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Improving Quality of Clinical Care

Incentives for Health Care Workers

Despite the urgency of improving health in developing countries, quality of care has been largely ignored. For example, researchers who directly observed clinical practices found that 75 percent of cases in a seven-country study were not adequately diagnosed, treated, or monitored, and that inappropriate treatment with antibiotics, fluids, feeding, or oxygen occurred in more than half of the cases.

Poor-quality care can be traced to many sources, including:

- Lack of staff (see table);
- Lack of appropriate training or skills;
- Limited incentives for staff to provide good quality care;
- Lack of simple equipment; and
- Poor drug supply systems.

Staffing problems are common to most low- and middle-income countries. It is often difficult to persuade doctors to work in remote rural areas. And those who do take such posts typically do not remain long.

An Ongoing Challenge: Brain Drain

The available pool of health care workers also shrinks due to emigration. A study in six African countries showed that most health workers intended to migrate to get jobs with higher salaries. By 1999, just four years after graduation, 70 percent of Ghana's medical school graduates in the class of 1995 had emigrated.

A wide gap in pay provides a strong incentive to migrate. For example, a junior doctor in the United Kingdom averages US$3,029 a month and a registered nurse averages US$1,500, compared with US$300 per month for a medical officer and US$180 per month for a registered nurse in Uganda.

In many low- and middle-income countries, health care salaries are based on civil service pay scales. This practice further widens the salary gap between professionals working in their home countries and those working abroad.

The low pay has other repercussions as well. It is common for doctors to work in both the public and private sectors. This custom, known as "dual practice," sometimes harms public services when doctors use their public sector job to enhance their private practice. Some doctors, for example, pilfer supplies from the public sector health care setting for their private practice, or stimulate demand for their private services among their public-practice patients.

Meeting Health Care Needs With New Types of Workers

New categories of staff are increasingly providing essential health services in low- and middle-income countries. The range of health care workers has widened to include people trained only in basic skills and others who receive enhanced training such as nurses who receive extended training in emergency obstetrics. Another group of people works at subnurse levels with anywhere from a few weeks' to three years' training.

These new kinds of health care employees can play a major role in the provision of services. For instance, in Malawi, clinical officers with extensive training, although less training than doctors, perform surgical procedures, administering anesthesia as well as providing medical care.

Nonphysicians can offer good value for the money. In one study, nurse practitioners and physician's assistants were able to provide high-quality care for common outpatient

conditions such as high blood pressure, diabetes, asthma, middle-ear infection, and back pain at substantially lower costs than physicians.

Safety and Effectiveness of New Health Workers

Some may fear that the absence of a formal profession and the lack of internationally recognized training of this new type of health worker could detract from quality and safety. However, they fill critical gaps in care and are especially valuable for providing urgent action, such as emergency obstetric care.

In a study of emergency cesarean sections performed by clinical officers in Malawi, the overall maternal death rate was 1.3 percent, which is high, but much lower than if such services had not existed. The results of the study suggest that well-trained clinical officers can safely substitute for doctors in providing some basic procedures.

Improving recruitment and retention of doctors at health care facilities in low- and middle-income countries requires either offering higher rewards that make alternative employment less attractive or making qualifications less "portable" or less likely to be recognized in other countries.

The Role of Incentives

The Case of Cambodia

Incentives such as performance-based rewards can help boost quality of care. When Cambodia's New Deal experiment was launched in 2000, absenteeism from work was high at district hospitals and health centers. Sometimes staff worked only one to two hours a day. Informal charges, drug thefts, and dual practice by public health workers were typical, largely due to their low public salaries. Government staff received US$10 to US$12 per month, compared with a minimum of US$100 needed to achieve a basic standard of living. Poor quality care was extensive.

At the same time, informal charges and extensive use of unregulated private services were driving household health spending up to US$30 per inhabitant per year, equal to 11 percent of total household spending.

Managers offered staffers a bonus in return for strict adherence to internal rules. The benchmark bonus was set at an average of US$60 to US$90 per person per month. Official fees were also introduced on the assumption that people would pay for better public service.

After contracts were signed, staffers were more likely to follow rules. The staff was generally present, fees were transparent, emergencies were staffed at night, patients received drugs, and informal payments were not demanded. Use of health services increased significantly after the arrangement was introduced. The quality of services improved substantially and per capita family expenditures on health fell 40 percent.

The program was funded by a mix of government appropriations, user fees, subsidies, and external donors.

Incentives need not be higher wages, and could include free or subsidized housing, flexible working hours, planned time off, a job for the spouse, and access to training.

Training

One major underlying cause of poor quality of care is deficient clinical training. Providers often don't know what the best treatments and technologies are or do not know how to deliver higher-quality care to their patients.

While the quality of basic training of health professionals varies widely in low- and middle-income countries, the provision of continuing education and development is almost universally inadequate. Evidence indicates that good-quality continuing professional development is a positive incentive and helps to retain staff members. Continuing education can be made a condition of professional registration and can provide some guarantee of competence.

Clinical Services

Eliminating poor quality involves not only delivering better care, but also ensuring the adequacy of essential clinical and laboratory services, such as system-wide microscopy for diagnosing tuberculosis; stopping overuse of some care, including unnecessary injections; and ending misuse of unneeded services, such as unnecessary hysterectomies or antibiotics for viral infections.

Numbers of Physicians and Nurses, Selected Countries and Country Groups, 1998			
Country	Physicians per 100,000 population	Nurses per 100,000 population	Physician -nurse ratio
Angola	5	100	0.05
Bangladesh	19	11	1.7
Bolivia[a]	29	14	2.1
Botswana	20	100	0.2
Brazil	136	44	3.1
Burkina Faso	<3	20	0.15
Central African Republic	<3	<10	0.3
Equatorial Guinea	20	50	0.4
India	106	94	1.1
Nepal	4	5	0.8
Pakistan	57	34	1.7
Papua New Guinea	7	67	0.1
Peru[b]	10	7	1.4
South Africa	20	100	0.2
Sri Lanka	37	103	0.4
Low-income countries	73	132	0.6
Middle-income countries	142	278	0.5
High-income countries	286	750	0.4
Global average	146	334	0.4
Global median	114	233	0.5

[a] 1999 data. [b] 1996 data.

Source: Hongoro, C. and C. Normand. 2006. "Health Workers: Building and Motivating the Workforce." In Disease Control Priorities in Developing Countries, 2nd ed., ed. D. T. Jamison, J. G. Breman, A. R. Measham, G. Alleyne, M. Claeson, D. B. Evans, P. Jha, A. Mills, and P. Musgrove, table 71.1. New York: Oxford University Press.

Expanding the Knowledge Base

From a broader perspective, two strategies would help improve health care quality rapidly in developing countries:

- Encouraging comparative research on clinical care outcomes and processes; and
- Sharing findings on variation in quality of clinical care.

Improving provider practices in developing nations should be a continuous learning process in which goals are defined, results are measured, and innovations are initiated and tested against goals.

Challenges for Governments

Governments in developing countries face huge challenges in the quest to strengthen their health systems, especially their human resource capacity—if cost-effective disease control interventions are to achieve the desired results.

Governments should take the following into consideration:

- The salaries necessary to recruit and retain health care staff will depend on the opportunities such workers have for other employment within the country and abroad;
- Health care workers with internationally recognized qualifications are likely to command higher salaries

in higher-income countries;

- The need to focus on developing the most important skills by training new types of health workers, taking into account evidence that such health workers can be safe to deploy when properly trained;
- Country training policies should earmark funds for continuing staff development after basic training is completed; and
- Better quality of care depends on rational workforce planning in which skills match local needs.

For More Information

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