

A Primer for Quality Assurance in Pacific Island Health Services

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Introduction:

Quality Assurance (QA) is the practice of actively using performance data to improve a health system. Quality Assurance includes the following components (Figure 1).²

1. Defining Quality (QD) — the establishment of performance standards and targets to improve a health care system. Policies and procedures may also be developed to define how the organization should operate in order to reach these standards and targets.

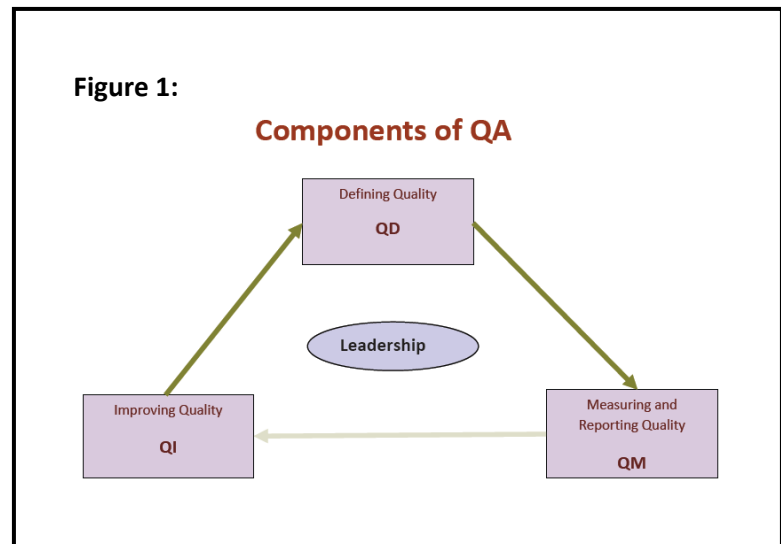
2. Quality Measurement &

Reporting (QM) — the use of performance data to measure progress in meeting standards and targets; the processing of data into a report that is easy-to-understand and use, and the distribution and presentation of these reports to the people who can best make use of them.

3. Quality improvement (QI) — the use of performance reports to make changes needed in order to meet quality standards. QI may involve changes in public health policies, procedures, programs, infrastructure, or staff training.

Once standards and indicators are selected, QA becomes an ongoing process, with the QM and QI steps above being repeated at regular intervals so that the ideals (i.e standards) to which the system is striving can be achieved, then sustained over time.

There is a wide range of approaches that use the paradigm above and QA has been applied to a variety of settings including hospitals, outpatient clinics, and government public health departments. The terminology used by various authors in the health quality literature can be confusing. Regardless of the terminology used, it is important to grasp the basic concept of QA as outlined above, and to appreciate that this concept can be applied in a number of ways with varying program scope, emphasis and structure. The scope of QA programs can be limited to standards for a single problem or be as wide as the entire health service. The emphasis can be on the coordination of processes within an organization, staff behavior and performance, aspects of



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² From the Quality Assurance Project: The Quality Assurance Kit, 2002. Available at <http://www.qaproject.org/pubs/pubscds.html> (Accessed Sept. 24, 2008)

clinical care, or the alignment of the organization's capacity and effort with a set of strategic goals. Programs can be structured to use sets of standards and measures that are generated internally or ones that come ready-made from an external source. Policies and procedures (i.e. the blueprints for how work teams will meet standards) can be developed as part of the process of setting up a QA program, or the standards and indicators can be set first, leaving work units to decide what processes will lead to success on the basis of survey results. The surveyors who measure indicators can also be internal staff members, external independent contractors, or employees of an external accrediting authority. The data generated from surveys can be organized and reported in such a way as to reflect the performance of identified individuals, front line work unit teams, or departments within the organization, while the results can be linked to rewards and sanctions that are delivered to individuals, teams or, in the case of some accreditation systems, affect eligibility to receive funds from insurance companies or government.

The majority of QA programs conducted in the developing countries to date are single- issue, clinical topic programs. The focus with these programs is on reducing the gap between actual practice and best practice (given available resources) for a particular health issue. The Quality Assurance Project's programs to decrease neonatal mortality and improve the delivery of treatment for tuberculosis and HIV in developing countries are examples of single-issue, clinical topic QA programs. Another example that is practiced in several Pacific island jurisdictions is the Centers for Disease Control's Diabetes Collaborative, which seeks to improve preventive care for diabetics.

Whole-system QA programs, in contrast, seek to improve performance across an entire organization. The QA program that Mary Cowan worked to develop with several of the state health departments in the Federated States of Micronesia over the past 10 years is an example of a whole-system QA approach which focuses on the improvement of organizational processes.³

Accreditation uses whole-system standards that are set and surveyed by an external authority. The first such authority, the Joint Commission for the Accreditation of Health Care Organizations (JCAHO), was founded in the U.S. in the 1950's. The focus of Joint Commission accreditation standards is the promotion of patient safety by regulating an organization's process of care, environment of care, and governance of staff. Over the past 50 years, most developed nations have established their own accrediting bodies for hospitals (and sometimes other clinical services). Three of these organizations, including JCAHO (through its subsidiary, Joint Commission International), the Canadian Council on Health Services Accreditation-International, and the Australian Council on Health Care Standards-International Division, are offering accreditation to hospitals and clinics worldwide. The standards set by these agencies are appropriate for developed country health care organizations (or very well financed facilities in other countries). Both the infrastructure needed to meet standards and the process of accreditation by these agencies can be very expensive. Some middle- income countries (e.g.

³ Quality Assurance for Healthcare Services in Developing Countries. Cowan M. Cowan Consulting Services, 2007. For copies contact: maryarmy@yahoo.com

Malaysia and S. Africa) and low- income countries (e.g. Zambia and, for outpatient “polyclinics”, Bolivia) have also developed accreditation systems.

Until recently, there were no accreditation systems for public health departments. However, in a 1988 report entitled, the “Future of Public Health”, the Institute of Medicine called for the establishment of an accreditation system for government public health departments.⁴ Since then, there has been a great deal of activity by groups including the Association of State and Territorial Health Officials, the National Association of City and County Health Officials, the CDC and the Public Health Foundation toward creation of a national accreditation system. An independent Public Health Accreditation Board (PHAB) has been formed and, in February 2009 the PHAB released its draft accreditation standards for pilot testing. Full accreditation system launch is scheduled for 2011.⁵ The focus for this system is the ten essential public health services, a list of the public health activities that should be undertaken in all communities, which was developed by a committee composed of representatives from the agencies above. Thus, accreditation will confirm that health departments at the state and local levels have developed the capacity to perform the activities that are considered by consensus to be essential. Several state-wide local health department accreditation programs based on more-or-less the same framework are already in place.

The accreditation-related QA surveys that are evolving for the public health side of the health sector in the US have the disadvantages of being in a state of flux. Also, like the JCAHO surveys for hospitals, they are complex and demanding.

There is general agreement that the practice of setting explicit standards, selecting indicators to measure whether standards are being met, and using the feedback provided from these assessments to make improvements is very effective. However, there is no clear consensus regarding which approach is best, with several recent reviews failing to find evidence that any one approach is superior.^{6, 7, 8} Since there is no evidence to select one QA approach over another, leaders should select an approach based on what is most appropriate to local needs. This issue is discussed in more detail with reference to Pacific island jurisdictions in Annex 1.

⁴Institute of Medicine: Committee for the Study of the Future of Public Health; Division of Health Care Services. The Future of Public Health. Washington, D.C. National Academies Press. 1988 (with update in 2002).

⁵ Available at: <http://www.phaboard.org/standards/default.asp> (accessed on February 17, 2009).

⁶ What are the Best Strategies for Ensuring Quality in Hospitals? Ovreteit J, WHO Health Evidence Network, 2003. Available at: <http://www.euro.who.int/document/Hen/hospquality.pdf> (Accessed Sept 12, 2008)

⁷ Using Research to Inform Quality Programmes. Ovreteit J, Gustafson D. British Medical Journal ; Vol 326 No 5 pgs 759-61, 2003.

⁸ Evidence-Based Quality Improvement: the State of the Science. Shojania K, Grimshaw J. Health Affairs Vol 24, No 1, pgs138-50, 2005.

The PIHOA QA Initiative:

In recognition of the as-yet unmet potential for QA in the region, one of PIHOA's strategic priorities is to assist member jurisdictions to build their quality assurance systems. In early 2008, PIHOA has launched its Quality Assurance Initiative, which comprises three components:

Phase 1 of the initiative is a review of available background literature, resources, tools, agencies, models and consultants, both within and outside of the region, the assembly of a QA advisory committee, and the development of funds to assist member jurisdictions with QA development. A review of available materials has been completed and a PIHOA QA website linked to the PIHOA home webpage is being prepared to provide easy access to these materials. Some members of a QA advisory committee have been identified with recruitment of others ongoing. Sufficient funds to complete Phase 1 and Phase 2 of the initiative have been secured, with Phase 3 funding still largely unidentified.

Phase 2 is an individualized site assessment for PIHOA-affiliated departments of health, hospitals, and community health centers. The purpose of this phase is to assess the local status of QA activities, to determine whether conditions for building QA systems are favorable, and to develop a locally appropriate plan for implementing a stronger QA program at the site. Site assessments for Pohnpei State Department of Health Services/Pohnpei Community Health Center and the Kosrae Department of Health Services were performed in October and November, 2008, with district health units in Ebeye and Majuro in the Republic of the Marshall Islands done in January-February, 2009. The Ministry of Health of the Republic of Palau is also planning to perform a site assessment in the coming months.

Phase 3 will follow phase 2 assessments and will consist of implementing the QA development plans for each site. During phase 3, efforts will also be made to integrate QA-related components of other regional health care initiatives into the QA programs of individual jurisdictions. For example, a PIHOA regional lab meeting is being held in March, 2009 in Guam to consider regional lab standards. Once formulated, these standards will be disseminated through the PIHOA QA Initiative to jurisdictions that are currently building QA programs for incorporation into their programs. A PIHOA QA advisory committee is also forming to assist with capturing resources for QA-building activities, to assist efforts to build consensus regarding regional standards for the full spectrum of health service delivery, to forge links with other groups, e.g. WHO, with quality-related initiatives, and to work toward the development of teaching modules related to QA.

Comment:

QA programs should be considered as an essential (perhaps the most essential) component of the health information system for a district health service. QA programs enhance coordination within

the health organizations and help to align efforts of people toward desired goals. A well-functioning QA program creates a favorable climate for the success of both categorical public health programs and clinical services. Of the various components that make up a health information system, quality assurance is one of the most underutilized in the Pacific island jurisdictions. This may be due in part to the fact that most of the health related data collection and reporting that takes place in the region is driven by external funding agencies. Quality assurance programs, in contrast, generate and apply data locally. When well executed, QA programs put the power of data into the hands of those who are in the best position to deliver services that improve health- local health system managers and front-line staff. QA programs also benefit funding agencies greatly by providing protection against the disorganization which cripples so many public health initiatives.

Efforts to build QA programs and to develop the health workforce are complementary. Well-trained health workers are much quicker to identify and implement the changes needed to meet service delivery standards, while a disorganized health service is an unfavorable setting for training and maintaining the skills of health workers. Both QA and training of health workers are cross-cutting strategies that build general capacity within the health system and improve the effectiveness of whatever endeavors are undertaken by the organization.

QA is also analogous to workforce training in that interventions with a broad scope are especially important for the health services that are least developed. It is widely recognized that short-term workshops designed to improve a few specific competencies tend to have limited impact when applied to health workers who lack basic foundation training for their professions. This is one reason that the large number of topical workshops conducted in the region over the past 3 decades has had rather disappointing results, overall. Health workers who are already equipped with basic skills and knowledge of their professions are much better able to understand and apply the narrowly focused material presented in a short workshop. In the same way, single-issue QA programs work much better in settings with functional wide-scope administrative health information systems. Otherwise, a steady stream of administrative crises tends to “spill over” to hamper progress regarding whatever single issue QA program is being conducted. In general, developing country health services should emphasize the provision of basic health professions training and whole-system operational QA systems before turning to narrowly-focused short term workshops and single-issue QA initiatives. Health services in more developed settings that are operating smoothly, on the other hand, can benefit most from QA systems that focus on particular problem areas, or that emphasize alignment with strategic goals, rather than operational processes. The scenarios in presented in Annex 1 illustrate these points.

Annex 1: Suggestions for building QA systems:

In this section, some common scenarios that reflect conditions that may be found in Pacific Island jurisdictions are provided, followed by suggestions for selection of a QA approach based on these circumstances. Regardless of which QA approach is selected, a baseline assessment is very useful, to determine whether the conditions needed for establishing a quality assurance (QA) system are in place and, in order to avoid duplication, to inventory any ongoing QA activities.

Scenario 1: You are the director of a government district health service that provides hospital services, outpatient care and public health programs. Your operating budget is low. Large portions of your health workforce lack formal training for their jobs and make frequent mistakes. Salaries have been frozen for years and it is difficult to motivate staff. There are frequent malfunctions of equipment and shortages of medications and supplies.

A whole-system QA program to improve coordination and basic operations will be most helpful. Examples of such as system include the Mary Cowan- developed program in Yap state, and similar whole-system sets of standards which have been developed for accreditation in other low to middle income countries, such as those of Malaysia and S. Africa.

Whichever set of standards and indicators is selected, several additional steps will need to be taken to implement a program:

- The standards and indicators will need to be adapted to local circumstances.
- Resources, both budgeted and in-kind need to be identified.
- QA surveyor(s)/coach(s) will need to be identified and trained.
- Health service leaders, mid-level supervisors, and front-line staff will need to be oriented to the program
- A strategy for the presentation of audit findings, for review by management, for linking of results to incentives, and the ongoing updating of standards and indicators needs to be developed

The steps above are adequate to implement the three components of QA in the health service. In addition, it is very helpful to systematically re-engineer policies and procedures to provide guidance to staff regarding how standards should be met. This is a big job that requires someone to be familiar with health services delivery, to have a talent for “systems thinking” (in order to fit the policies and procedures of multiple units into a functioning whole) and to have the ability to write clearly and precisely. A person who meets these qualifications should be identified and given the time and resources needed to perform this job. Mary Cowan’s QA manual provides a step-by-step method for writing good policies and procedures.⁹

Scenario 2: You are the chief executive officer of a hospital in one of the U.S. flag territories. Most of your workforce has been formally trained for the jobs they perform. You are able to provide emergency care, secondary hospital care and some tertiary medical services on a continuous basis with few major disruptions. In order to be eligible to receive payment from

⁹ Quality Assurance for Healthcare Services in Developing Countries. Cowan M. Cowan Consulting Services, 2007. For copies contact: maryarmy@yahoo.com

private health insurance companies and U.S. government-sponsored Medicare and Medicaid plans, it is essential for you to secure accreditation through either the Joint Commission for the Accreditation of Healthcare Organizations or the Centers for Medicare and Medicaid Services. Though your budget per capita is much lower than that for most community hospitals in the U.S., your clients expect delivery of American-style health care and are prone to litigation when their expectations are not met.

- Carefully review JCAHO standards for hospitals (available on-line)
- Decide with hospital Board and executive leadership, whether to commit the effort and resources needed to attain and maintain accreditation. The process is expensive and takes most hospitals between 12 and 24 months of intensive effort to be successful.¹⁰
- Create work teams to develop the policies, procedures, building alterations, signage, forms, etc. for the various hospital departments.
- Hire a full time nurse who has successfully brought a hospital through accreditation to orchestrate preparation activities.
- Subscribe to one of the services, such as that offered by Joint Commission Resources, to guide the staff through the preparation process.

In addition to a whole-system QA program in preparation for accreditation, hospitals in this category may also wish to provide special attention to selected problem areas with a single-issue QA approach.

Scenario 3: You are the director of a government district health service as above which has had a whole-system QA program in place for several years. Over time, the standards, policies and procedures in the program have become increasingly outdated. This is creating resistance among staff members and undermining the effectiveness of the program.

It is very common for QA systems to deteriorate over time, unless actively maintained. Putting such a program back on track is not difficult, though it becomes harder the longer it has been out of service. To re-establish such a QA program, the following steps can be taken:

- Conduct a unit-by-unit review of existing standards, indicators, policies and procedures to identify those that are out of date, irrelevant or troublesome.

¹⁰ A first-time accreditation can cost several hundred thousand U.S. \$ in consulting and survey fees. Maintaining accreditation is also most easily done by purchasing a subscription from a consulting firm which assists hospitals in maintaining accreditation readiness. The cost for such a program which includes quarterly site visits, twice-yearly workshops, audio conferences, e-mail and phone access to consultants, and access to an electronic self-assessment program is between US \$35-40,000. In addition, most hospitals employ a full-time nurse to work on accreditation readiness.

- Delegate or recruit someone with a health care background and writing skills to revise the standards, indicators, policies and procedures that need to be changed.
- Review the survey process to be sure that program surveyor(s) are sufficiently trained, objective in their observations, supported and accountable for performing surveys and conducting post-survey corrective planning meetings and submitting reports on time.
- Check to be sure that there is a linkage between QA audit results and sanctions/rewards for mid-level supervisors and front-line staff.
- Repair any of the deficiencies identified above.

Scenario 4: You are the director of a government public health department which is separate from the hospital and primary care services in your community

If your basic operations are not running smoothly: You may choose a whole-system QA program that focuses upon improving operations. If your department is relatively low-budget, the system developed by Mary Cowan should be most helpful (see steps for implementation as in Scenario 1, above). If your department has a relatively high budget, an operational QA system such as that used in the local health departments in the state of Tennessee may be used as well.¹¹

If your basic operations are running smoothly: You may wish to prepare for U.S. national accreditation (especially if you are in a US-affiliated jurisdiction), which will be available in 2011. Accreditation will be voluntary, but is likely to be useful for demonstrating competence to the local community, identifying gaps in the local public health system that need to be filled, and helping to attract U.S. federal public health grant funding. The following steps can be used to prepare:

- Review an accreditation preparation manual, such as Michigan state’s “Embracing Quality in Local Public Health”.¹²
- Select an on-line accreditation preparation self-assessment tool such as NACCHO’s “Local health Department Self-Assessment Tool for Accreditation Preparation”¹³ or the CDC National Public Health Performance Standards Program’s “Local Public Health System Assessment Instrument”¹⁴
- Review draft PHAB accreditation standards.¹⁵

¹¹ Template available by request. To arrange for this, contact Mark Durand at: durand@att.net

¹² Available at: http://accreditation.localhealth.net/MLC-2%20website/Michigans_QI_Guidebook.pdf (accessed Sept 24, 2008)

¹³ Available at: <http://www.naccho.org/topics/infrastructure/accreditation/OpDef.cfm> (accessed Sept. 24, 2008)

¹⁴ Available at: <http://www.cdc.gov/od/ocphp/nphpsp/General.htm> and <http://www.cdc.gov/od/ocphp/nphpsp/submittingData.htm> (accessed Sept. 24, 2008)

¹⁵ Available at: <http://www.phaboard.org/standards/default.asp> (accessed February 17, 2009)

- Form a task force to work through the self-assessment, then to make recommendations for system changes to correct any identified gaps and deficiencies. (an example of a completed accreditation preparation report for a county of 100,000 population can be obtained by request from Gaston County, North Carolina¹⁶)
- Consider requesting peer assistance by someone with experience in self-assessment and public health accreditation preparation through the National Association of City and County Health Officials Peer Assistance Network.¹⁷

Scenario 5: You are the director of a community health center which is separate from the government public health department and the local hospital.

If your basic operations are not running smoothly: You may choose a whole-system QA program that focuses upon improving operations. The system developed by Mary Cowan will be helpful, as would other whole-system process oriented sets of standards and measures, such as that developed by Management Sciences for Health's QA program for the outpatient clinics of the Bolivian Social Security Administration.¹⁸ (see steps for implementation as in Scenario 1, above).

If your basic operations are running smoothly: You may choose to address selected problem areas with single-issue QA initiatives such as CDC's diabetes and other chronic disease collaborative. You may also wish to make your quality control efforts more systematic by use of templates from other established CHC QA programs.¹⁹

¹⁶ Available by request at: <http://www.co.gaston.nc.us/healthdept/accreditation.htm> (accessed Sept. 24, 2008)

¹⁷ NACCHO Peer Assistance Network at: <http://www.naccho.org/topics/peerassistance> (accessed Sept. 24, 2008)

¹⁸ Available in the Health Manager's Toolkit at: <http://erc.msh.org/mainpage.cfm?file=2.56.htm&module=toolkit&language=English> (Accessed Sept, 24, 2008)

¹⁹ Examples available on request to Mark Durand: durand@att.net; Phone: 865-984-6784