



Quality of Health Care Doesn't Have to Cost a Lot

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Ample evidence suggests that quality of care (or the lack of it) must be at the center of every discussion about how to improve health in developing countries. Yet, many examples indicate that quality of care is still poor.

In a study in Papua New Guinea, almost three-quarters of health workers reported that they checked for only two of four examination criteria for pneumonia cases. And only one-quarter of these workers was able to correctly treat malaria.¹

Such deficits in quality of care come from gaps in knowledge, inappropriate applications of available technology, or the inability of organizations to change.² Local health care systems may have failed to align practitioner incentives and goals, to monitor clinical practice, or to link quality improvement to better health outcomes.

This fact sheet highlights approaches to improving quality of care that can be rapidly implemented, over months rather than years, without great cost. Better quality can improve health much quicker than other drivers of health, such as economic growth, educational advancement, or new technology. The key to improving quality is to measure it locally.

Nature of Care Giving in Developing Countries

The process of providing care in developing countries is often inadequate and varies widely. These variations are not related to access to care or cost of care: Neither greater supply nor higher spending has resulted in better care or survival.

In one seven-country study researchers directly observing clinical practice found that 75 percent of clinical cases were not adequately diagnosed, treated, or monitored and that inappropriate treatment with antibiotics, fluids, feeding, or oxygen occurred in more than 60 percent of cases.³

Clearly, lack of resources affects the quality of care received. Data indicate, however, that high-quality care can be provided even in environments with severely constrained resources.⁴

Defining Quality of Care

Measuring quality of care requires defining it in measurable terms. The U.S. Institute of Medicine defines quality of care as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge.”⁵

Quality is composed of three elements:

- *Structure* refers to stable, material characteristics such as infrastructure, tools, technology, and the resources of the organization, such as levels of funding, staffing, payment schemes, and incentives;
- *Process* is the interaction between caregivers and patients; and
- *Outcomes* are measurable health status indicators, like deaths, or disability-adjusted life years (DALYs), a measure that encompasses the illnesses and deaths of patients or groups of patients.

Experts writing in *Disease Control Priorities in Developing Countries*, 2nd edition (DCP2), argue that changes in the *process* of health care are the most promising way to improve quality of care in the short term.

INSTITUTE OF MEDICINE'S SIX ELEMENTS OF QUALITY

The Institute of Medicine, in a landmark report, *Crossing the Quality Chasm*, recommends the following attributes that can be overcome if quality of care improvements are implemented well:

- Patient safety
- Effectiveness of care provided
- Patient-centeredness
- Timeliness
- Efficiency
- Equity⁶

Quality of care measurement must also be done in the local context in order for improvements to be effective. Five approaches to measuring the process of health care merit consideration: chart abstraction, direct observation and recording of visits, administrative data, standardized patients, and clinical vignettes.

Measuring Quality of Care with Vignettes

A recent study used clinical vignettes (hypothetical written case scenarios administered to doctors) to assess quality of care among physicians. The study found widely varying, but generally low overall quality of care in China, the Philippines, Mexico, El Salvador, and India. Quality of care varied dramatically within countries, but in general, was better among younger, female, tertiary care, and specialist physicians. The authors concluded that some physicians provide good quality of care even in low-resource settings, and recommended that planners target the lowest-performing doctors to improve the overall quality of care delivered in developing countries.⁷

Interventions

Two general types of interventions that affect the process of health care (i.e., the interactions between caregivers and patients) can be considered:

CHANGING STRUCTURAL CONDITIONS THAT INFLUENCE PROVIDER BEHAVIOR

Organization and finance can influence process by changing the socioeconomic, legal and administrative, cultural, and information context of health care systems. Some interventions that attempt to change how organization and financing are structured include:

- Legal mandates, accreditation, and administrative regulations, such as the licensing of professionals and facilities, accreditation or certification to perform certain procedures, and the formal delineation of functions that various types of health workers can legally perform;
- Malpractice litigation;
- Professional oversight;
- National and local clinical guidelines that are evidence-based and used to ensure high-quality care, better health outcomes, and cost-effective treatments;

- Sharing information on quality improvement technology;
- Public-private provision of care;
- Targeted, professional education requirements; and
- Organizational change.

AFFECTING PROVIDER PRACTICE DIRECTLY

Interventions that directly affect provider practice to improve quality of care include:

- Training with peer review feedback;
- Performance-based pay;
- Promoting a high volume of care to strengthen provider experience and practice; and
- Performance-based professional recognition.

These interventions can often be done at virtually no extra cost, and may at times require shifts in either the structure of health care provision or changes in the process. Two examples—pneumonia and diarrhea—show how improving the process of detection and treatment of acute respiratory illness can be extremely cost-effective and bring about better health outcomes at minimal cost.

Evaluations of Quality's Cost-effectiveness in Developing Countries

PNEUMONIA

Part of the high mortality from childhood pneumonia in the developing world can be explained by poor quality of care – either the inability to accurately diagnose or to treat the disease. An analysis by experts writing in *DCP2* showed that when the baseline quality is low and the disease prevalence is high, an intervention that raises quality of care mainly through an educational intervention costs between US\$132 to US\$800 per life saved.

DIARRHEA

Another childhood illness, diarrhea, is one of the leading causes of sickness and death among children under age 5 in the developing world. Oral rehydration salts are the accepted standard of care for acute diarrhea, but are not widely applied. Improvements in diagnosing dehydration and reducing use of unnecessary medications leads to better outcomes.

Several interventions can make a dramatic difference in the process of diagnosis and treatment of diarrhea. In

one study, verbal case review and provider education regarding guidelines and ongoing monitoring increased the proportion of cases treated correctly from 16 percent to 48 percent.⁸ Small group, face-to-face interventions reduced misprescribing of antimicrobials and antidiarrheals by 7 percent to 16 percent. The average cost per intervention to improve quality of care for diarrhea diagnosis and treatment ranged from US\$25 to US\$125. In general, the cost of saving a life through educational interventions is less than US\$500 and can be as low as US\$14.

Promising Approaches

Promising approaches to improving the quality of care include the following:

- Invest in measuring quality and feeding that information back into the system. This approach is possible (for example, clinical vignettes) and effective.
- Use evidence-based criteria to link quality of care to outcomes. This approach can be implemented by training and creating incentives for adapting clinical guidelines or by using the collaborative improvement model.
- Improve system-level and provider incentives. For example, clarify the structure of financial incentives facing providers by establishing legal and ethical rules that do not allow care providers to profit personally from sale of drugs, diagnostic procedures, or referrals to expensive specialized care.
- Emphasize high-volume care for selected surgical procedures and common medical conditions. Such an approach can lead to higher quality and lower cost even while, in some cases (for example, cataract removal), allowing lower-level workers to substitute for more expensive and scarcer physicians.

Research Agenda

Quality-of-care research is needed to:

- Document the extent and context of quality at various levels, from individual providers to institutions to health care systems and whole populations;
- Explore how various interventions can be successfully introduced and implemented in health care settings;
- Understand how quality monitoring and assurance strategies for health systems contribute to society and at what cost; and
- Increase the evidence base regarding the effects of public policies concerning quality of care on provider behavior and assess whether they lead to better health, in the short- and long-term.

Good quality means that providers are able to manage an individual's or a population's health care through timely, skillful application of medical expertise in a culturally sensitive manner within the available resource constraints. Eliminating poor quality involves not only giving better care but also providing enough essential clinical services; stopping overuse of some care; and ending misuse of unneeded services. Unfortunately, quality of care has largely been ignored. Local measurement is the key to improving quality of care. And since better quality leads to better health, and since changes in the *process* of health care are the most promising in the short term, research on outcomes and process should be conducted and disseminated to help rapidly improve health care quality in developing countries.

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