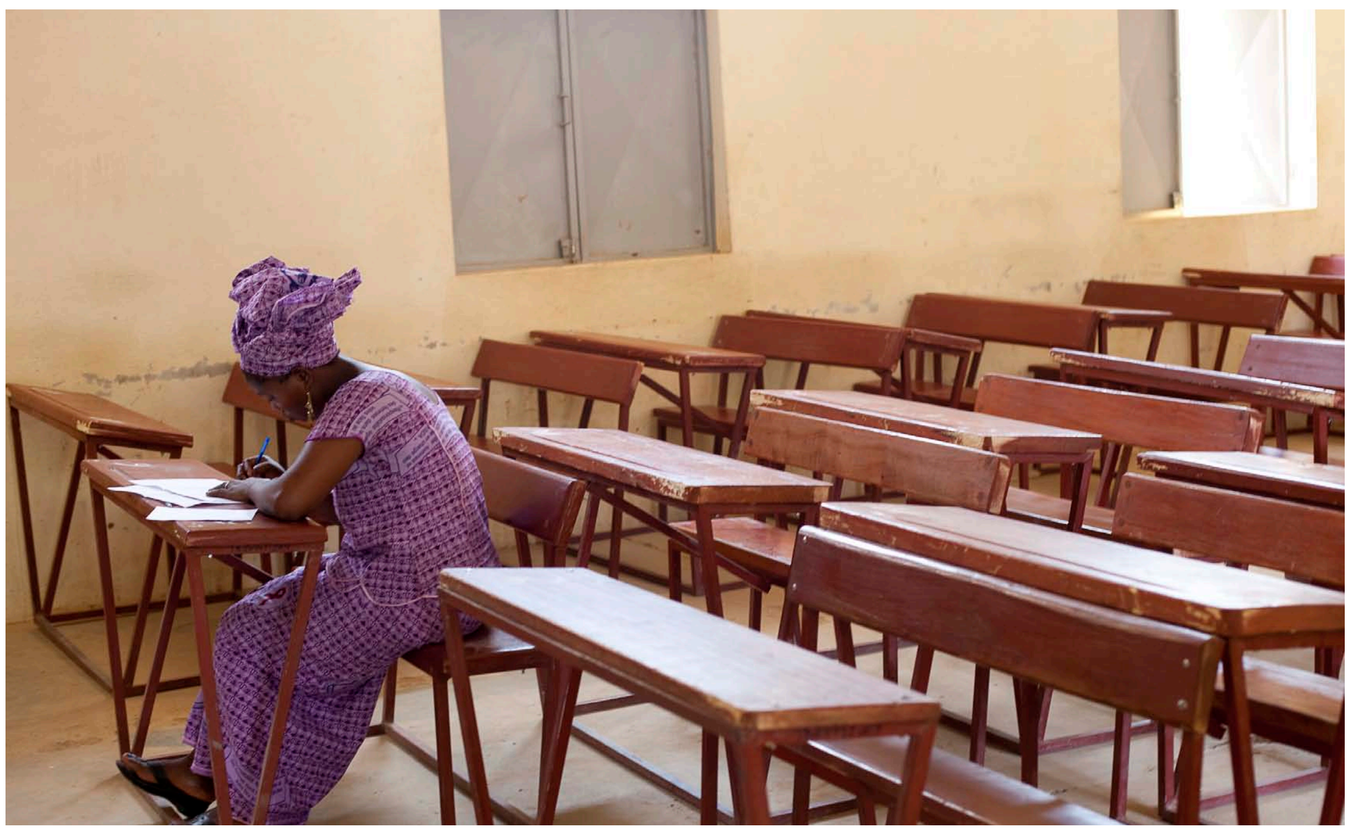

A MIXED METHOD APPROACH TO IDENTIFYING BOTTLENECKS IN THE PRODUCTION OF HEALTH WORKERS

Authors: Dr. Cheick Touré, Carie Muntifering Cox, Mamadou M'Bo, Demba Traoré, and Sara Pacqué-Margolis, IntraHealth International

Context

Provision of quality health services starts with health workers and the training they receive. For some health workers, preservice education is the only training they will ever receive. For others it is the foundation upon which all other training and professional development are built. Given resource limitations, it is essential to ensure that investments in preservice education are the most efficient and effective in producing quality health workers.

To identify the key bottlenecks to providing quality family planning and reproductive health training for nurses and midwives in preservice education, the USAID-funded Capacity*Plus* project conducted a needs assessment at six institutions in Mali using a mixed method approach.

Methods

Key informant interviews were conducted with two individuals from each institution using an adapted version of Capacity*Plus*'s Bottlenecks and Best Buys tool. This tool seeks to identify barriers to optimal health worker production. Key informants are guided in identifying and prioritizing bottlenecks and considering synergistic effects of investing in certain combinations of interventions.

The tool is intended to be used with faculty and staff at preservice training institutions. Following use of the tool in other settings, it became apparent that the student voice was missing. To address this gap, Capacity*Plus* developed a field guide to facilitate focus group discussions with students. Two focus group discussions were conducted at each of the six institutions with students in nursing and midwifery programs.

Results

The bottlenecks identified at each school were categorized into four topics—1) Faculty and Teaching; 2) Equipment and Materials; 3) Management; and 4) Curriculum—and prioritized by key informants. Insufficient quality and quantity of training equipment and materials as well as the overall infrastructure were prioritized as the most significant bottlenecks in five out of six institutions. Issues related to faculty and teaching such as a shortage of full-time faculty and a lack of capacity-building were also described as key bottlenecks, especially at one institution.

Students frequently commented on their dissatisfaction with the lack of hands-on training opportunities both in the classroom and during their practicums. The lack of training materials for demonstrations and equipment, such as books and computers, for enhanced learning were other key concerns mentioned by students.

Table 1: List of reproductive health training materials and equipment at each institution

Training Material/ Equipment	Preservice Institution					
	ESB	Bouctou	EFTSS	CFTSS	INFSS Bamako	INFSS Sikasso
Placenta model	0	2	0	0	0	0
Anatomical model	0	2**	0	1	2	1
Pelvis bone model	2	1**	1	1	1	1
Gynecological pelvis model	1	1	1	0	0	0
Poster of the pelvis	1	0	0	0	0	0
Poster of the uterus	0	0	0	0	16	0
Arm model (for implant insertion)	0	0	0	0	2*	0

Note: No mark = Good Condition; * = Fair Condition; ** = Poor Condition

Focus Group Discussion

Moderator: What suggestions do you have for improving how the family planning curriculum is taught?

Student: Have more practice with models – we never do that before we go in the field. We only learn theory at school.

Moderator: Can you tell us about any problems you face in your reproductive health and family planning practicum?

Student 1: [There is a] lack of trainers. It is necessary that they explain the cases to us well and that they do not disregard us when we pose questions…

Student 2: Explain to the staff [at the practicum sites] that we are students but we are not there to buy brochettes or make tea. We are there to learn.

Student 1: Students should not be left outside during deliveries or care. When a patient comes, they [staff] should not disregard students. It is necessary to let the students practice…we are not there to observe.

> We need equipment such as overhead projectors with a screen, models (male and female), a demonstration room. In our time, all that existed. [We need] samples of all [contraceptive] methods because I bought them myself [for demonstrations]. Currently, all courses are oral, the teachers only lecture and the students understand nothing without demonstrations and it affects me because I take them [students] as my children.
>
> **—Key informant interview**

The Bottlenecks and Best Buys tool consists of a series of questions that span six domains of health professional school capacity:

1. **Infrastructure** [Example: How many classrooms are there? Are they sufficient? Could facilities be rented?]
2. **Equipment and materials** [Example: Do students have access to anatomical models?]
3. **Curriculum** [Example: Does your curriculum have a community-based approach? If yes, please describe.]
4. **Faculty** [Example: Are faculty trained in pedagogical methods? If yes, please describe.]
5. **Clinical exposure** [Example: Do the clinical training sites have sufficient preceptors to train students?]
6. **Management** [Example: Is there a system to identify and help students at risk of dropping out for social or academic reasons? If yes, please describe.]

Conclusions

Conducting a mixed method assessment that combines the Bottlenecks and Best Buys tool with focus group discussions generates a range of perspectives and a thorough investigation of the barriers that challenge an institution's ability to improve and scale up production of health workers. The use of multiple methods for analysis allows for triangulation, resulting in greater confidence in the findings. Results from the assessments in Mali will be used to develop and cost a performance plan to adapt the family planning and reproductive health curricula and address gaps in training and infrastructure at each of the six institutions. This approach to assessing barriers to the training and production of health workers can be applied to other training institutions in Africa and beyond.