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RAPID ASSESSMENT OF THE QUALITY OF PRE-SERVICE EDUCATION IN PRIVATE MEDICAL COLLEGES IN ETHIOPIA

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- Tigray private training institutions and Regional Health Bureau
- Higher Education Relevance and Quality Agency
- PHSP staff in Addis Ababa and field offices

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CONTENTS

ACRONYMS

BPR	Business Process Reengineering
COC	Certificate of Competence
ESDP	Education Sector Development Program
EC	Ethiopian Calendar
HERQA	Higher Education Relevance and Quality Agency
FGD	Focus Group Discussion
FP	Family Planning
GPA	Grade Point Average
HIV	Human Immunodeficiency Virus
ICT	Information and Communication Technology
IDI	In-depth Interview
IT	Information Technology
KII	Key Informant Interview
MDGs	Millennium Development Goals
MOE	Ministry of Education
FMOH	Federal Ministry of Health
MNCH	Maternal, Neonatal, Child Health
NGOs	Non-governmental organizations
PEPFAR	President's Emergency Plan for AIDS Relief
PHSP	Private Health Sector Program
RH	Reproductive Health
RHB	Regional Health Bureau
SNNP	Southern Nations, Nationalities, and Peoples
STIs	Sexually Transmitted Infections
TB	Tuberculosis
TVET	Technical and Vocational Education and Training
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

BACKGROUND

The Government of Ethiopia encourages the private sector to participate in the development of trained medical professionals. The private training colleges have thus flourished throughout the country at a very rapid rate. The 2007/8 Health and Health Related Indicators Report indicated that 1947 health professionals graduated from private training colleges in that year alone. Even though the high number of professional graduates from the private colleges is desirable, the quality of training, particularly without additional teachers has become questionable. The Private Health Sector Program (PHSP) funded by the President's Emergency Plan for AIDS Relief (PEPFAR) through the United States Agency of International Development (USAID) and implemented by Abt Associates Inc. considers the quality of graduates from the private colleges and universities critical to ensure that the delivery of health care in Ethiopia is of the best quality. Therefore, PHSP decided to work with the Ministry of Education (MOE) and the Federal Ministry of Health (FMOH) to conduct a rapid assessment of the quality of pre-service training provided by the private medical colleges. The primary aim of this rapid assessment was to provide quantitative and qualitative information on the pre-service training at selected private medical school colleges, as a first step in assisting the MOE and FMOH to take appropriate action and ensure the best quality education to meet required standards.

METHODS

A cross-sectional study was conducted in selected private medical colleges in five regional states (Amhara, Harari, Oromia, Tigray, and Southern Nations, Nationalities, and Peoples [SNNP], Harari) and two city administrations (Addis Ababa, Dire Dawa). Twenty colleges distributed over 17 towns were assessed using several data collection techniques. To answer the study objectives, institutional information such as student enrollment and graduation data and availability of qualified teachers was collected from all the 20 colleges through interview and review of documents. To assess the availability and adequacy of teaching and learning resources, the teaching environment including classrooms, libraries, computer centers and skills learning labs were observed. To assess compliance with national standard curricula and the extent of inclusion of high impact public health interventions, a total of 25 curricula from seven colleges were reviewed. To obtain the views and experiences regarding provision of quality education and factors facilitating and hindering quality, seven focus group discussions (FGDs) were conducted with teachers and another seven FGDs with students; 20 in-depth interviews were completed with deans/presidents and another 19 in-depth interviews with graduates of private medical colleges; 12 key informant interviews were carried out with supervisors of private college graduates and another seven key informant interviews with representatives of the Technical and Vocational Education and Training Authorities (TVET) or Regional Health Bureaus (RHBs).

Six regional teams of research assistants conducted all the interviews, observations and FGDs. All individual and group interviews were tape-recorded. The three investigators and PHSP staff supervised the data collection process. The data analysis was done in three stages using framework analysis.

First, research assistants transcribed tapes and expanded their notes followed by preparing a summary for each interview and FGD using the questions as a framework.

Secondly, the investigators further analyzed the qualitative data thematically for each region generating seven regional reports. Data collected through observation of the training environment and review of

the curricula were summarized and described by the investigators qualitatively and quantitatively and integrated into the regional reports.

Finally, the principal investigator synthesized the regional findings into one consolidated national report. Data quality was assured through selection of qualified and experienced data collectors, training of data collectors using competency-based approaches, pretesting and adjustment of the methods before the actual fieldwork, supervision of the data collection process and the three stage data analysis.

RESULTS AND DISCUSSIONS

The private medical colleges which were included in the assessment included health care providers who had been trained six to eight years, on average. The most popular fields of study were nursing, pharmacy and health officer. Most colleges had training leading to both TVET level IV and degree qualifications. The average number of students per college ranged from 85 to 921, with vast female preponderance in most colleges.

Although there was consensus regarding the significant role the private sector is playing in addressing the human resources for health needs of the country and the high demand for education in private medical colleges, employment opportunities were reported to be inadequate.

The MOE defines the admission criteria for entry into private medical colleges, which almost exclusively relies on achievement in national examinations in grades 10 and 12 for TVET and degree programs respectively. Most private medical colleges followed the pass mark set by the government. Although academic achievement is a necessary criterion to select students, literature suggests that it is not sufficient to ensure an accurate and fair selection decision.

Although the Higher Education Relevance and Quality Agency (HERQA) document on institutional quality audit requires higher education institutions to have adequate student support services to ensure effective implementation of academic programs, the majority of the private colleges fell short of providing suitable and adequate student support and academic counseling services.

Training leading to TVET qualification had tuition fees in the range of 300-400 Birr per month or 1,700-4,800 Birr per annum. Degree programs charged 140-210 Birr per credit or 2,600-7,050 Birr per annum. Colleges training medical doctors collected tuition fees of 700 Birr per credit or 2,000-2,500 Birr per month or 28,000 Birr per annum. Eighteen of the 20 colleges reported offering scholarships to students. However, none had a student loan scheme, which is consistent with findings from other Sub-Saharan African countries.

Most students enrolled in private medical colleges progressed and completed their education successfully. Ten colleges had graduation rates above 90 % and three had rates between 72 and 80 %. Five colleges did not supply data to calculate graduation rates. In the few colleges where repetition was reported, rates ranged from 0.5 % to 12.2 %. However, it is difficult to be certain if this is the result of high quality education or a lenient assessment system. Even if HERQA expects higher education institutions to document student progression and graduation outcomes and to seek to improve student retention and achievement, none of the colleges had well organized relevant information.

Private medical colleges experienced a shortage of adequately qualified teachers. In 14 out of the 20 colleges studied, the majority of teachers were full-time hires. Even if HERQA's accreditation requirement for the student to teacher ratio is 20 to one, the median student to teacher ratio was found to be 34 to one. Eleven colleges had a student to teacher ratio in excess of 30 to one and six colleges had a ratio greater than 50. In addition, none of the 14 colleges that had degree programs met the requirement by HERQA that 80 % of permanent staff must have a postgraduate degree.

Some colleges had a sufficient number of suitable classrooms while others had overcrowded and noisy classrooms. The writing board was the most common audiovisual aid available, with little or no other audiovisual aids.

All colleges had skills learning laboratories with varying amounts of equipment, models, reagents and supplies. Shortage and unavailability of essential equipment and supplies were reported with a more severe gap for pharmacy programs forcing the omission of some skills sessions. The student to model/basic equipment (like microscope) ratio during skills practice was found to be 6-30 students and 1-15, in the clinical skills labs and procedural labs, respectively, showing several colleges had a student number that was too large for optimal learning in contrast to the two to three students working on a model reported in a successful training programs. This finding is also consistent with results from interviews and FGDs that indicated students had limited practice opportunities during skills lab sessions. The student to teacher ratio was also 10-35 to one teacher, higher than the average 8-12 students to one teacher ratio recommended for a successful in-service training program.

All private medical colleges reported sending students to health centers, hospitals and/or pharmaceutical facilities for their practicum. However, there were gaps in ensuring adequate practice due to shortage of practice sites and cases, large student numbers, shortage of supplies, inadequate supervision and uncooperative health care workers working in the clinical practice sites.

All 20 colleges had a library; however, most experienced a shortage of current books and many had an inadequate seat capacity and were not open all the time throughout the week constraining the sufficiency and quality of reading services available to students.

Although all private colleges had computer centers, teachers and students in many private colleges had insufficient access to computers and even less access to the internet due to inadequate numbers of functional computers and limited internet connectivity undermining the ability to access and use this valuable information and communication technology in education.

Review of 15 degree and 10 TVET curricula found that private medical colleges followed national curricula. Even if most reviewed curricula addressed TB, malaria, HIV/AIDS and sexually transmitted infections (STIs), the reproductive health/maternal and child health, time allocation and theory to practice ratio was mostly unspecified making it difficult to judge the adequacy of breadth and depth of coverage. In addition, most curricula were poorly written missing many essential components and lacking consistency within and between programs.

Regarding teaching and learning methods, there were gaps in course level matching with objectives, theory to practice ratio, timing of practice in relation to theory and sufficiency of practice opportunities and coaching support in simulation and clinical practicum sites making development of practical competencies questionable. Similarly, assessment methods suffered from poor alignment with objectives, inadequate coverage of practical competencies, overlooking formative assessment, poor discrimination ability and lax assessment policies. Performing continuous assessment was a positive element in the assessment practice though.

Notwithstanding, HERQA listing internal quality assurance as one of the 10 focus areas for quality in higher education institutions, the majority of the colleges included in the assessment did not have a system to assure and improve quality of education. They did not have a quality assurance unit or office. They didn't have a faculty development program. There was no structured evaluation of teaching effectiveness.

Although competency and performance of private medical college graduates were found to be variable, there were consistent reports from different sources about the presence of gaps in practical competencies, ability to provide high impact public health interventions and professionalism.

The biggest barriers to assuring quality of education in private colleges were found to be: a student's background preparation insufficient and lack of motivation; shortage of suitably qualified teachers; gaps in practical training, infrastructure and management; and limited support from the government and non-governmental organizations (NGOs).

Although the results of this assessment provide deep insights about the quality of education in private medical colleges, interpretation should take into account the following limitations:

- The findings are largely qualitative and hence may not be statistically representative of all private colleges in the country.
- There could be gaps in unraveling the truth fully due to the poor documentation available and the perceived sensitivity of the topic.

CONCLUSIONS

This rapid assessment covered a number of private medical colleges distributed among the seven regions and city administrations using mixed methods and provides reasonably trustworthy insights about private medical training in Ethiopia.

Private medical colleges are making a significant contribution to national human resource for health development efforts, particularly of middle level health care providers. Almost all students applying for admission in private medical colleges get accepted and admission criteria are mostly dependent on student achievement in national examinations. Most private college students successfully complete their studies, with graduation rates. However, these high rates might not necessarily guarantee that all students acquired the essential competencies and may indicate a lenient assessment system.

Private medical colleges charge varying amounts of tuition fees ranging from annual rates of 1,700 Birr for training leading to a TVET level IV qualification to 28,000 Birr for training leading to a degree in doctor of medicine.

Almost all private medical colleges lack the required number of suitably qualified permanent teachers on staff full time. Private medical colleges have a poor documentation system making it difficult to obtain complete and accurate data and undermining their ability to monitor academic program performance.

With respect to infrastructure and teaching materials, there were mixed findings in availability of sufficient classrooms conducive for teaching and learning. Although private medical colleges availed skills learning labs for development of clinical and laboratory skills, most provided inadequate skills learning opportunities due to shortages and unavailability of essential materials, a large student number and inadequate coaching. In addition, apprenticeship does not provide sufficient real world practice opportunities because there are few practicum sites, large student numbers, low caseloads and poor coaching and supervision of students. Most private college libraries are not providing optimal services. Most private college teachers and students have limited internet access.

Although private colleges follow national curricula for most of their training programs, the curricula are unlikely to provide adequate guidance on the educational process and ensure sufficient coverage of high impact public heath interventions. There are major gaps in the teaching, learning and assessment methods in the written and implemented curricula with method deficiencies most pronounced for practical competencies.

The majority of private medical colleges do not have a robust internal quality assurance system.

The most pronounced barriers to assuring quality of education and equipping students with essential competencies are inadequate student background preparation, shortage of appropriately qualified teachers, poor quality practical training, gaps in infrastructure and management, and limited support from government and non-government stakeholders.

MAJOR RECOMMENDATIONS

- Private medical colleges should strengthen their educational infrastructure to create a more conducive learning environment.
- Private medical colleges must hire and retain adequately qualified full time instructors in sufficient numbers as a matter of priority.
- Private medical colleges must develop their curricula carefully working with teams of subject matter experts and instructional designers.
- Private medical colleges should strengthen their internal quality assurance system by putting in place structures and processes for continuous improvement.
- HERQA and regional TVET authorities must step up their regulatory oversight while at the same time increase their support for quality assurance.
- NGOs must support the private sector to improve quality of education by including the private sector in their technical and material assistance schemes.
- More studies need to be done to assess quality of education and graduates' competence in both private and public training colleges and universities.

1. BACKGROUND

To meet the human resources challenge, the Government of Ethiopia launched the Ethiopian Education and Training Policy in 1994 with a basic focus on expanding equitable access and quality of education, restructuring of the education system, and changing the curriculum to maximize the relevance of education. The Ministry of Education (MOE) and partners developed subsequent education sector development programs (ESDP-I, II and III) aimed to tackle existing human resources challenges during the implementation of the national education policies by focusing on improving the educational system throughout the country.

One of the Millennium Development Goals (MDGs) is to achieve universal access to education by the year 2015. Ethiopia showed commitments to attain universal education goals and it targets by designing an applicable strategic direction starting at the primary level of education. In the past 10 years, the number of private and public universities and colleges has dramatically increased. As clearly stated in the Education and Training Policy, the Government encourages the private sector to participate in the development of trained medical professionals. The private training colleges have flourished throughout the country at a very rapid rate. According to the 2007/8 Health and Health Related Indicator Report, 1,947 health professionals graduated from private medical colleges in that year alone.[1] Even though the high number of professional graduates from the private colleges is desirable, the quality of training, particularly without additional teachers has become questionable. The MOE's strategy is to improve the quality of education from primary education to higher training institution commensurate with the expansion of the education program which was implemented to meet the needs of the hard-to-reach communities. Health professionals are required to pass a competency-based examination before they are licensed to practice and provide health services.

PHSP considers the quality of graduates from the private colleges and universities critical in ensuring that the delivery of health care in Ethiopia is of best quality. Therefore, PHSP decided to work with the MOE and MOH to assess the quality of pre-service training provided by the private medical colleges. The primary aim of this study was to conduct a rapid assessment to provide quantitative and qualitative information on the pre-service training at the private health colleges, as a first step in assisting the Ministries to take appropriate action. At the same time, this assessment suggests short and long term corrective measures to improve quality of training while at the same time meeting the quantitative human resources needs of the country. It is also hoped that this provide an opportunity for all stakeholders working in the area of education to collaborate intensively to resolve this critical challenge.

[1] Ministry of Health, 2007/8. Health and Health Related Indicators. Planning and Programming Department, MOH. P.55

2. OBJECTIVES

2.1 GENERAL OBJECTIVE

The overall objective of the study was to initiate a process for quality improvement by assessing the quality of pre-service education of health professionals in selected private medical training colleges in Amhara, Harari, Oromia, Tigray, and Southern Nations, Nationalities, and Peoples (SNNP) Regional States and Addis Ababa and Dire Dawa City Administrations.

2.2 SPECIFIC OBJECTIVES

- To collect and analyze data on enrollment systems at selected private medical colleges, including but not limited to minimum acceptance criteria and the application review process;
- To collect and analyze student data at the selected private medical colleges, including but not limited to number of applicants, number of applicants accepted and graduation rates;
- To collect data on student/instructor ratios and compare them against accreditation standards;
- To assess instructor credentials and systems by which instructors are evaluated and compare them against accreditation standards;
- To assess teaching, learning and assessment methods;
- To review the training environment including availability of training materials, equipment, content, client load, location and duration of practicum;
- To assess whether the private training colleges are following national training curricula and syllabi;
- To assess the degree to which high impact public health interventions such as TB,TB/HIV, HIV, family planning, reproductive health, sexually transmitted infections and malaria are included in the curricula and syllabi;
- To assess the demand for education in private medical colleges;
- To assess the financing situation in the private medical colleges such as tuition fees, cost per student and cost for practicum; and
- To provide recommendations for enhancing the quality of training in the private medical colleges.

3. METHODS

3.1 STUDY DESIGN, AREA AND PERIOD

A cross-sectional study was conducted in five regional states (Tigray, Amhara, Oromia, SNNP, Harari) and two city administrations (Addis Ababa, Dire Dawa) in March and April 2012.

3.2 TARGET AND STUDY POPULATION

The primary target and study population was a selected number of private medical colleges in Ethiopia, and secondary target populations were private medical college students, teachers, deans, recent graduates who have found a job, health workers supervising the graduates, and representatives of regional health and Technical and Vocational Education and Training (TVET) authorities.

3.3 DATA COLLECTION TECHNIQUES

A combination of quantitative and qualitative data collection techniques were used to gather data allowing triangulation. A questionnaire combining interviews and document review was used to collect institutional information about private medical colleges. The purpose of the questionnaire was to gather information on student selection, tuition fees, graduation rates, student support services, teacher qualifications and program evaluation. Curricula of all health programs were reviewed using a prepared guideline with the objective of documenting inclusion of essential curriculum components as well as the level of integration of high impact public health services, particularly maternal newborn and child health (MNCH), reproductive health/family planning (RH/FP), HIV, tuberculosis (TB) and malaria. In addition, the information about the training environment (including the classroom, laboratory, clinical site, community learning site, library and computer center) was collected using structured observation and semi-structured interviews.

Key informant interviews (KIIs) and in-depth interviews (IDIs) were done with the Regional Health Bureau (RHB)/TVET representatives (depending on who oversees private medical colleges in the specific region), deans of private medical training colleges, recent graduates of private medical training colleges and health workers supervising graduates. The aim of the interviews was to obtain the views and experiences of different stakeholders regarding the quality of education provision in private medical colleges (including competency and performance of graduates), factors facilitating and hindering quality of education provision (e.g., students, teachers, curricula, teaching/learning methods, assessment methods, teaching/learning resources, quality assurance and regulation) and recommendations for improvement. Interview guides customized to each respondent type and translated into local languages were used for the interviews.

Focus group discussions (FGDs) were conducted with private medical college teachers and students. The purpose of the FGD was to identify and assess their opinions and experiences on the quality of training, factors facilitating and hindering the quality of training provision in private medical colleges (for example, students, teachers, curricula, teaching/learning methods, assessment methods, teaching/learning resources, quality assurance and regulation) and recommendations for improvement. FGD guides were customized for each group and translated into local languages.

3.4 SAMPLE SIZE AND SAMPLING METHODOLOGY

The primary sampling population was private medical colleges in the targeted geographic regions of Ethiopia. A total of 20 private medical colleges distributed across the five regional states and two city administrations were randomly selected and assessed. Regarding the sampling procedure, 17 regional cities and major towns with relatively higher number of private medical colleges were selected from the seven regions and city administrations purposively. Towns selected for this assessment were: Mekelle, Adigrat and Axum from Tigray); Bahir Dar, Gondar, Dessie and Woldiya from Amhara); Adama, Shashemene, Chiro and Assela from Oromia;, Hawassa, Woliata Sodo and Arbaminch from SNNP; Addis Ababa and Dire Dawa and Harar City Administrations. One college was selected from each town except for Addis Ababa from which four colleges were selected. If a private college was assessed in one town, its branches in other towns would be excluded from the sampling frame. Curricula of all heath science programs in the seven largest colleges were reviewed, that is, the largest college was sampled from each region and city administration.

With regard to sample size for the secondary sampling populations (RHB or TVET representatives, college deans, teachers, students, graduates and health workers supervising graduates of private medical colleges), a reasonable number was proposed taking into account balancing between requirements for scientific rigor and practical considerations. Selection of participants for KIIs and FGDs from these target populations was made from the sampled medical colleges. The plan was to conduct a total of 59 KII and 14 FGDs.

In each region or city administration, either a representative of the RHB or TVET authority was interviewed depending on who had more information about private medical colleges in the respective region. All deans from the 20 private colleges were interviewed. Employed health workers who graduated from private colleges in the past one year were selected with the assistance of the deans and teachers, with one graduate from each college. Supervisors of the interviewed private college graduates were recruited for KII with two supervisors from each region. A FGD was conducted with one teacher and one student group in each region and city administration. Teachers who taught in different departments in the selected private colleges for at least one year were invited to participate in a FGD. Similarly, final year health science students studying in different disciplines were recruited from the selected colleges for the student FGD.

3.5 DATA COLLECTION

A total of 12 experienced research assistants with a background in public health or social sciences were selected and given competency-based training for three days. Two research assistants were deployed to a region or city administration to expedite the fieldwork except for Dire Dawa and Harari which were managed by just one pair because of their small size. The three investigators supervised the data collection by dividing the regions among them, whereby each investigator provided oversight to two regional teams. The research assistants were responsible for collecting institutional information (through interview, document review and observation of the teaching environment), IDIs and FGDs. Interviews and FGDs were tape-recorded in addition to notes taken by the research assistants. The investigators reviewed the curricula of all health programs in seven colleges (one college per region or city administration) to retrieve pertinent information. The data collection took about three weeks. The investigators and PHSP staff supervised the data collection process.

3.6 DATA PROCESSING AND ANALYSIS

The data analysis was done in three stages. First, research assistants completed the preliminary analysis of the qualitative data. They transcribed tapes of IDIs and FGDs and expanded their notes followed by preparing a summary for each interview and FGD using the questions as a framework. Secondly, the investigators further analyzed the qualitative data thematically for each region generating seven regional

reports. Data collected through observation of the training environment and review of the curricula were summarized and described by the investigators qualitatively and quantitatively and integrated in the regional reports. Finally, the principal investigator did further analysis, synthesis and compilation of a consolidated national report triangulating information from different informants and data collection techniques from the 20 colleges and seven regions. All three stages used framework analysis, identifying major themes in response to the questions by listening to tapes, repeated reading of transcripts, comparing and summarizing responses. Illustrative verbatim quotes were used to highlight results.

3.7 PRETEST

The data collection methods were pretested in one private medical college in Addis Ababa. The experiences and lessons learned were discussed with the research assistants and corrective improvements and clarifications were made to the tools in a plenary discussion with them (such as making the prompts more specific in the observation tool).

3.8 ETHICAL CONSIDERATIONS

Informed consent was obtained from all study participants. Results are reported in a manner that does not pose significant risk to participating colleges. To maintain confidentiality, identifier information is removed except for names of the regions and city administrations. Since the findings of the assessment would help to initiate a quality improvement process, the benefit from participating in the assessment outweighs the small risk associated with reporting the truth.

4. RESULTS AND DISCUSSION

Twenty private medical colleges from five regional states and two city administrations (Tigray, Amhara, Oromia, SNNP, Harari, Addis Ababa and Dire Dawa) were randomly selected to be involved in this rapid assessment to determine the quality of pre-service education in private medical colleges in Ethiopia. Four colleges each from Amhara, Oromia and Addis Ababa, three colleges each from Tigray and SNNP, and one college each from Dire Dawa and Harari were assessed. Institutional information was collected from all colleges through interview (with the dean/president, registrar and quality assurance officer as appropriate) and document review. Information regarding the teaching environment (including classrooms, skills learning labs, clinical sites, libraries and computer labs) of all the 20 colleges was collected through observation and interview. IDIs were conducted with 20 deans and/or college leaders, seven regional representatives (five TVET authority and two health bureau representatives), 19 graduates (one from each college except a college in Tigray which was yet to graduate its first batch) and 12 health workers supervising practicing private college graduates. In addition seven FGDs were conducted with teachers and another seven with students. Table 1 summarizes the distribution of respondents by region.

TABLE 1: DISTRIBUTION OF RESPONDENTS INVOLVED IN THE RAPID ASSESSMENT OF PRIVATE MEDICAL COLLEGES IN ETHIOPIA, APRIL 2012

Region/City Administration	# of towns	#of colleges	# of dean interviews	# of graduate interviews	# of supervisor interviews	# of teacher FGDs	# of student FGDs
Tigray	3 (Mekelle, Adigrat, Axum)	3	3	2	2	1	1
Amhara	4 (Bahir Dar, Gondar, Dessie, Woldiya)	4	4	4	2	1	1
Oromia	4 (Adama, Shashemene, Chiro, Assela)	4	4	4	2	1	1
SNNP	3 (Hawassa, Woliata Sodo, Arbaminch)	3	3	3	2	1	1
Addis Ababa	1	4	4	4	2	1	1
Dire Dawa	1	1	1	1	1	1	1
Harari	1	1	1	1	1	1	1
Total	17	20	20	19	12	7	7

The private colleges included in this assessment have been training health care providers for an average of six to 10 years. The most popular fields of study were nursing, pharmacy and health officer training. In most colleges both TVET and degree level trainings were provided. Most training programs were reported to be accredited. However, there were suggestions that some extension programs were not accredited. The average number of health sciences students in any given college ranged from 85 in Dire Dawa to 921 in Tigray, with overall female preponderance in most regions. Table 2 summarizes the basic information about the sampled colleges.

TABLE 2: SELECTED INFORMATION ABOUT THE PRIVATE MEDICAL COLLEGES IN THE SEVEN REGIONS AND CITY ADMINISTRATIONS, APRIL 2012

Characteristics	Tigray	Amhara	Oromia	SNNPR	Addis Ababa	Dire Dawa	Harari
Mean years of operation (range)	6 (2-9)	7 (6-8)	7.5 (6-8)	7.7 (5-10)	9 (7-10)	10	6
# of health programs offered							
• Nursing (Level IV, Degree)	(3, 1)	(4, 2)	(4, 2)	(3, 2)	(3, 4)	(1, 1)	(1, 1)
• Pharmacy (Level IV, Degree)	(3, 1)	(3, -)	(3, -)	(3, 1)	(3, 1)	-	(1, 1)
• Medical Laboratory (Level IV, Degree)	(2, -)	(1, -)	(1, -)	(1, -)	(3, -)	-	(1, 1)
• Midwifery (Level IV, Degree)	(-, 1)	(1, -)	-	-	-	-	(1, 1)
• Health Officer	2	2	2	2	3	-	-
• Medicine	-	1	-	-	2	-	-
Accreditation status	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Mean number of health science students (Range)	921 (497 to 1517)	482 (204 to 853)	222 (104 to 402)	609 (150-1240)	636 (510 to 793)	85 1.8 to 1	470 1 to 1.5
• Male to Female Ratio	1 to 2.2	1 to 1.3	1 to 1	1 to 0.9	1 to 2.1		
Teachers							
• Percentage of teachers that are full-time	43.7 %	78 %	79.1 %	69.5 %	54.8 %	63.6 %	29.2 %
• Ratio of full-time teacher to student (Range)	1:37 (1:28 to 1:107)	1:27 (1:11 to 1:76)	1:26 (1:20 to 1:51)	1:45 (1:21 to 1:56)	1:33 (1:19 to 1:57)	1:12	1:67
• Percentage of full-time teachers with postgraduate degree	40 %	36 %	11.7 %	39 %	70.5 %*	28.6 %	0 %
Tuition fees in Birr (Range)							
• TVET Level IV	310-400 per month	4,200-4,740 per annum	1,700-4,800 per annum	3,600-4,200 per annum	300-400 per month	3,000 per annum	340 per month
• Degree	140 per credit or 4650 per annum	140-210 per credit	2600-7050 per annum	4500-6000 per annum	4,200-6,000 per annum		
• Medicine		700 per credit			2,000-2,500 per month or 28,000 per annum		
Student acceptance rate	100 %	No data	No data	100 %	96.2-100 %	100 %	100 %
Graduation rate	96.5-100 %	76-100 %†	91 %	95.6-100 %	72.6-80.6%‡	50 %	No data

* Includes part-time staff for three of the four colleges

† Complete data not available to calculate graduation rate for two colleges

‡ Complete data not available to calculate graduation rate for two colleges

4.1 CONTRIBUTIONS OF PRIVATE MEDICAL COLLEGES IN ADDRESSING HUMAN RESOURCES FOR HEALTH NEEDS

Interviews and discussions with a variety of study participants across all selected regions revealed a consensus about the significant and growing role the private higher education institutions are playing in training and supplying health workers to the country's health system. Interviews with practicing health workers (graduates and supervisors) and RHB representatives found that graduates from private colleges currently constitute as many as one-third to one-half of the mid-level health care providers working in the public health facilities where the respondents came from. Some illustrative comments regarding the demand for private medical college are given in the textbox to the left.

> *"It is very hard to get a job after graduation. Currently there are too many graduates. I myself searched for a job for about eight months… of the 20 graduates in my class, only five of us are employed now."*
>
> Nurse graduate in Oromia

> *"In Dire Dawa, a job opportunity is related to passing a certificate of competency exam. There were about 30 students in clinical nursing who graduated in my class. Ten of us managed to take the exam, but only two of us passed. Only the two of us who passed the exam got a nursing job. Those 28 of my classmates have not yet found job."*
>
> Nurse graduate in Dire Dawa

Deans and regional TVET/health bureau representatives explained the presence of high demand for education in private medical colleges due to a number of reasons. These included the need for trained health workers and demand for higher education which could not be met by public training colleges alone, the relatively better employment opportunity for health graduates, the ability to choose one's field of study which may not always happen in the public sector, and the desire of some parents not to send their children to a public university located in a remote or different town. However, participants noted factors that were limiting the ability of private colleges to satisfy the high demand from the community. These included constraints in students' ability to pay tuition fees, regulatory limit on class size, insufficient job opportunities for graduates and shortage of clinical practicum sites. There were also explanations suggesting that some colleges were experiencing a decline in the number of applicants more recently compounded by dwindling job opportunities and the growing competition in the job market. Illustrative comment regarding the demand for private medical college is given in the textbox.

> *"Majority of health professionals we hired last year are graduates from private medical colleges."*
>
> Representative of Tigray RHB

> *"There are 200 staff in this hospital; out of this 60 to 70 professionals are graduates from the private colleges."*
>
> Supervisor in Amhara

> *"I can say there is unmet demand…honestly speaking, we enrolled 1,500 to 2,000 in nursing and pharmacy departments until the government imposed a restriction in 2003 E.C."*
>
> College President in SNNP

Asked about employment opportunities for graduates of private colleges, two themes emerged from the responses. One is about the likelihood of getting a job soon after graduation and the other is about the difficulty of doing so in comparison to graduates from public teaching institutions. There was variability within and among regions depending on the competence of the graduate, the field of study and relationship (kin or friend) a graduate may have with the employer. Students who graduated with distinction and graduates who passed the

certificate of competence (COC) exam were more likely to find a job soon after graduation. Pharmacy graduates reported to have the greatest difficulty and a long wait before finding a job, while it appeared to be the easiest for medical doctors. Respondents from Tigray, Addis Ababa and Harari suggested that a majority of their classmates were hired while respondents from Amhara, SNNP, Oromia and Dire Dawa indicated that the majority of their classmates were yet to find a job. Lead time between time of graduation and employment for those interviewed graduates ranged from immediately after graduation to up to nine months and with a pharmacist reporting many of her colleagues have been looking for a job for two years. Regarding equal employment opportunities, there were mixed findings, some reporting that this is an equitable process and others saying there was discrimination compared to their government counterpart.

The health and education sector plans recognize the importance of public-private partnership in training of a skilled workforce. The Health Sector Development Program (HSDP) IV[5] acknowledges the private sector as an important partner in health sector development and seeks to encourage and support the engagement of the sector in training health workers for which there is a critical shortage. The Education Sector Development Program (ESDP) IV also reported that the private sector accounted for 50% and 17.3% of the total enrollment in TVET and higher education, respectively, at the end of HSDP III[6]. The TVET strategy also acknowledges and calls for strengthening public private partnership.[7]

This rapid assessment demonstrated that private medical colleges are making significant contributions in training health workers particularly mid-level professionals. The assessment team found, however, that many private college graduates had difficulty finding a job possibly due to inadequate and sometimes biased employment opportunities, limited hiring ability of the private sector, poor market orientation of study programs and failure to pass the COC exam. Notwithstanding the policy statements, the support and incentives given to private medical colleges to improve quality of education were perceived to be widely insufficient.

4.2 STUDENT ENROLLMENT

Interviews, FGDs and curriculum reviews indicated that the admission criteria for private medical college entrance are set by government regulatory bodies. The MOE defines the criteria for admission into degree programs and the regional TVET authorities define the criteria for TVET programs. The admission criteria were based almost solely on academic achievement in national examinations for grades 10 and 12, also known as the Ethiopian General Secondary Education Certificate Examination and Ethiopian Higher Education Entrance Certificate Examination, respectively. Student selection criteria for advance standing programs were having a diploma from an accredited college and two to four years of work experience. The reviewed curricula also listed being healthy and having good moral standing among the selection criteria, though they did not provide details on how to verify this. Although the curricula mentioned that candidates should be natural science students, there were some reports suggesting private medical colleges did not always abide by it. Only two out of the twenty colleges studied administered an

> *"Private colleges do not strictly use the admission criteria set by the government. If the entrance cut off point is 2.14, students who have a GPA of 2.0 can be enrolled in private colleges."*
>
> Teacher in Harari

[5] FMOH, Health Sector Development Program IV: 2010/11-2014-2015 (Final draft)

[6] FMOE, Education Sector Development Program IV: 2010/11-2014/2015

[7] FMOE, 2008. National Technical Vocational Education and Training (TVET) Strategy

entrance exam to select students for some of their programs (medicine and health officer). Most respondents including deans, teachers and students claimed that private medical colleges adhered to the admission criteria set by the regulatory bodies. However, there were reports in the FGD with teachers in one region and a FGD with students in another region that the criteria might not be always followed. Illustrative quote is provided in the textbox.

> *"Most private medical colleges have a tendency to violate the standard in terms of the permitted number of students per class…these days a common problem in most private colleges is the number of students per class. For example, if they have a license to train 30 students per class, they will make it 40 students per class or even more."*
>
> TVET Representative in SNNPR

None of the colleges reported having special recruitment for women and students from rural and/or underserved populations. Nonetheless, the curricula reviewed alluded to priority given to female applicants.

The size of student intake is determined by the Higher Education Relevance and Quality Agency (HERQA) for degree programs and TVET authorities for TVET programs, and this was mostly reported to be respected by the colleges. However, when asked about what proportion of prospective applicants was accepted in the current academic year, almost all assessed colleges reported receiving their students ranging from 96 to 100% (See Table 2). According to the information obtained through interviews with deans and registrars, all candidates apply for a place having met the minimum requirements set by the government and practically all get accepted. However, there were gaps in availability of reliable data to the compute student acceptance rate. Eight colleges could not provide any data. There were also comments suggesting non-compliance with prescribed class size. These might make one doubt adherence to class size prescribed by regulatory bodies.

Student admission criteria play an important role in determining whether students who are most likely to succeed are selected in a fair manner. Even though most respondents agreed that private medical colleges adhere to the admission criteria set by the government, the allegation by some teachers and students that private colleges might not always comply is significant in terms of affecting student selection and needs closer attention by regulatory bodies. The other important point to consider is making admission criteria more comprehensive and defensible. A literature review by Bore and his colleagues suggests using a combination of informed self-selection, academic achievement, general cognitive ability testing and aspects of personality and interpersonal communication skills to maximize the probability of making accurate, fair and defensible selection decisions[8].

4.3 STUDENT SUPPORT SERVICES

A number of student support services were reported in the different colleges. These include counseling students with academic, social and disciplinary problems, tutorials (classroom, skills lab learning and English language fluency), preparing students for the COC exam, peer study groups, vocational counseling, organizing students in clubs and providing scholarship for students with financial difficulty. However, only seven out of the 20 colleges reported

> *We used to get counseling services when we were in high school. But here everything is left for yourself…there is no support to help you".*
>
> Student in Addis Ababa

[8] M Bore, D Munro, D Powis, 2009. A Comprehensive Model for Selection of Medical Students. Medical Teacher 31:1066-1072

having organized counseling services on academic and social issues for students. Colleges in Amhara and Tigray Regions appeared to be providing more structured counseling services to students. The remainder provided advice on an ad hoc basis often dependent on the presence of considerate deans, department heads and/or instructors. Tutorial services were not provided on a regular basis. Only in some institutions instructors had regular student consultation hours. More importantly, only a few students utilized the available services partly due to lack of awareness of the presence of these services in their colleges. Although HERQA's document on institutional quality audit requires higher education institutions to have adequate student support services to ensure effective implementation of their academic programs9, the majority of the private colleges fell short of providing suitable and adequate student support and academic counseling services. The low utilization of the available services points to the need to create awareness among students.

4.4 TUITION FEES AND SCHOLARSHIPS

In this assessment, we collected data on payment students incur to attend their training in private medical colleges. The largest share of the student payment went to tuition fees. Students paid tuition fees in several installments on a monthly, semester or yearly basis. There was variability in the tuition fees between colleges within and across regions with Oromia Region showing the greatest intra-region variation among private medical colleges. Training leading to TVET qualification had tuition fees in the range of 300-400 Birr per month or 1,700-4,800 Birr per annum. Degree programs charged 140-210 Birr per credit or 2,600-7,050 Birr per annum. Colleges training medical doctors collected tuition fees of 700 Birr per credit or 2,000-2,500 Birr per month or 28,000 Birr per annum. Other costs to students included additional payments for registration, handouts, practicum, qualifying exam and re-examinations and were in the range of 50-300 Birr each. Hence, the total estimated cost of private medical education ranged from a low of 5,300 Birr for TVET qualification to a high of 170,000 Birr for the degree of doctor of medicine.

> *"There is negligence on the part of students…we don't see many dismissals here."*
>
> Student in Addis Ababa

Eighteen of the 20 colleges reported offering partial or full scholarships to students and were able to provide a number of scholarships awarded with the exception of one college which could not provide data. The median number of total reported scholarships at the time of the survey was 11 per college, ranging from just 100 to 200 per college. Although there were no completely transparent and uniform criteria to obtain a scholarship, beneficiaries included students having financial problems, advance standing students working in affiliated clinical practicum sites and members of the college sports club.

None of the colleges had a student loan scheme. Having a student loan system would have increased access to education particularly for students from a humble economic background. This finding is consistent with reports from other African countries. A fact sheet on higher education in Sub-Saharan Africa based on a student survey reported that 46 countries did not have significant student loan systems and only two countries had one.

4.5 GRADUATION AND REPETITION RATES

To assess student success in private colleges, we measured graduation and repetition rates. Both rates were calculated by asking questions about the last academic year. Most students enrolled in private medical colleges successfully completed their education. In five out of six regions which provided data to

[9] HERQA, 2006. HERQA Institutional Quality Audit: Areas of Focus for Institutional Quality Audits. Page 7.

compute graduation rates, more than three quarters of students admitted had graduated. In terms of colleges, 10 had graduation rates above 90% and three had graduation rates between 72 and 80%. The lowest graduation rate was reported in one college, where only one-half of the students made it to graduation. However, there were constraints in availability of complete data. Five colleges did not supply data to calculate graduation rates (See Table 2). Even in the colleges where data were obtained, there was no compiled information and some provided the numbers only verbally. A number of factors were mentioned by deans as reasons for failure to graduate. The most frequently mentioned reasons were academic weakness, lack of motivation to learn, inability to pay tuition fees and health problems.

Repetition rate is also another measure of student success as it tells the percentage of students who did not progress to the next academic year. The presence of repeating students was reported in one or more colleges studied in three regions (Addis Ababa, Tigray, Oromia) only. In Addis Ababa, two of the three colleges that provided data on repeating students had average repetition rates in excess of 5%, with one college having a 12.2 % repetition rate. There was also variation by type of cadre. In Tigray, however, only one college reported repeating students in the range of one to two per discipline. The four colleges in Oromia had four repeating students overall, giving a repetition rate of 0.5%. These findings, however, should be interpreted cautiously due to the lack of a proper documentation system in the colleges studied.

During one FGD with students, there was a suggestion that private students are careless partly because of the smaller risk of failure and dismissal. A straight forward interpretation of the findings of the assessment would be that most students enrolled in private colleges would progress and complete their studies successfully, which is a good thing both from student and institutional effectiveness points of view. However, it is difficult to be certain whether this was the result of high quality education that ensured student achievement or that it was a consequence of a poor assessment that allowed incompetent students to graduate. If the latter is the case, utility of graduation rate as an indicator of quality of education in private medical colleges would be questionable.

Interpretation of our findings is also constrained by lack of complete and accurate data. The American Council on Education also advises considering several factors before using graduation rate as a measure of success.[10] HERQA identified student progression and graduate outcomes as one of the 10 areas of focus for an institutional quality audit in higher education institutions. HERQA's document on institutional quality audit states that every higher education institution is expected to document student progression and graduate outcomes and use it to improve student retention and achievement.[11] However, none of the colleges had well organized information, let alone the ability to use this to improve student retention and success.

4.6 AVAILABILITY, QUALIFICATIONS AND COMMITMENT OF STAFF

The assessment team considered the numeric adequacy, qualifications, and commitment of teaching staff to facilitate learning of students in private medical colleges using several data collection techniques and tools: questionnaire to gather organization-based information, IDIs with deans and regional TVET/health bureau representatives and FGDs with teachers and students. In 14 out of the 20 colleges studied, the majority of teachers were full-time hires. In the remaining six colleges, four had a majority of part-time staff and two colleges did not provide specific data on the number of part-time teaching staff. The team also computed the student to full-time teacher ratio and found that the median was 34. Eleven colleges had student to teacher ratio in excess of 30 to one and six colleges had a ratio greater than 50 to one.

[10] American Council on Education, Center for Policy Analysis. College Graduation Rates: Behind the Numbers. September, 2010

[11] HERQA 2006. HERQA Institutional Quality Audit: Areas of Focus for Institutional Quality Audits. Page 9.

"During my training the quality was good except for lack of permanent teachers…"

Graduate in SNNP

"A class that needs to be covered in a week is given only once a week for lack of teachers and also the high cost associated with hiring enough teachers for the curriculum." Teacher in Amhara

"There are many competent teachers who are committed to their profession. However, the problem is they teach us very quickly because they come from other towns and want to return back quickly; sometimes there is a situation where a class that should be given for an entire week is completed in one day teaching."

Student in Oromia

There was wide variability ranging from 11 to 107 to one. HERQA considers the presence of an adequate number of qualified teachers as one of the essential requirements for accreditation of an educational program. The HERQA criterion for student to teacher ratio in the medical field is 20 to one, which the majority of private colleges did not fulfill.[12] This interpretation, however, did not take into account the contribution of part-timers in teaching of students.

To determine the availability of adequately qualified teachers, the study team calculated the proportion of full-time teaching staff having first degree and above qualifications and those having a postgraduate degree in colleges offering TVET level and bachelor's level training, respectively. Of the 14 colleges offering degree level training, two colleges did not have full-time teachers holding a postgraduate degree; and in six colleges, less than half of the teachers had a postgraduate degree. None, however, met the requirement by HERQA that 80% of permanent staff have a postgraduate degree.[13] However, these data should be interpreted cautiously as the completeness and accuracy of data could not be assured due to poor documentation.

Additional information was obtained from IDIs and FGDs. Synthesizing the information from the different respondents, the principal theme that emerged was that private medical face a major challenge of having enough adequately qualified teachers to assure quality training. Almost all colleges reported a shortage of qualified staff. A number of reasons were given including not being able to find teachers in the market, the unattractive benefit package for teachers, high turnover of staff, and the extreme profit orientation of some owners. All private colleges used part-time teaching staff, most of whom had their primary appointment with government teaching institutions in the same town. There were also many accounts of instructors teaching in more than one private medical college. In terms of the competence of teachers, the responses were mixed. There was appreciation as much as there were complaints. Some colleges reported that most of their teachers were COC certified, while other respondents argued otherwise. Lack of pedagogic skills and limited opportunities for teachers to improve their teaching skills were also mentioned.

Complaints often revolved around part-time staff not teaching well, some teachers being incompetent, and some teachers lacking professionalism and ethics. Although using part-time teachers is not a problem per se, over-reliance on part-timers would make implementing continuous quality improvement interventions difficult and reforms made unsustainable.

[12]HERQA, 2008. HERQA Experts' Site Visit Checklist: Requirements for Program Pre-accreditation, Accreditation and Re-accreditation. HERQA Publication Series-020.

[13] HERQA, 2008. HERQA Experts' Site Visit Checklist: Requirements for Program Pre-accreditation, Accreditation and Re-accreditation. HERQA Publication Series-020.

4.7 AVAILABILITY AND ADEQUACY OF TEACHING AND LEARNING RESOURCES

The team assessed the teaching environment with regard to the availability and adequacy of teaching and learning resources needed to create a conducive learning environment and support learning. Findings from observations were triangulated with dean IDIs and FGDs with teachers and students.

The visited colleges had several classrooms with functional seats. In terms of adequacy for student numbers, however, the results were mixed. In some of the colleges, the classrooms were sufficient for the number of students in class and in others they were overcrowded. All classes were furnished with a blackboard and occasionally a whiteboard. However, modern audiovisual aids like an LCD, overhead projector and video were seldom found. The team also observed that there were well-ventilated, illuminated and quiet classroom environments in some colleges and the opposite in other colleges. External noise was particularly a more frequent problem in many colleges, where classroom buildings were located beside main roads without soundproofing.

All the twenty private medical colleges had skills learning labs. Each college had one to two clinical skills labs mostly used by nursing and midwifery students. There were also labs for medical laboratory and pharmacy students and basic science labs (such as anatomy, microbiology, physiology) for medicine and health officer students in colleges where the programs existed. All labs were furnished with anatomical models, equipment, supplies and reagents;. However, there were shortages and maintenance problems.

Shortage and unavailability of essential equipment and reagents in pharmacy labs were particularly severe and consistent across all private medical colleges forcing them to forgo some skills practice sessions. Field study varied from one college to the other in the number of students that skills labs accommodate at a time. During a typical skills practice, there would be 10 to 35 students in the clinical skills labs and 10 to 26 in other labs, resulting in six-30 students working with a model and one-15 students working with basic equipment such as a microscope. Successful training programs use a student to model ratio of two to three but not

"We had problems because the instructors were not with us all the time. The nurses there followed us if they were wanted to. Most of the time they were busy and couldn't show us each of the procedures."

Student in Addis Ababa

"Most of the time during a hospital attachment, there is nothing we do except simple observation due to shortage of time and lack of opportunity to practice because of too many students."

Student in Oromia

"There are books in the library but you can't find more than one copy; if one student takes that book you have to wait until it is returned to the circulation desk".

Student in Addis Ababa

"There is only one LCD projector in the college. During class time, every teacher runs to the office to grab it first".

Student in Oromia

"We ask our instructors coming from the [public] university to teach us the lab class and they say they cannot teach lab class in the absence of chemicals. As a result, we dropped courses in previous semesters. The pharmacy lab is not fit for a degree program."

Student in Tigray

"There are some equipment and tools about which we learnt theoretically but have not seen them with our eyes."

Nursing Student in Oromia

more than six for optimal learning.[14] Generally, the fewer the number of students the better it is for skills learning.

The observations and FGDs also found crowding in some of the labs. Teachers and/or technical assistants supervised students during skills practice, with a teacher/technical assistant to student ratio varying from 1:10 to 1:35. Compare this with in-service training programs that suggest one trainer should successfully work with eight-12 participants in a simulated setting.[15] Although there were mixed reports, the weight of opinions and observations suggested that skills lab learning relied more on observation during demonstration with limited opportunities for every student to practice and receive feedback after observation of a procedure or skill. Interviews and FGDs had also found reports suggesting gaps in expertise in technical assistants and students working alone in clinical skills lab in some colleges. Some labs did not have standard operating procedures or checklists to facilitate skills development and practice.

In summary, although the availability and use of skills learning labs in all colleges is commendable, large student to anatomical model/equipment ratio, large student to teacher ratio, shortage of materials and supplies and inadequate practice opportunities for students militated against sufficiency and quality of skills training in private medical colleges.

All private medical colleges reported sending students to health centers, hospitals and/or pharmaceutical facilities for practicum, even if a memorandum of understanding was not signed with the facility. However, most (17/20) private colleges did not have their own clinical facilities and even those three colleges who had their own, they rarely used it for student practice. There were also gaps in ensuring adequate practice due to shortage of practice sites and cases, a large student number, shortage of supplies, inadequate supervision and uncooperative health care workers in clinical practice sites. Hence, we can surmise that students would not fully benefit from their clinical placements because of inadequate exposure and coaching.

All the 20 colleges had a library however, many had limited seat capacity. For instance, the team found libraries which had seating capacity of one-tenth and one-seventh of the student population in contrast to the HERQA requirement that the library should accommodate 25% of the total enrolled students at a time.[16] Unavailability and shortage of books particularly recent editions was reported in most colleges. Some college libraries provided access to electronic resources. Journals and periodicals were scanty in all colleges. None of the colleges opened the library seven days a week for sufficiently long hours (18 to 24 hours). Many were accessible less than seven days a week. There were also reports suggesting that students did not use the libraries much. In conclusion, an inadequate number of library

> *"From the computers available in the information technology department, only four are functional and during class one computer is used by six students. All the computers available are not internet connected. Even information technology students do not have internet access or even access to a computer."*
>
> Student in Harari

[14] Jhpiego Corporation, 2010. Training Skills for Health care Providers: Reference Manual (Third Edition).

[16] HERQA, 2008. HERQA Experts' Site Visit Checklist: Requirements for Program Pre-accreditation, Accreditation and Re-accreditation. HERQA Publication Series-020.

resources prevents the medical colleges from providing students and teachers with the required support for the teaching and learning process.

The TVET strategy underlines the importance of modern information and communication technology (ICT) to TVET delivery and assessment and promotes the introduction and use of ICT solutions to TVET delivery[17]. Having sufficient and functional computer centers with internet access also features among key infrastructure and learning resources of higher education institutions in HERQA's institutional quality audit parameters[18]. All private colleges had computer labs for teachers, students or both. However, many had a shortage and non-functioning computers. Except for a few colleges, most had poor or no internet connectivity. Instructors and students alike complained about limited internet access. Our findings showed that teachers and students in many private colleges had insufficient access to computers and even much less to the internet taking away a huge opportunity to use freely available global resources for teaching and learning.

Availability of physical space for extracurricular activities was variable. Many colleges had adequate space to promote student interaction and sports activities. Some, however, had limited space and no sports field at all. All private colleges had toilet facilities for staff and students.

4.8 CURRICULUM AND SYLLABUS IN PRIVATE MEDICAL COLLEGES

We reviewed curricula of all health programs offered in seven private medical colleges, selecting the largest one from each region. Overall, 15 degree and 10 TVET level IV curricula were examined primarily to verify whether they followed national standards, whether high impact public health interventions are addressed sufficiently, and whether the balance of theory and practice is optimal. In terms of discipline, medicine, health officer, nursing (degree and level IV), midwifery, pharmacy (degree and level IV) and medical laboratory (degree and level IV) curricula were included in the review.

The curricula were adopted or adapted from similar programs offered at public universities and colleges. Evidence for this was that the degree curricula referenced government universities (such as Addis Ababa, Jimma and Gondar Universities) as sources and the curriculum components were similar to established government programs. The model curricula for all TVET training programs in the country were prepared by the MOE based on the Ethiopian TVET occupational standards. The model curricula for health trainings were developed in 2007 by a working group of experts from regional TVET bureaus, FMOH and health professionals from universities and health science colleges. The

> *"We have a very big problem in this regard. Last year's curriculum does not apply this year."*
>
> College Dean in Tigray

> *"Actually there is no outcome-based curriculum; we are using the curriculum prepared for former diploma program to teach level IV students. The curriculum does not match with the occupational standards. For example, in nursing… we are using the former diploma curriculum for level IV students…"*
>
> Teacher in Oromia

> *"To give any opinion on the curriculum we need to know it first…it is difficult to give any opinion without knowing it."*
>
> Student in Addis Ababa

[17] Ministry of Education, 2008. National Technical and Vocational Education and Training Strategy. Page 32.

[18] Higher Education Relevance and Quality Agency, 2006. HERQA Institutional Quality Audit: Areas of Focus for Institutional Quality Audits. Page 6-7

development of the TVET curricula was facilitated by the MOE, Engineering Capacity Building Program (ECBP), TVET reform components and the FMOH. In principle, each of the private medical colleges is expected to assess the labor demand for their training and develop curricula of their own along with the necessary teaching, training, and learning materials. However, in practice, all the colleges use the model curricula prepared by the MOE for the TVET programs. In terms of curriculum model, the degree programs followed a traditional subject-based curriculum while the TVET programs used an outcomes-based curriculum.

The common features of the degree curricula were the title of the program, graduate profile, admission criteria, graduation requirements, teaching and learning methods, assessment methods, list and descriptions of courses and quality assurance. The TVET curricula had sixteen common features including the title of the TVET program , description of the program , learning outcomes of the program, duration, qualification level and certification, target groups, entry requirements, concept and mode of delivery, structure of the program, module-unit relationship matrix, assessment strategies, resources, trainers' profile, customization, generic competencies, and licensing and regulatory requirements.

> *"In my practice site there were students who came from not less than 10 schools, and we were 60 trainees in one pharmacy. So, how could 60 students practice in a single pharmacy at a time? It is difficult to say that we were trained."*
>
> Student from Addis Ababa

> *"Students are instructed to search for a firm and practice anywhere. Due to time and financial constraints, students prefer practicing in locally available pharmacies. However, in this town there are no large pharmaceutical industries. Mostly we focus on the dispensary."*
>
> Student in Oromia

In terms of coverage of priority national health issues, most reviewed curricula addressed tuberculosis, malaria, HIV/AIDS and sexually transmitted infections, reproductive health/maternal and child health in the syllabi of the different courses. However, time allocation and theory to practice ratio was mostly unspecified making it difficult to judge the adequacy of breadth and depth of coverage. Even worse, the medicine curriculum did not provide content outline to judge if priority health issues were addressed or the time allocation. For example, there was no mention of TB, HIV or malaria in internal medicine and pediatrics courses, which are expected to cover these diseases. Qualitative interviews particularly with graduates indicated that major public health problems were addressed in theoretical and practical education. However, since there were unanimous complaints that instructors did not have training opportunities, it was possible that students would not have up-to-date education on such important public health issues.

There were gaps and inconsistencies in the balance of theory and practice in the curricula reviewed. Many curricula did not clearly specify hours for theoretical and practical teaching and learning, making it difficult to judge the appropriateness of the balance and leaving implementation open to interpretation. Although in principle TVET programs are practice-oriented, some TVET curricula allocated greater hours for practice, while others allocated more hours. Even when the curricula were more practice-oriented, the proportion of practice hours in the TVET programs was at most 63%, less than the prescribed 70%. Most degree programs allocated a greater proportion of the contact hours to theory.

Upon closer review of the curricula, we also found a number of flaws across all disciplines and levels of training that compromised the optimal delivery of teaching and learning. The curricula were poorly written and lacked uniformity across different programs even within the same institution. Essential curriculum elements were missing. Some of the curricula documents did not have clearly written

statements of mission and objectives. The graduate profile or intended learning outcomes were identified in all reviewed curricula. However, there were gaps in comprehensiveness, systematic organization, specificity, measurability, and balance of task functions and learning domains (knowledge, skills and attitude). The assessment policies were not clear and complete. Many curricula did not have grading guidelines and promotion policy. Some skipped the graduation criteria.

The team also reviewed the structure and contents of syllabi in the 25 curricula collected. Although there was varying levels of completeness in writing of the syllabi, most course syllabi were poorly written providing inadequate information to guide and inform teachers and students. Even if most of the usual elements of a syllabus were present for many courses, there were serious flaws, inconsistencies and missing elements. One extreme example of the lack of care and seriousness in the design of courses was found when the team reviewed a health officer curriculum in one private medical college. The same teaching and assessment methods were suggested for all courses throughout the curriculum. For example, clinical and community-based teaching and assessment methods were proposed for courses that did not have any clinical and community components such as sophomore English, anthropology and anatomy. In many curricula reviewed, the syllabi had poorly written course descriptions-reduced to just a mere listing of contents for several courses. Some courses lacked course descriptions and/or objectives. Where there were objectives, many objectives were stated using non-measurable verbs, for example, "know, appreciate and understand". In some of the reviewed syllabi, even if the objectives were measurable, they were not appropriate to the expected level of performance. Course logistics (describing place, time and duration of theoretical and practical learning) were missing in almost all courses. Many courses did not specify time allotted for specific contents. In some courses, assessment methods were not described.

IDI and FGD participants also provided comments regarding the curricula that need attention. A recurrent theme in the interviews with deans and FGDs with teachers was discontent with the TVET curricula. First and foremost, study participants complained about the too frequent changes in the curricula by TVET authorities. They also did not think the modular approach and requirement for one teacher to be responsible for the entire module were productive and motivating for the teacher and student. Teachers who participated in the FGDs argued that the curricula also lacked relevance to the health needs and context of Ethiopia. They provided specific examples to demonstrate that the curricula were adopted from other countries and were prepared by non-qualified persons. As a result of the dissatisfaction with the TVET curriculum, there was a report by teachers during their FGD that they used the old diploma curriculum instead of the TVET curriculum for nurses in one of the regions. There was also a suggestion that students were not familiar with the curriculum for their learning. Considering the centrality of curriculum in defining the educational process and experience, the significant gaps unraveled in this assessment are likely to undermine the provision of quality education in private medical colleges.

4.9 TEACHING AND LEARNING METHODS

In this assessment we examined appropriateness of teaching-learning methods to enable development of the desired competencies through review of the curricula and qualitative interviews with different respondents. A variety of teaching/learning methods including lecture, group discussion, seminar, tutorial, lab practice, clinical placement and community attachment were suggested to enable learners to develop the intended learning outcomes. Although there were mixed findings in selection and use of appropriate methods within and between programs and colleges, important gaps were noted. Course level matching of learning outcomes with relevant methods was weak. For example, many courses in the reviewed curricula did not select methods that maximize development of practical skills despite objectives expecting students to develop practical skills. To provide a specific illustration, for an objective in the health officer curriculum that states, "learners will be able to diagnose cause of disease and identify prevention and treatment methods," the suggested teaching methods were lecture, group

discussion and seminar. Case study and guided clinical practice would have been the most appropriate teaching and learning methods.

In terms of the teaching and learning, the frequently mentioned gaps pertained to the practical training. Study participants widely reported that practical components of the curriculum received inadequate time in comparison to the theory. Deficiencies in availability of required equipment and reagents were also mentioned by several participants particularly those needed for pharmacy programs. Teachers participating in the FGD in Harari also argued the 70/30 practice to theory ratio was not practical due to the scarcity and high cost of laboratory equipment.

Other important gaps in skills learning in the lab were insufficient practice opportunities for students due to their large number, few mannequins and equipment, and shortage of time. As a result, skills lab sessions relied heavily on observation during demonstration by the instructor. To compensate for this, some colleges reported allowing students to practice in the skills lab during their spare time. There were also reports that sometimes students practiced in the skills lab without supervision.

Study participants also described several constraints in the clinical training. One of the most frequently mentioned problems by deans, teachers and students alike was the lack of cooperation of health workers at clinical facilities to coach and supervise students during practicum/apprenticeship. A related common theme was discriminatory treatment of students from private medical colleges when they go to government health facilities for practice. Inadequate supervision of students during clinical practice was not only due to uncooperative health care providers but also due to some instructors ignoring their responsibilities and leaving students unsupervised.

"The college regularly administers continuous assessment. It helps to assist students based on the result they score…when they finish one unit, they are assessed. They are assessed at least once in a month."

College Vice President in Dire Dawa

"When we compare theoretical with practical assessments, the major focus is on theory and very little on practice... In one class… like our class where there are 53 clinical nursing students, the teacher stops the practical exam after testing three or four students. Practical exams take too much time."

Student in Oromia

"Not even a single instructor came to see what we were doing and learning during the apprenticeship. No one assessed our learning. They just gave us grades."

Graduate in Addis Ababa

"I haven't seen any student who failed during my stay in the last three years in this college. There is no academic dismissal at all in this college."

Student in Oromia

Inadequate practicum sites and low volume and range of cases relative to student numbers were also reported to be major problems. For disciplines like pharmacy, the unavailability of industries nearby to provide required learning experience was stated as a common problem.

Another critical gap we observed during curriculum review and FGDs was the lack of integration of theoretical and practical learning. The practical components of clinical courses came a semester or year after the classroom learning had been completed. There were also reports suggesting over-reliance in skills lab practice de-emphasizing clinical training in the TVET programs exacerbated by the design of the COC exams (examinations are on anatomical models and are not patient-based) and hence students are

not very keen to work with patients. In summary we found massive gaps in practical/clinical training raising red flags in the sufficiency and quality of students' preparation for the world of work.

4.10 ASSESSMENT METHODS

A variety of assessment methods that measure knowledge, skills and attitude were described in the reviewed curricula. These include written exam, oral exam, practical exam, supervisory checklist, logbook, progressive assessment, assignment, lab report and case presentation. However, there were major gaps in the written curricula that would make generalization about appropriateness of the assessment methods to measure attainment of the desired competencies difficult.

The team observed a tendency to list generic assessment methods for all courses in a curriculum without due consideration to relevance to the specific learning outcomes. For example, clinical assessment methods were suggested for courses that did not have a clinical component. The team found that some curricula only mentioned the timing of the assessment (mid and final exam) without specifying the assessment types or tasks, making it difficult to judge alignment with learning outcomes. In some of the syllabi the team observed a clear misalignment of the selected assessment methods with the intended learning outcomes. Some courses did not specify the weight of the different assessment methods. Even when they specified, the weight assigned to the different assessment components might not be equivalent to what was suggested by the intended learning outcomes and contents of the course. For example, in the Nursing Assessment and Fundamentals Course, the practical assessment accounted for only 25% of the total assessment score despite the course having predominantly practical learning outcomes.

"I am very committed to my work and have a strong family like relationship with my patients…I believe I am performing very well".

Nurse graduate in Tigray

"I would not say they taught me well…let us not talk about competency. We can't talk about being competent but they gave us highlights..."

Pharmacy graduate in Addis Ababa

"I saw two graduates of this college… practicing in a health center before they sat for the COC exam. They were practicing in the health center after their graduation because the college could not equip them with practical skills. I know the graduates were theoretically competent but practically they were not confident at all."

Student in Dire Dawa

On the plus side, the TVET curricula put emphasis on continuous assessment instead of just mid and/or final exams and this was also acknowledged in the interviews and FGDs. Nonetheless implementation gaps were present with reports alleging inconsistencies in practice. Although the curricula proposed having formative assessment in addition to the summative, the team found that formative assessment was misunderstood as synonymous to graded progressive or continuous assessment. As a result, its potential in supporting student learning was not harnessed.

Interviews and focus group discussions pointed to major gaps in assessment of practical competencies. There was inadequate assessment of practical competencies due to large student number, poor supervision during practice and unavailability of skills lab equipment.

There were reports by graduates, teachers and students suggesting lax assessment policies in private medical colleges in multiple regions, to the extent that almost everyone would be successful regardless of their competency. Teachers who took part in the focus group discussion in Tigray also reported that clinical instructors provided more or less similar scores to students during clinical practicum.

"We started class three weeks ago. However, only 15 out of 40 students have shown up so far…some students come only for the exam...the college's problem is lack of strict control."

Student in Tigray

"Quality of education is already bent and when you try to fix it here at the college level it will break... so corrective measures should start from kindergarten and primary schools."

Quality Assurance Officer in Addis Ababa

"When teachers are hired, their experiences must be seen or a written exam and interviews must be given. As it was mentioned earlier, s/he should not be hired by other criteria or because s/he negotiates a lower salary. To maintain quality, the selection criteria must be very narrow."

Teacher in Addis Ababa

The advent of COC exam was reported to have had a positive impact in the assessment practices to ensure student success at COC. Private colleges reported preparing model exams for students and redesigning assessment to simulate what students were likely to be tested on COC. Students were also spending more time in the skills learning labs.

Many study participants criticized how assessment results are reported in the TVET programs. TVET programs did not provide numeric scores and rather reported student results as competent or incompetent. They said the assessment method currently in use did not help to discriminate among the competent students and was not motivating for high-performing students in particular. Synthesizing all these findings, we can surmise that the assessment practices fail short of supporting student learning and are inadequate to make valid and reliable pass/fail decisions.

4.11 QUALITY ASSURANCE AND IMPROVEMENT SYSTEM

Though the HERQA listing internal quality assurance as one of the 10 focus areas for quality in higher education institutions[19], the majority of the colleges included in the assessment did not have a system to assure and improve quality of education. They did not have a quality assurance unit or office. They didn't have a faculty development program. There was no structured evaluation of teaching effectiveness. Even if the curricula of many of these colleges alluded to quality assurance, they were not translated into action. On the other hand, there were some colleges that articulated how they were going to assure quality in their curricula and were implementing concrete quality assurance interventions. For example, a college in Tigray had a Quality Assurance and Improvement Unit led by a director and a curriculum development and standardization committee. The Unit organized teaching skills workshops. The college also evaluated teachers' performance by students and department heads. Exams were reviewed. The college also sponsored staff to attend postgraduate training. The curricula in this college also have a section on quality assurance reinforcing the view that it gives due attention to quality assurance. The curricula in the same college also identified a number of strategies to monitor and assure quality of training ranging from input (such as recruitment of qualified staff and periodic acquisition of up-to-date references, lab equipment and reagents) to process (such as supervised clinical practice and continuous assessment of students) to outcome (such as feedback from employers and graduates).

In terms of evaluation of teaching effectiveness, only some colleges implemented structured evaluation of teacher's performance. Department heads and students assessed the instructor's performance at the

[19] HERQA, 2006. Institutional Quality Audits: Areas of Focus for Institutional Quality Audits.

end of each semester. The results of these evaluations are compiled and used for action. However, none of the colleges reported using peer evaluation to improve teaching performance.

4.12 COMPETENCY AND PERFORMANCE OF GRADUATES FROM PRIVATE MEDICAL COLLEGES

None of the colleges had evaluated performance of their graduates after deployment nor did they have a system to do that. We interviewed graduates themselves and their supervisors to collect information about the performance of the index graduates and all other private college graduates. Additional information about competency of private college graduates was obtained from FGDs and interviews. We found mixed results, some respondents claiming private graduates are prepared well in their pre-service education and are providing competent services while others acknowledged the presence of critical gaps in their education and performance at work to the extent that they required months of additional training after graduation to prepare for the COC exam. There were also suggestions that subsequent to the introduction of the COC, private medical colleges and students were putting greater effort to make students competent and successful in the exam and that is paying off.

There were consistent reports from different sources about the presence of gaps in practical competencies, ability to provide priority public health services and demonstration of professional behavior and ethical values. Respondents described gaps in graduates' ability to provide service delivery for TB, HIV and malaria and even general surgical, pediatric and obstetrical care. However, there were also opinions suggesting that the gaps reported were not peculiar to private college students and were also problems of students in government colleges.

Deficiencies in practical competencies were attributed to not every student having the opportunity to practice all procedures and skills (in the skills lab and during the clinical practicum), shortage of equipment and duration for skills lab practice, shortage of samples for laboratory practice, short duration of clinical experience, poor coaching and follow-up, insufficient monitoring during the practical attachment, and limited opportunities for pre-placement training on HIV and TB for private college students (similar to that given to students in government universities by NGOs).

Discontent with respect to professionalism, ethical values and attitudes was reported widely by graduates themselves, their supervisors, teachers and deans. Respondents from all regions admitted that private college graduates lacked professionalism and ethical conduct in caring for patients and discharging their duties. As is the case with practical skills, there were suggestions that lapses in professionalism and ethical behavior were not unique to private college graduates, however. Study participants recommended the need for greater support and follow up to shape students better during their college education.

4.13 CHALLENGES IN ASSURING QUALITY OF EDUCATION AND RECOMMENDATIONS TO IMPROVE QUALITY OF EDUCATION

The team asked study participants to identify the biggest challenges and barriers faced by private medical colleges to assure quality of education and their suggestions to overcome them. Below is a summary of the major themes that emerged from their responses.

Low student readiness and motivation to learn: The most frequently mentioned fundamental barrier to ensuring quality of education and competency of students was said to be the inadequate preparation of students in their pre-college education including poor English language proficiency. This is compounded by the low motivation and desire of students to learn, partly because of the weak background of students and entry of students due to family pressure. Attendance problems were reported widely. The perception that there is only a small risk of failure and dismissal in private colleges did not help the rampant apathy among students.

"There are now around 60 government and private institutions in the region under our supervision…we are unable to conduct supervision regularly as needed because of lack of human resource power and other resources. For example, as per our bureau's Business Process Reengineering, we are expected to supervise all colleges at least twice a year but we do not have adequate experts and lack vehicles."

TVET Representative in SNNPR

"Building rent is taking more than 75% of our resources due to unavailability of land. You can see that the government is supporting investors but it is not giving any attention to the education sector."

Dean in Addis Ababa

"A college might prepare everything only for the period of evaluation; it is better to include students' feedback in the evaluation."

Graduate in Addis Ababa

To address these challenges, respondents recommended improving the quality of education in primary and secondary education. Study participants also recommended improving the student selection criteria such as through introducing an entrance exam. There were also recommendations to: use teaching methods that give students greater responsibility for their own learning; to assess and monitor students using different methods and frequently and take remedial action; and to provide tutorial, counseling and other student support services.

Shortage of qualified teachers: One of the biggest challenges to assure quality of training was reported to be the shortage of qualified teaching staff. All colleges expressed the difficulty that they were facing in obtaining appropriately qualified staff to work on a full-time basis; consequently all colleges relied heavily on part-time teachers. This is made worse by part-time staff teaching in more than one college, high staff turnover (partly precipitated by low salary) and the tendency to hire unqualified staff because of kinship in some colleges. That teachers in private colleges did not have opportunities for career development due to the restriction of postgraduate training in government universities for private applicants was vehemently criticized. Similarly, the exclusion of private college teachers from short-term training on pedagogy and technical updates on priority health problems constrained their ability to provide quality education.

To address these challenges, study participants recommended hiring experienced academic staff on a permanent basis, having strict teacher selection criteria and providing pedagogic training to teachers.

Gaps in practical training: Private college students were reported to have significant deficits in their practical skills mainly because of challenges in the practical portion of their training. The barriers to quality skills/clinical education were said to be poorly equipped skills labs, limited opportunities for practice, shortage of clinical practicum sites, large student to caseload ratio, insufficient coaching and supervision of students and uncooperative health workers in practicum sites.

To address these challenges, study participants gave a number of recommendations. They called for availing more resources particularly those required for skills learning labs, increasing time for practical training, building their own clinical training site and improving student coaching and monitoring during clinical education.

Infrastructure and management gaps in private colleges: Many colleges had infrastructure and management constraints that made provision of quality education difficult. Most colleges did not have in place the necessary teaching materials and infrastructure to support student learning. There were frequent reports of shortages of up-to-date books and limited availability of essential mannequins and equipment for skills lab practice. Deans discussed the unavailability of materials for skills learning labs in the local market. A majority of colleges did not have an organized quality assurance system. Many did

not have a strategic plan. There were also loopholes in management partly due to greed on the part of some owners, not having suitably qualified staff to lead key departments like the registrar and quality assurance office, and poor documentation. There were also some reports suggesting private colleges often admitted more students than they had the resources for and had lax student monitoring.

To address these challenges, study participants gave a number of recommendations. They recommended owners to be mindful of their responsibility of producing competent health professionals and moderate their excessively profit oriented mindset. They suggested private colleges should be led by academically qualified professionals. They also recommended that student assessment and monitoring needs to be improved. Availing educational resources including through support from government and NGOs was also suggested.

Limited support from stakeholders: One of the most frequently mentioned challenges was the double standard in treatment of private colleges by the government institutions and NGOs. Most colleges reported that the support the government was giving to strengthen private colleges was very small. Private college teachers were largely excluded from career development and short-term training. NGOs provided little technical and material support to private medical colleges. There were also complaints about the frequently changing directive from TVET authorities and too frequent changes in the TVET curricula. Many study participants also felt that regulatory bodies did not monitor and follow up private colleges frequently and closely enough.

To address these challenges, study participants gave a number of recommendations. They recommended the government and NGOs to support private colleges and avoid discrimination against them. They would like the government to play a more supportive role such as granting land for building and tax waivers on imported educational materials. Similarly, they would like NGOs to provide them with short-term in-service training on key health problems like HIV/AIDS and provide material assistance. They also suggested asking students for feedback during monitoring visit by regulators.

5. LIMITATIONS

The results of this assessment may not be statistically representative of all private medical colleges and their graduates because of the largely qualitative nature of the data collected.
Because of the sensitive nature of the information collected, it is possible that colleges might not have provided accurate information.

Student and teacher related information may not be accurate because of the poor documentation available in all private medical colleges.

6. CONCLUSIONS

Private medical colleges are making a significant contribution to the national and regional human resources for health development particularly of middle level health care providers. There is high demand for private education in the community however, finding job after graduation is proving difficult for many private college graduates undermining the value of the investment by students, their families, teachers and the private education sector.

Almost all students applying for admission to private medical colleges are accepted. Academic achievement in the 10th and 12th grade national examinations is found to be the mainstay of student selection. The pass marks in these national examinations are set by the government and most private colleges comply. However, there are some indications about existence of practices inconsistent with minimum acceptance requirements and class size determined by regulators.

Many private college students do not receive regular student support services to navigate through the academic programs partly due to lack of an organized support system and partly due to low demand by students.

Private medical colleges charge varying amounts of tuition fees ranging from annualized rates of 1,700 Birr for training leading to TVET level IV qualification to 28,000 Birr for training leading to a degree in doctor of medicine. The total cost of education in private medical colleges was estimated to range from 5,300 to 170,000 Birr. Payments are due in multiple installments. Most private colleges provide scholarships, however, none of the studied colleges had student loan schemes.

We found most private college students successfully complete their studies, with very high progression and graduation rates. However, we urge caution in interpreting this finding because of the poor documentation in private medical colleges. It should also be remembered that the very low repetition rate and high graduation rate might not necessarily guarantee that all students acquired the essential competencies before graduation and may even indicate a lenient assessment system.

Almost all private medical colleges lack the required number of suitably qualified permanent teachers. Overreliance on part-timers would make it difficult for private colleges to implement sustainable educational quality improvement.

Private medical colleges have poor documentation and a record keeping system making it difficult to obtain complete and accurate data. This would undermine their ability to monitor and evaluate academic programs.

There were mixed findings with regards to availability of conducive classroom learning environments. Some private colleges had overcrowded classrooms. External noise interference was a frequent problem. Blackboard was the only audiovisual aid available in most classrooms.

Although private medical colleges availed skills learning labs for development of clinical and laboratory skills, most had an inadequate number of anatomical models, equipment and supplies. Shortages of necessary lab equipment and supplies were most severe for pharmacy programs. In addition, large student to model/equipment and student to teacher ratios limited the sufficiency and quality of practice and feedback for students.

All private colleges send out students for practicum in health centers, hospitals and/or pharmaceutical industries and dispensing outlets. However, the apprenticeship does not provide sufficient real world

practice opportunity because of there being too few practicum sites, large student numbers, low caseloads and poor coaching and supervision of students.

Most private college libraries are not providing optimal services. Some have inadequate numbers of seats. Most have shortage of the latest books. Periodicals are almost non-existent. Libraries do not open seven days a week or for sufficiently long after-working hours.

Although all private colleges have computer center(s), the numbers were too few in many institutions. Internet access is very limited in most colleges.

Although private colleges follow national curricula or their adaptations for most of their training programs, the curricula and syllabi of most colleges are poorly written and miss standard curriculum components. Although most curricula allude to priority health problems in Ethiopia, the sufficiency and quality of coverage are far from certain. Time allocation and theory-to-practice ratio are either unclear or suboptimal. Hence, the curricula are unlikely to provide adequate guidance on the educational process and ensure a quality educational experience.

There are massive gaps in the teaching and learning methods (in the written as well as implemented curricula) particularly of practical competencies, which matter the most in training of health workers. Among other things, selected teaching methods poorly aligned with the learning outcomes, inadequate time for practical training, poorly equipped skills learning labs, large student numbers, uncooperative health workers in practicum sites, shortage of practice sites, and separation of theory and practice are the most important problems.

There are major gaps in assessment methods and practices at private colleges including poor alignment with learning outcomes, little formative assessment, disproportionately low practical assessment and lenient grading and pass/fail decisions. Although it is not implemented consistently, the practice of continuous assessment is a strong point.

Majority of private medical colleges do not have a robust internal quality assurance system such as a quality assurance office, dedicated personnel, staff development program, and evaluation of teaching effectiveness, to mention some.

There are mixed findings with regard to performance of currently practicing private college graduates. There are those who are providing competent and quality health care and there are others who are not fit for practice. However, there are frequent reports suggesting gaps in practical competencies and professional behavior including those required to deliver high impact health interventions.

The biggest barriers to assuring quality of education and equipping students with essential competencies prior to graduation are found to be inadequate student background and motivation to learn, shortage of appropriately qualified teachers, poor quality practical training, infrastructural and management gaps and limited support from government and non-government stakeholders. Study participants recommended addressing these barriers to improve quality of education provision and graduate performance.

7. RECOMMENDATIONS

1. The quality of primary and secondary education should be improved to ensure adequate preparation of students for their college education. The Government should step up its quality improvement support and regulation of education provision in these two levels.
2. Private medical colleges should improve student admission criteria by adopting a more comprehensive and defensible selection criteria that include informed self-selection, academic achievement, general cognitive ability testing and assessment of personality and communication skills. They must also rationalize the number of students accepted based on the resources available to support student learning.
3. Private medical colleges should strengthen their educational infrastructure particularly the skills learning labs, libraries and ICT infrastructure to create a more conducive learning environment. They should also build their own clinical training sites.
4. Coordination and consultation forums and mechanisms should be created to promote understanding and mutually beneficial partnerships between private medical colleges and practicum sites.
5. Private medical colleges must hire and retain adequately qualified instructors in sufficient numbers as a matter of priority.
6. Private medical colleges must develop their curricula carefully working with teams of subject matter experts and instructional designers.
7. Private medical colleges should strengthen their governance and management systems by hiring suitably qualified leaders.
8. Private medical colleges should strengthen their internal quality assurance system by putting in place structures and processes for continuous improvement.
9. HERQA and regional TVET authorities must step up their regulatory oversight while at the same time increasing their support for quality assurance.
10. The government should encourage and support the private sector to improve the quality of education, for example, stop discriminatory practices, avail staff development opportunities, assist in procurement of educational materials, and provide incentives like land for building and tax waiver for educational materials.
11. NGOs must support the private sector to improve the quality of education by including the private sector in their technical and material assistance schemes, for example, provide technical updates on high impact public health interventions and pedagogic training to instructors teaching at private medical colleges and donate simulators and other skills lab materials that are not available in local market.
12. More studies should be conducted to assess the competency of graduates from private as well as public training colleges and universities with a focus on high impact health interventions, practical competencies and professionalism.

ANNEXES: DATA COLLECTION TOOLS AND ASSESSMENT TEAM MEMBERS

ANNEX 1: INFORMED CONSENT FORM

Explanation

- Hello, my name is _____and I am here on behalf of the Private Health Sector Program (PHSP).
- PHSP implemented by Abt Associates and funded by the President's Plan for Emergency AIDS Relief (PEPFAR) through the United States Agency for International Development (USAID) considers the quality of graduates from private higher education institutions as a critical cause of delivery of health care in Ethiopia. Hence, it is assisting the Government of Ethiopia to improve the quality of its health care delivery by supporting the private sector. To that end, PHSP has contracted a private firm to assist in conducting a rapid assessment of the quality of pre-service training provided by private medical colleges in five regional states and two city administrations. We review records and curricula of sampled private colleges and conduct individual and group interviews with regional health/education bureau representatives, presidents/deans, teachers, current students, graduates from private colleges and health professionals working closely with the graduates.

Purpose

- The main aim of the survey is to initiate a process for assessing the quality of pre-service education of health professionals in selected private medical colleges. As one of the key stakeholders of private health professions education, we would like to collect information from you.

Benefits

- By participating in this assessment you will provide valuable information to evaluate quality of pre-service education in private medical colleges, which in turn will help PHSP and the Government of Ethiopia to target its support for the same. This will contribute to the national effort to meet its human resources for health needs, quantitatively as well as qualitatively.

Risks

- All the information you provide will be kept confidential and your name and that of your institution will not be mentioned in the report. Since data will be reported as aggregate for the region and the nation, there is no significant risk in participating in the assessment.

  We want to emphasize that your participation and willingness to provide accurate information has paramount importance to understand the existing situation and design strategies to improve the quality of education.

  Are you, therefore, willing to participate in this study? You have the right to discontinue at any stage during data collection. If the answer is yes, continue. If the answer is no, thank the person and stop.

Procedure (for qualitative interviews)

- Since we want to ensure that we capture everything you say, we will tape-record the focus group discussion/interview in addition to the notes we take. The tapes and notes are to be used only for the assessment purpose and only the research team will have access to them. Furthermore, they will not have names rather just only labels for identification. Any question or concern? Do you agree with the tape-recording? If they have questions or concerns, explain or clarify. If they agree, proceed.

ANNEX 2: QUESTIONNAIRE FOR INTERVIEW (WITH DEAN AND/OR REGISTRAR) AND RECORD REVIEW

Instruction to Data Collectors

- In all cases require to see documentation in support of claims. If the contact person is not able to present documents to substantiate the claim, that should be noted.

Date of Visit: _____

Background Information

1. Name of College: _____
2. Address:

   Town/City: _____ Region: _____

   Postal Address: _____

   Telephone: Office _____ Mobile _____ Fax: _____

   E-mail:_____

   Contact Person's Name, Title and Position _____
3. What year was the school founded? _____
4. What is the start date of the current academic year? _____
5. What is the end date of the current academic year? _____
6. Health professions programs offered in the College:

Regular Programs				Extension Programs	
Degree	**Accreditation Status**	**Level IV**	**Accreditation Status**	**Degree**	**Level IV**

7. Total number of students in the college: Male___ Female ___ Total____
8. Number of students enrolled in health professions programs:

Program	Year 1		Year 2		Year 3		Year 4		Year 5		Year 6	
	M	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**	**M**	**F**
Nursing												
Midwifery												
Pharmacy												
Laboratory												

Laboratory												
Medicine												
Total												

Student Selection

9. Number of applicants for training in the health stream in the current academic year: Male ___ Female ___ Total__

10. Number of students admitted in the health stream in the current academic year: Male___ Female _____ Total ___

11. What body is responsible for student selection policy? _____

12. What are the criteria for admission to the school program?

_____
_____
_____

13. What methods of selection does the school use?

_____
_____

14. What mechanisms exist for appeal?

_____
_____

15. Does your college have any recruitment programs for women? Yes or No

16. Does your college have any recruitment programs for students from rural or underserved populations? Yes or No

17. How is the size of student intake determined?

_____
_____
_____

Tuitions and Fees

18. What is the annual tuition for a program _____?

19. How do students pay? Installment ___ One-time payment_____

20. Does the college have student loan scheme? Yes__ No__

21. What additional annual costs do students incur?

- Practicum _____
- Books _____
- Library Fees _____
- Transportation _____
- Examination (external, qualifying exams)
- Other (please specify): _____

22. Are scholarships available? Yes __ No __

- Number of students awarded scholarship this year_____
- For what duration of the training the scholarship cover_____

Graduation Rate

23. How many health science students graduated last year vis-a-vis their number at admission?

Program	Graduated		Number at admission	
	Male	Female	Male	Female
Nursing				
Midwifery				
Pharmacy				
Laboratory				
Laboratory				
Medicine				
Total				

24. Total Number of health science students repeating the year

Program	Year 1		Year 2		Year 3		Year 4		Year 5		Year 6	
	M	F	M	F	M	F	M	F	M	F	M	F
Nursing												
Midwifery												
Pharmacy												
Laboratory												
Laboratory												
Medicine												
Total												

25. What are the top three reasons for failure to graduate? Please list in order of importance
26.

1. _____

2. _____

3. _____

Student Support Services

26. What counseling services are available in the college?

_____
_____
_____

27. What other student support programs are available through the program?

_____
_____
_____
_____

Qualifications of Staff

28. What policies does the college have for ensuring that the staffing profile matches the range and balance of teaching skills required to deliver the curriculum?

_____
_____
_____

29. What are the requirements related to the qualifications for appointment?

_____
_____
_____
_____

30. How many teachers do you have by qualification?

	Full-time	**Part-time**	**Total**
PhD, specialist doctor or Assistant Professor and above			
Masters, general practitioner (MD) or lecturer			
BSc or graduate assistant			
Diploma or technical assistant			
Total			

Program evaluation

31. How does the school assess instructors' performance?

    32.1 Instructors performance is measured on a regular basis Yes __ No __

    32.2.1 Evaluation of performance is performed using a standardized format? Yes_ No__

    32.2.2 The evaluations are documented in writing? Yes/No

    32.2.3 Instructors participate in peer evaluations? Yes/No

    32.2.4 Feedback to staff performance includes evaluations completed by

    32.2.5 Students Yes__ No__

    32.2.6 Peer Yes___ No ___

    32.2.7 Head Yes___ No ___

32. Results of evaluation are used for management decision Yes__ No__

33. Does the college have a strategic plan document? Yes __ No___

ANNEX 3: CHECKLIST FOR OBSERVATION OF EDUCATIONAL FACILITIES/INFRASTRUCTURE

Date of Visit: _____

Instruction: Observe while students are using the specific learning environment/facility

1. Classroom:

1.1 Number of classrooms: _____

1.2 Capacity is enough for the number of students (verify by observing two classrooms) Yes __ No __

1.3 Adequate number of functional seats in the classroom Yes __ No __

1.4 AV aids are available Yes __ No __

1.5 Other comments (Illumination, ventilation, external noise, etc.)

_____
_____
_____

2 Laboratories

2.1 Clinical skill lab (demonstration room) is available Yes __ No __

Comment on number of skill labs and disciplines

_____
_____

2.1.1 How many students use the skills lab at a time? _____

2.1.2 What is student: model ratio during skills lab use? _____

2.1.3 What is the teacher/technical assistant ratio during skills lab use? _____

2.1.4 Are there standard operating procedures or checklists of skills demonstrated? Yes___ No_____

2.1.5 Verify by interviewing if all students have practice opportunity? Yes __ No___

2.1.6 Verify by interviewing the technical assistant adequacy of models, equipment and other supplies for all procedures

_____
_____
_____

2.2 Lab is available Yes __ No __

2.2.1 How many students use the lab at a time? _____

2.2.2 What is student: equipment (microscope) ratio during lab use? _____

2.2.3 What is the teacher/technical assistant ratio during lab use? _____

2.2.4 Are there standard operating procedures or checklists of skills demonstrated? Yes___ No_____

2.2.5 Verify by interviewing if all students have practice opportunity? Yes __ No___

2.2.6 Verify by interviewing adequacy of equipment, reagent and other supplies for all procedures

_____
_____
_____

2.3 Lab is available Yes __ No __

2.3.1 How many students use the lab at a time? _____

2.3.2 What is student: equipment (microscope) ratio during lab use? _____

2.3.3 What is the teacher/technical assistant ratio during lab use? _____

2.3.4 Are there standard operating procedures or checklists of skills demonstrated? Yes___ No_____

2.3.5 Verify by interviewing if all students have practice opportunity? Yes __ No___

2.3.6 Verify by interviewing adequacy of equipment, reagent and other supplies for all procedures

_____
_____
_____

3 Clinical training sites (verify by interviewing)

3.1 Health Center _____ number ___

3.2 Hospital _____ number _____

3.3 Other (Specify)_____

3.4 Is there written Memorandum of Understanding between the College/University and the clinical training site? Yes__ No__

3.5 Is there is a clinical facility used for student learning within the college? Yes_____ No_____

If yes, observe the clinical site and comment on the following:

3.5.1 Clinical teacher to student ratio _____

3.5.2 Student to patient ratio in the observed department_____

4 Community learning/practice site (verify by interviewing):

4.1 Where is it? Rural _____ Urban_____

4.2 Type of facility? Clinic ___ Health Center _____

4.3 Adequate for the number of students? Yes __ No __

4.4 Is there written Memorandum of Understanding between the College/University and the community site? Yes__ No__

5 Library (Comment on availability and adequacy)

5.1 Books on the major professional courses are available? Yes___ No___

5.2 Books on major professional courses are published in the last ten years? Yes___ No_____

5.3 Comment on adequacy of books by interviewing the librarian:

_____

5.4 Journals and periodicals on disciplines being provided at the college:

_____

5.5 Computer to access electronic resources_____

5.6 Library seat capacity and seat to student ratio _____

5.7 Other library resources:

_____

5.8 Opening days and hours

5.8.1 Opening days: 7 days a week___ Less than 7 days____

5.8.2 Opening hours: 24 hours___ 18 hours___ Less than 18 hours____

6 Is computer center/lab available? Teachers Yes __ No __ Students Yes__ No___

6.1 Total number of computers available to students? _____

6.2 Internet connection? Yes___ No___

7. Comment on availability and adequacy of physical space to promote student interaction or activities outside classes?

8. Does the school have facilities for staff and students?

8.1 Cafeteria Yes___ No___

8.2 Toilets/washrooms Yes__ No__

8.2.1 Separate for staff Yes__ No___

8.2.2 Separate for male and female students Yes__ No ___

8.3 Sports fields Yes__ No__

9. Other observations and comments

_____

_____

ANNEX 4: GUIDELINE FOR REVIEW OF CURRICULA OF PRIVATE MEDICAL COLLEGES

Instruction: Review curricula of health science programs on offer at the college (Limited to medicine, health officer, nursing, midwifery, pharmacy and medical laboratory)

1. Specify program under review.
2. Is the curriculum the same as the national/regional standard curricula for the specific cadre? If different, describe the variation.
3. Year the curriculum was last revised
4. What is the duration of training to graduate?
5. Is the mission statement clearly described?
6. Are the objectives of the training program described clearly?
7. Is the graduate profile or core competencies described?
8. What are the admission criteria?
9. What are the graduation criteria?
10. What is the curricular model?
11. What is the balance between theoretical and practical training?
12. To what extent are priority national health problems (TB, malaria, HIV/AIDS and sexual and reproductive health and family planning) addressed in the curricula?
13. Time allocated for theoretical
14. Time allocated for practical
15. Are the learning and teaching methods appropriate to achieve the desired competencies of the graduate?
16. Is there a clear assessment policy including grading guideline?
17. Are the assessment methods appropriate to the desired competencies?
18. Is there an inbuilt quality assurance and/or program evaluation system?
19. Are the courses sequenced in a logical way to develop competencies of students?
20. Are the course syllabi properly designed (including clear course description and clear and measurable objectives)?

ANNEX 5: INTERVIEW GUIDE- TVET/HEALTH BUREAU REPRESENTATIVE

1. How do you see the contribution of private medical colleges to meeting the national health workforce needs?
2. What is your view regarding the demand for private sector education by the community in your region?
3. How do you see the quality of education in private medical colleges in your region?
   - What are the strengths?
   - What are weaknesses?
4. What do you say about the curricula in private medical colleges?
   - Do they follow national and regional curricula?
5. What do you say about availability and quality of teaching-learning resources in private medical colleges?
   - What do you think about availability and quality of books and library?
   - What do you think about availability of appropriate AV aids including computer and internet access?
   - What do you think about availability and quality of skills learning labs including anatomical models?
   - What do you think about availability of equipment and supplies during clinical practicum?
   - Clinical practicum sites with optimal caseload
6. What do you say about the availability, qualification and commitment of teaching staff including clinical preceptors?
   - What do you think about the adequacy of teaching staff number?
   - What do you think about the qualification and preparedness of the teaching staff to facilitate learning?
7. What do you say about students enrolled into private medical colleges?
   - What do you think about the selection criteria?
   - How prepared are they for college education?
8. What do you think about the competency level of graduates from private medical colleges?
   - Do you say students graduate after attaining the essential competencies expected of them?
   - How prepared are graduates to deal with priority public health problems like TB, HIV, malaria, and sexual and reproductive health at the point of graduation?
9. What are the practices regarding employment opportunities for graduates from private health colleges?
   - Do you provide equal employment opportunities as those from government colleges?
   - What proportion of those employed in the last fiscal year was from the private medical colleges?
10. What do you say about quality assurance and improvement system in private medical colleges?

- What quality assurance and improvement mechanisms exist and what do you think about them?

11. What do you say about the support and regulation you are providing (education bureau/health bureau) to assure the quality of education?

- What are you doing to assure quality of education?
- What supports do you provide to private medical colleges to meet accreditation standards?
- Do you provide in-service training opportunities to private medical college staff?

12. What is the biggest challenge/barrier to assure quality of education in private medical colleges?
13. What do you recommend to improve the quality of pre-service education in private medical colleges?
14. Any other comments?

Thank you

ANNEX 6: INTERVIEW GUIDE- PRESIDENT/DEAN

1. What do you think about the governance and management systems in your institution?
   - Clarity of organizational structure including roles and responsibilities of different organs
   - Autonomy of the executive body
   - Is there a functional academic commission? What are its mandates? How frequently does it meet?
2. What is your view regarding the demand for private sector education by the community?
3. How do you see the quality of education in your college?
   - What are the strengths?
   - What are weaknesses?
4. What do you say about appropriateness of the teaching-learning methods used in the curricula?
   - What do you think about whether the teaching/learning methods enable students to develop the desired competencies?
   - What do think about the duration and balance between theoretical and practical training?
   - Do students have sufficient opportunity to apply what they learned?
   - Is the learning atmosphere supportive and friendly?
5. What do you say about the appropriateness of assessment methods used in the curricula?
   - What do think about the ability of assessment methods to distinguish competent from incompetent students?
   - What do think about the ability of assessment methods to support learning?
   - What do you think about the balance between knowledge assessment and practical assessment?
   - What do you think about the frequency and timing of assessment?
6. What do you say about availability and quality of teaching-learning resources?
   - What do you think about availability and adequacy of classrooms?
   - What do you think about availability and quality of books?
   - What do you think about availability of appropriate AV aids including computer and internet access?
   - What do you think about availability and quality of skills learning labs including anatomical models?
   - What do you think about availability of equipment and supplies during clinical practicum?
   - What do you think about adequacy of caseload at clinical practice sites?
7. What do you say about the availability, qualification and commitment of teaching staff including clinical preceptors?

- What do you think about the adequacy of teaching staff number?
- What do you think about the qualification and preparedness of the teaching staff to facilitate learning?
- What do you think about the willingness and commitment of teaching staff to support student learning?

8. What do you say about students enrolled into college?

- What do you think about the selection criteria?
- How prepared are they for college education?
- What do you think about their motivation to learn?
- What do you think about their effort to learn?

9. What do you think about the competency level of graduates from your college?

- Do you say students graduate after attaining the essential competencies expected of them?
- How prepared are graduates to deal with priority public health problems like TB, HIV, malaria, and sexual and reproductive health?

10. What do you say about quality assurance and improvement system in your college?

- What quality assurance and improvement mechanisms exist and what do you think about them?
- Continuous professional development opportunities for staff? Pedagogic training for staff?
- Are there career development plans for staff?
- Reward for good teaching?
- Regular staff meeting to discuss management issues?
- Student performance and teaching results are reviewed?
- How does your college get information about the competency of its graduates? How does this feed into the college's program development/improvement?

11. What is the role of stakeholders in the overall education process?

- Students
- Government (MOE/HERQA/REBs, MOH/RHBs)
- NGOs (including professional associations)
- Community and parents of students

12. What do you say about the support you get from the government (HERQA/MOE, regional education/health bureau) to assure the quality of education?

- Are you supported to meet accreditation standards? Describe how.

13. What do you think about the support you get from the owner(s) to assure quality of education?

14. What is your biggest challenge/barrier to assure quality of education?

15. What do you recommend to improve the quality of pre-service education in private medical colleges?

16. Any other comments?

Thank you

ANNEX 7: INTERVIEW GUIDE-GRADUATES

1. Tell me about yourself?
   - When did you graduate? From which college? In what discipline?
2. What do you say about the easiness or difficulty of finding job in your field?
   - How soon after graduation did you find job?
   - Roughly what percentage of your classmates have found job?
3. What do you say about the quality of your pre-service education?
   - Were you adequately prepared to provide safe beginning-level health care services at the point of graduation?
   - Did it equip you to tackle priority public health problems (TB, HIV, malaria and sexual and reproductive health)?
4. Which aspects of your pre-service education were useful?
   - What areas you found yourself prepared well?
5. What were the competencies your pre-service education did not prepare you well?
   - Which areas you felt you were deficient?
6. How do you assess your performance as a health care provider?
   - How well are you applying your knowledge, skills and attitude to providing quality health care services?
   - How supportive is your working environment to apply the knowledge, skills and attitude you acquired in school?
   - What is preventing you from providing quality health care services?
7. In hind sight, what do you say about the content and process of your pre-service education?
   - What do you think about the duration?
   - What do you think about the content including balance between theoretical and practical?
   - What do you think about the teaching-learning methods?
   - How competent and prepared were your teachers?
   - What do you think about the assessment methods?
   - What do you think about availability of learning resources?
   - What do you think about the learning environment (classroom, lab, clinical site)?
8. What changes might help to improve the quality of the training so that those inadequacies like that you faced shall be improved?
   - If you had the opportunity, what would you change about private colleges training?
   - What do you recommend to improve the quality of education in private colleges?
9. Any other comments?

Thank you

ANNEX 8: INTERVIEW GUIDE- HEALTH WORKERS SUPERVISING RECENT PRIVATE COLLEGE GRADUATES

1. How do you see the contribution of private medical colleges to meeting the national health workforce needs?

   - What proportion of health workers in your facility are graduates from private colleges?

2. What is your experience working with graduates from private medical colleges?

   - Tell me about your supervisory responsibility with graduates from private medical colleges

3. What is your assessment of the competency of private medical college graduates working in your facility?

   - Do they have safe beginning-level competencies at the point of employment?
   - In what areas did you find them well-prepared at the point of employment?
   - In what areas did you find them ill-prepared at the point of employment?
   - How well are they performing in their job currently?

4. What is your assessment of the professional behavior and attitudes of graduates from private medical colleges working in your facility?
5. What changes might help to improve the quality of training in private medical colleges so that those inadequacies like that you faced shall be improved?

   - Recommendations regarding duration
   - Recommendations regarding content including balance between theoretical and practical
   - Recommendations regarding teaching-learning methods
   - Recommendations regarding assessment methods

6. Any other comments

Thank you

ANNEX 9: FGD GUIDE-STUDENTS

1. Can you tell us your view of the quality of the college education you are receiving?
   - What are the strengths?
   - What are weaknesses?
2. What do you say about appropriateness of the teaching-learning methods used in the curricula?
   - What do you think about whether the teaching/learning methods enable students to develop the desired competencies?
   - What do think about the duration and balance between theoretical and practical training?
   - Do students have sufficient opportunity to apply what they learned?
   - Is the learning atmosphere supportive and friendly?
3. What do you say about the appropriateness of assessment methods used in the curricula?
   - What are your views regarding compatibility of assessment methods with educational objectives?
   - What do you think about the ability of assessment methods to distinguish competent from incompetent students?
   - What do you think about the ability of assessment methods to support learning?
   - What do you think about the balance between knowledge assessment and practical assessment?
   - What do you think about the frequency and timing of assessment?
4. What do you say about availability and quality of learning resources?
   - What do you think about availability and adequacy of classrooms?
   - What do you think about availability and quality of books?
   - What do you think about availability of appropriate AV aids including computer and internet access?
   - What do you think about availability and quality of skills learning labs including anatomical models?
   - What do you think about availability of equipment and supplies during clinical practicum?
   - What do you think about adequacy of volume and type of caseload at clinical practice sites?
5. What do you say about the availability, qualification and commitment of teaching staff including clinical preceptors?
   - What do you think about the adequacy of teaching staff number?
   - What do you think about the qualification and preparedness of the teaching staff to facilitate learning?
   - What do you think about the willingness and commitment of teaching staff to support student learning?

- Availability of teachers for out-of class consultation? Do they have schedules for such purposes?

6. What do you think about the competency level of graduates from private colleges like yours?

   - Do you say students from private colleges like yours graduate after attaining the essential competencies expected of them?
   - How prepared are graduates from the private colleges to deal with priority public health problems like TB, HIV, malaria, and sexual and reproductive health?

7. What do you say about availability and mechanisms for student evaluation of the education process?

   - Do students evaluate the teaching-learning process?
   - How and when are student evaluation of the education is done?

8. What do you say about student representation in the academic commission?
9. What do you say about counseling support for problems you encounter in the college?
10. What do you say is the biggest challenge/barrier to assure quality of education?
11. What do you recommend to improve the quality of pre-service education in private medical colleges?
12. Any other comments?

Thank you

ANNEX 10: FGD GUIDE-TEACHERS

1. Can you tell us your view of the quality of the education in the private medical colleges you are teaching?

   - What are the strengths?
   - What are weaknesses?

2. What do you say about appropriateness of the teaching-learning methods used in the curricula?

   - What do you think about whether the teaching/learning methods enable students to develop the desired competencies?
   - What do think about the duration and balance between theoretical and practical training?
   - Do students have sufficient opportunity to apply what they learned?
   - Is the learning atmosphere supportive and friendly?

3. What do you say about the appropriateness of assessment methods used in the curricula?

   - What are your views regarding compatibility of assessment methods with educational objectives?
   - What do you think about the ability of assessment methods to distinguish competent from incompetent students?
   - What do you think about the ability of assessment methods to support learning?
   - What do you think about the balance between knowledge assessment and practical assessment?
   - What do you think about the frequency and timing of assessment?

4. What do you say about availability and quality of teaching-learning resources?

   - Availability of office for instructors and their adequacy?
   - What do you think about availability and adequacy of classrooms?
   - What do you think about availability and quality of books for teachers and students?
   - What do you think about availability of appropriate AV aids including computer and internet access?
   - What do you think about availability and quality of skills learning labs including anatomical models?
   - What do you think about availability of equipment and supplies during clinical practicum?
   - What do you think about adequacy of volume and type of caseload at clinical practice sites?

5. What do you say about the availability, qualification and commitment of teaching staff including clinical preceptors?

   - What do you think about the adequacy of teaching staff number?
   - What do you think about the qualification and preparedness of the teaching staff to facilitate learning?

- What do you think about the willingness and commitment of teaching staff to support student learning?

6. What do you say about students enrolled into private medical colleges?

- What do you think about the selection criteria?
- How prepared are they for college education?
- What do you think about their motivation to learn?
- What do you think about their effort to learn?

7. What do you think about the competency level of graduates from private colleges like yours?

- Do you say students from private colleges like yours graduate after attaining the essential competencies expected of them?
- How prepared are graduates from the private colleges to deal with priority public health problems like TB, HIV, malaria, and sexual and reproductive health?

8. What do you say about quality assurance and improvement system in private medical colleges?

- What quality assurance and improvement mechanisms exist and what do you think about them?
- How are you supported to improve your teaching? Pedagogic training opportunity? Opportunity for continuing professional development?
- Career development opportunities? Reward for good teaching?

9. What do you say is your biggest challenge/barrier to assure quality of education?

10. What do you recommend to improve the quality of pre-service education in private medical colleges?

11. Any other comments?

Thank you.