

131: CONTINUOUS QUALITY IMPROVEMENT OF X-RAY, LABORATORY AND EMERGENCY DEPARTMENTS IN 72 SICILIAN HOSPITALS

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Objective:

Implementation of CQI in X-ray (77), Laboratory (70) and Emergency (63) Departments in 72 public Sicilian Hospitals.

Method:

In May 2000, Cefpas, Centre for Training and Research in Public Health (Caltanissetta, Sicily), designed this three years project (supported by national and regional governments) using an innovative strategy based on bottom-up approach and a benchmarking methodology. The project adopted a step by step CQI strategy involving managers, health personnel and population in managerial/ professional/perceived quality aspects. The first step involved the analysis of the existing situation, the second the definition of objectives, the plan and implementation of improvement activities.

1) Managerial quality

Project Departments should achieve at least Minimum Standards defined by national law in relation to organizational, structural, technological aspects.

After five sequent visits by Cefpas staff and meetings with personnel of the involved departments, acquisition of documentation and information was achieved using semi-structured questionnaires and check lists. After analysis, improvement activities were defined and implemented.

2) Perceived quality plan foresees:

- Quality Assessment by self and by internal and external clients using eight questionnaire types and an observation grid (24.700 clients);
- Analysis using multiple triangulation and quali-quantitative methodologies.

3) Technical-professional quality

- Health personnel, using a bottom-up approach, defined a set of Minimum Standards in relation to *knowledge, behavior and skills* for different health professionals.
- A set of shared, appropriate and reproducible processes and result indicators was identified using the same approach during two workshops (about 210 health professionals). Each indicator has a proper relation and is linked to behavioral guidelines. The first step was a retrospective analysis of data to verify the existence of major shortcomings to be progressively corrected, continuously monitored and prospectively evaluated.
- Using the protocol for review of hospital use, appropriateness of admission and hospitalization was evaluated.
- Training and other quality improvement activities should allow personnel to reach at least Minimum Standards.

Results:

- Situation analysis completed in all Departments for Organizational Minimum Standards, through checklists includes 180 items. The results are characterized by wide variability. Improvement activities started with the organization of courses on "Strategic Management Organization of Departments" for all departments' chiefs. Seven different courses were planned on critical topics that emerged after analysis.
- Six focus-groups meetings, oriented to internal and external clients, were held throughout Sicily to develop perceived quality instruments. A pilot test of 64 questionnaires was carried out.
- Health personnel defined 597 professional standards. Cefpas team developed checklists and carried out situation analyses.
A set of 33 process and results indicators were defined, involving health personnel and were tested retrospectively. The prospective data collection is underway. Main indicators are linked to: standardized guidelines for chest pain, minor head injuries, cardiac markers, abdominal ultrasonography, protein electrophoresis. The indicators retrospective evaluation

demonstrated a great variability in data availability. There is a positive trend in the last prospective evaluation.

Some examples:

Indicator	Dic. 2001 (%)	Dic. 2002 (%)
<i>Abdominal ultrasonography</i>		
Patients with ultrasonography carried out within 21 days from request	79.7	84.0
Requests with diagnostic indication	67.0	75.1
Pathological Reports	36.1	46.5
<i>Minor head injuries in ED</i>		
Patients undergone cranial X-Ray	59.6	46.7
Patients undergone with CAT	12.4	18.8
Patients sent back home with directives	55.4	75.3

Conclusions:

The first results confirmed the existence of a non-homogeneous situation of databases and of clinical and managerial performances that justifies a serious and constant commitment on CQI promotion for Sicilian hospitals. The trend of results is positive and promising.