





## USAID Health Workforce Improvement Program: Brief on Improving Quality of Pre-Service Education of Health Professionals

**Implementers**: Jhpiego, Amref, Ethiopian Medical Association, Ethiopian Nurses Association, Ethiopian Midwives Association, and Ethiopian Association of Anesthetists

Time Period: April 7, 2020-April 6, 2025

**Goal**: Ensure Ethiopia's health workforce is better skilled, motivated, and managed to achieve health Sustainable Development Goal targets

**Target**: 30 higher education institutions and seven professions (medicine, nursing, midwifery, anesthesia, pharmacy, medical laboratory, and public health officer)

**Rationale:** The Government of Ethiopia has made impressive progress in increasing the number of health workers thanks to a massive expansion in pre-service education (PSE) capacity. However, substantial gaps in the competence of the health workforce due to limited capacity of Ethiopia's higher education institutions (HEIs) and quality assurance agencies to ensure that students acquire the essential

competencies present a challenge to Ethiopia's aspiration to achieve universal health coverage and the Sustainable Development Goals. Since 2020, the U.S. Agency for International Development's Health Workforce Improvement Program (HWIP) has been supporting HEIs, the Ministry of Health, the Ministry of Education, the Education and Training Authority, and seven professional associations to improve quality of education.

Theory of Change: If HEIs implement competency-based education, faculty and preceptors improve their teaching skills, student engagement is enhanced, clinical education is strengthened, teaching/learning of national health priorities is improved, a culture of educational quality improvement is institutionalized, educational infrastructure is strengthened, use of digital learning technology is expanded, gender-transformative approaches are implemented, accreditation of health professionals education is strengthened, and the national licensing examination is strengthened, then the quality of PSE will improve.

## **Major Achievements**

- 1. **Optimized Adoption and Implementation of Competency-Based Curricula.** Competency-based education is the recommended curriculum model to maximize attainment of essential competencies by students. Between 2020 and 2023, adoption of competency-based curriculum increased from 72% to 100% (Figure 1). The quality of competency-based education improved with HWIP advocacy and with technical and financial support to strengthen curricula, develop/adapt problem-based learning cases, strengthen student assessment practices (e.g., introduction of exam blueprinting, objective structured clinical examination, and workplace-based assessments) and 40 hub-and-spoke virtual learning exchanges.
- 2. **Enhanced Faculty Development.** Instructors and preceptors must have opportunities for continuous professional development to improve their teaching effectiveness. Over 4,064 instructors, preceptors, skills lab assistants, and academic leaders benefitted from faculty development, including effective teaching skills, student assessment methods, problem-based learning, clinical preceptorship, simulation-based training, student assessment methods, elearning, and academic leadership, through a fixed amount award and technical assistance provided by HWIP. As a result, the proportion of HEIs that organized faculty development during the academic year increased from 58% at baseline to 100% in 2023 (Figure 1).
- 3. Strengthened Clinical Education. Clinical education plays a central role in developing health care delivery skills and professional behaviors. HWIP strengthened clinical education by supporting preceptorship skills training of 384 preceptors and skill lab assistants, expansion of clinical practices, strengthening collaboration between HEIs and clinical practice sites, and generating research evidence on clinical skills education.
- 4. **Strengthened Teaching of National Priority Health Conditions.** HEIs must prioritize national health conditions in the teaching and learning process to prepare fit-for purpose graduates. HWIP strengthened teaching of priority health conditions by supporting technical update training of 793 instructors and preceptors, promoting use of national guidelines in teaching and learning, and development of 63 problem-based learning cases on national priorities. Notably, the percentage of HEIs that provided technical updates on priority health conditions to their

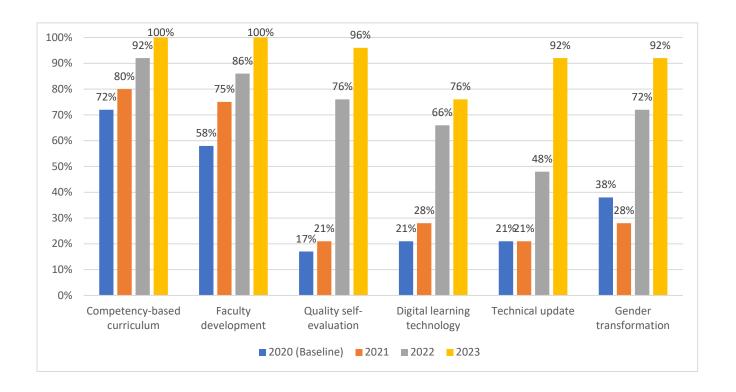
<sup>&</sup>lt;sup>1</sup> Frenk J, et al. Health professionals for a new century: transforming education to strengthen health systems in an interdependent world. Lancet. 2010 Dec 4;376(9756):1923-58. DOI:10.1016/S0140-6736(10)61854-5

- faculty and teaching staff during the academic year increased from 21% at baseline to 92% in 2023 (Figure 1).
- 5. Strengthened Educational Infrastructure and Resources. Clinical skills labs are essential resources for development of practical competencies in a simulated environment. HWIP donated 656 mannequins and skills lab materials and provided training and technical support to skills lab managers/assistants to optimize the management and use of skills labs for clinical skills teaching, learning, and assessment.
- 6. Institutionalized a Culture of Continuous Education Quality Improvement. Strengthening the internal quality assurance system in HEIs is necessary to assess, enhance, and monitor the quality of PSE on an ongoing basis. As a result of HWIP's persistent advocacy and technical and financial support, the proportion of HEIs that conducted regular program self-evaluation using national standards increased from 17% at baseline to 96% in 2023 (Figure 1). Attainment of standards also improved, for example by 13 and 9 percentage points in medicine and nursing programs, respectively.
- 7. Promoted Gender-Transformative Education. Female students perform less well than their male counterparts in Ethiopia due to discriminatory gender norms and practices. HWIP provided advocacy, technical and financial support to establish or strengthen gender offices in HEIs and to examine and question gender imbalances through gender transformative interventions, such as life skills training, tutorial and material assistance to 7,998 students, and training of 564 faculty on gender-based violence and gender-responsive pedagogy, conducting a gender audit in HEIs, establishment of female academic staff forums in 15 HEIs, appointment of 405 female academic leaders, among other things. As a result, the percentage of HEIs implementing multiple gender-transformative interventions increased from 38% at baseline to 96 % in 2023 and the participation of women in academic leadership rose from 9% to 16% (Figure 1).
- 8. **Expanded Use of Digital Learning Technology**. Digital technology has the potential to improve the quality and efficiency of teaching, learning, and assessment. As a result of HWIP's technical and ICT infrastructure strengthening support, the percentage of HEIs using digital technology in teaching, learning, and assessment increased from 21% at baseline to 76% in 2023 (Figure 1). Notably, 18 HEIs began implementing computer-based testing, 12 HEIs introduced digital skills lab scheduling and management system, and three HEIs designed blended learning courses for their PSE courses.
- 9. **Strengthened Accreditation System**. The World Health Organization strongly recommends establishing or strengthening accreditation to transform health professionals' education.<sup>2</sup> HWIP strengthened systems for accreditation of health professionals' education by supporting the Education and Training Authority and professional associations to develop or update the accreditation directive, standards, and tools and to train over 962 people.
- 10. Strengthened National Licensing Examination. The purpose of a national licensing examination is to verify the competence and readiness of graduates for safe and effective healthcare delivery upon entering the workforce. HWIP strengthened the national licensing examination by supporting the Ministry of Health to review and update licensing exam blueprints, shift to computer-based testing to improve exam administration efficiency, and conduct post-

<sup>&</sup>lt;sup>2</sup> World Health Organization. 2013. Transforming and scaling up health professionals' education and training. https://www.who.int/publications/i/item/transforming-and-scaling-up-health-professionals%E2%80%99-education-and-training

examination analysis and research to improve the quality, fairness, and impact of the licensing examination.

Figure 1. Percentage of HEIs that implemented key interventions, 2020–2023



## **Results**

HWIP has strengthened institutional capacity of 30 HEIs, seven professional associations, and the Ministry of Health, the Ministry of Education, and the Education Training Authority and positively impacted the quality of learning of **27**, **851** health science students. Importantly, the pass rate in national licensing examination has increased by 13 percentage points from the baseline in 2020 (Figure 2). The gender disparity in student drop-out rate has disappeared (Figure 3).

Figure 2. Percentage of students who passed the national licensing examination at first attempt, 2020–2023

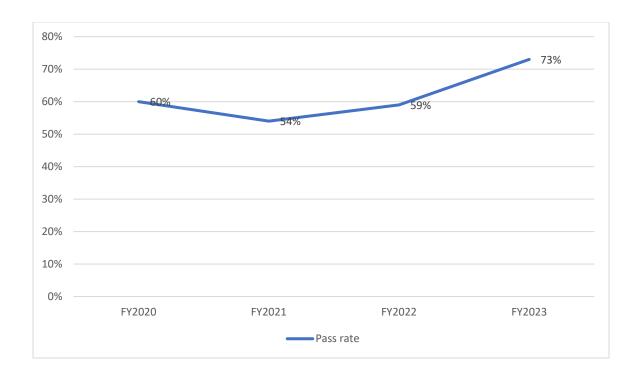
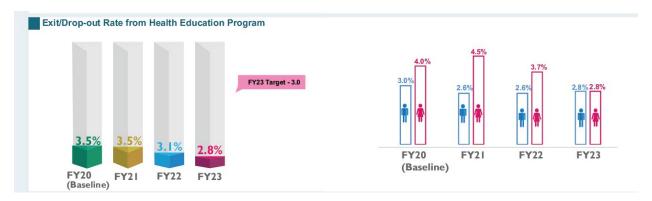


Figure 3. Drop-out rate from health professionals' education programs, 2020–2023



## **Major Challenges**

The COVID-19 pandemic, armed conflict, and insecurity presented major challenges to effective and efficient implementation of HWIP interventions.