

III Quality Management

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Introduction

The purpose of this chapter is to enable registered health and social care practitioners to assume a clinical and/or a professional leadership role in quality management in the health and social care sectors. The contents in this chapter will strengthen the management competences of practitioners working in these sectors, including critical thinking, critical reflection, problem solving and decision-making, thus improving the quality in health and social care services.

Learning Outcomes

Having studied this chapter, the student should be able to:

- Define the quality in social and health organizations;
- Define the planning process to implement quality of care at the organizational level;
- Understand the tools available for quality assurance;
- Understand continuous quality improvement processes;
- Analyse quality systems in social and health care organizations.

There is recognition of the importance of those leading health and social care organisations “to raise the quality of services and to improve the health and social wellbeing of the people” (Department of Health, Social Services and Public Safety, 2006, p. 2). However, the concept of quality has different meanings for different individuals, depending on what one considers and/or expects to get or achieve. Quality emerges as an inseparable requirement of health and social care systems (Martin, Henderson & Charlesworth, 2010). This inseparable requirement, in our view, is related to the relevant social, political and economic impacts of the health and social care sector and has therefore received increasing attention from the responsible entities.

This chapter incorporates an examination of key quality management practices within the context of health and social care organisations focusing on quality planning, quality assurance and continuous quality improvement in social and health care.

Quality and Quality Planning

Quality definition and quality planning are justified because all professionals should understand the cause and effect relationships between their organisation’s actions and the results achieved. Because quality has an impact on the outcomes delivered by health and social systems, it is imperative that decision-makers, planners and professionals at all organizational levels have knowledge on how to make informed strategic and scientific choices for quality improvement. All organizations should provide high quality care for everyone, however, quality might have many meanings, for example: a degree of excellence; conformity with

requirements; fitness to use; fitness for purpose; customer's satisfaction; and the totality of characteristics of an entity that bear on its ability to satisfy stated or implied needs (Hoyle, 2011).

All stakeholders involved in the delivery of health and social care services are important to attain good quality. Quality may be divided into two main dimensions that are conceptually different: quality of products and quality of services (Hoyle, 2012). The importance of product characteristics used in care delivery cannot be neglected. Nevertheless, this work will focus only on the quality of services. The most common characteristics of service quality are: accessibility; accuracy; courtesy; comfort; competence; credibility, dependability; efficiency, effectiveness; flexibility; integrity; responsiveness; reliability and security (European Commission, 2014).

To provide quality services or *to do the right things in the right way*, it is imperative to understand the purpose. The International Organization for Standardization (ISO, in Hoyle 2011) defines purpose as a comprehensive and fundamental rule or belief for leading and operating an organization to success that must respect at least eight quality management principles: customer focus, leadership, involvement of people, process approach, system approach, continual improvement, factual approach to decision making and mutually beneficial supplier relationships (ISO, 2012). In management science, to plan is the first step that drives all organizations. Without a good plan, good performance or results cannot be assured. The steps for good quality planning are: the establishing of goals; identifying who is impacted by these goals; determining the needs of the stakeholders; developing products or services to fulfil the needs of those stakeholders; developing processes able to produce, promote and distribute the product features; and establishing process controls, as well as transferring the plans to the operation forces (Hoyle, 2011).

To plan quality management, it is necessary to work within a good framework that provides the guidelines to understand and manage its complexity and include all the necessary requirements for quality. One of the most common frameworks applied to health and social care is the Excellence Model of the European Foundation for Quality Management (EFQM). The designed EFQM Excellence Model "allows people to understand the cause and effect relationships between what their organisation does and the results it achieves" (EFQM, 2013, p. 2).

Many other factors have contributions to quality at macro, meso, micro and nano levels, and many disciplines – not only scientific and technological knowledge but also new organizational conceptions and communications strategies and tools – make their contributions.

Quality Assurance

Quality assurance, to the ISO, is about providing confidence that quality requirements will be fulfilled (Hoyle, 2011, p. 60), or is "the measurement of the actual level of the service provided plus the efforts to modify, when necessary, the provision of these services in the light of these results of the measurement" (Williamson, 1979, in Sale, 2005, p. 1). To understand the main quality activities that drive quality assurance the following subjects were selected: effectiveness and efficiency; risk management and safety; standards and measurement.

Effectiveness is one of the main aspects of quality assurance and can be defined as the degree to which the organization ensures that the best practice, based on evidence, is used in the organization and that interventions do what they are intended to do (Sale, 2005). Social and health care delivery must be clinically and cost-effective (efficiency) because the costs of care are increasing every day. Clinical guidelines can be used to assist practitioners and the customer to make the best decision in a specific situation and are developed mostly by scientific societies and professional organizations, but also by government insti-

tutes such as NICE (National Institute for Health and Care Excellence – <https://www.nice.org.uk/>). Evidence can also come from: clinical experience, patients, clients, carers, local context and environment.

Risk management in healthcare is the systematic identification, assessment and reduction of risks to patients and staff through: a) the provision of appropriate, effective and efficient levels of patient care; b) the prevention and avoidance of untoward incidents and events; c) the adoption of the lessons learned and the changing of behaviour or practices as a result of near-miss incidents and adverse outcomes; d) the communication and documentation of care in a comprehensive, objective, consistent and accurate way (Sale, 2005).

Clinical risk management can be seen as having three component parts: a) identifying risk; b) analysing risk; and c) controlling risk. The identification of risk is achieved through the analysis of data collected about accidents, near-miss incidents and the results of systematic service reviews. The three components of clinical risk management can be developed into a risk management cycle similar to the quality assurance cycle and the audit cycle (Sale, 2005). In addition, the leadership team should ensure that there are sufficient resources to meet the requirements of the organisation and systems to effectively mitigate, control and manage all risks, and that attention is focused on the core business of the organisation – to care for and treat consumers / patients in a safe and high quality clinical environment (ACHS, 2013).

Another important aspect of quality assurance is *standard definition*. According to the UK's Department of Health, Social Services and Public Safety (2006), "A standard is a level of quality against which performance can be measured. It can be described as 'essential' – the absolute minimum to ensure safe and effective practice, or 'developmental' – designed to encourage and support a move to better practice." (p. 2). The importance of standards is to:

"Give Health and Personal Social Services (HPSS) and other organisations a measure against which they can assess themselves and demonstrate improvement, thereby raising the quality of their services and reducing unacceptable variations in the quality of services and service provision; enable service users and carers to understand what quality of service they are entitled to and provide the opportunity for them to help define and shape the quality of services provided by the HPSS and others; provide a focus for members of the public and their elected representatives to assess whether their money is being spent on efficient and effective services, and delivered to recognised standards; help to ensure implementation of the duty the HPSS has in respect of human rights and equality of opportunity for the people of Northern Ireland; and promote compliance, and underpin the regulation and monitoring of services to determine their quality and safety and to gauge their continuous improvement." (Department of Health, Social Services and Public Safety, 2006, p. 3).

The accomplishment of the standards of the chosen system can give the organization a quality certification. The National Institute of Standards and Technology (2015_2016) defined seven key areas of the organization: leadership; strategic planning; customer and market focus; information and analysis; human resources; process management; and business results.

Quality control is the oldest quality concept. It refers to the detection and elimination of components or final products that are not up to standard. It is an after-the-event process concerned with detecting and rejecting defective items. As a method of ensuring quality it may involve a considerable amount of waste, scrap and reworking. Quality controllers or inspectors usually carry out quality control. Inspection and testing are the most common methods of quality control, and are widely used in health and social services, education, and so on, to determine whether the standards are being met.

There are seven basic tools of quality control, first emphasized by Kaoru Ishikawa, a professor of engineering at Tokyo University and the father of “quality circles” (Tague, 2004):

- *Cause-and-effect diagram* (also called ‘Ishikawa’ or ‘fishbone’ chart): Identifies many possible causes for an effect or problem and sorts ideas into useful categories;
- *Check sheet*: A structured, prepared form for collecting and analysing data; a generic tool that can be adapted for a wide variety of purposes;
- *Control charts*: Graphs used to study how a process changes over time;
- *Histogram*: The most commonly used graph for showing frequency distributions, or how often each different value in a set of data occurs;
- *Pareto chart*: Shows on a bar graph which factors are more significant;
- *Scatter diagram*: Graphs pairs of numerical data, one variable on each axis, to look for a relationship;
- *Stratification*: A technique that separates data gathered from a variety of sources so that patterns can be seen (some lists replace ‘stratification’ with ‘flowchart’ or ‘run chart’).

These tools can be used to gauge performance against standards and also provide comparable measures over time.

Continuous Quality Improvement

Quality improvement has a long history in organisational thinking and practice and many changes related to quality improvement have occurred in recent years in European countries (the development of the Service Excellence Frameworks, the Quality Standards, and the accreditation systems). Despite all these systems, the quality of services is not something implied, given or fixed. As such it is mandatory to ensure that organisations systematically and intentionally improve services and increase positive outcomes. Continuous quality improvement (CQI) is a systematic approach, a “*management philosophy and a management method*” (McLaughlin, McLaughlin & Kaluzny, 2004, p. 8) that may be used to describe, assess, evaluate and improve an existing service, practice or product (Radawski, 1999).

Quality Improvement is also defined as “a structured, organized organizational process for involving personnel in planning and executing a continuous flow of improvements to provide quality care that meets or exceeds expectations” (McLaughlin et al., 2004, p. 8). In this definition all the basic assumptions of CQI are present. The principal ones relate to people, who are at the core of CQI. CQI recognises internal and external “customers” (Graham, 1995). While external customers include clients or patients and their families, but also the local community or external contractors; internal customers include all professionals. On one side, the CQI has a substantive requirement to involve the staff in the process of quality improvement (and thus build an organisational commitment to quality through the quality activities: the description of the processes, their monitoring and the application of the changes). As such, while the process is managed from the top, the changes are implemented from the bottom. On the other side, instead of the individual, CQI emphasises the organisation, systems and processes when considering improvement opportunities (Graham, 1995). The staff are not primarily seen as the source of problems or mistakes; CQI assumes that most of the problems in organisations lie in processes, not in people (Graham, 1995).

CQI is also a flow – an endless, cyclical process based on the experimentation or variation testing of proposed changes on the level of everyday processes. For affirmation that changes really bring improvement, objective information is mandatory in CQI; the data are gathered to analyse and improve processes (Graham,

1995). CQI is a method of management that uses a scientific methodology; it is management by fact (Goldstone, 1998).

CQI, as a management philosophy, also assumes that most things can be improved through small incremental steps and that opportunity for improvement exists in every process. It requires an organisational culture where mistakes are seen as opportunities and where improvement is a natural part of the everyday work. With this assumption, CQI is a very proactive (not reactive) approach, supposing that incidents and problems can be prevented and that it is better to monitor and improve services than wait for something to go wrong and then fix it (Maher & Penny, 2005).

Plan-Do-Study-Act (PDSA) Cycle

A number of methods, often represented by a cycle or diagram, can be used to apply CQI. The best-known method of CQI is the four-step PDCA/PDSA cycle, also called the Deming circle, the Deming wheel, control circle or cycle, or plan-do-study-act cycle. Originally used in business, but applicable in all types of organisations (Moen & Norman, 2006), in recent decades it is the most commonly used approach for rapid cyclical improvement in healthcare (Varkey, Reller, & Resar, 2007). The concept of PDCA (Plan, Do, Check, Act) was published by W. E. Deming in the 1950s. Later, Deming modified PDCA to PDSA – Plan, Do, Study, Act – because he thought that “C” for “check” emphasised inspection rather than analysis (Moen & Norman, 2006). This method is characterised by a testing, sample approach in which the improvement, an examined solution, new approach or new practice is tested on a small scale before any changes are applied to the whole system (Berwick, 1998; Langley et al., 2009). The PDSA cycle has four phases (Figure 1).

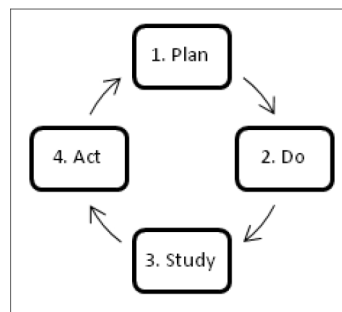


Figure 1. Phases of the PDSA cycle (Moen & Norman, 2006)

The first phase – “Plan” – means the planning of improvement. At the beginning it is necessary to understand how **the process** (treatment, care, support process) works at present and identify exactly the problem to be addressed. Then a potential solution can be developed and formulated. For this solution, the changes to be made and the goal of the improvement must be defined, and then a plan for the implementation of the change has to be prepared. The second phase – “Do” – means realising the change, implementing the potential solution. In this phase the solution will not be fully implemented – the changes are to be tested on a small scale. During the implementation phase, monitoring, gathering of data and documenting of both the process and the outcomes is mandatory (Maher & Penny, 2005). In the third phase – “Study” – the results of the testing phase will be considered. The data is analysed and the results are compared with the original goals or the predicted outcomes with the actual ones

(Maher & Penny, 2005), in order to draw a conclusion and decide if the expected benefits were achieved. Depending on the success of the pilot project and the number of areas that needed improvement, a decision on implementation or redefinition of the solution – by incorporating other improvements and repeating the testing – should be made. The fourth and final phase – “Act” – means adopting the change, fully implementing the solution into the whole system if the pilot test succeeded, or abandoning it otherwise. This phase is crucial for maintaining the change in practice. It is necessary to establish the systems and support them through the integration of the change in the organisational culture (Maher & Penny, 2005).

By repeating this cyclical testing of improving solutions, a better quality of healthcare or social services may be achieved. This strategy minimises the risk of the implementation of an inappropriate solution to the whole organisation. Furthermore, the PDSA procedure supports acceptance of the change by the staff because they have been involved in the process, because of the time they have to understand the goals of the change and because of the procedures to increase the credibility of the change through testing and improving of solutions in the real practice of the organisation. Therefore, the PDSA cycle may serve as a method eventually adaptable to the conditions and specificities of the organisation, thus developing the quality management strategy to fulfil the requirements and take advantage of the CQI approach.

Findings in Social and Health Care Context

As a means to justify the value of Quality Management we tried to identify studies that relate any of the different components and find whether effectiveness in health and/or social care has been proven, regardless of the models implemented. As a reference we can refer to the work ‘Deepening our Understanding of Quality Improvement in Europe project (DUQuE)’ by Sunol et al. (2015, p. 2) where the authors found that “there are significant gaps between recommended standards of care and clinical practice in a large sample of hospitals”. Moreover, implementations of department-level quality strategies are significantly associated with good clinical practice. In the same project, Groene et al. (2015, p. 2) found an “absence of, and wide variations in, the institutionalization of strategies to engage patients in quality management or implement strategies to improve patient-centeredness of care... suggests that patient-centred care is not yet sufficiently integrated in quality management”.

Despite this assertion, it was found that many hospitals of the DUQuE project have now obtained the ISO 9001 certification and have launched policy management initiatives and improvements at the organizational level. Subsequently, some management indexes have been improved, as has health care quality (Munehika, Sano, Jin, & Kajihara, 2014). Another study that compares evaluations made by care standards inspectors, based on the experience of residential care, concluded that “national minimum standards and modernization of inspection methods recently announced by the Department of Health and the Commission for Social Care Inspection are timely and appropriate” (Beadle-Brown, Hutchinson, & Mansell, 2008, p. 210).

It was found that different methods of training for quality assurance (QA) effectiveness can decrease the cost/care process significantly (Cánovas, Hernández, & Botella, 2009). As such, “Internal QA programmes should be incorporated into the professional culture of health institutions and routine activities in the health teams daily work should be encouraged and given incentives by the system, as they may have an improvement effect on the care provided to patients” (Cánovas, et al., 2009, p 818).

Another important aspect of quality management is patient safety. Indeed, positive correlations exist between total quality management and patient

safety management, as well as between patient safety and service quality (Tsai & Wu, 2013).

These studies justify the investment in quality management programmes in health and social care organisations in its different aspects, as it improves the quality of the service and greatly benefits all the involved agents, especially customers.

Discussion

Quality management is a continuous process of planning, implementation and evaluation of quality assurance structures, systems, procedures and activities, focused on human factors and assuring the deployment of motivational and quality culture. The success depends on the commitment of everyone and this will increase with training, safety and worker involvement in product and services development (Sallis, 2002; Coote, 1993; Donabedian, 1988; Setbon, 2000; Mezomo, 2001).

To transfer quality of care as a scientific process to health and social care structures requires a major reorganization of the entire system's procedures. The quality of health and social care is not restricted to observance, development and application of technical factors. In fact, it also involves other problematic areas of modern and developed societies, such as: extending the quality of care to other dimensions beyond the technical one; the use of quality concepts and standards to regulate the "distribution" of health and social services; and, last but not least, the value of professional groups in the evolution of quality of health and social care (Amar, 2000; Revez & Silva, 2010; Malley & Fernández, 2010), which has proven difficult to assess.

In the coming years, tighter public budgets – due to greater pressure to cut costs and the challenge upon governments to prove to taxpayers that they can do more with the available resources – will encourage further development of quality measures (Malley & Fernández, 2010).

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