Investing in Health Workforce Education and Training for Expanded Access to Essential Health Services for Underserved Populations

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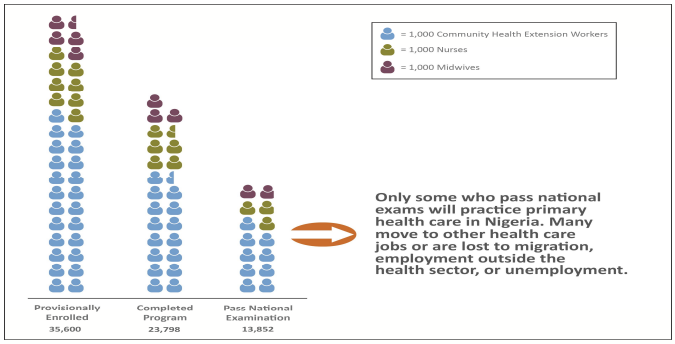
Introduction

According to the World Health Organization, an estimated 7.2 million additional doctors, nurses, and midwives are needed globally to achieve universal health coverage, but less than 2% of global health spending is dedicated to educating the next generation of health workers. More overall investment is needed to accelerate production of the range of workers needed to deliver quality health services, including professional and associate professional cadres, also known as midlevel health workers. More efficient and effective use of existing investments is also vital.

Objectives

To inform dialogue on current costs of health workforce education, additional investments needed, and potential efficiency savings in education and training, the USAID-funded Capacity*Plus* project developed and applied methodologies and instruments to: 1) estimate the cost to an educational institution and its affiliated clinical practice facilities of educating a single health worker; 2) identify targeted investments likely to increase production while maintaining the quality of graduates; and 3) strengthen the capacity of school leaders to better manage human, financial, material, and intellectual resources.

Figure 1: Number of Nigerian Health Workers Who Enroll in Accredited Programs, Complete Programs, and Pass National Examinations



Methods

In collaboration with the PEPFAR-funded Nursing Education Partnership Initiative (NEPI), Capacity*Plus* applied a retrospective, top-down costing approach at one medical school in South Africa and two nursing and midwifery schools in Ethiopia. The analysis included the financial cost of all resources used in producing a graduate, regardless of funding source; identified constraints to increasing the quantity or quality of graduates; and estimated additional costs to overcome those constraints. Additionally, we completed broader capacity assessments of 19 Nigerian schools of nursing, midwifery, and community health extension workers. Assessments included interviews with classroom and clinical teachers, school administrators, and students, and guided observations across nine areas of education, including curricula, teachers, management practices, infrastructure, materials, student selection and advancement, quality assurance, partnerships, and clinical practice.

Table 1: Cost Estimates and Scenario Costs, University of Gondar, Ethiopia (BS Nursing, BS Midwifery) and Walter Sisulu University, South Africa (MBChB)

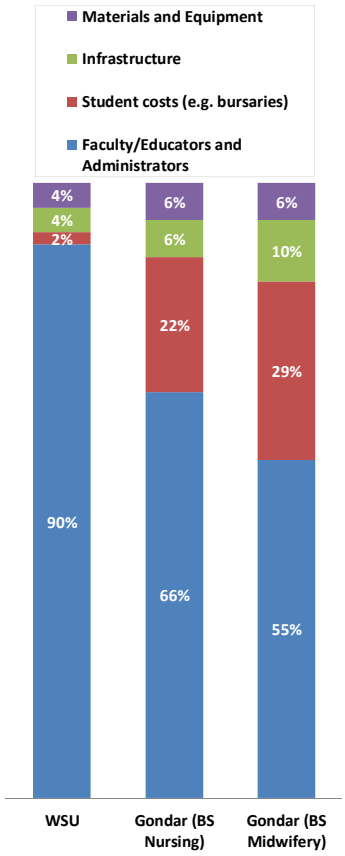
	Pre-Intervention Cost Per Graduate	Post-Intervention Cost Per Graduate*
Nursing (University of Gondar, Ethiopia)	$1,714	$2,241
Midwifery (University of Gondar, Ethiopia)	$1,733	$2,384
Medicine (Walter Sisulu University, South Africa)	$113,638	$112,804

**Includes estimated costs of a scenario of interventions that aim to increase the quantity and/or quality of graduates produced*

Major Findings

The costing studies showed striking variations in the level of investments needed to educate a health worker. Educating a medical doctor in South Africa, following a problem-based distributed learning approach, costs substantially more than educating a nurse or midwife in Ethiopia through a more traditional training approach (Table 1). Variation is due to location, educational method, length of educational program, and other factors. The relative contributions of various cost categories (e.g., personnel, infrastructure) are remarkable (Figure 2).

Figure 2: Cost Drivers' Relative Contributions to Cost Per Graduate at Walter Sisulu University and University of Gondar



At both the University of Gondar and Walter Sisulu University, findings supported advocacy for greater investments in health workforce education to increase the quantity and/or quality of graduates.

Capacity assessments in Nigeria found that more than 50% of students drop out or fail to pass their certifying exams (Figure 1). The assessments informed the development of a package of targeted investments to improve teaching quality and provide financial support to at-risk students, which led to a 9.1% increase in graduation rates in less than two years.

Conclusions

Increased overall investment in health workforce education, coupled with targeted financial support for evidence-based practices to strengthen instructional and institutional aspects of education, can rapidly and efficiently scale up the production of competent and qualified health workers.

Furthermore, improved school management practices, such as updating admissions policies, better student tracking, and psychosocial, academic and financial support to at-risk students can increase the return on investment through higher graduation rates.

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