

MAXIMIZING QUALITY OF CARE IN HEALTH SECTOR REFORM: THE ROLE OF QUALITY ASSURANCE STRATEGIES

QUALITY ASSURANCE PROJECT

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ACRONYMS

HSR Health Sector Reform

ISO International Organization for Standardization

LAC Latin America and the Caribbean

MOH Ministry of Health

PAHO Pan American Health Organization

QA Quality Assurance

QAP Quality Assurance Project

QI Quality Improvement

WHO World Health Organization

USAID United States Agency for International Development

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EXECUTIVE SUMMARY

Beginning in the 1980s, countries throughout Latin America and the Caribbean (LAC) initiated a number of broad health sector reforms aimed at improving the efficiency of the public sector and containing costs. Reforms were designed to increase access to care through competition, stimulation of the private sector, and emphasis on the efficiency of health sector investments. More recently, reform efforts have begun to focus on broader definitions of health system performance, which go beyond efficiency to explicitly include good health, fairness in financing, and responsiveness to client expectations. Thus, health sector reforms in the LAC Region are becoming increasingly quality-oriented in their goals.

In addition to seeing health sector reforms evolve toward a more quality-oriented focus, the past decade brought an explosion of interest, both globally and in the LAC region, in the development of methods and programs to guarantee and improve quality of care. Quality assurance experts worked at various levels in the healthcare system to develop standards, monitor quality, and implement improvements that have a direct and predictable impact on quality of care at the point of service delivery. Just as the conceptual framework for health sector reform became more complex and inclusive as it developed, so did the dimensions of quality and the boundaries of quality assurance. The quality paradigm presented in this framework is broad, including everything from clinical care to management support systems to leadership styles and strategies. The concept of healthcare quality espoused is multi-dimensional, going beyond technical performance to include dimensions such as access, continuity of care, interpersonal relationships, and choice.

In general, health sector reforms are enacted at the macro-level, with the intent of shaping an environment conducive to quality and enabling quality indirectly. Quality assurance activities, while they can be implemented system-wide, are concerned with assuring that all the determinants of quality care are in place and are being carried out at the operational level. Because of the inherent complexity of healthcare systems and the many factors which affect health outcomes, both health sector reform and quality assurance strategies have limitations. However, when implemented in a coordinated way, they can overcome some of these limitations and realize complementary and synergistic benefits. In the presence of broad-scale health sector reforms that provide strong forces for change, quality assurance programs can serve as a compass that focuses on the point of service delivery, allowing healthcare managers and providers to navigate through the system to maximize health outcomes for the communities they serve.

This paper explores the important role of quality assurance as an integral part of health sector reform. Chapter One presents a model for health sector reform, introduces the basic principles of quality assurance, and briefly reviews the LAC experience with both types of health system intervention. Chapter Two clarifies the ways that quality assurance and health sector reforms, with their respective foci of technical effectiveness and allocative efficiency, can reinforce each other. In addition to providing a conceptual framework, this paper presents a scheme for analyzing health sector reforms from the point of view of quality. Chapter Three presents a matrix that permits a comprehensive analysis of how a specific reform or set of reforms might affect key determinants of quality of care. Further, the analysis allows identification of quality assurance strategies that could enhance and reinforce the impact of health sector reform on quality. In conclusion, Chapter Four underscores the importance of including QA strategies when health sector reforms are initiated and outlines future directions for methodology development and research.

We should point out that both health sector reform and quality assurance should address all aspects of the health system (personal health services, preventive and promotive care, health education and behavioral change, sanitation and the control of infectious diseases). In this publication we address primarily the issues of ensuring the quality of personal health services, both curative and preventive.

This document aims to facilitate the development of quality-oriented health sector reforms by providing a clear conceptual framework that can serve as a roadmap for policymakers and senior managers. By taking advantage of opportunities to integrate quality assurance activities into health sector reforms, healthcare leaders can maximize the effectiveness of reform and move toward optimizing health outcomes for the citizens of Latin America and the Caribbean.

I. THE ROLE OF QUALITY OF CARE IN HEALTH SECTOR REFORM

This chapter provides a working definition of health sector reform (HSR), briefly describes trends in health sector reform efforts in Latin America and the Caribbean, and presents a model that outlines major HSR strategies. It defines quality of care, describes Quality Assurance (QA) strategies, identifies key determinants of quality of care, and profiles the LAC QA experience. The overview provides a foundation for the exploration of the relationship between health sector reform and quality assurance described in Chapter Two and for the discussion of strategies to incorporate QA into health sector reforms covered in Chapter Three.

1.1 HEALTH SECTOR REFORM: AN OVERVIEW

Health sector reform can be defined as efforts or activities which seek to improve health sector performance by making fundamental changes in the way healthcare is organized, financed, and paid for, as well as the way legal mechanisms regulate care. It can also include attempts to change or develop health sector leadership and culture (Brenzel 2002).

"In the Region of the Americas, health sector reform has been proposed as a process directed at introducing substantive changes in the various sectored entities and functions to improve equity in benefits, administrative efficiency, and the effectiveness of actions, thereby meeting the health needs of the population. It is an intensified phase of health system transformation, implemented at a particular time and defined by the particular situations that justify it and make it viable." (PAHO 1997)

Before describing health sector reform strategies, it is worth reviewing the concept of health system performance, which has evolved considerably since the inception of reform efforts in Latin America and the Caribbean. Although early initiatives focused on cost-effectiveness, recent models have framed health system performance more broadly to give emphasis to concepts of equity and access. In 1995, representatives at a meeting of governments and international agencies in the LAC region set the following five guiding principles or goals for health sector reform: equity, quality, efficiency, sustainability, and social participation (Lopez-Acuña 2000). Meeting participants agreed that an ideal health sector reform initiative would improve all five aspects of health system performance.

In 2000, the World Health Organization (WHO) published a framework for health sector performance assessment (WHO 2000) and purported to rank countries based on a weighted composite indicator. The framework, methods, and ranking engendered a lively debate around the world, and especially in Latin America. The discussions constituted a technical critique of the model and its application, but more importantly, pointed the way toward a more precise and decision-oriented system for assessment (PAHO 2001). Pan American Health Organization (PAHO) member states articulated the need for multi-dimensional assessments of performance, a "dashboard" approach that went beyond measures of efficiency to include key areas such as competence, access, and continuity. They called for an inclusive process to define indicators and assessment methods, particularly in the formulation and use of composite measures, and recommended increased capacity building at the national level so that data quality and national information systems would be up to the task of supporting health systems performance assessment. In summary, the concept of health system performance in the LAC region has evolved into a multi-dimensional model, and reforms are expected to address all aspects of performance. Thus, quality assurance strategies should be part of health sector reform strategies and work synergistically with them to achieve the goals of reform.

Health sector reform strategies range from financing interventions to decentralization efforts to entitlement programs. Strategies are based on macro-level policy changes that aim to enhance health system performance. Although there are many useful ways to categorize reforms, in practice, many health sector reforms cannot be grouped under a single heading because of the complex and inter-related nature of the components of the health system.

The health sector reform terminology presented in this document is based on the PAHO framework for reform (PAHO 1997) and draws insights from a model that describes five "control knobs" that can be manipulated to affect the performance of the complex machinery of the health system (Roberts et al. 2001). The resultant health reform framework focuses on four components of the healthcare system: stewardship and steering, financing mechanisms, healthcare guarantees, and delivery. Table 1.1 defines these four components and lists some common health sector reform strategies. These strategies and their implications for quality of care are discussed in detail in Chapter Three.

1.2 HEALTH SECTOR REFORM IN LATIN AMERICA AND THE CARIBBEAN

Against a global backdrop of increasing demand for limited health resources and extensive debate about how to achieve efficiency, effectiveness, and equity in healthcare, almost all Latin American and Caribbean countries undertook health sector reform in the 1990s. Most of these reform initiatives were part of larger governmental reforms aimed at improving the efficiency of the public sector. The expressed goals of the health reforms focused on increased efficiency, improved quality of care from a technical standpoint and user's perspective, expanded coverage, and equity between groups. Decentralization and privatization were favored reform strategies, and most reforms were carried out with financing from outside entities such as the World Bank, the Inter-American Development Bank, and other development assistance organizations. It is difficult to evaluate these reforms, both because of the inherent difficulty of finding common criteria and isolating cause and effect, and because many of the reforms are simply too recent to be definitively evaluated. A 2000 multi-country evaluation reported that very few countries had been able to document improvements in healthcare quality or in public perceptions about quality of care (Infante et al. 2000).

Given the emphasis on quality as a desired outcome and the power of QA strategies to have an impact on quality of care, exploration of ways in which these strategies can enhance and reinforce the goals of health sector reform is not only warranted but overdue. The following section provides an introduction to quality assurance concepts, principles, and strategies.

TABLE 1.1 HEALTH SECTOR REFORM FRAMEWORK

| STEWARDSHIP AND STEERING FINANCING HEALTHCARE DELIVERY | | | | |
|--|--|--|---|--|
| SIEWARDSHIP AND SIEERING | FINANCING MECHANISMS | HEALTHCARE GUARANTEES | DELIVERY | |
| Definition: Regulatory actions (Rules, laws and decrees provided by an authority to standardize, change or channel provider behavior, and to protect patients rights), stewardship efforts that define the roles of actors within the system, and leadership efforts that shape the culture of the healthcare system itself. | Definition: Income generating mechanisms that provide resources for healthcare, preventive services, early detection, and health promotion. Payment mechanisms that provide funds to individual and institutional providers of healthcare, preventive services, and health promotion. | Definition: Specification of a package of health benefits to be provided to all citizens or specified sub-populations. Criteria may include reduction of disease burden, efficiency in resource allocation, equitable access, and others. | Definition: Determination of how services are to be provided and by whom, both sector-wide and within specific service delivery settings. | |
| Strategies: Licensing Certification and Accreditation Develop national norms and practice standards Legislation re: patients' rights Regulate insurance companies Separation/redefinition of functions (insuring, financing, providing) Define coordination, cooperation and healthy competition among actors in tridimensional system Centralization/decentralization initiatives Develop stewardship/steering capacity Foster essential public health functions Promote awareness about citizen's rights and responsibilities in healthcare Promote awareness about provider rights and responsibilities | Strategies: | Strategies: Defining what services will be covered for the overall populations Defining service packages for subpopulations such as pregnant women, mothers and infants, and the elderly Rationing care for individuals Coverage requirements for insurance policies | Strategies: Definition of service delivery model(s): scope and continuum of care Human resource interventions Innovations in information systems Regionalization strategies Allocation of more resources to primary care and less to secondary care | |

1.3 AN INTRODUCTION TO QUALITY ASSURANCE

Quality healthcare can be defined in a variety of ways. When quality of care is considered in the context of health sector reform, it is often associated solely with technical quality, defined as compliance with regulations and adherence to standards, rather than with such attributes as access or cost-effectiveness. Quality, however, implies the timely delivery of efficient and safe care (technical quality) in adequate physical and under ethical conditions (perceived quality) (PAHO 1997). In fact, quality of care is a multi-dimensional concept that embraces these attributes and more.

While various experts in quality assurance may define the term quality differently, they generally agree on a comprehensive construct that reflects the complexity inherent in any effort to improve or maximize health status. Based on over a decade of experience of using QA methods to improve healthcare in developing and middle-income countries throughout the world, the Quality Assurance Project (QAP) has identified nine dimensions that comprise quality care as described in Table 1.2 below (Franco, Silimperi, et al. 2002).

| DIMENSION | DEFINITION |
|--------------------------|---|
| Technical Performance | Compliance with technical standards. |
| Access to Services | Removal of geographic, economic, social, organizational or linguistic barriers to care. |
| Effectiveness of Care | Degree to which desired health results are achieved. |
| Efficiency of Care | Extent to which minimal resources are used to achieve desired results. |
| Interpersonal Relations | Effective listening and communication, establishment of trust, respect, responsiveness, and confidentiality. |
| Continuity of Services | Consistency of provider where feasible and appropriate, as well as timely and appropriate referrals. |
| Safety | Degree to which risk of injury, infection, or side effects is minimized. |
| Physical Infrastructure/ | Amenities of care such as physical appearance, cleanliness, comfort and |
| Comfort | privacy. |
| Choice | Choice of provider, treatment, or insurance plan, as appropriate and feasible. Access to information that allows client to exercise autonomy. |

TABLE 1.2 DIMENSIONS OF QUALITY

Although the various dimensions of quality can be separated for conceptual purposes, in practice, all of these elements must merge at the point of service delivery for quality care to occur. In this sense, all quality is local. The following case example, taken from QAP's experience in Nicaragua, illustrates the complexity of uniting theory, knowledge, and practice at the point of service delivery.

"A Nicaraguan woman who was about to give birth called on a traditional birth attendant in her village for assistance. The birth attendant had been trained to recognize that if the placenta was not delivered 30 minutes after the baby was born, there was the danger of hemorrhage. In fact, hemorrhage due to retained placenta is the leading cause of maternal mortality in Nicaragua. When the placenta was not delivered in that time, she sent the brother of the woman to the road to flag down a vehicle to take him to the health center in Bocay. He reported the problem and an ambulance was sent to fetch the woman. When the woman arrived at the health center she was bleeding due to her retained placenta. The health center team admitted her quickly, inserted an IV, and began an Oxytocin drip. Her placenta was removed manually just a few minutes after her arrival at the center. One half hour later, and only two hours after the baby's birth, the mother was resting comfortably in bed nursing her infant." (Nuñez and Urbina 2001)

As illustrated by this example, quality is not just an abstract concept reflected in an indicator or debated by planners. Rather, quality care is experienced as a tangible and personal experience for patients, their families, and communities—often with life or death consequences. Many factors contributed to the positive outcome described in the case example: The woman trusted and respected the birth attendant enough to seek her care. The birth attendant was linked to the health system. She had received training that allowed her to recognize danger and understood her role as part of a continuum of care where high quality medical attention could be provided without barriers to access. The decision to evacuate from village to health center, the availability of transportation, the efficient reception at health center, and the rapid mobilization of emergency care all proved critical in creating the conditions for health center staff to provide effective technical care. The availability of a comfortable bed and appropriate follow-up care made it possible for the mother to successfully initiate breastfeeding as she rested and bonded with her child.

It may be tempting to attribute the outcome of a case example like this one to luck or providence, but, in fact, the system had been re-designed to work just this way, and this vignette shows that it was capable of performing as designed and did so. The goal of a quality healthcare system is to provide its residents with quality healthcare by making timely and efficient use of all available resources.

What are the determinants of high quality care? How can the necessary processes be made explicit so that a complex system performs as it should? Quality assurance experts have identified six determinants of quality care. Five are characteristics of the health system: staff motivation, staff competence, adequate resources, appropriate content of care, and good flow and organization of care. The sixth refers to the client and community, whose full participation in the process of care is an important determinant of quality care. These determinants are described in Table 1.3. For high quality of care to be realized, these determinants must be present at the point of service delivery. The concepts build on what has been learned from providing quality care in individual cases and permit generalizations that describe a system which is ready to treat a variety of individual cases. Figure 1.1 illustrates the relationship between these determinants and high quality care.

TABLE 1.3 DETERMINANTS OF QUALITY CARE

| DETERMINANT | DEFINITION |
|---|--|
| Staff Motivation | Staff must be willing to exert the necessary effort to carry out services according to standards and in a manner that is respectful of the user (Franco, Bennett et al. 2002). |
| Staff competence | Staff must have the ability to do what is needed, including the skills to know what clients need and treat them with respect (Kak et al. 2001). |
| Adequate resources | Resources (human and material) to provide appropriate care in an equitable and accessible manner are available. |
| Appropriate content and process of care defined | The "what" of care must be defined (including interpersonal communications, health promotion, etc), based on evidence about what is known to be effective and what is appropriate in that setting (Marquez 2001). |
| Good flow and organization of services along a continuum of care | The system of care delivery and support must be organized such that it can provide efficient and acceptable services to clients, ensuring equity, access, continuity, appropriate referral and good coordination along a continuum of care (Massoud 2001). |
| Active participation in defining and receiving care by client/community | Clients and communities are motivated and empowered to participate actively in determination of what and how services are offered, in care decisions, and in compliance with mutually negotiated/agreed upon treatment plan. |

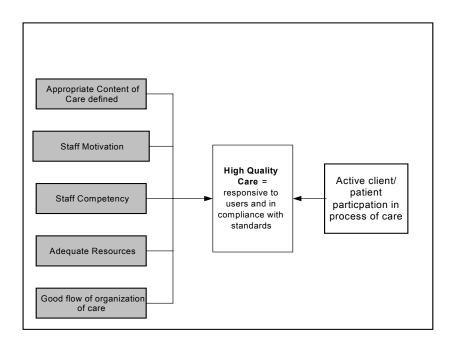


FIGURE 1.1 IMMEDIATE DETERMINANTS OF HIGH QUALITY CARE

Both health sector reform initiatives and quality assurance activities impact upon the six determinants of care. At times the effects are intentional and explicit; at other times they are unintentional and implicit. How can we evaluate the impact that broad multi-purpose reforms will have on quality of care? How can we harness opportunities for QA strategies to strengthen such reforms? The determinants of quality care described above provide a conceptual framework for systematic analysis of the impact of health sector reform on quality and for identification of opportunities to maximize quality. Before outlining this analytical framework further; however, we must first review the basic concepts and strategies of quality assurance.

1.4 QUALITY ASSURANCE CONCEPTS AND STRATEGIES

Health sector reform efforts often address quality assurance only in terms of regulation and accreditation strategies enacted at the policy level. Unfortunately, many policymakers assume that quality assurance requirements have been satisfied by inclusion of regulation and accreditation measures. In fact, quality assurance is, and always has been, much broader than the application of regulatory mechanisms.

When seeking health services, patients select an entry point along a continuum of care. They depend on providers at that entry point to coordinate their care and to appropriately initiate referrals to other points on the continuum. By continuum of care we refer to the full range of services that a patient or client may need for adequate case management from screening to primary care to acute hospital care to rehabilitative care and to home care. Quality of care problems occur, not only because of a failure to comply with standards at the point of service delivery, but also because of failures or errors in transition from one point on the continuum to another (i.e., referral from screening to treatment or from basic services in health centers to specialized services in hospital or from hospitals back to primary care again). For the purpose of this discussion, quality assurance is defined as all actions that may be taken to improve healthcare at the service delivery entry point and across the continuum of care.

Extensive global experience with QA programs has led to the identification of basic

principles that provide a foundation for all QA efforts:

- 1. A client or community focus;
- 2. A system- or process-oriented understanding of healthcare services;
- 3. The use of data to measure the effects of changes and to monitor performance;
- 4. A team-oriented participatory approach to improvement.

These principles are consistent with those defined in quality management literature (Berwick et al. 1992 and Langley et al. 1996).

Specific QA strategies fall under three core activities: defining quality, measuring quality, and improving quality. Using a systematic approach to identifying client and provider needs, quality design strategies create high quality systems and processes of healthcare delivery that previously did not exist. Similar approaches can also be used to redesign or make substantial changes to existing systems and processes of healthcare delivery in order to achieve significantly better results. This approach is used when improvement methods applied to the current system cannot themselves produce the magnitude of change desired. Quality measurement strategies measure inputs, processes, outputs, and outcomes of healthcare systems and services on a routine or ad hoc basis. Quality improvement strategies make changes to healthcare systems and processes to reduce problems and improve results. Figure 1.2 depicts the QA triangle and names some specific QA strategies that are commonly used. New QA approaches and methods are constantly being developed. One of these is the collaborative approach, in which a network of organizations or facilities work together to identify problems, share solutions and monitor key results. Significant improvements in results are achieved in a short period of time because of this shared learning. The relationship of these strategies to health sector reform will be discussed in more detail in Chapter Three.

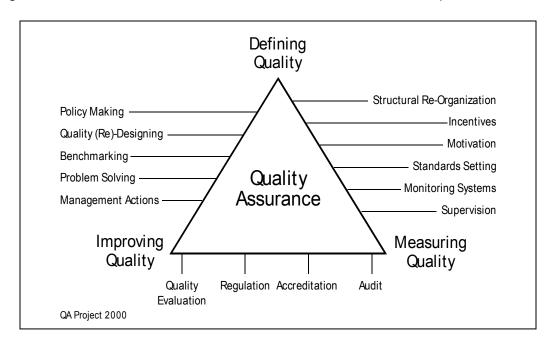


FIGURE 1.2 QUALITY ASSURANCE TRIANGLE

Over the past ten years, a number of LAC countries have made efforts to address quality of care issues either through regulatory efforts that were part of health sector reforms or through multi-faceted QA efforts within specific services or programs. In a few cases, efforts were made through well-developed system-or sector-wide QA programs with a designated structure and ongoing design, monitoring, and improvement activities (Ross et al. 2000; Legros et al. 2000; and Hermida and Robalino 2003). Lessons learned from these experiences can be profitably applied to the design and implementation of health sector reforms.

In summary, both the conceptual and practical elements of quality assurance and health sector reform strategies have developed over the past decade. There has been considerable experience with using HSR and QA in Latin America, and both types of intervention have developed to a point where their implementation can make important improvements in the region's health status. The next chapter explores the relationship between these two types of reform.

II. THE RELATIONSHIP BETWEEN HEALTH SECTOR REFORM AND QUALITY ASSURANCE

Both health sector reform initiatives and quality assurance efforts are comprised of management and policy interventions that seek to improve health system performance. In fact, QA may be one strategy in HSR. Yet, for purposes of this paper it is useful to understand how the approaches differ so that health sector leaders can fully exploit the two strategies' individual and combined impact on performance.

2.1 THE CENTRALITY OF QUALITY OF CARE

One important difference between HSR and QA is that health sector reform focuses on a broad range of goals including health status, efficiency, equity, and access, while quality assurance focuses primarily on quality of care. While the centrality of quality is implicit in HSR, in QA it is explicit and articulated in terms of measurable indicators of the process of care. In order to maximize the impact of reforms and understand the results, a focus on the quality of the service process is as important as a focus on outcomes as reflected in health status.

In addition to showing a logical link between effective application of evidence-based standards and improved health outcomes, research studies reveal a correlation between health outcomes and quality of care (Walker et al. 1988; Ahmed et al. 1999; and O'Connor et al. 1996). Clearly, among the many factors that affect health status from economic conditions, to environmental risks and benefits, to nutritional and cultural practices, quality of healthcare emerges as a major determinant. Yet in spite of the importance of quality healthcare, studies have shown that quality of care is severely lacking in many countries around the world (Rowe et al. 2001; Nicholas et al. 1991; Krause et al. 2000; and Nolan et al. 2001). Thus, quality-oriented health reforms are desirable and necessary.

Even in the presence of improvements in health status, it is important to measure quality of care in order to demonstrate a causal link between HSR and improvements achieved. This is both sound scientific practice and politically prudent. For reformers to gain and sustain support from stakeholders in the healthcare system and the population served, they must show that the reforms contributed to the improved health status, which might also be attributed to better economic and environmental improvements. Further, in those unfortunate situations where economic or environmental conditions lead to declines in health and well being, it is helpful for health sector leaders to be able to document improvements in service quality. While the net change in health status for a given period may be negative, it is still possible to show that, in spite of decreases in health status, health sector reforms achieved improved quality and may have actually prevented the situation from becoming worse. In summary, it is difficult to measure the contribution of health sector reform, with its many determinants, without documenting quality of care.

Debates about quality vs. efficiency or quality vs. coverage can sometimes take center stage in the policy dialogue about reforms. It is clear from the definitions of health sector reform and quality assurance that these debates are rooted in a superficial understanding of both strategies. The central realization resulting from the dialogue is that while improving health outcomes are the goal of both types of interventions, keeping improved quality of care as the central focus will anchor reform efforts on health outcomes, while balancing concerns about efficiency and sustainability.

2.2 Macro-Level Policy Interventions vs. Changes at the Operational Level

Another way that HSR initiatives and QA initiatives differ is in the nature and scope of their interventions. Health sector reforms are usually policy changes that occur at the national level. These policy level shifts are intended to impact care by changing the environment in which care is delivered. While QA also includes some policy-level actions, its main strength lies in a rich offering of strategies that lead to predictable results at the point of service delivery. Overall, HSR interventions are policy-oriented, whereas QA strategies are oriented toward operational changes that are carried out either locally or throughout the system. Illustrative examples of how these two types of interventions can work together are presented in Chapter Three. In spite of these differences, HSR and QA do share some common strategies, particularly in the regulatory area. The Venn diagram (Figure 2.1) below illustrates the ways in which QA and HSR overlap.

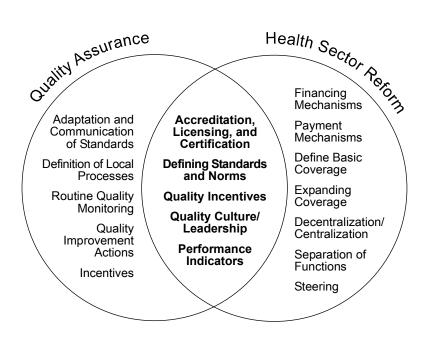


FIGURE 2.1 INTERSECTION OF QUALITY ASSURANCE AND HEALTH SECTOR REFORM

While accreditation, certification, licensing, and development of national norms and standards are carried out under both HSR and QA initiatives, the strategies' approaches to regulation differ considerably. As will be seen in the detailed discussion of regulation in Chapter Three, the effectiveness of these strategies can be greatly enhanced by merging the strong policy focus of HSR with the participatory, implementation-oriented approach of QA methods. The strategies may also be implemented in a coordinated way to realize complementary benefits in a healthcare system's efficiency. While both HSR and QA seek efficiency, QA strategies work toward *technical efficiency* at the operational level, that is, the extent to which services are delivered at minimal cost, while HSR strategies seek *allocative* efficiency at the macro level by determining a constellation of health services that maximizes health outcomes and satisfaction for a given population (Roberts et al. 2001).

The complementary nature of these two types of efficiency can be visually portrayed on a graph where the vertical axis represents the range of health services offered, and the horizontal axis represents the equitable distribution of health benefits, with each axis representing a minimal to maximal range (see Figure 2.2). For every level of resources invested in healthcare there is a technical quality frontier (Roberts et al. 2001), which can be depicted as a curve. Performance can, and usually does, fall below the curve, but every point on the curve represents a maximally efficient way to deliver a given mix of health services. Quality assurance is intended to lift system performance to a point where services are provided as effectively and efficiently as possible. Examples are points A, B, and C where A would provide a broad range of quality care to a few people, and C would provide a narrow range of quality services to a large number of people. Point B is a balance between these two extremes. From a QA point of view, all three points are efficient because they fall on the curve, rather than inside it. While it is easy to see that some points provide access to a greater number of people, QA tools do not address trade-offs in access between groups. Rather, the quality of care dimension of access is limited to assuring that absence of barriers for individuals seeking care.

While health sector reform may also try to stimulate technical efficiency, the primary focus of broad reforms is to *maximize health benefits to the overall population* by working toward an optimal package and wider distribution of services. There are many ways health service benefits can be measured, from life expectancy, to reductions in infant and child mortality, to disability-adjusted life years. Whichever measure is chosen, the magnitude of health benefits that correspond to a specific level of performance can be conceptualized as the area of the rectangle prescribed by the coordinates of a given performance point on or inside the technical quality frontier. Thus, a reform that moves performance from point D to E would be considered successful because it both increases the range of services offered and more equitably distributes benefits. The value of moves from D to F or D to G might be subject to debate because they cover approximately the same areas.

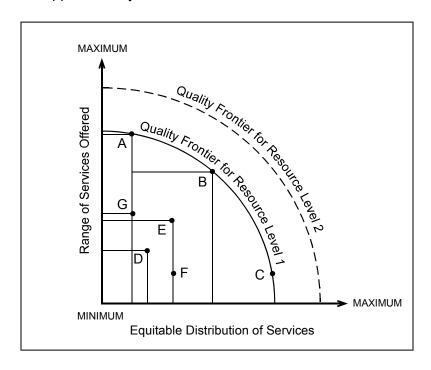


FIGURE 2.2 EQUITABLE DISTRIBUTION OF SERVICES

As suggested by the Venn diagram in Figure 2.1, both QA and HSR can improve health benefits by shifting performance to a place that cuts out a rectangle with a larger area. Upon inspection of Figure 2.2, the point B appears to carve out the largest rectangle, suggesting that use of both QA and HSR strategies would be needed to arrive at point B, the optimal level of technical and allocative efficiency.

These relationships can be illustrated by mapping several policy options for programs to address malnutrition on the curve. One option might focus on providing multi-disciplinary care to cases that present as severely malnourished to hospitals and large clinics. Prescribed care might call for dietary education, food supplementation, and frequent growth monitoring, as well as treatment of associated medical conditions. This policy would provide a limited but needy population with a broad range of services but some who need the services would not have access to care. Actual performance could fall anywhere on line GA, depending on the quality of implementation. A second option might be a national education campaign on child nutrition, accompanied by a requirement that growth monitoring and education be included in the protocol for well-child care for all pediatric visits. This program would reach more children, but with a more restricted range of services. Care would still be limited to those who are users of the healthcare system. Actual performance could fall anywhere along line DB, depending on how well the program is implemented. A third program might focus on increasing access by providing growth monitoring and referral by community health workers or volunteers at the household level. This program would offer a more limited range of services but could reach a higher percentage of the population. Performance might fall at point C or below.

Each of these strategies has strengths and drawbacks. The purpose of the examples is not to imply which solution is best—a decision that might vary from country to country. In fact, a hybrid of the three programs might serve as a possible solution. The point of the examples is to show that although selection of service delivery strategy (a health sector reform task) is a major factor, equally important to reaching full impact, is ensuring quality of implementation. Only when policy choices work in tandem with efforts to assure effective implementation can they have the desired effects.

As seen in both the model and the example, quality assurance methods and health sector reforms are most effective when combined to implement what can be called quality-oriented health sector reforms. This type of reform is concerned with the art and science of making allocation decisions that find the optimal point on the technical quality frontier for a given resource level. Such efforts are likely to produce optimal health benefits that are in keeping with the distributive goals of a society.

III. QUALITY ASSURANCE STRATEGIES IN THE CONTEXT OF HEALTH SECTOR REFORM: IDENTIFYING OPPORTUNITIES FOR SYNERGY

In order to promote and safeguard healthcare quality, policymakers must assess the impact of each health sector reform on the determinants of quality care, take measures to minimize or eliminate disincentives for quality, and create or optimize incentives for quality. This chapter presents a simple matrix that permits systematic evaluation of the various components of health sector reform in light of the determinants of quality care and recommends appropriate QA strategies. The discussion of HSR options is not exhaustive, but is intended to provide a framework that establishes a starting point and a process for thorough evaluation of a reform program so that the link between reform and quality can be made explicit and quality-oriented health sector reforms can result.

Before discussing targeted QA strategies, it is important to recognize that a QA program should be conceptualized and designed with an end goal of institutionalization in mind. Guidelines for designing sustainable QA programs that take into account the organizational culture, structural requirements, and support systems that need to be in place are outlined in detail elsewhere (Franco, Silimperi et al. 2002). Health sector reforms will almost always benefit from implementation of such programs, and, ideally, a QA program should be integrated into the initial design of any Health Sector Reform initiative. A QA program design should identify, for implementation of quality procedures, either a new structure or clearly delineated responsibilities in the existing program. QA programs should foster a quality-oriented culture and include standard setting, monitoring, and quality improvement activities (Brown 1995).

It will usually not be possible to implement all QA strategies and approaches at once. Rather, they will more often need to be phased in and harmonized with other key HSR strategies according to the availability of resources and opportunities for optimizing synergy. There is no one method used to phase in different QA strategies; instead the plan would depend on the history of QA efforts, local circumstances, and national priorities. An example of a three-phased approach might be:

Phase I:

- Development of standards and guidelines for care
- Licensing of providers and facilities
- Quality control of drugs, labs, and radiology facilities
- Infection control in hospitals

Phase II:

- Quality improvement training and activities
- Measurement of outcomes
- Monitoring of compliance with standards and guidelines (e.g. medical audit)
- Improvement collaboratives
- User group participation in governance

Phase III:

Accreditation of facilities

- Regulation of insurance companies
- Pay for performance
- Technology assessment

Many countries might prefer a far different array or sequence of approaches in each phase. Most key to the plan is that national authorities and experts meet to review options and plan a logical and feasible phased strategy.

The relationship between QA and pre-service training must be stressed in any quality assurance initiative. Not only must pre-service training be linked to state-of-the-art, evidence-based standards of care, it must introduce QA skills and methods. The extent to which medical and other health professional schools introduce and train students in QA affects not only skills but also the extent to which a quality-oriented culture is established in the health sector. By providing a quality assurance foundation at the pre-service level, educators prepare providers to take on a role in QA efforts and pave the way for health systems to provide effective in-service training.

The discussion below highlights the relationships between specific QA strategies and various types of reforms so that health sector leaders can gain a clearer sense of the elements QA can add to ongoing reforms. The matrix presented at the end of each section summarizes both key potential benefits and risks to quality associated with each type of reform and gives examples of QA strategies that can maximize the effectiveness of the reform. While the discussion is not intended to be an exhaustive treatment of each area, it should provide health sector leaders with a starting point to help strengthen or reinforce the impact of their efforts on quality of care.

The matrices presented as analytical tools may be used to develop a country-specific plan designed to strengthen the impact of health sector reform on quality. The format provides a structure for a systematic analysis of the impact that planned or ongoing reforms will have on the six determinants of quality. By studying potential risks and benefits in the context of specific reforms, QA strategies can be identified and customized to meet the needs of the situation.

3.1 STEERING

Steering in healthcare is a broad category that encompasses regulation, definition and modification of roles and responsibilities, and articulation of values that shape the culture of the health sector. Organizational changes in health systems and the nature of responsibilities held by national health authorities can be grouped into five broad areas that constitute the steering role of the ministries of health. Exercising the steering role in health includes such substantive and non-delegated tasks as sectoral regulation. This obligation is fundamental to the work of the ministries of health, which are the state agencies designated as responsible for safeguarding public welfare in this area. The main product of the health authority's exercise of regulation is protection and promotion of the population's health, a responsibility at the core of essential public health functions under the purview of the State. This responsibility can be delegated or shared by various institutions and at several levels within the state apparatus, but the basic mission falls to the ministries of health to ensure that these functions are carried out as effectively as possible.

"Concerning the sectoral regulatory role, whose purpose is to design the normative framework that protects and promotes the health of the population and guarantees that compliance with the regulations, the following lines of action are included:

(a) Development and refinement of national health legislation and its necessary

harmonization with the health legislation of countries participating in regional integration processes;

- (b) Analysis and sanitary regulation of basic markets allied with health, such as public and private insurance, health services, inputs, technology, and social communication, as well as consumer goods and basic inputs, public establishments, and the environment;
- (c) Technical analysis and regulation of health service delivery, certification and professional practice in health, and training and continuing education programs in the health sciences:
- (d) Establishment of basic standards for healthcare; development of quality assurance and accreditation programs for health service institutions; and
- (e) Health technology assessment." (PAHO/WHO1997)

The following section discusses the role of steering as exercised in three distinct areas: 1) regulation; 2) stewardship; and 3) leadership.

3.1.1 Steering through Regulation

Regulations are prescriptive rules (laws, decrees, orders, codes, administrative rules, guidelines) provided by an authority to change or channel behavior (Brennan and Berwick 1996). Their effectiveness is dependent on their degree of legitimacy, that is, the degree to which they are embedded in widely held beliefs about the way government should restrict individual satisfaction and private choices in the interest of the larger community. The goal of regulation in the healthcare provision is to keep healthcare honest and safe by establishing basic conditions of honest exchange, compensating for the patient's limited ability to judge quality, and directing government provision of public and merit goods. Regulation also addresses insurance plans and coverage, controls entry and exit to the healthcare market, influences competitive practices and remuneration, sets minimum standards of care, and ensures the safety and quality of the healthcare system. Regulation continues to grow in importance as the private sector expands and assumes many of the services delivery roles previously carried out by the public sector.

Regulation is often used to control inputs (e.g., drug standards, accreditation, certification, licensing), processes (e.g., practice guidelines, patient rights), and outputs (e.g., standard quality report cards, liabilities for medical negligence/malpractice). It can also be used to limit providers' ability to induce demand for healthcare by regulating inputs (manpower supply) and capital investment (health technology assessment and certificates of need).

Regulation's traditional approach to assuring quality has been to focus on staff competency, adequate resources, and appropriate content of care. In many cases, regulation has been more of a set of standards "on the books" without much operational application beyond initial licensing for individuals and facilities. Where there is enforcement, much of the regulatory activity has focused on "culling," the process of sorting and removing the bad from the satisfactory through inspection and penalties. Current examples include licensing boards removing provider licenses to practice, or accreditation programs that certify whether a facility meets expectations. Sound culling, however, rests on two foundations: efficient management of inspection (using trends, focusing on those at highest risk) and adjustment of action thresholds to the best economic levels (based on a determination of whether they contribute to improved care).

A PAHO review found that of 25 countries surveyed, only six had formal procedures for accreditation of health services and facilities (Infante et al. 2000). While additional countries have licensing and certification mechanisms, regulatory measures appear to be an underutilized reform strategy in the region (Askov and Marquez 2005). Although research on the effectiveness of regulation in developing and transition countries is limited at this time, there

exists nonetheless a significant opportunity to improve system quality by implementing regulation, if cost-effective, proven strategies are correctly chosen and applied.

While regulation can impact on all the determinants of care, content of care, technical competence, and adequacy of resources are central to strategies such as certification, licensing, accreditation, and development of norms. Patients' rights legislation affects these determinants as well as affecting community participation.

Licensing, certification, and accreditation are traditional regulatory mechanisms that can range in the scope and depth of their evaluation. Regulatory efforts have increasingly tried to include an element of self-regulation based on a belief that the most effective regulatory tool is routine self-monitoring. These regulatory methods hold the potential to significantly improve quality by:

- Defining minimal or optimal standards of care
- Standardizing care, and
- Clarifying program inputs and contents so that facilities can acquire basic resources.

However, a number of risks should be taken into account when designing and implementing regulatory reform:

- Evaluation can focus on requirements that are not proven to affect quality of care.
- Regulatory procedures can be costly to implement and/or may require professional regulatory competencies that may not be available.
- The evaluation process, if not handled carefully, can negatively impact attitudes and opinion of providers.
- Publicizing poor results may undermine public confidence in services.
- Too stringent regulations may limit provision and access to care.
- Regulatory actions can be disconnected from improvement efforts.

QA strategies can be used both to reinforce the positive potential of regulation and to reduce the risks. Quality assurance experts have offered the following approaches to enhance the effectiveness of regulatory mechanisms (Brennan and Berwick 1996 and Nicholas 1999):

- Align regulatory focus with health sector priorities.
- Build on self-regulatory mechanisms for compliance.
- Reduce the costs of regulation via rational sampling, focused accreditation, and tiered inspection.
- Assess/accredit management and internal QA processes and structures.
- Minimize internal costs of response to inspection.
- Establish "safe havens" for learning and innovation by placing high value on quality improvement efforts and by ensuring sufficient flexibility in standards to allow organizations to make effective and efficient improvements in their systems.
- Require follow-up improvement with outcomes monitoring.

Development of norms and standards is often part of HSR regulatory efforts. These efforts impact on all the determinants of care, particularly *content* and *flow of care*. To be effective, norms and standards must codify high quality care and define well-integrated

procedures so that prevention, screening, and treatment flow logically, both within and across medical conditions. In some countries, norms and guidelines are developed by a division of the MOH; in other countries they may be developed in a more diverse fashion by different professional groups but then be required or encouraged by national authorities or insurance companies.

Health sector reform, as a national effort to define norms, is well positioned to draw from the best national and international expertise to develop state of the art standards. As a result of this input from experts, consensus and clarity about expectations result. However, these standards may prove unrealistic for service delivery settings, or the centralized national effort may be unable to effectively communicate the new policies to providers. Further, once an official standard is approved it may be difficult to revise or modify in a timely manner. If a standard is required, leaders must make sure that the needed resources are made available. If they cannot, the standard may need to be changed.

QA strategies can significantly improve the effectiveness of standard setting exercises. The participatory approach lends itself to the development of evidence-based standards and adaptation to local settings. QA strategies for communicating standards through written protocols, training activities, job aids, and peer review procedures, such as mortality reviews and medical audits, can greatly enhance the degree to which standards are understood and put into practice. Further, where a QA structure is in place, it is much easier to maintain a process for review and update of standards.

Patient's rights legislation is an important way to establish consensus about patients' rights among policymakers and health system leaders and to provide a legal basis for enforcement. However, such legislation will not have an impact at the point of service delivery if patients and providers are not made aware of their rights and responsibilities. QA strategies can be used to communicate these rights, which are also codified in the dimensions of quality. Client/user groups, established as part of many QA programs, are a logical place for patients to voice their concern and conduct a dialogue about their rights. In addition to the regulatory aspect of patients' rights, important leadership issues exist in this area. These issues will be discussed under the leadership/organizational culture component of health sector reform.

Regulation of insurance companies includes a range of strategies: mandating basic service packages, setting minimum and maximum fees, assuring financial solvency, disallowing services by non-licensed providers, requiring that policies be offered to certain beneficiary groups and requiring appeals processes for beneficiaries. Regulation sometimes results in greater bureaucracy and costs and can sometimes impede the ability of the private sector to respond creatively to situations. However, this kind of regulation offers a strong advantage of extending the reach of quality monitoring into the private sector and can create a significant incentive for providers to practice quality assurance and gather comparable health service data for sector-wide planning.

A summary of the potential benefits and risks incurred by regulatory reform and corresponding QA strategies is presented in Table 3.1.

TABLE 3.1 QUALITY-ORIENTED REGULATORY REFORM

| REFORM STRATEGY | POTENTIAL BENEFITS (+) AND RISKS (-) | QA STRATEGIES |
|---|--|---|
| Accreditation, certification, licensing | + Standardize optimal care + Clarify inputs and programs - Requirements not "proven" - Cost - Negative experience for staff - Poor results undermine public confidence - Disconnected from priorities or improvement efforts | Align with sector priorities Use internal assessment /self-regulation Cost reduction strategies Assess QA structures Focus system culture on valuing recognition of problems and improvement Require outcomes monitoring and improvement |
| Development of standards | + Draws on best national and international expertise + Makes expectations clear - May be unrealistic for setting - May be difficult to revise or modify in a timely manner | Participatory approach to development and adaptation of standards Strategies to communicate standards (written norms, orientation workshops, job aids, self assessment tools) Process for review and update of standards |
| Patient's rights legislation | + Establish consensus about patients' rights + Legal basis for enforcement - Difficult to make changes at point of service delivery by decree, difficult to make operational | Bring awareness to point of service delivery by communicating with providers and patients QA dimensions of quality reinforce and support rights Client/User committees gives patients a voice/chance for dialogue about quality and resource allocation |
| Regulation of insurance companies | + Assures financial solvency + Extends arm of quality requirements + Useful data source - Costs, bureaucracy | Internal QA programs for insurance agencies and providers QA monitoring to pool and use data |

3.1.2 Stewardship

The role of stewardship is comprised of a variety of methods that healthcare leaders use to define and shape the system on behalf of their constituents. While stewardship can impact on all the determinants of care, particular consideration should be given to the factors of *staff motivation*, *adequacy of resources*, *flow of care*, and *community determinants* when analyzing options for quality-oriented health sector reform. Some common stewardship strategies follow and are summarized in Table 3.2.

Policymakers often incorporate into health sector reforms a separation/redefinition of functions such as stewardship, insuring, financing, and providing. While cost saving and efficiency is generally the motivation for such strategies, a positive impact on health status can result if changes are designed and managed well, with a quality-oriented focus. When policymakers choose to shift service provision from the public to the private sector, or to insure members of the population rather than serve them directly, the hope is that market mechanisms in the private sector will lead to responsive, flexible, and economical services. While this is one possible outcome, it is by no means guaranteed. Quality-oriented incentives and safeguards must be put in place at the outset, which if done effectively, enables the MOH to achieve cost-

savings and improvements in coverage and extend its impact beyond publicly funded services to the overall health sector.

The downside of separation of functions is that MOH staff members are generally trained for service delivery and may not have the leadership, management, and administrative skills to oversee the kinds of contracts and arrangements implicit in this type of reform. It is important to conduct skills assessment and training to prepare the MOH staff for their new roles. QA techniques such as developing job descriptions and job aids, team skills, and a supportive supervision and peer review process can be useful in supporting these changes. Also, the MOH can use its role as financier of services to mandate QA procedures, guidelines, and quality monitoring. The MOH is thus enabled to act as a quality steward in the overall health sector.

TABLE 3.2 QUALITY-ORIENTED REFORM: STEWARDSHIP

| REFORM STRATEGY | POTENTIAL BENEFITS (+) AND RISKS (-) | QA STRATEGIES |
|---|---|---|
| Separation/redefinition of functions (stewardship, insuring, financing, providing) | + Cost savings + Contract private organizations that can be more flexible - Existing MOH staff don't always have the skills needed - Oversight is challenging | Mandate QA procedures, guidelines, targets, and coverage Establish quality monitoring of privately provided services MOH oversee quality throughout the sector QA leadership development |
| Changing the way actors in tri-dimensional system (MOH, private systems, social security institutions) coordinate, compete, and cooperate to provide care | + Increased consumer choice + Flexible/responsive + Price competition/savings - Duplication of services - Uninsured/poor left out - Tiered system of care | QA monitoring for sector-wide oversight QA programs in all settings |
| Fostering centralization/ decentralization | + Responsive care + Efficiency - Too much authority is sometimes retained at central level - Central level may not be downsized, resulting in higher costs - Staff may feel insecure about change - Decentralized units may not be viable financially and technically | Implement QA teamwork Use QA tools to analyze new tasks/workflows Facilitate participation in design and implementation of plans for change, contracts, and targets Monitor changes in quality of care, outcomes, and efficiency resulting from decentralization |

Changing the way actors in tri-dimensional systems (MOH, private systems, social security institutions) coordinate, compete, and cooperate to provide care is essential if citizens are to experience the healthcare system as a seamless continuum of services that meet their needs. At their most effective, privatization strategies can increase consumer choice, be flexible and responsive to the needs of the overall population and various sub-groups, and provide helpful price competition that leads to savings for citizens and governments. However, the free market mechanism does not produce these benefits automatically, especially in places where traditional market assumptions about demand and supply do not always apply. Without safeguards in place, the result can be wasteful duplication of services, gaps in services, or a two-tiered system of care—where high quality services are available for those who can afford it, and poorer quality services are provided to the rest. In some countries, these problems have led to a situation where the poor are left out or are forced to pay high out-of-pocket costs for private services, rather than to seek care at facilities that provide perceived poor quality of care.

In an atmosphere of privatization, QA can provide indicators and data-gathering mechanisms to monitor quality sector-wide. Not only do these tools help to protect the population from poor quality care, they provide a mechanism for citizens to compare care across the public and private sector. In the absence of such data, cost is equated with quality, and people may erroneously assume that more expensive and attractive private facilities always provide higher quality care. Further, QA programs should be encouraged in all settings, and results should be shared across the sector. Cooperation across services can be an important building block in the process of constructing cooperative relationships and links between different kinds of providers in the sector.

Fostering decentralization is one of the most common strategies for organizational reform. The strategy is based on the belief that locally controlled services can be both more efficient and responsive to the community. However, decentralization efforts can be impeded by implementation problems. The central level may not downsize as planned and costs may thus increase. Too much authority over budget and personnel hiring may be retained at the central level while responsibility for services is delegated. This can lead to a sense of frustration among staff, which may grow cynical, feeling that decentralization and local sustainability strategies are merely masked efforts to shift responsibility for public care to local governments.

In one LAC country, agreements have recently been negotiated between the central level and the regions that spell out priorities and targets. A number of the regions view the agreements as developed centrally and handed down without adequate negotiation. They perceive that sometimes the resources are not available to meet the targets or that the central level is not held accountable for the resources it is supposed to provide to the regions. Sometimes the baselines that are used to calculate the appropriate increase in targets are not accurate and are based on faulty demographic estimates.

QA strategies can support decentralization efforts in a number of ways. In a situation where decentralized units must be viable technically as well as financially, QA training and improvement activities can strengthen weak management and clinical areas. Also, at a time when staff may feel insecure about change, the QA team approach provides a challenging and meaningful way for staff to participate and take control in the work setting. The opportunity to display leadership, creativity, and self-expression can be reassuring in a time of organizational change. QA tools can also be very useful in analyzing decentralization by allowing staff to map the organization and flow of the various healthcare functions so that a complete procedural understanding of the changes can be communicated to all. Quality can also increase demand and thus increase revenues.

3.1.3 Leadership and Organizational Culture

Reform strategies that address leadership and organizational culture aim to change the knowledge, attitudes, and practices of health sector leaders and providers, as well as the population served. Strategies include: hiring trained managers as regional, district, or facility administrators and using physicians as technical directors; providing needed skills to physician managers so they can better serve in a rapidly changing environment; and launching public information campaigns to educate consumers about their rights and responsibilities. Leaders must work to enhance voluntary community support and donations for the local health system, which can increase resources and help improve quality. While leadership can impact on all the determinants of care, careful consideration should be paid to *staff motivation*, *staff competency*, and *community determinants* when analyzing options for quality-oriented health sector reform.

Fostering steering and stewardship skills is an important aspect of reform, precisely because it is an area of the healthcare system for which healthcare practitioners receive the

least medical training. Programs to strengthen stewardship skills might focus on development of skills in organizational analysis, group facilitation, and consensus building and negotiating, as well as data analysis and the interpretation skills needed for monitoring and surveillance. Successful quality assurance programs depend first and foremost on leadership. Therefore health sector leaders and managers must be trained in quality assurance and held accountable for its implementation and success.

Leadership in promotion of **citizen and provider rights and responsibilities** begins with the kinds of measures discussed above under regulation, but does not end there. Communication that expresses commitment to the values of healthcare quality, equity, access, and human dignity are important aspects of leadership. For example, leaders must foster the development of customer service training, the employment of customer service representatives, and customer feedback mechanisms as ways to promote a culture of quality. These strategies differ from those used in social marketing campaigns designed to change health behaviors such as smoking, or drug use because the focus is on roles and responsibilities in the health system rather than on generalized health behavior.

Table 3.3 shows a list of strategies that can be used to reform sector leadership and culture. When changes are being implemented in the system, QA programs can prove particularly useful because the providers carry out tasks that show that the system really is changing for the better. Provider participation leads to increased ownership and buy-in. In terms of development of steering capacity, QA leadership training can serve as a useful strategy because it promotes a participatory leadership style and offers a structure for training in new skill areas. QA may also prove useful in expanding patient and provider rights because it offers meaningful opportunities for substantial involvement in defining care and crafting a path toward improvement.

TABLE 3.3 QUALITY-ORIENTED LEADERSHIP AND ORGANIZATIONAL CHANGE

| REFORM STRATEGY | POTENTIAL BENEFITS (+) AND RISKS (-) | QA STRATEGIES |
|---|---|--|
| Develop steering Capacity | New and more useful roles are defined Staff are not always equipped with needed new skills | QA leadership training QA tools help leaders to use and understand data |
| Foster public health functions | + Focus on population needs based on epidemiologic data and disease burden - Need to be able to deliver what is promised | QA tools useful to define standards and map out new services and procedures |
| Promote citizen's rights and responsibilities | Enfranchises patients to demand what they need Failure to back up promise with quality care | Participation of users groups in quality improvement teams QA helps define criteria to monitor effectiveness and satisfaction |
| Promote provider rights and responsibilities | + Opportunity to enfranchise providers - Must follow through | QA improvement efforts/teams offers opportunity for leadership and creativity for all |

3.2 FINANCING MECHANISMS

Policymakers intend healthcare financing reforms to ensure adequate resources and appropriate distribution (allocation) of resources by making changes in how resources are mobilized from citizens and how they are used. While financial mechanisms may impact on all the determinants of care, particular consideration should be given to *staff motivation* (especially intentional and unintended monetary incentives), *adequacy of resources*, *flow of care*, and *community determinants* (willingness to pay and perceptions about fairness and affordability) when analyzing options for quality-oriented health sector reform.

3.2.1 Healthcare Financing

How adequately **resource generation mechanisms** provide resources for essential public health functions and services greatly affects quality of care. The levels of quality that care can reach are determined significantly by financing reforms' impact on the availability of adequate resources at the point of service delivery. Adequate resources for service delivery and quality healthcare depend on answers to three questions:

- Are resources allocated to public health functions in a manner most appropriate to achieving optimal health status?
- Are adequate resources available in the system as a whole to provide quality care at the service delivery point?
- Are resources allocated down the system to the point of service delivery in a manner adequate to deliver quality services?

In addition to impacts on resource availability for service delivery, resource generation and allocation within the sector can indirectly affect availability of *competent staff* and the ability to implement *appropriate standards of care*. These effects come from adequate financing and support for appropriate training of the health workforce, licensing of personnel, support for development of standards, and definition of scopes of practice and service delivery models. Financing mechanisms also indirectly affect the quality of care determinants of *staff motivation* and *adequate resources*, depending on the provider payment mechanisms used to disburse revenues generated and allocated. (See section 3.2.2 Payment Mechanisms, Level of Payment.)

In addition to the potential effects of financing on quality of care, community perceptions of quality can have an impact on resource generation efforts if financing mechanisms depend on direct payments from citizens at the point of service. When perceived quality is high, the community is more likely to use these services, facilitating revenue generation.

3.2.2 Payment Mechanisms

Reforms of provider payment mechanisms attempt to change how and to whom payments are made. Payment mechanism reforms directly affect quality through the incentives, which serve as motivation for managers and providers and through payment levels, which affect the supply of adequate resources and competent staff. They can positively affect worker and manager motivation by ensuring payment for services to organizations and providers creating incentives for good quality that don't rest solely on cost savings or productivity. Further, if payment levels are appropriate, they ensure that adequate funds are available. Negative effects on quality primarily result when policymakers design incentives to contain costs or increase

productivity, without putting in place incentives related to quality.

Three different aspects of payment mechanisms should be considered:

Payment methods: Choice of method depends on the extent of integration or separation of health authority functions, but each payment method creates certain kinds of incentives. Payment methods determine whether the payer or provider bears the financial risks. Payment methods, depending on their type, also create incentives to increase the number of patients, decrease the number of services per patient, increase reported illness severity, and select healthier patients (Hsiao 1997). For example, fee-for-service mechanisms put the financial risk on the payers (whether patients or insurers), and create incentives for providers to increase the number of patients, the number of services provided, and reported severity. Capitation payments, by contrast, create incentives to decrease the number of services provided and to select healthier patients. A study conducted in Argentina, Nicaragua, and Thailand (Bitran 2001) showed that capitation payments were associated with greater use of primary care services, shorter average length of hospitalizations, and reduced overall costs. Research from the United States indicates that quality of care has been generally maintained under capitation (as compared with retrospective or fee-for-service methods), although choice is restricted and there may be deterioration if insufficient market competition exists (Bitran 2001). The adoption of capitation payments has led to the establishment of quality assurance mechanisms in Nicaragua (development of treatment protocols) and in Thailand (monitoring patient complaints and average length of stay, fulfilling ISO 9000 and accreditation criteria).

Recent experiences in pay for performance (also known as the contractual approach) in low resource countries such as Guatemala, Cambodia, and Rwanda have demonstrated new and exciting ways to link contracts and payment incentives to improving access, coverage and quality of care (Soeters and Griffiths, 2003, Hardeman, et al. 2004 and Soeters et al. in preparation). Regional Holding Funds receive funds from the government and donors and then contract with health centers and private providers to provide specified services at a specified level of quality. Bonuses for meeting quality standards are also provided. Health centers and hospitals become quasi-privatized and can still charge user fees, although the contracts may specify that some services must be offered at no cost or low cost. District management teams verify outputs and assess quality of care. Results have shown a lowering of user fees, increased service utilization (especially by the poor), improved quality, and higher health worker incomes.

- **2. Level of payment**: The amount reimbursed or paid out will affect the quality of care provided to those covered by that mechanism. For example, the maternal and child social insurance program in Bolivia, although improving access and utilization by the poor, also resulted in poor quality of care provided to beneficiaries because the capitation rate was too low to cover all the costs of appropriate care (Dmytraczenko 1999). Raising capitation rates allows providers to provide similar levels of quality to all patients.
- **3. Potential effect of payment mechanisms on patient/consumer demand**: The part of payment systems that require patient co-payments or other out-of-pocket expenditures will affect patient demand for care, compliance with treatment regimens, and appropriate follow-up.

Provider payment systems, because of the incentives they generate, directly and indirectly affect many key immediate determinants of quality. The effects, however, are not necessarily negative. A good payment system design would include mechanisms to provide for analysis of explicit and implicit provider and user incentives, and sufficient resources for quality service delivery.

Table 3.4 lists the potential benefits and risks associated with a number of payment and financing reforms. In the context of health reform in a particular country, the potential benefits

and risks can be more specifically developed and quantified. While QA strategies do not address every aspect of reform, when a coordinated implementation of strategies is planned, several general themes emerge.

TABLE 3.4 QUALITY-ORIENTED PAYMENT AND FINANCING REFORM

| REFORM STRATEGY | POTENTIAL BENEFITS (+) AND RISKS (-) | QA STRATEGY |
|--|--|--|
| Tax policy | + Sound and rational resource base + Progressive results are possible - Taxations schemes can have regressive effects | |
| Insurance schemes | + Potential for progressive impact on access to care - Two tiers of care can result - Some populations are left out | QA programs provide criteria for comparison of system performance in private/social insurance and public sector |
| User fees | + Resources are generated - Self-rationing by patients occur (seek care when they need it) - Fees that are too high limit access - Fees that are too low lead to overutilization | Self-rationing can be positive or negative, depending on whether the care is "needed" or "unneeded" Quality improvement efforts can facilitate introduction of user fees since clients may be more willing to pay for service if the latter are perceived to be of high quality |
| Community financing | Foundation for responsive system of care Regional or national contributions may disappear | Community involvement in user groups Community involvement in improvement teams Services designed to optimize client satisfaction |
| Allocation formulas/rationing | + Acknowledges reality of limited resources - Difficult to arrive at optimal equations - May conflict with individual rights to seek and access care | |
| Vary payment to providers and provider organizations | + Resource shifts can lead to better care and fairer reimbursement - Financial motivations may interfere with technical decisions about the type and frequency of services rendered | QA efforts emphasize compliance with clinical standards Quality monitoring provides an objective basis for measuring technical performance under various types of payment systems |
| Financial incentives (e.g., pay for performance and contractual approach) | + Can foster and recognize quality, coverage, access, and efficiency — Can be complex to manage | Quality of care criteria can link financial incentives more directly to improved care |

First, it is clear that any financial reform, no matter how well designed, is vulnerable to "gaming," whereby individuals (both patients and providers) and organizations work within the rules to maximize the benefits and funds that accrue. Over time distortions can occur, and the policy's impact can be undermined or nullified. Management oversight and external audits of services rendered and of quality are critical. While QA cannot prevent gaming, it can facilitate an environment, or "culture of quality", that supports ethical behavior through a dual emphasis on

compliance with technical standards and monitoring. Clear technical standards leave less room for non-clinical incentives to distort care. QA activities also may foster the leadership necessary to prevent distortion of the objectives of financial reforms. Thus, a QA effort carried out concurrently with financing and payment reforms may reduce the likelihood of distortions in clinical decision-making. Similarly, monitoring quality helps to document trends in care and can be useful in identifying changes in clinical decision-making that might be linked to distorting financial incentives.

Second, all monetary aspects of the healthcare system can and should be evaluated in terms of whether they are progressive or regressive. A quality-oriented look at this question defines not only who pays for which share of the healthcare pie, but also whether people who seek care in different parts of the sector receive similar quality. This is vitally important, because access to poor quality healthcare may not be much better than no care at all. Further, information and assurances about quality can help consumers to make better choices about where to seek care and how to spend their healthcare resources.

3.3 HEALTHCARE GUARANTEES

Healthcare guarantees define a cluster of services that will be "guaranteed" to all the citizenry or to a sub-population. The guarantee may be formulated in a number of ways: The government may entitle the entire population or sub-population to a specific service, such as immunization or prenatal care. Alternatively, guarantees may offer a service at a certain level, leaving actual utilization and coverage to be determined by the dynamics of demand and access in the existing system. For example, a dental health program might promise a dental clinic available to regions or populations of a certain size, guaranteeing that it will provide services at a specified level. Such guarantees are one way that health sector reforms can address the balance between offering a broad range of services and ensuring that the distribution of health benefits is equitable. Reforms of this kind have been attempted in Argentina, Uruguay, Bolivia, Costa Rica, and Ecuador (PAHO/QAP 2002). Of course, guarantees must be backed up by supplying the necessary resources.

Healthcare packages may be based on a number of criteria (Rovira et al. 2002) including insurance against catastrophic events, distribution of social risks, efficiency, equity, or reduction of disease burden. While healthcare guarantees can impact all determinants of care, the most important factors to consider when analyzing healthcare guarantee options for quality-oriented health sector reform are: content of care, adequacy of resources, flow of care, and community participation.

Defining the service package for the overall population or specific sub-populations is a policy initiative that requires a dialogue between healthcare leaders, politicians, providers, and citizens. Packages of health benefits can aim to provide basic, essential or comprehensive coverage, depending on resources available, political will, and technical feasibility. Once the parameters are broadly defined, determining eligibility requirements and referral procedures and setting the boundaries of prescribed services can prove equally complex.

Rationing care and limiting access to certain services to where they are most needed are practices that often cause concern because they limit patient choice. In addition, providers may fear that their autonomy in clinical decision-making will be affected. Rationing may be accomplished through fees, referral requirements, or queuing practices, where people must wait in turn for service. In spite of these problems, these strategies can offer important guarantees to populations who are under-served, under-insured, and at greatest health risk. They also offer opportunities to contain costs.

Coverage requirements for insurance policies can expand access to services quickly and ensure fairness between providers. Without such requirements private coverage might be expected to shift over time, with insurers leaving public providers to provide guaranteed services. A number of QA strategies can be employed to make health guarantees more feasible and effective:

- QA participatory methods offer approaches to make the policy dialogue more effective.
- Process analysis tools can be useful in working out procedural details so that the package will fit seamlessly into the overall continuum of care.
- Evidence-based quality criteria can be used to determine which services will be included in a package and to whom services will be offered.
- QA methods can be used to develop service guidelines and referral mechanisms that ensure patients opportunities to compare providers.
- A quality of care monitoring program can allay public concerns about the quality of mandated care.

Table 3.5 summarizes potential benefits and risks of reforms to healthcare guarantees and related QA strategies.

| REFORM STRATEGY | POTENTIAL BENEFITS (+) AND RISKS (-) | QA STRATEGIES |
|--|--|---|
| Defining what services will be guaranteed for the overall population and sub-populations | + Increased access for many + Increased accountability - Rapid change may compromise quality - Costly (resources may not be adequate) | Introduce clinical care guidelines at the time service is mandated Use quality criteria/evidence basis to define/justify packages Monitor quality of care, outcomes and costs |
| Rationing care | + Gets care to those in need - Limits patient choice - Limits provider autonomy in clinical decision-making | QA methods can define referral procedures to insure smooth transitions in continuum of care QA strategies to involve providers in defining protocols and criteria |
| Coverage requirements for insurance policies | + Promotes fairness in distribution of service delivery burden - Implementation can be chaotic - May be costly | QA monitoring can encourage common indicators to insure and demonstrate comparability of care across providers |

TABLE 3.5 QUALITY-ORIENTED REFORM: HEALTHCARE GUARANTEES

3.4 DELIVERY

Delivery refers to how services are organized and provided, as well as to who provides them, both within specific service delivery settings and at the sector-wide level. Reforms can be enacted at the national or local level, but at either level, changes can have repercussions throughout the continuum of care. National mandates can affect allocation of time and resources at the community level; for example, a vaccination campaign may require staff to reduce or eliminate the time they make available to patients seeking curative care. Similarly, local service delivery initiatives, such as an outreach program for cervical cancer screening or community-based case finding for tuberculosis, can affect the case mix and demand for services at referral hospitals.

While health delivery reforms can be linked to all the determinants of care, they are most likely to affect *staff motivation*, *flow and organization of care, resources* (because of changing patterns of utilization), and *technical competence*, especially in those situations where individuals or groups are expected to perform tasks that are very different from their previous experience and training. Because of the health sector's complex composition, there is no single effective strategy for quality-oriented organizational reform. Instead, each reform must be analyzed for its potential effect on quality of care so that strengths can be reinforced and weaknesses can be reduced or eliminated.

Determination of the scope and continuum of care defines the types of care provided and which types of health professionals and facilities offer which kinds of services. The scope and continuum of care stipulate rules for moving from health centers to clinics, from general care to specialty services, and from outpatient to inpatient care and back. This aspect of reform is important because transition points in the continuum of care are susceptible to quality problems. If such problems can be anticipated and prevented at the design stage, the reform will be more clinically effective and efficient.

Human resource interventions are often the target of reform initiatives. The QA approach lends itself to more effective human resource management. Supportive supervision, which focuses on a contractual approach between managers and healthcare providers, can foster health workers' professional growth and ensure work conditions conducive to good job performance. Self-assessment and peer review mechanisms can replace inspection, leading to a more collaborative and constructive relationship between management and service providers. As discussed below, various human resource interventions have been attempted in Latin American and the Caribbean.

Qualifications and staffing. Many reform processes have had a structural effect on employment, changing the qualification requirements for staff. In many countries, hospital bed closures have led to redeployment of nurses into less qualified jobs (ILO 1998). A report on five Latin American countries noted that a tendency to fill nursing positions with partially trained aides can result in unmeasured quality consequences (Guevara and Mendias 2001). Pressures incurred by changes in staffing size, payment schemes, and high stress working conditions have impacted the internal climate of health organizations. Issues surrounding quality, adequate staffing, and patients' rights to adequate nursing care are receiving increasing amounts of attention (Aiken et al. 2001; American Nurses Association, 1997; Needleman et al. 2001; Clark et al. 2001; and Vahtera et al. 1997). Research results seem to confirm the influence of balanced staffing on the technical quality of services, but there is a paucity of evidence about its effects on users' satisfaction (perceived quality).

Where service demands are heavy, such as where HIV/AIDS care adds additional service burdens, the use of lay personnel for counseling has provided an acceptable solution. In fact, in two African countries lay counselors performed better than nurse counselors primarily because they had more time available to meet the counseling standards, whereas the nurses were often pressed for time because of their many other duties (Furth, in preparation).

New roles. New structures can require an interchange of knowledge and practices for the sake of efficient and equitable health services. Multi-skilled health workers serve as the primary resource for extending coverage and delivering integrated services (Hurst 1997). However, legal or unofficial monopoly of skills by certain professional groups has limited quality and restricted coverage, even where help for a patient in an emergency is several hours or even days away. In addition, training paramedical staff to provide medical services and skill substitution across professions is likely to engender opposition from professional organizations (Dovlo 1998; Buchan 2000; and Maceira and Murillo 2001).

New regulation of professional practice and supervision. As patterns of service delivery change, separate professional regulatory processes will need to be integrated to facilitate cooperation between practitioners from different backgrounds and ease professional mobility for individuals (Doyal and Cameron 2000). The competencies approach (PAHO/WHO 2000) seems an appropriate tool to guide quality performance in this framework; however, this method may call for professional associations to overcome any reluctance to accepting new categories of health workers (Bach 2001 and Campos et al. 1997).

Motivation and quality. Quality outcomes usually are listed among the objectives of proposed efforts to improve health worker motivation and job satisfaction. However, the implementation of incentives to attain this objective frequently falls subject to assumptions about anticipated response to economic factors. Financial rewards and adequate salaries potentially are powerful motivational factors; however, data suggest that non-financial mechanisms can also serve as significant incentives.

A research study on motivational factors in hospitals found a few key determinants of affective and cognitive motivation (Franco et al. 2000). Two types of interventions—communication and job design—emerge as being feasible to implement in most organizational settings at a low recurrent cost. These two interventions, even in a context of limited financial incentives, can be utilized as tools to enhance self-efficacy, work locus of control, attitudes to change, and perceptions of management support.

Incentive schemes. Many studies show that doctors' behaviors often vary with types of payment system. Prospective payment systems appear to result in a lower tendency to accept and treat chronic and complex patients and to call for tests and procedures prescribed for the same or similar symptoms or conditions under other payment systems (Maceira 1998). Studies show that salaried physicians have lower ratios of visits per patient, including preventive services, and lower probabilities of treating their patients in emergency situations (Cherchiglia 2002). The collective resistance of professional associations to financially risky payment systems, combined with the public's unease over being treated by a medical workforce concerned more with the economic than the technical aspects of their practice, are producing a backlash against many managed care schemes (Adams and Hicks 2001 and Stoddard et al. 2002). The weakness of some economic incentives in producing quality services—actually threatening quality in many cases—gave new drive to the role of professional standards and guidelines and their mutual enforcement as means to ensure quality processes and outcomes (Dussault 1994; WHO 1996).

When exploring human resource interventions, health sector reform efforts invariably promote policies that address health worker incentives. While performance-based salary increases, bonuses, and other compensatory benefits are important to explore, the financial realities of most reforms mean that salary incentives can form only a part of a larger motivational strategy. Acting synergistically, a quality-oriented approach broadens the range of options to include intangible rewards such as job satisfaction, prestige, and pride in excellence. Though it is important to address problems with compensation and work conditions in many healthcare settings, health sector reforms must also harness the power of enduring non-monetary incentives. QA efforts, with their focus on measurable performance improvements, are inherently motivational, and their successful results are self-reinforcing. Providing quality care leads to higher job satisfaction and esteem derived from excellence of performance. In turn, patient satisfaction increases, manifesting itself in appreciation and respect for health workers, thus enhancing the respect and prestige a healthcare provider can earn and enjoy.

Innovations in information systems can enhance system performance by making the system work more efficiently, in terms of speed, cost, and the reliability and quality of

information. When such systems become available it is important to consider the potential for collecting data about service quality from the outset, otherwise an opportunity for monitoring quality may be missed. QA expertise can be helpful in identifying key indicators for monitoring high volume or high risk conditions that are indicative of the overall state of care in a facility or system.

Not withstanding the potential benefits, state-of-the-art information technology can intimidate managers and overwhelm them with data if not introduced collaboratively with provider input or if the data systems become ends in themselves. Information technology specialists and monitoring and evaluation experts must be cognizant of the time it will take health workers to collect, tabulate, and report the data. Often the reporting forms are standardized and designed for automation but the actual source data is recorded in multiple ledgers that are not standardized and require laborious entry of information by hand. Training will also be necessary to ensure the accuracy and comparability of the data. QA design principles can be useful in designing systems for collecting, presenting, and making decisions with data. In addition to providing simple tools for data analysis and presentation, QA programs and activities provide a structure and process for using the data at the service delivery level to guide quality improvement efforts.

Further, information and communication systems have clinical applications in the area of technical support and medical consultations. QA methods can be used to define procedures from simple referral and consultation to those employed by complex collaborative networks to allow healthcare providers to work jointly to advance the state of the art and rapidly communicate advances.

Regionalization of services allows communities to collaborate to form centers of excellence that provide medically specialized services. The centers provide larger areas with high quality services at a lower cost. To be successful, however, strategies must go beyond provision of specialty medical services. Health systems must also provide a reliable and trustworthy referral and transport system so that citizens and providers in remote parts of the service area can be confident that services truly are accessible to them. At its best, regionalization can result in a web of interdependence that brings needed services within reach of the overall population. However, if the outreach component is not given careful attention, there is a risk of duplication or underutilization of services.

A summary of the potential benefits and risks for service delivery reforms and the corresponding QA strategies is presented in Table 3.6.

TABLE 3.6 QUALITY-ORIENTED REFORM: SERVICE DELIVERY

| REFORM STRATEGY | POTENTIAL BENEFITS (+) AND RISKS (-) | QA STRATEGIES |
|--|---|---|
| Defining scope and continuum of care | + Greater efficiency + Improved access - Risk of gaps in continuity | QA process analysis can detect and repair gaps in the continuum of care Well-developed protocols can allow lower level health workers to provide quality primary care |
| Human resource interventions Innovations in | + Clarify staffing and skills requirements + New tools for staff motivation and retention + Guidelines can be incentives to professional development + Incentives can increase previously inadequate provider incomes + Opportunity to better understand impact of incentives - Changes may be unsettling for staff at first + Efficient service/administration | QA activities function as part of a motivation strategy QA facilitates collection of data about the impact of different skill mixes on quality QA gathers evidence about quality implications of different staffing models Quality monitoring data can provide basis for performance-based incentives Dual-purpose data: administrative |
| information systems | + High quality information + Data can guide QI efforts - Data can overwhelm managers - Data collection can burden providers - Resistance from providers if not designed collaboratively - Information technology becomes end in itself | reporting and quality monitoring Help identify gaps and problems QA tools to understand and use data |
| Regionalization strategies | + Efficient use of specialty medical services - Risk of underutilization - Difficult to sustain continuity of care | Quality design can ensure that referral mechanisms are developed concurrent with new specialty services QA teams can help in system design and dissemination of information |

IV. Conclusions and Future Directions

Quality assurance techniques, with their focus on quality of care at the point of service delivery, can work synergistically with health sector reforms to achieve overall improvements in health system performance. Ideally, quality assurance strategies should be considered as one of the HSR strategies during the design phase of a health sector reform effort. QA expertise can be brought into the policy formulation process to underscore the importance of quality assessment, to advocate the inclusion of quality of care indicators in overall evaluation criteria, and to explore incentives for quality that can be built into the plan for reform. Where existing reforms are already in place, quality initiatives can solve problems and enhance effectiveness.

To make the kinds of programs described in this document a reality, international cooperation between national and international health sector leaders is needed. Country leaders must take a hard look at the data about health status, access, and available resources to develop evidence-based programs for quality-oriented health sector reform. International agencies that provide bi- and multi-lateral aid and loans must be ready to support the decisions of national leaders and to provide technical support and inter-country networking.

Comprehensive QA programs are generally feasible and affordable and can be enhanced by emphasizing QA strategies that are particularly relevant to a specific reform. Many QA methods are developed, field-tested, well documented, and ready for immediate application. A need for methods development remains in areas such as:

- 1. Developing a core list of quality of care indicators for assessment and monitoring;
- 2. Developing evidence-based guidelines for the phasing in of different QA approaches;
- 3. Determining the most effective forms of credentialing, licensing, and accreditation;
- 4. Benchmarking for quality that will be meaningful across countries and regions; and
- 5. Identifying effective provider and client incentives.

The challenge facing health sector leaders today is to continue to apply a broadly known body of knowledge to implement reforms and changes in healthcare systems, while at the same time, developing methodologies further so that even greater benefits in health status and system performance can be realized.

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