

# Organizational Schema For Management Control Of Quality Care: A Program Perspective

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## RÉSUMÉ

Les recherches présentées ici avaient deux buts. Le premier était de différencier l'évaluation de la qualité et la garantie de la qualité. Le deuxième but était de développer et d'illustrer l'usage d'un cadre conceptuel pour la gestion des soins de première qualité.

Cette étude est fondée sur la conviction que les soins de première qualité sont évalués d'après les valeurs tenues par les consommateurs et les pourvoyeurs de ces soins. Cette conviction a abouti dans le développement d'un modèle où s'articulent et sont synthétisés les systèmes de valeurs des deux parties. Ce modèle permet l'identification d'indices de soins de première qualité d'où sont dérivés les buts et les objectifs de l'organisation.

L'étude a poursuivi le développement des buts et objectifs jusqu'à leur conclusion logique selon la méthodologie traditionnelle de la garantie de la qualité et puis, a identifié un système par lequel des standards puissent, à partir des buts, être développés et contrôlés. Le résultat de ce procédé est un composant d'un système compréhensif d'information administrative qui sera complémentaire à un composant de contrôle fiscal dans l'étude des questions sur l'efficacité des coûts par rapport à l'efficacité clinique.

## ABSTRACT

The present research had two objectives. The first was to differentiate between quality assessment and quality assurance. The second was to develop and illustrate the use of a conceptual framework for management control of quality care.

This study was founded on the belief that quality care is evaluated on the basis of values held by the consumers and the providers of that care. This belief led to the development of a model which articulated and synthesized the value systems of the two parties. The model permitted the identification of quality care indicators from which organizational goals and objectives were derived.

In bringing the development of goals and objectives to its logical conclusion in the traditional quality assurance methodology, the study went on to identify a system through which standards could be developed from goals and controlled. The outcome of that process constituted a component of a comprehensive management information system that would complement a financial control component in addressing issues of cost effectiveness and clinical effectiveness.

Quality care is an attitude, influenced not only by the care providers but by the system within which they work. This system is influenced internally by values, organizational structure and design, resource limitations, human resource management, technology; and, externally by customers, economic conditions, legal mandates, political pressures, and regulatory bodies (Daft, 1983; Peters and Waterman, 1982; Tichy and Ulrich, 1984).

Elimination of error alone does not constitute quality! This fact underscores the weakness of quality assurance systems designed around "assessment" of care-giving processes. Much of the quality assurance literature to date is, in fact, a discussion of quality assessment (Donabedian, 1966; Isaac, 1983; Mapa and Turner, 1984). Even the quality assurance standards put forward by the Canadian Council on Hospital Accreditation (CCHA) are subject to this limitation in that they describe these programs as "designed to enhance patient care through ongoing assessment and correction of identified deficiencies" (CCHA, 1983:43). But, as Jessee (1977) aptly points out, "assessment" and "assurance" are not synonymous. Management control of quality must determine that health care processes are, in fact, producing the desired health care outcomes.

Skillicorn (1981) suggests that the disillusionment professionals have experienced with the achievements of traditional quality assurance (QA) mechanisms relates to the inability to measure the differences between adequate care, good care, and excellent care and the effectiveness of that care. Standards are usually based on the fulfillment of minimal requirements and outcome determinations are rarely made. As well, standards are evaluated in isolation with no overall system tying them together. Attempts have been made to coordinate quality assurance activities at the committee level with representations from various disciplines. Communications with quality assurance professionals have indicated that this mechanism has met with limited success.

Continuing lack of success through this mechanism can be predicted if one believes in the adage, "the whole is greater than the sum of its parts." A management control system must be able to identify optimal quality and must address relationships between the "parts" in order to identify factors which contribute to a problem or solution within the "whole." Standards can be made optimal and can be integrated by means of a system that has "quality of design" as a primary focus and "assessment of compliance with standards" as a secondary goal. A quality design is necessary in order to evaluate the effectiveness of patient care delivery against desired organizational goals. Once the organizational goals and related standards are established the assessment and correction activities as in traditional QA programs are more meaningful.

How can a system be designed that identifies "optimal, achievable quality care" in a given organization? The following discussion will outline a schema using the common organization design format; identification of values, philosophy, mission, goals, and objectives to formulate a plan for specification and control of quality patient care. The identification of a value system underlying the delivery of patient care is central to the discussion of quality. In studies of successful organizations, Peters and Waterman (1982:280) state their belief that "the basic philosophy, spirit, and drive of an organization

have far more to do with its relative achievements than do technological or economic resources, organizational structure, innovation, and timing''.

The value system, once identified, will form the foundation around which a conceptual model for quality health care will be built. This model will encompass beliefs about the patient, his/her needs for care, health care resources, and the effectiveness of delivery. From this conceptual model quantifiable elements of care and possible program goals will be identified, and a framework for management control of quality will be developed.

### **Foundation of the Model—Values and Philosophy**

Values are the driving force behind any organization. The values will direct the actions, reactions, and plans of the participants in the organization. The impact of these values on "quality" must be fully understood prior to development of the model.

Critical in the determination of quality are the values held by both consumers and providers of health care. "Values influence our behaviour and affect judgements about ourselves, others, and society, according to the extent of desirability and preference for each value" (RNABC, 1976). The Judeo-Christian value system has traditionally influenced judgements about quality of care through the beliefs of love, respect, dignity, individual worth, equality, justice, and fairness (RNABC, 1976). Little and Carnevali (1969) have articulated these values in beliefs about the patient. They recognize that human beings:

- react totally to the stress of illness: physiologically, emotionally, and intellectually;
- have individual worth;
- have the right and responsibility to participate in their health care in illness as in health;
- have the capacity to change their behaviour (to learn);
- are not separable from their culture;
- experience anxiety when exposed to the unknown;
- are not isolated, but belong to some constellation of fellow human beings, family, friends, and others important to them.

Stemming from the above value system, the patient may be seen as a person lacking the ability to continuously maintain that amount and quality of self-care which is therapeutic in sustaining life and health, in recovering from disease or injury or in coping with the effects of illness (Orem, 1980:93).

Apart from ethical values arising from Judeo-Christian philosophies, consumers also form judgements from another value system based on pleasure. Here such factors as accessibility, acceptability, affordability, and effectiveness of care come into play (RNABC, 1976). Once the underlying value systems have been articulated, they must be synthesized into a philosophy for the organization. The philosophy will bring those values together into a statement of the broad principles of quality. An example of a philosophy for an ambulatory unit is given below:

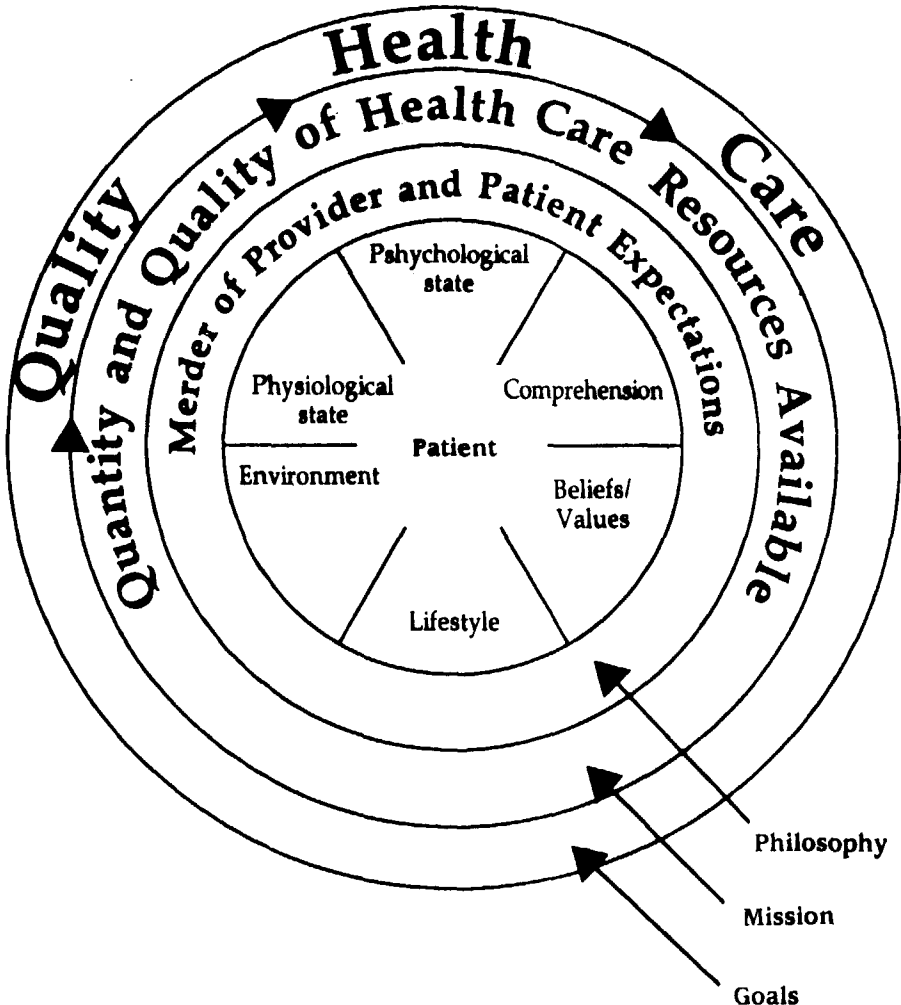
**PHILOSOPHY OF QUALITY CARE**

Every effort will be made to aid the patient in his/her efforts to maintain health or recover from illness or injury in a manner which takes into account all facets of the patient's being.

**Conceptual Model of Quality Care**

In order to get closer to a definition of "quality care" one must merge the ideals alluded to in the values and philosophy with the organizational limitations and potentials. A model which accomplishes this will allow a complete representation of the components of "quality care." (See Figure 1.)

**Figure 1: Model of Quality Care**



The **inner region** of the model is labelled "patient" because values about the patient are central to the notion of quality. The delivery of care is a function of the limitations and potentials of the patient (Blum, 1976; Orem, 1980). The five characteristics of the patient; physiological state, psychological state, comprehension, beliefs/values, and environment/lifestyle limit the extent to which the actions stemming from values can be exercised at any point in time for any given patient (Maslow, 1959).

The hatched **area** is the pivotal point of the model in that it represents a merger of values (inner region) and organizational realities (mid region). Here the patient's expectations and values, i.e., what s/he wants, needs, and can accept, are considered in light of the provider's expectations and values, i.e., what should be done, what can be done, and how it should be done.

The provider's expectations will be affected by the quality and quantity of available resources as denoted by the **mid region** of the model. In this context the hospital's duties to the patient are recognized. Such duties include the hospital's responsibility to provide competent, qualified staff; proper facilities and equipment; and, organizational systems to ensure the provision of safe and effective care (Picard, 1984). The model now encompasses not just what the organization hopes and is expected to do but the resources it has on hand to accomplish these tasks.

The exercise of identifying the values and philosophies and expanding upon them through the model leads to their recognition in a mission statement. A mission statement operationalizes the organization's aspirations by setting them out in meaningful terms achievable within the organization's system. A mission statement for an ambulatory care unit could be somewhat like the following:

#### MISSION

This ambulatory care unit will be active in the health care delivery system through the provision of quality care on an ambulatory basis. This quality care will be provided with due consideration for the patients' dignity and comfort, with minimum inconvenience. Treatment will be provided by sufficient quantities of qualified, motivated personnel and other institutional resources used in an efficient and effective manner.

In order to complete the fulfillment of its expanding role in health care, the AC unit will encourage teaching and research through the fostering of an appropriate environment.

The model has now taken into consideration all the important inputs into quality care. The **outer-most** region of the model has been reached. Because the components of quality care have been identified the model can be used to direct "quality" in any given setting. The outer region of the model demonstrates that an organization's goals flow from the mission statement and philosophy. An organizational goal "is a desired state of affairs that the organization attempts to realize" (Etzioni, 1964:6).

### **Program Goals and Objectives for Quality Care**

Elements of quality care suggested in the mission statement will form the basis of program goals. From the previous discussion, eight elements of quality care can be identified. The first set of four arise from our beliefs about the patient and include health education, clinical care, access/acceptability/convenience, and concerns for patient individuality. The second group of four arises from organizational practicalities and include staffing, safety, management, and effective use of resources.

A consideration of the patient's environment/lifestyle will lead to the inclusion of "education" as an element of quality care. If the patient's knowledge level and lifestyle is a barrier to his or her capacity for self care, then an education program will augment his capabilities and must be included as part of the care. Education, of course, must be tailored with due respect for the patient's comprehension level at a given period of time.

Physiological and psychological problems of the patient will lead to the need for clinical care. Beliefs and values regarding the patient give rise to factors such as access, acceptability, and convenience. A consideration of all-five patient characteristics will lead to the inclusion of concern for patient individuality as an element of care.

The notion that sufficient quality and quantity of care must be available will generate the four additional elements of care: staffing, safety, management, and effective use of resources.

An examination of the model leads to the argument that quality health care arises from an interaction between the organization's beliefs about the patient and its available resources. Eight elements of care have been identified as being essential components of quality as defined by the model. This identification of essential elements of care allows the development of specific program goals which will operationalize values and beliefs related to quality patient care.

Once goals are determined, they are realized through the identification of specific objectives relative to each goal.

Objectives are action steps to achieve goals and help to assess whether or not a goal has been attained (Daft, 1983). Objectives can be specified after due consideration has been given to the external environment as well as the organization's values, philosophy, and mission. Objectives, because they should be measurable, will be the "yardsticks" in management control of quality.

### **Framework for Management Control of Quality Care**

Management control of quality patient care can be facilitated through the use of the industrial control model. Nelson (1977) argues that quality control, whether in industry or service organizations, is a combined process of specifi-

**Table of Elements and Corresponding Goals**

<b>Elements</b>	<b>Goals</b>
<b>Concerns for Patient Individuality</b>	To establish commitment on the part of staff to fulfill the values of the organization.
<b>Access Acceptability Convenience</b>	To provide acceptable, accessible, convenient care for patients.
<b>Staffing</b>	To provide adequate and competent staff who shall practice in accordance with the professional and ethical standards of both their profession and the hospital.
<b>Safety</b>	To promote an environment that presents the least possible risk to patients, visitors, and staff.
<b>Clinical Care</b>	To provide integrated, competent clinical care.
<b>Effective Use of Resources</b>	To provide the highest quality of care in both an effective and efficient manner.
<b>Management</b>	To establish systems that instill the organization's values in staff and coordinate personnel, facilities, and equipment to assure a reasonable standard of care.
<b>Health Education</b>	To facilitate the patient's right and responsibility to participate in their own health care.

cation, delivery, and inspection. In adapting Nelson's model to a health care setting the establishment of goals is analogous with specification. Delivery is defined through the identification of objectives. Inspection is analogous to health care assessment and evaluation activities and can be studied in three domains; input, process, and outcome (Nelson, 1977).

Attention to input is necessary because the product is dependent on the quality of its inputs. Process addresses utilization of these inputs in an efficient and effective manner to produce the desired outcome. In a hospital, resource inputs can be identified as facilities, materials, labour, equipment, philosophies, and objectives. The process domain focuses on the activities, pursuits, and behaviours of the providers (Schmadl, 1979). This domain includes both behaviour or lack of behaviour, either of which may be judged as appropriate or inappropriate. In the outcome domain, one must deter-

mine whether what was desired was, in fact, obtained. This may include aggregate measures of health status such as complication rates, infection rates or mortality rates; patient's satisfaction, and staff and organizational performance (Nelson, 1977; Schmadl, 1979).

Figure 3 presents detailed examples of specific points that need to be considered in the development of objectives with regard to input, process and outcome as they relate to the identified goals.

**Figure 3: see pages 19, 20**

### Conclusion

The methodology to assure and assess quality in hospital care developed in this paper differs from traditional approaches in three ways. It makes use of organizational, management, and program evaluation theories to specify quality care from a program perspective. This first difference leads to the second in that this method provides a system for coordination and integration of quality control that spans professional and organizational boundaries. Finally, it permits one to define quality not only from an organizational perspective but from the patient's viewpoint as well. The patient's beliefs, values, comprehension, lifestyle, and environment are factors, along with his/her medical needs, that will influence the manner in which "quality care" is individually defined. Only when due regard is given to the multiple characteristics of the patient can an organization successfully achieve patient satisfaction.

It is the authors' belief that the outcome of the methodology developed in this paper to define and control quality at a program level can provide a management information that could be as vital to a health facility's success as its financial and other management information systems. In a complex and turbulent environment the hospital will need an information system that simultaneously addresses the issues of cost-effectiveness, clinical effectiveness, and patient satisfaction.

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**Figure 3: Summation of Framework for Management Control of Quality Care**

\*Cells contain key words to indicate the objective.

<b>Goals</b>	<b>Input</b>	<b>Process</b>	<b>Outcome</b>
Concern for Patient Individuality	<ul style="list-style-type: none"> <li>- mission</li> <li>- management values</li> <li>- provision for dignity and respect</li> <li>- philosophy supporting patient self-responsibility</li> <li>- patient advocate</li> </ul>	<ul style="list-style-type: none"> <li>- maintenance of respect and dignity and individuality</li> <li>- care planning based on a recognition of individual's needs</li> </ul>	<ul style="list-style-type: none"> <li>- patient feels treated with respect and dignity</li> <li>- feedback from patient advocate</li> <li>- letters to administration regarding treatment</li> </ul>
Access Acceptability, and Convenience	<ul style="list-style-type: none"> <li>- facility design</li> <li>- parking</li> <li>- hostel</li> <li>- hours of operation</li> <li>- coffee shop</li> </ul>	<ul style="list-style-type: none"> <li>- patient flow</li> <li>- scheduling</li> <li>- coordination of services</li> <li>- encourage use of amenities</li> </ul>	<ul style="list-style-type: none"> <li>- operative waiting lists</li> <li>- optimal queue size</li> <li>- patient satisfaction</li> </ul>
Staffing	<ul style="list-style-type: none"> <li>- qualifications</li> <li>- credentialling</li> <li>- job descriptions</li> <li>- orientation</li> </ul>	<ul style="list-style-type: none"> <li>- job appraisals</li> <li>- inservice education</li> <li>- continuing education</li> </ul>	<ul style="list-style-type: none"> <li>- satisfied staff</li> <li>- staff competency</li> <li>- staff performance evaluation</li> </ul>
Safety	<ul style="list-style-type: none"> <li>- accident prevention programs</li> <li>- equipment and supplies</li> <li>- crash carts</li> <li>- preventative maintenance programs</li> </ul>	<ul style="list-style-type: none"> <li>- environmental audit</li> <li>- compliance with accident prevention and maintenance programs</li> <li>- identification of appropriate patient for surgery</li> </ul>	<ul style="list-style-type: none"> <li>- safe equipment and facilities</li> <li>- number of incident reports</li> <li>- number of lawsuits</li> </ul>

Goals	Input	Process	Outcome
Clinical Care	<ul style="list-style-type: none"> <li>- policy manuals</li> <li>- consents</li> <li>- procedure manuals</li> <li>- infection control program</li> <li>- standards of care</li> <li>- protocols</li> </ul>	<ul style="list-style-type: none"> <li>- patient follow-up</li> <li>- peer review</li> <li>- chart audit</li> <li>- compliance with protocols</li> </ul>	<ul style="list-style-type: none"> <li>- number of complications</li> <li>- number of iatrogenic illnesses</li> <li>- number of readmissions</li> <li>- recovery time</li> <li>- compliance with standards</li> </ul>
Health Education	<ul style="list-style-type: none"> <li>- facilities available for education</li> <li>- pre-operative instruction</li> <li>- post-operative instruction</li> <li>- videos, brochures, and patient education programs</li> </ul>	<ul style="list-style-type: none"> <li>- allowance for patient participation in decision-making</li> <li>- staff support of patient education process</li> </ul>	<ul style="list-style-type: none"> <li>- patient compliance with treatment regime</li> <li>- fewer cancellations</li> <li>- audit of patient education programs</li> <li>- patient knowledge of health problems and treatment processes</li> </ul>
Efficient Use of Resources	<ul style="list-style-type: none"> <li>- appropriate facilities</li> <li>- hostel</li> <li>- information base</li> <li>- budget</li> </ul>	<ul style="list-style-type: none"> <li>- cost effectiveness measures</li> <li>- appropriate reports generated</li> <li>- appropriate utilization of facilities and resources</li> </ul>	<ul style="list-style-type: none"> <li>- comprehensive data base for decision-making</li> <li>- utilization review</li> <li>- budget variance analysis based on case mix and volume</li> </ul>
Management	<ul style="list-style-type: none"> <li>- mission statement and goals</li> <li>- management values</li> <li>- systems in place to support patient flow/communications/ and patient classification</li> <li>- policies and procedures</li> </ul>	<ul style="list-style-type: none"> <li>- incentive systems to promote hospital goals/values</li> <li>- decision-making at appropriate levels in the organization</li> <li>- appropriate number of F.T.E.s</li> </ul>	<ul style="list-style-type: none"> <li>- compliance with policies and procedures</li> <li>- staff commitment</li> <li>- a cohesive, competent, and efficient internal environment</li> <li>- congruency between required and actual staffing patterns</li> </ul>

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