Introduction

The International Labor Organization (ILO) estimates that there are 64 million unemployed youth and 145 million youth living in poverty. At the same time, the World Health Organization (WHO) Global Human Resources for Health (HRH) Strategy: Workforce 2030 estimates a worldwide health workforce shortage of 18 million, and potential for the creation of 40 million new health jobs by 2030.

The number of youth who need jobs combined with a global need for health workers presents a ‘win-win’ opportunity. Health workforce shortages offer an opening to prepare and employ young people for decent and meaningful work in the health sector. To achieve Workforce 2030 goals, universal health coverage (UHC), and Sustainable Development Goals (SDGs), including gender equality, decent work, and health equity, the global community must capitalize on employment opportunities in the health sector and prepare youth to effectively contribute to the future health workforce.

Through this technical brief, the United States Agency for International Development (USAID)-supported Human Resources for Health in 2030 Project (HRH2030) explores how technical and vocational education training (TVET) could more effectively build and sustain young people on career paths in the health sector.

Transforming health workforce education pathways

Youth must gain relevant, work-ready skills that respond to current and future labor market needs. In many technical sectors – including health – TVETs have the potential to address the challenges of employability and unemployment and are well positioned to address youth employment.

Globally, there is a disconnect between health professional education institutions and public and private sector health employers. Pathways to higher education for unemployed youth may be limited due to application requirements, access to education institutions, or financial barriers. TVETs can provide an alternative path and address these gaps. While some health workforce cadres require three to seven years of education, disadvantaged youth need work now. TVETs offer certification in paraprofessional health cadres as alternatives to four-year institutions, yielding marketable skills in less time and at a lower cost. For example, allied health profession jobs (i.e., pharmacy technician, laboratory technician, phlebotomist, and others) often require no more than one to two years of post-secondary training.

Because of the often shorter duration of certification programs, TVETs offer the potential to be more flexible to respond to changes in the labor market than traditional tertiary education institutions. While adjusting curricula for doctor and nursing programs is difficult, requiring a time-intensive process, this is often not the case for TVET programs. In addition, TVETs are well placed to address concerns expressed by a 2018 OECD health workforce skills assessment highlighting the needs for interpersonal and soft skills essential for achieving person-centered care. Greater inclusivity and diversity in terms of which youth enter and remain in the health workforce is needed.

There is no #UHC without #healthworkers and there is no #healthworkforce without #youth.

— Basem Higazy, 2018 Youth Hub Leader, WHO Global Health Workforce Network
How can TVETs unlock potential opportunities to address youth unemployment, improve education opportunities, respond to health labor market demands, and ultimately deliver health for all? This brief explores ideas and best practices to achieve these objectives.

**Best Practices and Promising Partnerships for TVETs and Health Employers**

Adapting the WHO health labor market framework and USAID’s YouthPower Positive Youth Development (PYD) framework, HRH2030’s Youth Employment in Health framework (see Figure 1) illustrates a vision for optimal partnerships for engaging and preparing youth to become the future health workforce needed to achieve UHC. Partnerships and opportunities are organized by the PYD framework categories of contribution, enabling environments, assets, and agency. Broadly, this framework conveys recommendations for TVETs to collaborate with local employers to integrate the necessary assets, or skills, that youth need to be fully prepared to enter the health workforce; engage young people to contribute to their own professional development; support youth on their professional paths; and promote continual learning.

To see how this framework could be applied to a country context, HRH2030 conducted a case study in Indonesia. Read more here to learn about the case study approach and opportunities identified.

In the following sections, we consolidate approaches, partnerships, recommendations, and opportunities for TVETs and employers to support youth for careers in health.

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**Enhance youths’ contribution to the health sector by addressing barriers to their engagement**

When considering which youth seek to enroll and complete health training, many promising young people may not be aware of the diversity and flexibility of careers in the health sector. Some young people may perceive being a doctor as out of reach, due to the length or cost of the program. Others may not be aware of the job demand for allied health professionals—or even know what an allied health professional is. Further, when TVETs are not located in underserved or remote areas, youth from those areas often cannot attend these institutions due to distance and costs. According to the HRH2030 Youth Employment in Health framework, there are several actions institutions can take to overcome these barriers to engagement:

- **Recruit and support high-potential students committed to their communities**

  By focusing on youth where they live, TVETs could better respond to health system needs to reach all, especially those in more remote communities. For example, pillar 3 of WHO’s retention guidelines and recommendations supports recruiting students with rural backgrounds to increase the likelihood of graduates choosing to practice in rural areas. Governments and schools need to implement cohesive strategies including school outreach, education preparatory courses, admission policies that recognize diversity of geographic backgrounds and experiences, and tuition and scholarship support to make education affordable. WHO’s recommendations also include locating health professional schools outside of major cities and introducing strategies such as distance education and e-

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**FIGURE 1: YOUTH EMPLOYMENT IN HEALTH FRAMEWORK**

- **CONTRIBUTION**: Youth engagement and vocation for a career in health
- **ENABLING ENVIRONMENT**: Support, value, and recognition; physical and psychological safety; inclusion; opportunities for community/professional engagement
- **ASSETS & AGENCY**: Personal and demonstrated interpersonal & STEMM (Science, Technology, Engineering, Math, and Medicine) skills; formal education and training; perseverance and goal-setting; positive identity & self-efficacy

**EDUCATION SECTOR**

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<thead>
<tr>
<th>Best Practices to Build a Youth Health Workforce</th>
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<tr>
<td>Recruit high-potential students committed to their communities</td>
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<td>Provide opportunities for professional preparation</td>
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<td>Further develop interpersonal &amp; STEMM skills</td>
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<td>Engage employers to develop relevant, practical curricula</td>
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**EMPLOYMENT IN HEALTH**

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<th>Best Practices for Optimizing and Sustaining the Health Workforce</th>
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<td>Focus on “priority-for-purpose” sector jobs</td>
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<td>Establish career development paths in emerging areas</td>
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<td>Provide mentoring and continuous professional development</td>
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<td>Promote diverse work and career professionalization</td>
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Adapted from Sauna et al. 2013 and Heaven et al. 2016.
learning approaches to give more rural residents access to education.

Further, exposing secondary school students to the diversity of health careers can spark interest in previously unknown opportunities and connect youth to models and mentors. Johnson & Johnson’s long-standing Bridge to Employment (BTE) program has worked with local secondary schools, health professional institutions, employers, and community organizations in more than 16 countries around the world to develop strategies for youths’ academic enrichment, career readiness and exploration, and higher education exploration and preparation. The BTE model’s involvement of community organizations and employers in the partnership ensures that it is appropriately adapted to the local labor market needs, and can be sustained over time as they are invested in addressing a commonly understood gap of improving youth’s work readiness skills.

✓ Enact policies and invest in programs aligned to the health labor market

Employers and educators can engage governments to better understand the health labor market and work together to invest in programs and policies to align youth skills and assets to the growing health sector. Promoting TVET starts at the top, and governments—national, regional, and local—have a responsibility to enact supportive policies that provide funding for institutions and ensure appropriate infrastructure is in place to facilitate learning and provide viable career options and decent work for youth. According to WHO guidance, governments at all levels can adopt intersectoral approaches and action plans, allocating financial resources towards transforming education, skills, and job creation. Increasing investments in the health sector expands job creation and stimulate and strengthen economies.

In some countries, it has proven beneficial for governments to engage actively with nongovernmental actors to respond to health labor market needs. For example, in South Africa, the provision of HIV service delivery – specifically antiretroviral treatment (ART) – has expanded rapidly, which has placed pressure on pharmaceutical services. To address this health workforce shortage, the NGO Kheth’Impilo developed a pharmacist assistant training program in which community members, many of them young people, can earn a pharmacy assistant qualification over a two-year period. Kheth’Impilo works with the Provincial Departments of Health to create posts to increase the likelihood of gainful employment for program graduates.

While not the focus of this technical brief, the COVID-19 pandemic has highlighted the importance of the health workforce and the need for governments to respond to changes in the health labor market. This pandemic has opened additional job opportunities for youth graduates, such as contact tracers, support for index testing, or COVID-19 information call centers. The COVID-19 pandemic underscores the need to continuously understand how current events affect the health labor market.

Support youths’ enabling environment for successful health training and careers

Young people require support, value, and recognition for their achievements, both during health studies and as they enter the job market. A supportive enabling environment – such as youth-oriented partnerships, engaged family members and mentors, and flexible learning – can mitigate the economic, familial, cultural, geographic, and financial hardships that young people face and therefore support more youth to pursue studies.

✓ Develop both formal and informal structures/partnerships for two-way communication and engagement with TVET students and their families

Around the world, NGOs, governments, and donors have aimed to enhance employment opportunities for youth. One optimal partnership to highlight is found in Kenya, where youth outreach and engagement is proving to be a powerful tool in reaching future members of the workforce. The USAID-supported K-YES program provides training to unemployed and underemployed youth who have not finished secondary school. One project initiative links K-YES graduates to a mentoring app and monitors them through a managed database. In addition, local resource centers help to foster youths’ marketable skills and confidence.

Another example of strong partnerships, in Rwanda, the Akazi Kanoz2 (AK2) project implements a Work Ready Now! curriculum which offers a customizable format that includes modules on personal development, communication, job seeking and workplace behaviors. In addition to the core curriculum, AK2 provides specialized workforce development skills training and resource programs for youth, including workforce linkages opportunities such as internships, and apprenticeships.

In addition, TVETs should engage family decision-makers to nurture familial support over the course of a student’s enrollment, admission, study, course completion, and graduation. Family members may be influential in identifying and reducing barriers that contribute to student attrition. Several youth interviewed for HRH2030’s TVET case study in Indonesia cited family involvement when considering their area of study and employment options. For example, students reported enrolling in midwifery programs rather than other cadres (such as pharmacy or laboratory technicians) as midwifery was a position viewed favorably by their family. Other youth reported turning down job offers because family members were not supportive of the job due to clinic hours or location.
Design flexible learning approaches and timelines

Educators can consider developing accelerated curricula to truncate the school-to-work timeline. Under the “No Worker Left Behind” initiative, the state of Michigan developed accelerated education programs to address shortages of healthcare workers through the Michigan accelerated Health Care Training Initiative (MiAHCTI), reducing program times from a few weeks to 24 months.

Flexible continued learning models are one way of creating supply to meet growing demand for health workers. In Afghanistan, an accelerated course in midwifery is available so that students can go through coursework and receive the same certifications as other midwifery students, but complete their studies in half the time. Similar actions have been taken in Ethiopia and Ghana and are proving to be effective models in reducing the school-to-work timeline.

Improve youth graduates’ assets for health jobs

TVETs have an opportunity to strengthen youth graduates’ assets—the foundational competencies and interpersonal skills required for a successful career in health. HRH2030 recommends focusing on both interpersonal skills and science, technology, engineering, math, and medicine (STEMM) competencies within practical curricula that are relevant to the local job market. Although the skill level needed varies for different cadres, basic math and science skills are important for the day-to-day tasks of many health care careers.

Identify and bolster in-demand competencies required for health jobs, informed by labor market needs

In recognizing current and anticipated competency gaps within their health workforce, employers can collaborate with TVET institutions to ensure curricula and education programs are designed to meet these needs. The International Youth Foundation has developed a toolkit which includes a series of guidelines and tools to aid in identifying gaps, which may be related to assets such as interpersonal skills or professionalism.

Other competency gaps may be related to STEMM, computer skills, or critical thinking. Alternatively, they could be higher-level, more specific occupational competencies. GE Healthcare’s collaboration with Tata Trusts provides a successful model in India focusing on specific occupational skills. Through this collaboration they have drawn on private hospital networks to identify necessary and appropriate hard and soft skills required for entry level jobs in their institutions and incorporated them into their training programs.

Reinforce interpersonal and STEMM skills

The 2018 OECD health workforce skills assessment highlighted skills for providing personalized care ranging from non-routine tasks in a complex environment, and skills that support a positive work culture. Technical and clinical skills matter, but so do “transversal,” or cross-cutting interpersonal skills, communication, teamwork, and openness. The value of these skills was highlighted in an assessment of workforce connections for Kenyan youth.

One country showing success in this area, Rwanda, has focused on building youth’s capacity in STEMM fields since 2003. Its national strategy centers on fostering a strong STEMM ecosystem and investing in policies aligned to incentivize STEMM innovation and growth including building strong STEMM education systems in secondary schools and TVET programs. Specific initiatives include holding ‘world science day,’ a series of competitions to spark interest among youth in STEMM, and the creation of Rwandan TechWomen to encourage women to pursue STEMM careers through mentorship and cross-country exchange.

Equally as important as STEMM skills are soft skills. One analysis of the benefits to both youth and the labor force show interpersonal and intrapersonal skills are often lacking and are gained through informal education. Through HRH2030’s case study in Indonesia, employers noted the importance of soft skills when making hiring decisions, while simultaneously, youth commented that career counseling and guidance was not provided through their TVET education. This mismatch highlights the opportunity to reinforce youth soft skills to better prepare them for the workforce.

One example of how to address these gaps is provided by The African Center for Global Health and Social Transformation (ACHEST), which developed a three-day training curriculum to provide newly qualified health professionals with soft skills needed to build the foundation for resilient and successful health workers. The course helps these young professionals foster self-confidence, build strong relationships, and gain an understanding of how to navigate the challenging work environment as well as the significance of teamwork.

In addition to interpersonal and STEMM skills, health care is increasingly relying on technological innovations to help drive service delivery. Many health careers require knowledge and skills for effective use of information, communication, and technology (ICT). The K-YES program, previously mentioned, provides youth with necessary tech training to improve those IT competencies.
Promoting positive self-efficacy and identity will support youth for successful careers in health, which can be shaped by education institutions and employers.

✓ Raise awareness of health sector jobs early
Youth are often unaware of career opportunities in the health sector, beyond that of doctors and other specialists. For example, a health workforce assessment in South Africa identified constraints to youth employment in health that included weak systems for career exposure, information and guidance about opportunities in the health sector, and unclear pathways and disparate information on health occupations. This assessment also found that the need for career guidance and structural support was greatest felt in rural areas.

Opportunities exist for both educators and employers to build partnerships and put systems in place to facilitate young people’s exposure to the sector. For example, the BTE program creates these connections through building long-term partnerships between businesses, educators, community groups, and parents to increase the number of youth pursuing careers in health. Also, the ACHEST curriculum introduces graduates to the job market and career progression.

✓ Foster diverse and well supported mentoring programs
Another important contribution to support youth’s agency can be made through diverse, well-prepared, and well-supported mentors. Youth need mentors who understand their challenges to TVET enrollment and completion, as well as ongoing mentoring as they enter the formal workforce. Once in the workforce, young professionals will continue to benefit from on-the-job mentorship, guidance, and resources for continual professional development. TVETs can play a role to facilitate support to career resources. For example, within the BTE programs, local partners maintain strong alumni chapters that provide continual mentorship and support to young people as they grow.

Conclusion
The future of the health workforce relies on those who are working to build and strengthen it. TVETs can offer a ‘win-win’ solution by satisfying health workforce shortages and simultaneously helping youth find productive work. Educators, employers, government, and youth are dependent on one another to ensure mutual success. Youths’ success in the health sector is dependent on their educators and their institutions preparing them for the workforce. Employers are equally dependent on these institutions for youth with work-ready skills. Institutions rely on the public sector for funding and supportive policies to equip the next generation of health workers with the training they need to gain decent work. Opportunities exist for educators and employers to support youth for careers in health, economically empowering young people and filling health workforce needs.

www.hrh2030program.org
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