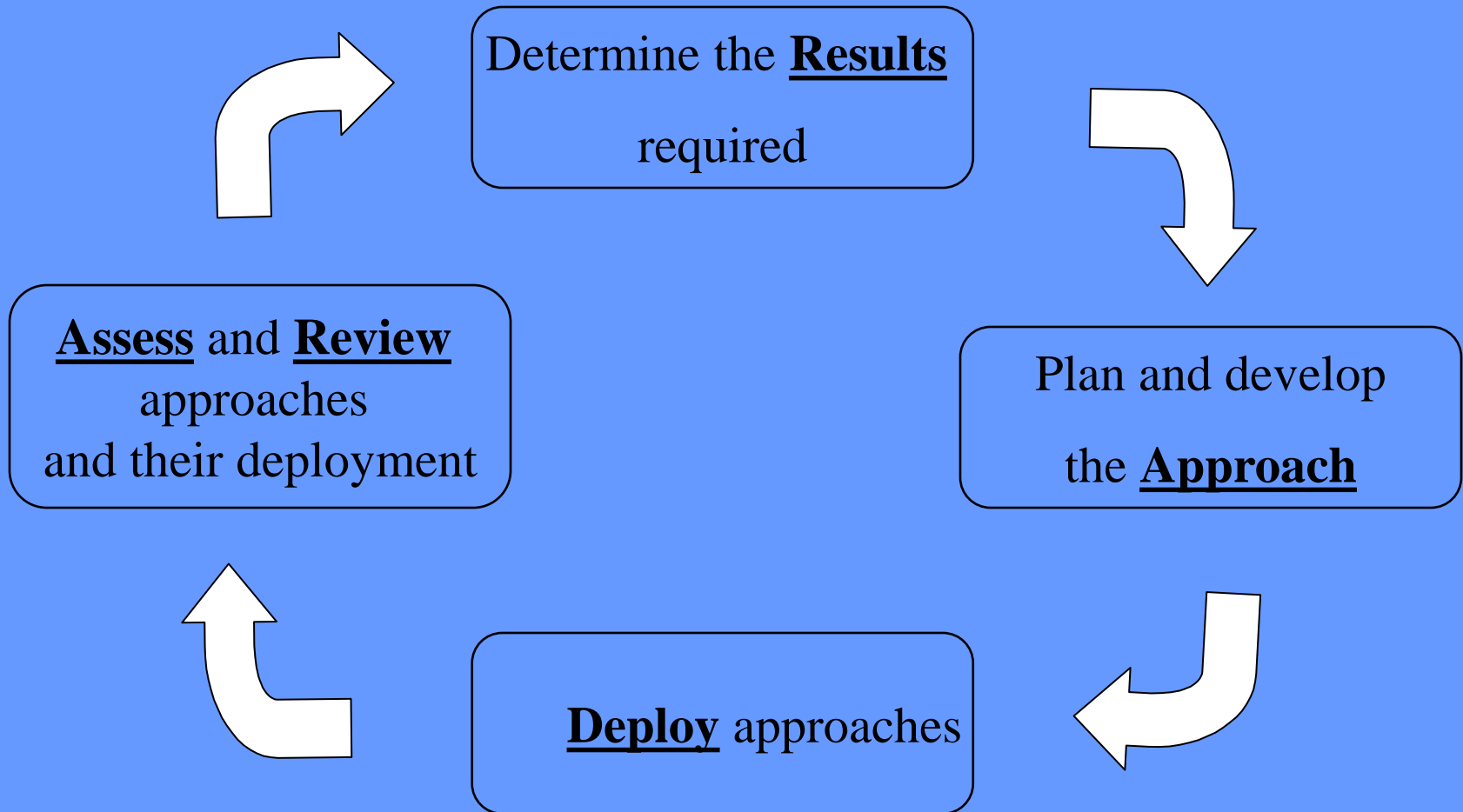
➢ **Peer involvement Approach**

RADAR

RADAR:

is the essential business logic at the heart of the model determining the success of the quest for performance improvements. The fundamental building blocks of the concept underpinning corporate excellence are
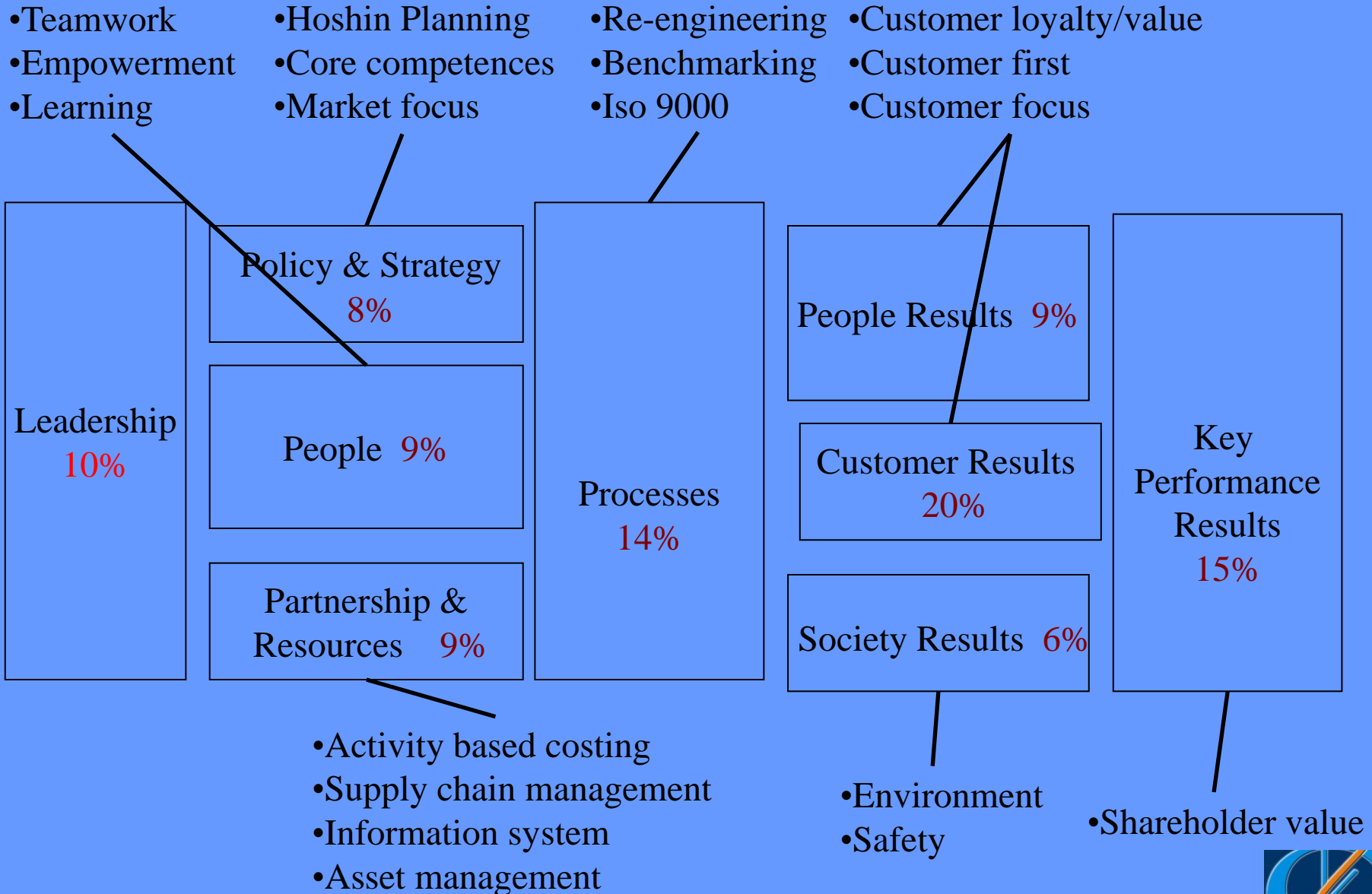
Results, **A**pproach, **D**eployment, **A**ssessment and **R**eview.

RADAR

Determine the **Results** required

Plan and develop the **Approach**

Deploy approaches

Assess and **Review** approaches and their deployment

WAYS TO DO IT

•Teamwork
•Empowerment
•Learning

•Hoshin Planning
•Core competences
•Market focus

•Re-engineering
•Benchmarking
•Iso 9000

•Customer loyalty/value
•Customer first
•Customer focus

Leadership
10%

Policy & Strategy
8%

People 9%

Partnership &
Resources   9%

Processes
14%

People Results 9%

Customer Results
20%

Society Results 6%

Key
Performance
Results
15%

•Activity based costing
•Supply chain management
•Information system
•Asset management
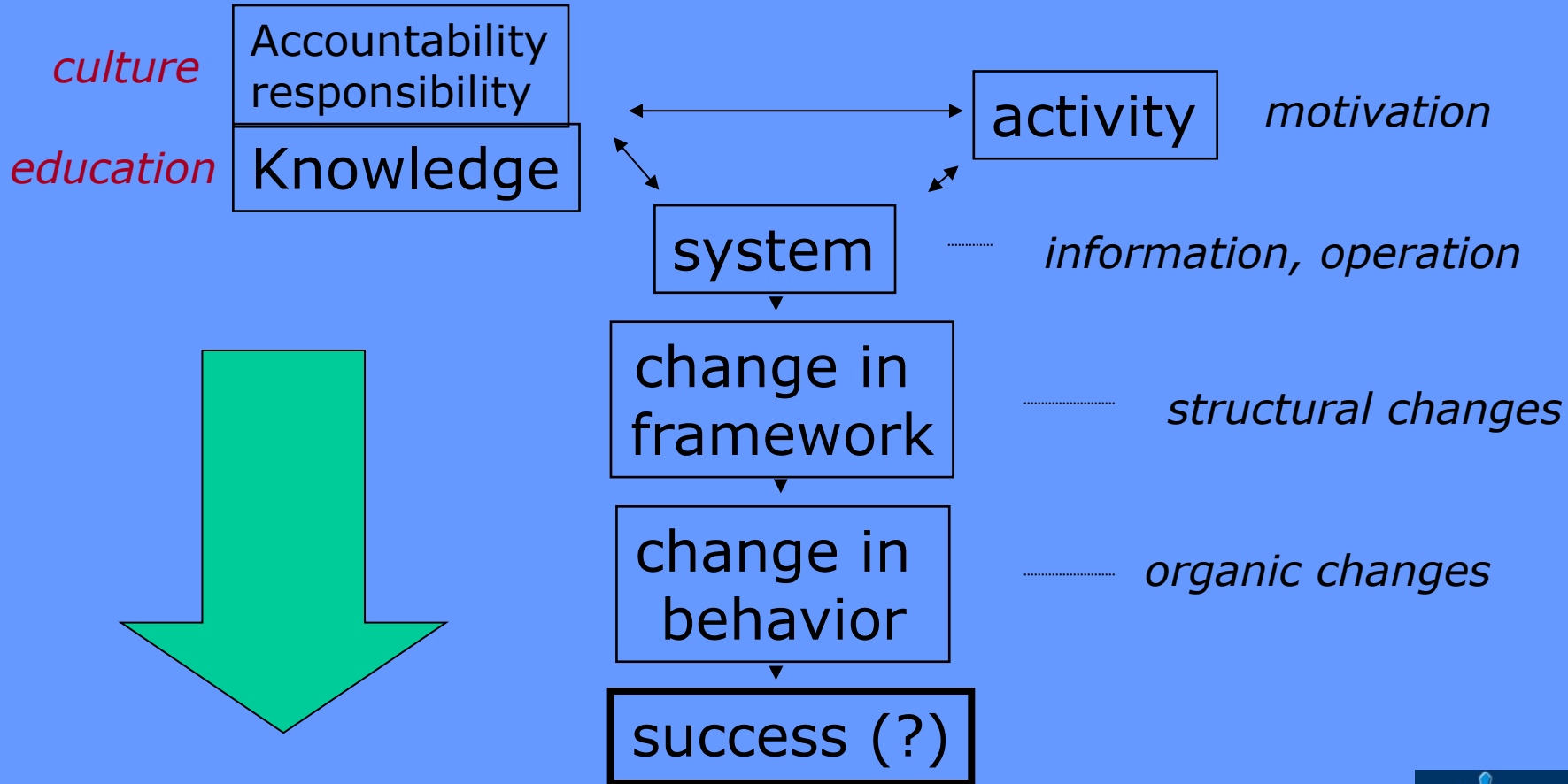
•Environment
•Safety

•Shareholder value

EFQM MODEL & BENCHMARKING

➢ **Benchmarking** – the process of systematically comparing your own organisational structure, processes and performance against those of good practice organisations globally, with a view to achieve business excellence

➢ **The Self-Assessment using the EFQM Model is a benchmarking Process. There is a comparison between a company and the ideal Europen Company**

➢ **Self-Assessment is a Learning Process**

Principles of change

culture

Accountability responsibility
Knowledge

education

activity — *motivation*

system .... *information, operation*

change in framework .... *structural changes*

change in behavior .... *organic changes*

success (?)

Roles of healthcare system actors

Allocation efficiency in health care

Patient profit:
Health status (objective and subjective)
Minimizing stress and discomfort or insecurity
Minimizing social problems
Minimizing personal investments etc.

Provider profit:
Short and long term financial stability
Maximizing payments
Optimizing resource use
Growth of organization
Good record, patient satisfaction
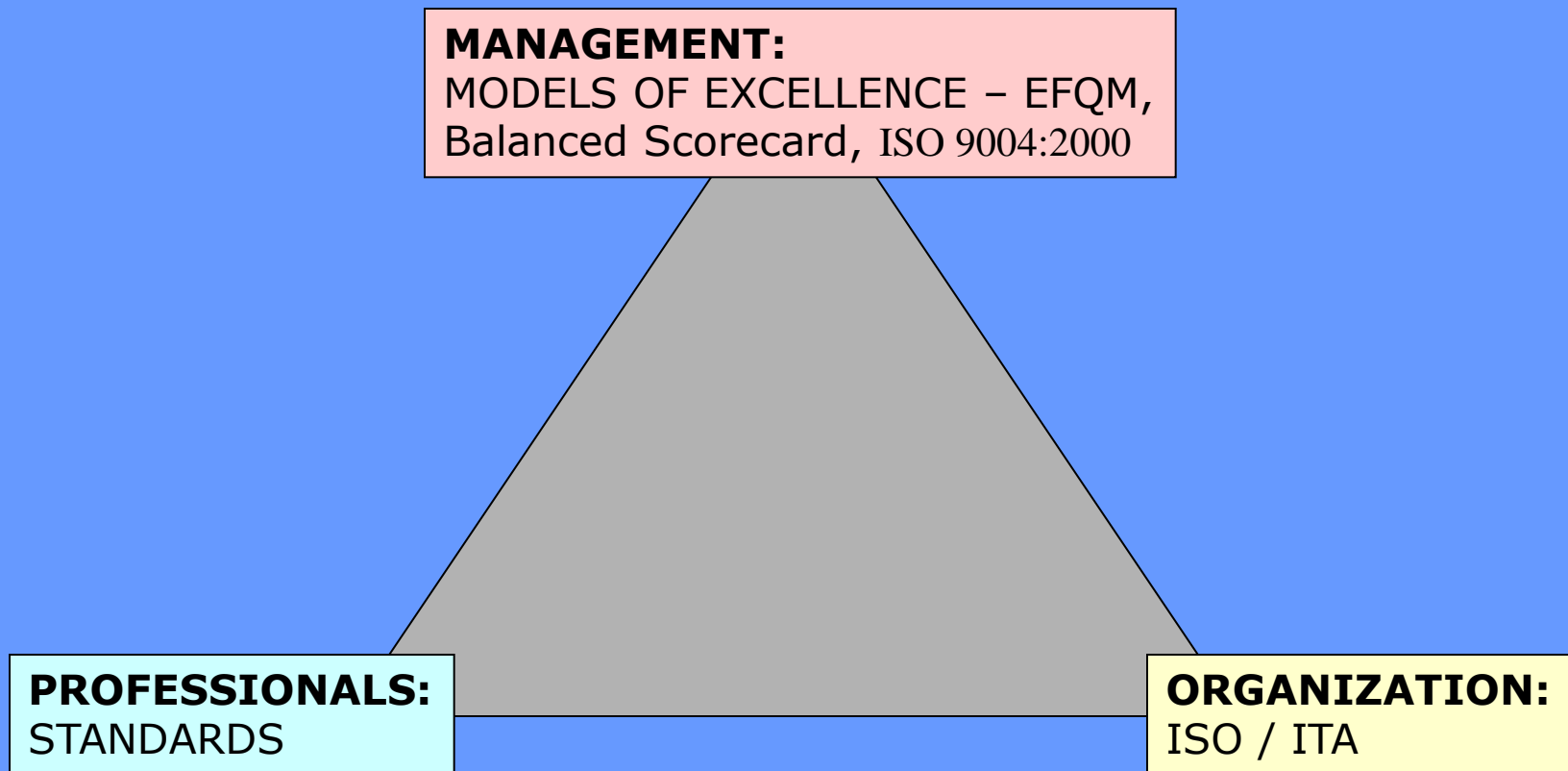Staff satisfaction and growth

Payer profit:
Short and long term financial stability
Maximizing insurance payments
Optimizing resource use
Growth of organization
Good record, patient satisfaction
Staff satisfaction and growth

Harmony in organization triangle

Various levels need various tools

MANAGEMENT:
MODELS OF EXCELLENCE – EFQM,
Balanced Scorecard, ISO 9004:2000

PROFESSIONALS:
STANDARDS

ORGANIZATION:
ISO / ITA

Integrating management-smart method of self-assessment with clinical standards delivered by peer auditing and accreditation systems generates thee potential to deliver excellence in healthcare

SKILL of MANAGEMENT

- CHANGE MANAGEMENT - To transform organizations, we first need to understand the natural change processes that are embedded in all living systems. Once we have that understanding, we can design processes of organizational change accordingly and create human organizations that mirror life's adaptability, diversity, and creativity.   (Fritjof Capra)

NOT so easy

QUALITY IMPLEMENTATION - A MULTIDIMENSIONAL PROCESS

MEASUREMENT INDICATORS

ORGANIZATONAL CONTEXT

CULTURAL CONTEXT & VALUES
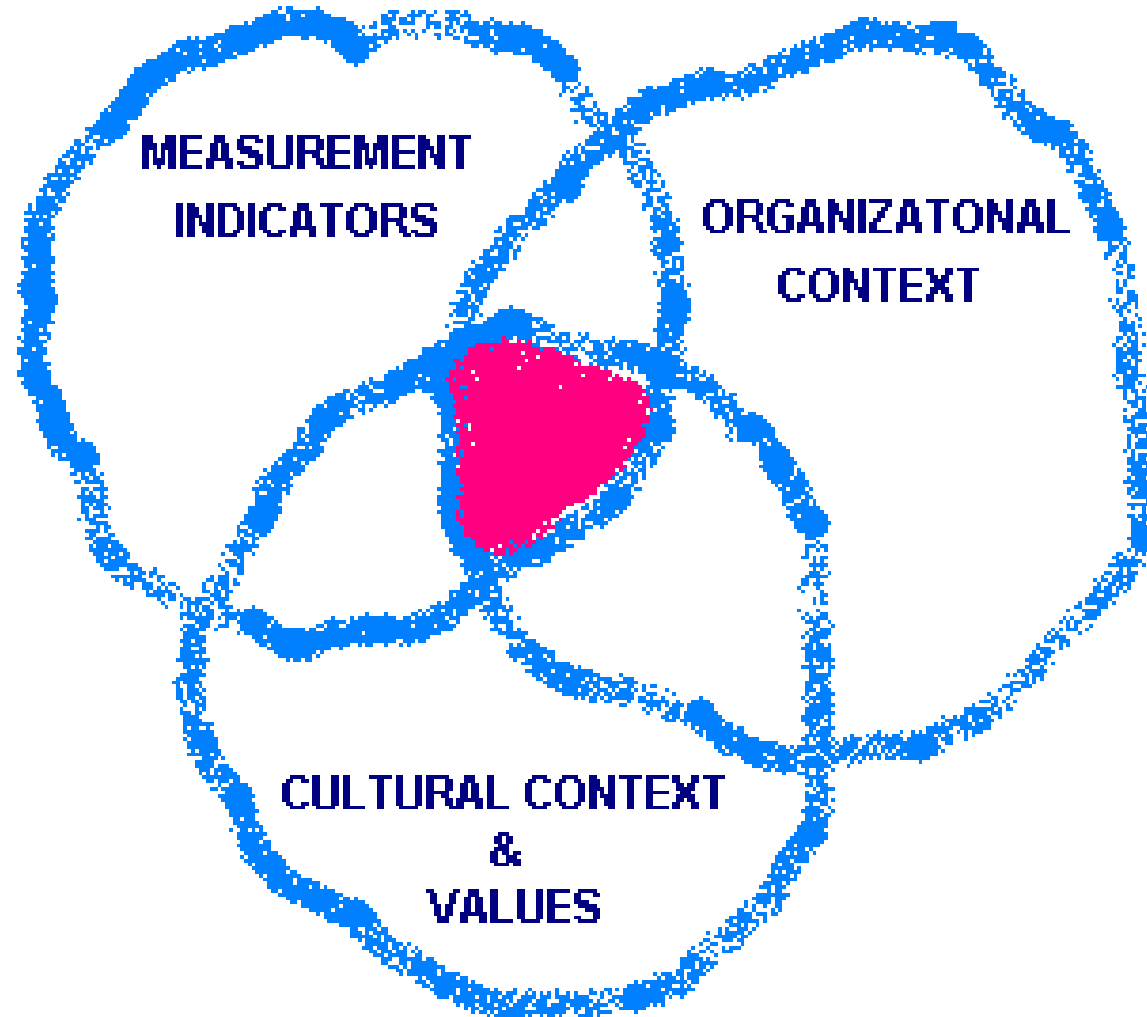
A LONG JOURNEY

Thanks for your attention!!

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