Quality Improvement and Performance Improvement: Different Means to the Same End?¹

Thada Bornstein, MEd, Deputy Training Director, Quality Assurance Project

PERFORMANCE IMPROVEMENT (PI) is a methodology for improving the quality of institutional and individual performance. PI, a term often used interchangeably with Human Performance Technology (HPT), has attracted much attention lately in the international development community, due largely to the enthusiasm of the USAID Office of Population, which is encouraging Cooperating Agencies (CAs) to adopt PI. The CAs are at varying stages of familiarity with both PI and quality improvement (QI). Because even seasoned practitioners have different perspectives on the relationship between PI and QI, the topic has caused lively and useful discussions in the CA community.

This article describes some of the similarities and differences between the two methodologies. It is written and should be read with the understanding that QI and PI are continually evolving and that there is no discrete boundary between them.

In both QI and PI, their application in the U.S. and other developed countries is at a later stage of evolution and experience than in developing countries. This paper is limited to the application of QA/QI and PI in international healthcare. (Many of the statements in this article apply equally to QA and QI.)

The USAID-sponsored Performance Improvement Consultative Group (PICG) is composed of CA representatives who have worked with the Office of Population to develop performance improvement strategies, tools, and approaches. The PICG has developed its own framework based on that of the International Society of Performance Improvement (ISPI). The customized version is suited to the needs and experiences of those who work in the developing world. This version emphasizes the step of obtaining stakeholder agreement to the PI process from the very beginning, before any intervention is attempted thus avoiding the problems that can arise when there are multiple clients with different goals. PICG has agreed to use the common framework in the field in order to reduce confusion among clients, although each group will apply the PI process somewhat differently.

Origins

Although PI and QI arise from different beginnings, both take a systems view. ISPI defines HPT/PI as: "Human performance technology is a set of methods and procedures, and a strategy for solving problems, for realizing opportunities related to the performance of people. It can be applied to individuals, processes, and organizations. It is, in reality, a systematic combination of three fundamental processes: performance analysis, cause analysis, and intervention selection."²

HPT has deep roots in human resources, instructional design, and training, and draws on many fields, including systems theory, learning psychology and behaviorism, information technology, feedback systems, organizational development, analytical systems, ergonomics, human factors, and psychometrics.³ PI grew out of the realization that

¹ In general, the Performance Improvement framework is an evolving concept with new concepts emerging as work continues in this field. The concepts presented here reflect the current thinking when this article was prepared.

² International Society for Performance Improvement. 2001.

³ M. Rosenberg, W. Coscarelli, and C. Hutchison. 1992. "The Origins and Evolution of the Field" in Stolovitch and Keeps, eds., Handbook of Human Performance Technology. San Francisco: Jossey-Bass Publishers.

poor job performance seldom is due solely to the performer's lack of skills and knowledge, but usually to other factors in the system.

PI is based on the theoretical framework of HPT, a systematic method based on data, aimed ultimately at improving human performance by addressing the gap between the present state and the desired state. Its foundation is the belief that to improve human performance, one must manage the performance improvement system, which must be the core of an organization's human resource efforts.⁴

Progressive companies in private industry have practiced both PI and QI since the '70s. Performance improvement is helping to change the widespread notion that all performance problems are best addressed by training. Traditionally, management viewed poor performance as a lack of knowledge or skills, without regard for a variety of internal and external determinants of performance, such as motivation, incentives, environmental factors, resources, feedback, coaching, supervisory support, and others. This mentality leads managers to think that workplace performance problems can be "fixed" by training, so training became a panacea for those problems but rarely solves them. Even when training is required, it alone is often insufficient to improve job performance ("training transfer"). Without certain supports present in the workplace, performance may improve for a short period following training, and then erode.

Quality assurance (QA) and its component, QI, originated in engineering and manufacturing where systems theory, statistical process control, and continuous quality improvement were combined with general management methods. Both QA and QI have long since been adopted and adapted by healthcare systems in many developed countries.



Theory and Principles

Simply stated, QI examines processes in order to improve them. Like the other components of QA, QI relies on the guiding principles of teamwork, systems and processes, client focus, and measurement. The focus on *teamwork* recognizes that team members bring valuable insights regarding the process to be improved because of their knowledge of and experience in it, and are more likely to implement improvements they helped to develop. The focus on systems and processes recognizes that providers must understand the service system and its key service processes in order to improve them; resolving the problem of unclear, redundant, or incomplete processes or systems yields better results than placing blame on individuals. Focus on the *client* emphasizes that services should be designed so as to meet the needs and expectations of clients and community. Focus on measurement means that data are needed to analyze processes, identify problems, and measure performance. This focus promotes taking action based on facts rather than on assumptions.

A more complete examination of the fundamental principles of QI are presented in "Advances in Quality Improvement: Principles and Framework," on page 13 of this issue. However, it is good to remember that the one of the simplest definitions of quality, "Doing the right thing, right," illustrates that author's two major components of care: content (doing the right thing) and process (doing it right).

Methodology

PI

PI addresses human performance within organizations at the individual, process, and organizational levels.It uses a systematic method that has five stages:(a) getting agreement on the project goal from the

⁴ International Society for Performance Improvement, 2001.



clients, stakeholders, and PI practitioner; (b) conducting a performance needs assessment (identifying performance gaps and their root causes); (c) designing the interventions to close the gap; (d) implementing the interventions, and (e) evaluating the change in the performance gap.

The PICG has identified the following conditions⁵ needed for people to perform well:

- Clear job and performance expectations
- Clear and immediate feedback on performance
- A supportive environment, including adequate and proper tools, supplies, and work space
- Motivation to perform to expectations (intrinsic motivation to do the job)
- Organized support in terms of strategic direction, leadership and management communication, organizational structure, and well-conceived job roles and responsibilities

Knowledge and skills to do the job (technical competencies that match the requirements of the job)

The types of interventions most often recommended by PI address the performance factor deficiencies, including: information systems, job aids, job and work design, leadership, organizational design, performance support, staffing selection, supervision, appraisal systems, career development, coaching/mentoring, culture change, compensation, documentation, environmental engineering, health/wellness, team building, training, and education.

As illustrated in Figure 1, PI is a systematic process that considers the institutional context, identifies gaps between actual and desired performance, determines root causes, chooses one or more solutions aimed at closing the gap, and measures the change in performance. The performance needs assessment identifies current performance or competence, comparing the



Figure 1 The Performance Improvement Process

⁵ U.S. industrial models of performance factors differ from these and include categories such as Capacity, which refers to individual capability and aptitude for the job, as well as selection of the right person for the job, and Incentives, which encompasses adequate pay and non-pay incentives made contingent upon performance, clear consequences for performance, and absence of disincentives, such as rewarding poor performance or negatively rewarding good performance.

desired state to the actual state, and seeks the root cause of poor performance.

PI practitioners also identify the need for future training when new tasks, equipment, or techniques are introduced, anticipating future performance deficiencies as the worker's job changes. Root-cause analysis ensures that the interventions recommended are based on data and are what is really needed. Often a combination of multiple interventions is implemented as part of a comprehensive solution. While PI's focus may range from the micro level (individual performers) to the macro level (the organization), its roots and close alignment to human resources, training, and organizational development may influence its practitioners to favor certain types of interventions.

QA/QI

The Quality Assurance Project illustrates QA activities as three points on a QA triangle (see Figure 2). The points are: defining quality (QD), measuring quality (QM), and improving quality (QI). QD means developing statements regarding the input, process, and outcome standards that the healthcare delivery system must meet in order for its patients to achieve optimum health gains. Such statements are used to define expected quality in all aspects of healthcare. QM consists of quantifying the current level of compliance with standards. QI involves using appropriate methodologies to close the gap between the current and expected levels of quality; it uses quality management tools and principles to understand and address system deficiencies.

Approaches to conducting QI activities are numerous and lie along a continuum from simple to complex. Four basic approaches are: (a) individual problem solving, (b) rapid team problem solving, (c) systematic team problem solving, and (d) process improvement. (These four approaches are explained in "Advances in Quality Improvement: Principles and Framework" on page 13). The PI approach is most



Improving quality requires engaging in appropriate methodologies to close the gap between current and expected level of quality. It uses quality management tools and principles to understand and address systems deficiencies and improve or re-design efficient and effective healthcare processes.

similar to the third, systematic team problem solving (see Figure 1).

QI activities are conducted using variations on a fourstep method: (a) identify (determine what to improve), (b) analyze (understand the problem), (c) develop hypotheses (determine what change[s] will improve the problem), and (d) test and implement, or Plan, Do, Study Act (PDSA). In the fourth step, the solution is tested to see whether it yields an improvement; the results are then used to decide whether to implement, modify, or abandon the proposed solution. If the tested solution does not achieve desired results, the process cycles back to the third step for reiteration. If the results are achieved, the solution is implemented on a larger scale and monitored over time for continuous improvement.



QI does not end with step four; it is an ongoing process. In fact, QI is generally considered in the context of QA, itself an ongoing process.

QI vs. PI

Although both QI and PI take a systems view, a noticeable difference between them is that PI places more emphasis upon human performance while QI focuses on processes. Both assert the need for data.

The QA Project recommends a flexible stance in deciding how to perform the analysis step, i.e., whether to conduct a root-cause analysis, whereas PI holds firmly that root-cause analysis should be performed. When root-cause analysis is conducted in QI, hypotheses are produced using a variety of techniques, such as generating possible causes and organizing them on a fishbone (Ishikawa) diagram, or using the Tree Diagram technique ("Five Why's"), narrowing down the most likely causes, and developing simple

data collection tools to verify which one is the actual root cause. Descriptions of root-cause analysis in PI often exclude the verification step.

The QA Project advocates not performing root-cause analysis when the cause is

obvious (this usually applies when the individual approach is used), or when the problem solvers are sufficiently knowledgeable about the process to make educated guesses as to the cause (often used by teams using the rapid or process improvement approach). These approaches yield a quicker result, but require a level of QI expertise to know when they should be applied. Rapid approaches employ solutions from a list of known change strategies that have a history of results in reducing errors and rework.

Another significant difference between PI and QI is that PI is usually led by a specialized practitioner, while QA and QI have always been intended to be managed by the health program staff itself. This approach supports the institutionalization of quality in many of the countries where the QA Project works and is exemplified in the autonomous and continuous character of QI teams, which are central to the sustainability of QI. QI teams are usually self-directed groups of facility-based health workers.

The teams are developed and supported by coaches who provide them with both formal and just-in-time training in QI—the process, tools, and techniques and on team process matters such as: the functions and roles of team members; communication skills (e.g., active listening, giving and receiving feedback); decision making; planning, conducting, and documenting team meetings; and presenting team results to managers.

Teams use the QI process to decide what they want to improve, and are thus empowered to improve their

Rapid approaches employ solutions from a list of known change strategies that have a history of results in reducing errors and rework. work conditions and outcomes, often making systemic transformations to their work environment. This contrasts with PI, which does not emphasize the use of teams. QI team members are selected for their expert knowledge of

the process being improved or other special skills. This combination of knowledge and skills gives the team the expertise that enables them to deal with complex systems and processes. Often a QI team is wholly responsible for the process they are improving (process improvement teams). Such teams can continually seek opportunities for improvement, and design, test, and implement solutions without requiring higher authority to initiate the effort.

On the other hand, PI is often initiated at a client's request and directed by a PI practitioner. While teams are formed to design and implement interventions, there is less indication that, after the original performance problem is improved, self-directed facilitylevel teams continue to initiate PI activities independently as part of their regular way of doing business. However, many CAs are now conducting PI training to develop the capacity of field staff and host country counterparts to use PI independently of headquarters.

Because of its roots in human resources (HR) and training, PI is more inclined than QI to consider

HR-related causes and solutions, for example, clear job expectations, performance feedback, motivation, and incentives. And QI is more predisposed toward looking at processes and systems, a focus that generates a broader array of interven-

tions. One example of such complex interventions is an accreditation system that may incorporate both internal and external monitoring and improvement. Another is the systematic monitoring of Health Management Information Systems (HMIS) data to generate opportunities for continuous QI.

However, there is increasing evidence of common ground between QI and PI: QA/QI is developing and testing so-called "HR"-type interventions, such as supervisory feedback and health worker motivation, while PI is identifying systemic causes such as lack of systematic monitoring and evaluation.

Many system-wide intervention mechanisms (e.g., licensure, accreditation, regulation, and certification) that are tailored to healthcare and employed by QI have not yet been adopted in the current practice of PI.⁶ Accreditation can take any of several forms:

focused accreditation (focused on a single service) and facilitated accreditation with self-appraisal are two such complex interventions that improve quality in an organized way. Another solution that can arise from QI is Quality Design, which employs a welldeveloped methodology to create new services or processes.

QI is only one methodology in the larger QA system, and as such, it is not the sole entry point for improving the performance of a healthcare system. One can

QA recognizes that standards must be in place and met for these inputs, processes, and outcomes in order to maximize the potential for desired health outcomes. just as easily begin with QD or QM. In fact, there are many entry points by which quality can be introduced into a healthcare system. It is a function of QA's maturity, and the great needs of healthcare systems in developing countries, that the interven-

tions mentioned in this article can be implemented and achieve results without necessarily going through the QI process.

Both QA/QI and PI emphasize standards, but the former is more systematic and comprehensive. In QA/QI, standards are classified into two domains: technical (clinical, based on evidence-based medicine) and administrative. In each domain, there exist model standards for inputs (e.g., staff, equipment, supplies), processes (e.g., patient care, admission, housekeeping), and outcomes (the results of the inputs and processes: e.g., delivery of a baby, health gain of a patient, mother appropriately following a health provider's guidance for the care of her child). QA recognizes that standards must be in place and met for these inputs, processes, and outcomes in order to maximize the potential for desired health outcomes.

⁶ This statement excludes Joint Commission Resources, Inc. (JCR), an internationally focused subsidiary of the US-based Joint Commission on Accreditation of Healthcare Organizations (JCAHO), and JCAHO, who use the term "Performance Improvement" slightly differently from the PICG. For more information on JCR, see their website at <www.jcrinc.com>.



In PI, the term "standards" is most often applied to worker performance expectations, namely job descriptions or specifications although, as mentioned above, clinical guidelines are a well recognized performance factor and solution in PI. However, PI uses terminology for performance factors (e.g., "environment") that include elements QI would call "input standards." The different terminology can cause confusion. QI and PI may both recognize the same deficiencies, but while one sees the lack of a standard, the other sees a lack of an environmental support mechanism. In this case, the two perspectives may lead to the same conclusion, but QI/QA's more comprehensive and systematic process for developing, communicating, and implementing standards around those or similar factors appears more likely to achieve success, and successes are sustained longer if staff retain, refer to, and follow standards.

Summary

Both QI and PI use a systems approach and are databased. They also share some tools and techniques. Because proponents of each approach who work in the international arena may not be well versed in both, they don't always recognize how much they have in common. However, each has developed unique approaches, along with deep knowledge in specialty areas that the other, in the spirit of continuous improvement, would do well to embrace. For example, PI practitioners could draw on QI's use of faster approaches and expand its use of interventions to include already developed methodologies such as QD, etc. QI could benefit from formalizing the stakeholder process and placing a greater importance on human performance support systems such as capacity and selection, individual job descriptions, motivation, and incentives.

As CAs better define the commonalities and improve our understanding of these two approaches to achieving improvements, we will be better equipped to draw on the strengths of both. USAID has made a significant contribution by bringing both of these approaches to the table, and the clients are the ultimate beneficiaries.

Many thanks to the individuals who graciously agreed to review and give comments on this article: Jim Heiby, Diana Silimperi, Jolee Reinke, Joanne Ashton, Lynne Miller Franco, Rick Sullivan, and Jim Griffin, and especially our editor, Beth Goodrich. I thank you for your useful suggestions; any errors are solely my own.



Quality Assurance Project is operated by the Center for Human Services in collaboration with the Joint Commission Resources (formerly known as the Joint Commission International) and Johns Hopkins University (including the School of Hygiene and Public Health, The Center for Communication Programs, and the Johns Hopkins Program for International Education in Reproductive Health). The project is sponsored by the United States Agency for International Development under Contract Number HRN-C-00-96-90013. For additional information please contact: Dr. David Nicholas, Director Quality Assurance Project Center for Human Services 7200 Wisconsin Avenue, Suite 600 Bethesda, MD 20814-4811 dnicholas@urc-chs.com or Dr. James Heiby, Project Manager G/PHN/HN/HPR U.S. Agency for International Development Washington, DC 20523-1817 jheiby@usaid.gov