Welcome to the third edition of our rehauled Skills4Dev Knowledge Digest. Whether this is your first time reading this digest or you are already one of our devoted readers, we hope you find this new thematic format helpful. This month we are bringing together World Bank subject-matter experts currently working on various fronts to collaborate and share their knowledge on the pressing topic of global healthcare workers: education, mobility, and financing.

We welcome ideas, suggestions, and questions at skillsgsg@worldbankgroup.org. Learn more about what the GSG can do for you at the end of this digest.

Happy reading!

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**Editorial**

Many health professionals around the world work in countries different from the ones in which they were born. Because of a shrinking working-age population, OECD countries are increasingly recruiting internationally. At the same time, many low- and middle-income countries (LICs and MICs), such as Lesotho and South Africa, recruit internationally as they do not train enough students in medical and health fields to treat their population.

Many health professionals migrate because they expect to earn significantly lower wages at home than abroad or are confronted with high unemployment at home as fiscal constraints limit the number of health jobs available in the public sector. Migration is also often the only way for medical specialists to gain
relevant professional experience. In some countries, including the Philippines or Romania, the opportunity of employment abroad has increased the numbers of medical and nursing students and the total stock of medical professionals, as not all graduates end up migrating. However, in Croatia, the number of nurse students dropped by half after the curriculum was restructured in 2012 to ensure better education quality, enable nursing schools to be EU accredited, and facilitate access to health jobs in the EU. While out-migration of health professionals has raised concerns in origin countries, the multiple layers of this phenomenon need to be considered to fully understand its real implications, including in education and health workforce management.

Education policy plays a vital role in ensuring that health workers provide quality care. While governments will have to increase the number of students in medical fields, most education systems in LICs and MICs do not have the capacity to train more health students, and universities report high vacancy rates among medical faculties. As a result, many medical and nursing graduates have degrees that are not being fully recognized in destination countries. Lack of teaching forces, poor infrastructure, outdated curricula, weak accreditation, and quality assurance are all challenges faced by LICs and MICs. Additionally, the general education system will need to produce qualified students ready for health studies. In LICs and MICs, many children are not acquiring foundational skills, and many students perform poorly in relevant science fields (including mathematics, biology, chemistry, and physics), and in digital skills.

Another concern is that physicians benefit from an expensive government-financed medical education and then leave their countries to work and pay taxes abroad. To train more health professionals, governments therefore need to find new ways to finance medical education, including options such as income-contingent student loans (ICLs). ICLs have been successfully used in the Netherlands, Ireland, the United Kingdom, and Hungary to finance higher education. Through this instrument, students start repaying their loans only once they are earning an income above a certain threshold. Global skills partnerships are another example through which origin and receiving countries can strengthen the supply of health professionals across the world. Via these programs, destination countries technically and financially support the training of students likely to migrate in sectors which are deemed essential and face current shortages.

Finally, research shows that the extent to which the so-called medical brain drain phenomenon takes place might be overestimated when differences between countries of birth, education and employment are not considered. Hence, a substantial increase in data and analysis will be required to fill the current dearth of information on the migration of health professionals.

This edition showcases a curated repository of work and information that provides an in-depth discussion of the challenges mentioned above. And it also presents the latest research concerning the education and skills aspects of the emerging global challenges of healthcare provision. Collaboration between health, education, and labor practitioners will become essential to address these challenges. We hope you enjoy the reading!

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FEATURED WORKS ON GLOBAL HEALTHCARE WORKERS

The Future of Medical Work in Southern Africa
Ivins et al. | Discussion Paper | March 2022

This is the first analysis of the future of medical work in South Africa, which was conceived before COVID-19 disrupted health systems and economies around the world. This case study includes an analysis of the effect of the COVID-19 pandemic on the health workforce in South Africa.

A Global Skill Partnership in Nursing between Nigeria and the UK
Adhikari et al. | Case Study | July 2021

This case study – jointly done by CGD and World Bank – outlines how the Global Skill Partnership model could be applied to boost the number of skilled professionals in the health care sector in Nigeria and Europe, and to foster ethical and sustainable health worker migration between Nigeria and the UK.

Eastern, Central and Southern African Region. Education and Labor Markets for Nurses
World Bank et al. | Report | 2021

This co-publication with ECSACON, ICN, and Jhpiego, presents a comprehensive assessment of the education and labor markets for nurses in the ECSA region. The report also describes the nursing educational market, including the composition of training institutions and types of degrees.
Health Workforce Mobility from Croatia, Serbia and North Macedonia to Germany
Schneider et al. | Report | February 2021

This study focuses on the magnitude and effect of health workforce migration from Croatia, Serbia, and North Macedonia to Germany, and examines how increased mobility affects the health and education sectors in these countries and whether governments should be concerned about this mobility and should take actions accordingly.

Recent Trends in International Migration of Doctors, Nurses and Medical Students
OECD | Report | July 2019

This OECD report describes how the international migration of doctors, nurses, and medical students in OECD countries has evolved over the past decade, including country case studies. These recent trends are examined in the context of larger migration patterns, including the increasing mobility of students and highly skilled workers in general.

Medical Worker Migration and Origin-Country Human Capital: Evidence from U.S. Visa Policy
Abarcar and Theoharides | Article | October 2021

This journal article examines the changes in U.S. visa policies for nurses to measure the origin-country human capital response to international migration opportunities, using the data on all migrant departures and postsecondary institutions in the Philippines.
The Future of Medical Work in Southern Africa: Lesotho Case Study
Ivins et al. | Discussion Paper | March 2022

This is the first analysis of how global trends will affect medical work in Lesotho. This study was conceived before COVID-19 disrupted economies and health systems across the world. The analysis offers a series of policy recommendations to the government.

Building Resilient Migration Systems in the Mediterranean Region: Lessons from COVID-19
Testaverde and Pavilon | Report | June 2022

This report presents evidence on the effects of the COVID-19 pandemic on mobility in the Mediterranean region. The report underscores problems with the migration system that existed long before the pandemic and offers policy recommendations to improve the system so that future shocks are less disruptive.

Skilled Migration: A Sign of Europe’s Divide or Integration?
Bossavie et al. | Book | March 2022

This book uses empirical analysis to present recommendations for labor market and education policies and identify effective ways to address the various costs that migration induces among different skill groups, including healthcare professionals, within regions that send migrants and those that receive migrants.

Additional publications on Global Healthcare Workers

Income Contingent Student Loan Design: Lessons from around the World
Britton et al. | Journal Article | August 2019

This paper is the first comparative exercise of impact of the design of income contingent loans for higher education students in different settings and summarizes the changes in the government loan subsidies as a consequence of modifications to the interest rate, length of repayment period, repayment rates and threshold, and graduate earnings variability.

Income contingent loans in higher education financing
Chapman | Article | February 2016

This article examines the potential benefits of income contingent loans for student debtors and for governments, comparing with the government-guaranteed bank loans, and summarizes the pros and cons of both forms of higher education student loans.

Challenges and opportunities for educating health professionals after the COVID-19 pandemic
Frenket al. | Journal Article | October 2022

This article lists institutional and instructional reforms to assess what has happened to health-professional education since the Lancet Commission published the report in 2010 on transforming education to strengthen health system, and how the COVID-19 pandemic altered the education process.

The World Needs More and Better Nurses: Here’s How the Education Sector Can Help
Tanaka and Miyamoto | Blog | October 2022

This blog, written by the education team with input from the health team of the World Bank, shares some ideas about how the education sector can help address a shortage of healthcare workers, especially focusing on nurses, and meet the demand for quality health care workers, by highlighting existing World Bank supports and additional efforts to build on existing efforts.

Recover to Rebuild: Investing in the Nursing Workforce for Health System Effectiveness
Buchan and Catton | Report | March 2023

This policy report, commissioned by the International Council of Nurses, highlights individual nurses and the profession which have been severely damaged by the COVID-19 pandemic, using data from more than 100 studies from around the world. The report sets out the urgent policy action agenda, including education and training, for 2023 and beyond to protect and support the nurse workforce for health system rebuild.

The Economics of Health Professional Education and Careers: Insights from A Literature Review
This study is a scoping review of the literature mainly covering the last two decades to seek evidence related to historical trends and globalization, specialty choice among health professionals and its health labor market determinants, the value and effectiveness of health professional education and the market for health professional education.

How Information Technology is Improving Nursing Education in Vietnam
Sang | Blog | May 2021
This blog highlights the competency gaps among nursing students in Vietnam and the World Bank’s support to the government to improve the quality of education for health professionals, including upgrading the curricula to competency-based ones and adopting information technology in nursing education.

The Future of Nursing 2020-2030: Charting a Path to Achieve Health Equity
National Academies of Science, Engineering, and Medicine | Report | May 2021
The report discusses the key areas for strengthening the nursing profession to meet the challenges of the decade ahead, including the nursing workforce, leadership, nursing education, nurse well-being and emergency preparedness and response, and the responsibilities of nursing about structural and individual determinants of health. Chapter 7 provides an overview of the nursing education system and the need for integrating equity into education.

World Health Organization | Technical Document | April 2020
This report aims at providing a vision and forward-looking agenda for nursing policy, including policies around nurse education and training. The report explores contemporary evidence, using robust and the latest data and most up-to-date evidence on the nursing workforce.

The Nurse Workforce in the Eastern Caribbean: Meeting the Challenges of Noncommunicable Diseases
Carpio and Fuller-Wimbush | Report | June 2016
This report examines the status of the nurse workforce in the Eastern Caribbean, based on case studies conducted in four countries: Dominica, Grenada, St. Lucia and St. Vincent and the Grenadines. The report explores possible best approaches to strengthen its capacity to respond to the growing burden of Noncommunicable diseases. Chapter 5 highlights the education and training system in each case country. The toolkit was also developed based on the findings of the study.

The Global Strategy on Human Resources for Health: Workforce 2030
World Health Organization | Publication | July 2020
The Global Strategy was developed through an extensive consultation process, and primarily aimed at planners and policymakers of Member States. However, its content benefits all relevant stakeholders in the health workforce area, including public and private sector employers, professional associations, education and training institutions, labor unions, bilateral and multilateral development partners, international organizations, and civil society.

International Migration and Movement of Nursing personnel to and Within OECD countries – 2000 to 2018: Developments in Countries of Destination and Impact on Countries of Origin
Socha-Dietrich and Dumont | Working Paper | February 2021
For policy dialogues at the national and international levels, this working paper aims to present the most recent data on the extent to which migrant nurses contribute to the nursing workforce in the OECD countries. The paper also presents the impact these regular migration flows have on their origin countries, using the data since 2000.

Migrating to Opportunity: Overcoming Barriers to Labor Mobility in Southeast Asia
Testaverde et al. | Book | October 2017
This report discusses the barriers that workers face when seeking to migrate for work. The report takes an innovative approach to estimate the costs for workers to migrate internationally and
studies the implications of these costs for worker welfare under the increased economic integration planned for ASEAN.

What Really is Brain Drain? Location of Birth, Education, and Migration Dynamics of African Doctors
This working paper first highlights the necessity of identifying where migrants were born, educated, and when they moved to the destination countries for the proper analysis of flows and impacts of skills migrations. The paper also identifies key patterns in career paths of the skills migrants, highlighting the doctors practicing in the United States who were born and/or trained in Africa, using data from the American Medical Association (AMA) and American Community Survey (ACS) via propensity score matching techniques.
This knowledge digest is a product of the Skills Global Solutions Group, co-led by Education Global Practice and Social Protection & Jobs Global Practice. Other contributors to this edition are Judith Perez (Skills4Dev Knowledge Digest Coordinator) and Gemma Rodon (Education Analyst).