

### FHSMUN 46

## WORLD HEALTH ORGANIZATION (WHO)

# ADVANCING EQUITY AND CAPACITY IN GLOBAL HEALTHCARE SYSTEMS

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#### Role of Health

In the pursuit of global healthcare equity and sustainability, the health of individuals plays a vital role, both as a fundamental driver and an outcome. Healthcare systems that have been developed to serve as a means for helping treat health concerns; however, that being said, they rely heavily on the health status of people to maintain the effectiveness of their role in society. The interplay that exists between peoples' health and the capacity of healthcare systems has contributed greatly in bringing attention towards areas where healthcare needs to be improved or lacks sufficient attention, while also helping advance the sustainability of those systems for future generations. The World Health Organization (WHO) has recognized that in order to fulfill the Sustainable Development Goal (SDG) 3, which accounts for good health and well-being, achieving Universal Health Coverage (UHC) is essential, as it continues to promote the idea that everyone has the ability to receive to equal quality healthcare without the burden of accessibility or financial struggles<sup>1</sup>

Health, as described by the WHO is, "A state of complete physical, mental, and social well being and not merely the absence of disease or infirmary." As a factor of what shapes the essence of a successful healthcare system, health runs far beyond metrics pertaining to disease burden or mortality rates. In addition to the spread of health concerns, accessibility of well developed systems and their maintenance also play a large role in what ultimately leads to successful healthcare. The right to health was initially recognized in the WHO constitution in 1946 then later also added as a clause within the Universal Declaration of Human Rights in 1948<sup>3</sup>. Furthermore, during the International Conference of Primary Healthcare in 1978, The Declaration of Alma-Ata was adopted, which reinforced the ideology that public healthcare was essential for attaining the goal of health for all.<sup>4</sup> While the declaration too, strongly emphasized the inequality that existed in healthcare as it was and advanced the idea that more emphasis should be placed on closing these gaps, the divergence in convenience to sufficient healthcare still exists today. These disparities manifest in several dimensions including economic factors, healthcare workforce distribution, and geographic variation.

The emergence of the COVID-19 pandemic that took the world by storm in 2020 and continually left impacts until today illuminated persistent healthcare inequities by showing areas that had clear variations in their healthcare systems. Despite decades of progress towards achieving more equitable healthcare, the devastation from the spread of the coronavirus showed that resources and access to healthcare still remain deeply uneven. The WHO estimates that

https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc).

<sup>&</sup>lt;sup>1</sup> "Universal Health Coverage (UHC)." World Health Organization, October 5, 2023.

<sup>&</sup>lt;sup>2</sup> "Constitution of the World Health Organization." World Health Organization. Accessed January 24, 2025. https://www.who.int/about/governance/constitution.

<sup>3 &</sup>quot;Human Rights." World Health Organization. Accessed January 24, 2025. https://www.who.int/health-topics/human-rights#tab=tab\_1.

<sup>&</sup>lt;sup>4</sup> "Declaration of Alma-Ata." World Health Organization. Accessed January 25, 2025. https://www.who.int/teams/social-determinants-of-health/declaration-of-alma-ata.

around 92% of countries reported disruptions to essential services amidst the height of the pandemic, and 82% of those countries continue to report disruptions.<sup>5</sup>

In Brazil, research shows the country to be a leader of cases and mortalities caused by COVID-19, alongside having some of the world's highest levels of income inequality.<sup>6</sup> In addition, reports containing informative statistics from the pandemic, alongside impacts that have lasted until current day, show that the socioeconomic differences in Brazil display a significant variation in regard to the impact faced by groups of individuals. Statistics reveal that the areas of Brazil with the highest mortality are in the Northeast and Southeast regions in areas including Rio De Janeiro, Sao Paulo, Pernambuco, and Ceara.<sup>7</sup> This is notable considering these regions are those with the highest poverty rates in the country. Despite Brazil providing universal health care, 3.8% and 7.5% of individuals reported that many needs were unmet, in a survey that was conducted during the pandemic.<sup>8</sup> This occurred for a multitude of reasons, but especially due to inequalities in gaining access to healthcare in a timely fashion while others used private healthcare insurance and were higher in socioeconomic status. Differences in healthcare access between the regions of high and low economic security in Brazil, sheds light on the gaps that need to be addressed in the efforts to attain equal and accessible healthcare for all.

The health catastrophe brought along by COVID-19 acted as a catalyst, which revealed the factors that global health organizations need to address in order to progress towards the fulfillment of SDG 3. The spread of infection in recent years also revealed many ways in which the United States has demonstrated some of the highest levels of difference in access to healthcare based on the impact of a variety of social determinants. The Kaiser Family Foundation (KFF) conducted a series of reports in order to determine how health and healthcare varied based on race and ethnicity. Using state, federal, and local data they were able to gather that people of color experience(d) a much higher rate of covid-19 cases and mortalities compared to others, with Black people facing death rates almost twice as high. The large gap that exists in these health statistics makes it evident that there is an underlying cause contributing to these results. As the years have progressed and treatments for the pandemic have been released, more research confirms that areas in America containing a greater number of people of color tend to have a higher demand for COVID-19 testing and treatment, contributing to much longer wait times and delayed access to efficient healthcare.

<sup>&</sup>lt;sup>5</sup> "Universal Health Coverage (UHC)." World Health Organization, October 5, 2023. https://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(uhc).

<sup>&</sup>lt;sup>6</sup> Boing, Antonio Fernando, Alexandra Crispim Boing, Maria Amélia Veras, Josimari Telino De Lacerda, Rafael Lopes Paixão Da Silva, Paulo Roberto Barbato, Caroline Fabrin, and S V Subramanian. 2022. "Area-level Inequalities in Covid-19 Outcomes in Brazil in 2020 and 2021: An Analysis of 1,894,165 Severe Covid-19 Cases." *Preventive Medicine* 164 (October): 107298. https://doi.org/10.1016/j.ypmed.2022.107298.

<sup>7</sup> Marinho, Pedro Rafael D, Gauss M Cordeiro, Hemílio F C Coelho, and Simone Cristina S Brandão. "Covid-19 in Brazil: A Sad Scenario." Cytokine & growth factor reviews. April 2021.

 $https://pmc.ncbi.nlm.nih.gov/articles/PMC9759916/\#:\sim:text=In\%20absolute\%20numbers\%2C\%20Brazil\%20stands, the\%20United\%20States\%20and\%20India.$ 

<sup>&</sup>lt;sup>8</sup> Coube , Maíra et al. Inequalities in unmet need for health care services and medications in Brazil: A decomposition analysis - The Lancet Regional Health – Americas. Accessed January 25, 2025. https://www.thelancet.com/journals/lanam/article/PIIS2667-193X(22)00243-5/fulltext.
<sup>9</sup> Samantha Artiga, Bradley Corallo. "Racial Disparities in COVID-19: Key Findings from Available Data and Analysis - Issue Brief - 9515." KFF, August 17, 2020.

https://www.kff.org/report-section/racial-disparities-in-covid-19-key-findings-from-available-data-and-analysis-issue-brief/.

Insights to these lasting healthcare disparities are important to recognize for many reasons, including the fact that they must be actively worked on to support communities who still lack quality healthcare, but also because ultimately achieving universal healthcare support for everyone makes for a much longer lasting healthcare system. Together, health and its effects on healthcare systems come together to form a cyclical relationship, where improved systems allow for better economic success within nations, stronger workforce development, and more system efficiency, making way to maximize the resources that can be allotted towards populations that need them.

Some countries have already developed ways to achieve this goal, while others are still developing effective ways to combat the discrepancies. For example, Costa Rica has employed Community Oriented Primary Care (COPC), which was one of the key strategies emphasized in the Alma-Ata conference. The goal of this system is to combine factors of community medicine with primary healthcare in order to create the most effective treatment system. The reason this is so effective is because COPC focuses on the care of individuals but also on the way that it contributes to the community as a whole, which is how countries like Costa Rica, are able to effectively care for all types of populations. <sup>10</sup> The model itself demonstrates how a different healthcare model can be influential in getting closer to achieving UHC goals. The COPC model uses a few key strategies, including having multidisciplinary companies throughout communities, geographic empanelment where citizens (especially in less accessible areas) are assigned to teams which promote quality care, integration of digital technologies in rural and urban areas, etc. These factors join together to form a successful healthcare system that ensures equitable and sustainable healthcare for all. As systems like these continue to be developed, we become closer to fulfilling the ultimate goal of accessible healthcare for all people, without the effects of social determinants.

#### **Role of Education**

Activist and politician Nelson Mandela once said, "Education is the most powerful weapon which you can use to change the world." According to the WHO, health education is "a tool to improve a population's general health and wellness through promoting knowledge and healthy practices." Among the many factors that contribute to building a successful healthcare system, education stands as a cornerstone. Factors such as health cannot be effectively addressed until the issue of health literacy is tackled, highlighting how each aspect relies on the others to develop an equitable and sustainable healthcare system. Education is the foundation of every element that contributes to successful healthcare in society, as it ultimately drives the actions individuals take to improve health outcomes, ensure equitable access to care, and foster sustainable healthcare practices. Education as a concept includes several different areas, including professional education and public health education as two of the largest.

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<sup>&</sup>lt;sup>10</sup> VanderZanden, Amelia, Madeline Pesec, Melinda K Abrams, Asaf Bitton, Anna Kennedy, and Hannah Ratcliffe. "What Does Community-Oriented Primary Health Care Look like? Lessons from Costa Rica." The Commonwealth Fund, March 15, 2021. https://www.commonwealthfund.org/publications/case-study/2021/mar/community-oriented-primary-care-lessons-costa-rica.

Education for health professionals is vital in creating the most efficient healthcare system that dominates in both equity and sustainability because it allows for the bridge between doctor and patient to be fulfilled. Without bridging this gap, people are often left without a sufficient understanding of their own health, and ultimately do not benefit from their healthcare system in the way that they should, often leading them to seek out help from other, more unreliable areas.<sup>11</sup> Additionally, educational training for professionals advances the longevity of factors within healthcare systems because doctors, nurses, technicians, etc. are more equipped to deal with circumstances that are all encompassing and for diverse populations. One key strategy that has been used to maintain the educational status of healthcare professionals is through Continued Professional Development (CPD) programs, which are courses designed to increase skills and maintain the education of healthcare professionals, whilst building on what they know to diversify their areas of understanding<sup>12</sup>. The creation of CPD programs can be traced back to the early 1900's in the United Kingdom, where the concept was initially established<sup>13</sup>. The first CME, Continuing Medical Education, course was held in 1930 and continued to play a role through the 1960s, from where it eventually became internationally recognized as a term. These courses eventually developed into a fundamental step in the process of education in the medical field as they ensure that healthcare workers are practicing their roles safely and efficiently. Furthermore, these courses keep professionals updated on knowledge to keep up to speed with the changing complexities that come alongside healthcare dilemmas. As a whole, the education of healthcare professionals plays an important role in society, as their learned skills and knowledge must continually be improved in order to adhere to the developing healthcare strategies, ultimately contributing to the creation of a long-lasting system where everyone is given equal treatment.

Having healthcare professionals who are adequately educated is important as they are ultimately the ones who are behind treatment plans; however, health education/literacy for the public is also a fundamental factor for a good healthcare system. Emphasis on the importance of public knowledge regarding their health was made evident in the United Nations ECOSOC Ministerial Declaration of 2009, which stressed health literacy to be a critical factor in ensuring health outcomes and therefore, called for plans of action in order to strengthen the information being delivered to individuals. Having an educated public enables individuals to make more informed health decisions, have a stronger understanding of their own medical situations, and have better health outcomes. Referring back to the Alma-Ata conference, health was defined to be a state of complete mental and social well-being, which are both ultimately products of education, which reinforces why this is such a critical component of healthcare systems

<sup>&</sup>lt;sup>11</sup> Danielle Gagnon, Mar 21, 2024, 2025, Health Jan 21, 2025, Health Jan 9, and 2025, Health Jan 6. "The Importance of Health Education." Southern New Hampshire University, March 21, 2024. https://www.snhu.edu/about-us/newsroom/health/importance-of-health-education.

Manley, Kim, Anne Martin, Carolyn Jackson, and Toni Wright. "A Realist Synthesis of Effective Continuing Professional Development (CPD):
 A Case Study of Healthcare Practitioners' Cpd." Nurse education today, October 2018. https://pmc.ncbi.nlm.nih.gov/articles/PMC6278905/.
 "The History of CPD in Pharmacy." Commonwealth Pharmacists Association, March 22, 2023.

https://commonwealthpharmacy.org/the-history-of-cpd-in-pharmacy/.

<sup>&</sup>lt;sup>14</sup> "Ninth Global Conference on Health Promotion, Shanghai 2016." World Health Organization. Accessed January 25, 2025. https://www.who.int/teams/health-promotion/enhanced-wellbeing/ninth-global-conference/health-literacy.

Public health education and health literacy also contribute to a key mechanism of shifting healthcare built on reactive treatment into different prevention strategies, allowing for greater sustainability as a long-term goal of healthcare systems. By promoting health education and empowering individuals to learn more about their health and the way their healthcare systems operate, societies will then be able to reduce the cost of healthcare, better the health of the population, and create equitable outcomes. The transformative potential can be seen in countries like Japan, where preventative healthcare measures are taken through educating populations so they know how to best prevent the spread of a disease. 15 For instance, Japan began including Interventional programmes where patients are empowered to get in touch with their health by working with healthcare providers. The implementation of programmes like these allowed for people to gain better insight into how the healthcare system works and establish greater relations with providers, who showed them steps they could take towards staying on the right track. In addition to these programmes, Japanese schools offer specific health education lessons where learning about taking control over one's own health through nutrition is encouraged and taught, which collectively have come together to produce outcomes such as higher life expectancy rates and low obesity rates. 16

Along with health literacy programs aimed at increasing the sustainability of healthcare systems, health education efforts are also especially created for specific communities in order to tackle the issue of inequality in the healthcare system. In the United States, statistics show that African Americans face significant health disparities due to factors like low income and not enough access to health literacy programs. According to the U.S. Department of Health and Human Services, health insurance information and other key details are often written in complex formats that are designed to be understood for people who have passed the high school level, and thus are not able to be understood by certain people with low health literacy levels.<sup>17</sup> While combating these effects in entirety is difficult, programs such as Community Based Culturally Tailored Education, are those which are aimed at helping understand specific diseases such as diabetes, hypertension, stroke, etc. in a way that is catered towards addressed specific communities so they can understand the treatment correctly. 18 While health literacy is still an ongoing concern, programs like these alongside the broader actions that are being taken to help improve education in the realm of healthcare overall collectively come together to form more resilient, informed and proactive healthcare systems and place a strong emphasis on prevention and individual/community well-being.

<sup>&</sup>lt;sup>15</sup> Ishikawa, Hirono, Ikuko Yamaguchi, Don Nutbeam, Mio Kato, Tsuyoshi Okuhara, Masafumi Okada, and Takahiro Kiuchi. 2018. "Improving Health Literacy in a Japanese Community Population-A Pilot Study to Develop an Educational Programme." *Health Expectations* 21 (4): 814–21. https://doi.org/10.1111/hex.12678.

<sup>&</sup>lt;sup>16</sup> Tsugane, Shoichiro. 2020. "Why Has Japan Become the World's Most Long-Lived Country: Insights from a Food and Nutrition Perspective." European Journal of Clinical Nutrition 75 (75): 1–8. https://doi.org/10.1038/s41430-020-0677-5.

<sup>&</sup>lt;sup>17</sup> Health, Office of Minority. "Advancing Better Health through Better Understanding for Black and African American Communities: Health Literacy, Health Care Access, and Culturally Appropriate Care 2024 Reading List." HHS.gov, January 31, 2024. https://www.hhs.gov/black-history-month/reading-list/index.html.

<sup>&</sup>lt;sup>18</sup> Singh, Hardeep, Joseph Fulton, Sofia Mirzazada, Marianne Saragosa, Elizabeth M Uleryk, and Michelle L A Nelson. "Community-Based Culturally Tailored Education Programs for Black Communities with Cardiovascular Disease, Diabetes, Hypertension, and Stroke: Systematic Review Findings." Journal of racial and ethnic health disparities, December 2023. https://pmc.ncbi.nlm.nih.gov/articles/PMC10645635/.

#### **Role of Governance and Collaboration**

Vice chairman Charlie Munger of Berkshire Hathaway, one of the world's largest holding companies, has the saying, "Show me the incentive and I'll show you the outcome" emphasizing the utility behind the Incentive Theory. The Incentive Theory of Motivation is a psychological, economic, and behavioral science concept that explains how human action, inaction, and behaviors can be predicted and/or directed by rewards, also known as incentives. 19 Studies done by the Incentive Research Foundation indicate that incentive programs have the potential to improve performance by 25 to 44 percent.<sup>20</sup>

The Department of the Treasury in the United States, with a budget of \$100 million, invited applicants to receive funding under the Social Impact Partnerships to Pay for Results Act (SIPPRA). In this program, they introduced the idea of paying institutions- but only when their program manifests results that contribute to one of the goals of the social impact partnership program. This potential funding motivates establishments in both local and state governments to contribute to valued causes- like supporting children.<sup>21</sup> Regardless of whether the funding is given before the project starts or after the results are shown, the financial support motivates action towards the causes that the government recognizes need attention. This emphasizes the influence that the government can have on filling the gaps in sectors of society- including in healthcare. For example, Conditional Cash Transfer programs follow the similar concept of "paying for results," but instead, the program conditionally transfers cash to causes that mechanize the improvement of health, education, and the reduction of poverty amongst low-income communities.<sup>22</sup>

Despite this, controversy suggests that the incentive system in healthcare establishments can be counterintuitive and have a lot of room for improvement. There is speculation that the system harshly punishes errors while minimally rewarding competence by taking advantage of a healthcare professional's moral duty. There is also a concern that incentives don't align with what is best for patients' health. This is especially the case when considering that the doctors who overuse resources, provide inefficient care, and ultimately have to repeat medical procedures and tasks for patients- bill and make more than the doctors who are efficient with their care.<sup>23</sup>

The United Kingdom's National Health Service (NHS) introduced a system where employers in healthcare would pay for performance. The Pay for Performance system incentivized healthcare professionals with an increase in their income, dependent on the improvement of their quality of care. Quality indicators are utilized to track and identify the

<sup>&</sup>lt;sup>19</sup> "Incentive Theory - the Behavioral Scientist." n.d. Https://Www.thebehavioralscientist.com. https://www.thebehavioralscientist.com/glossary/incentive-theory.

<sup>&</sup>lt;sup>20</sup> Stolovich, Harold. n.d. "Incentives, Motivation and Workplace Performance: Research and Best Practices." Incentive Research Foundation. https://theirf.org/research\_post/incentives-motivation-and-workplace-performance-research-and-best-practices/.

<sup>&</sup>lt;sup>21</sup> "Social Impact Partnerships to Pay for Results Act Projects." 2023. Federal Register. November 30, 2023. https://www.federalregister.gov/documents/2023/11/30/2023-26174/social-impact-partnerships-to-pay-for-results-act-projects.

<sup>&</sup>lt;sup>22</sup> Silverman, Kenneth, Brantley P. Jarvis, Joshua Jessel, and Alexa A. Lopez. 2016. "Incentives and Motivation." *Translational Issues in* Psychological Science 2 (2): 97–100. https://doi.org/10.1037/tps0000073.

<sup>&</sup>lt;sup>23</sup> Stead, William, Rita Redberg, Micheal Chase, Ralph Muller, Eugene Nelson, Elliott Fisher, and James Weinstein. 2011. "Healthcare System Complexities, Impediments, and Failures." Nih.gov. National Academies Press (US). https://www.ncbi.nlm.nih.gov/books/NBK61963/.

extent of a provider's care quality and reward them accordingly.<sup>24</sup> This system is comparable to payment systems where quantity is rewarded over quality or where a doctor who bills more is valued over one that prioritizes respecting a patient's treatment preferences.

On the topic of a physician's quality of care, the healthcare system must look out for their healthcare professionals and ensure that they are allotted the conditions to provide efficient care. These conditions involve factors like a reasonable schedule for a work-life balance and enough sleep each night. In 2011, the Accreditation Council for Graduate Medical Education (ACGME) instated a national policy that prevented interns, first-year medical residents, from being scheduled for shifts longer than 16 hours. During this time, it was reported that resident-physician errors and mistakes dropped by over 33%. Despite the progress, this national policy was overturned six years later, re-allowing first-year residents to be scheduled for 24 hours of continuous work.<sup>25</sup> According to the CDC, Centers for Disease Control and Prevention, being awake for over 24 hours is compared to having a Blood Alcohol Content (BAC) of 0.10%. In the United States, the BAC of a drunk driver is 0.08%, while in other countries, it can be around 0.05%. <sup>26</sup> In other words, a physician's mental and physical state after being awake for 17 to 24 hours is worse than that of a drunk driver. Individuals voice the concern that a person who can't be trusted to operate a vehicle shouldn't be entrusted in life-or-death decisions that could appear during a treatment plan or surgery. On the other hand, attending physicians, residents, and fellows reported that the work-hour limitation negatively impacts patient care and safety efficiency. There were several cases of noncompliance despite the national policy. The house staff suggests that the policy instated to mechanize a lifestyle balance among residents is the very thing obstructing the healthcare education required to create experts in the field.<sup>27</sup> Additionally, recognizing that while national policy can be highly influential, it will not lead to blind compliance within communities unless the conditions are perceived as reasonable. Consequently, it is vital to find a compromise between the work required to be a competent medical professional and the rest needed to ensure a healthy lifestyle.

The Australian Medical Association's (AMA) national code of practice does not involve an absolute limit on aspects like maximum work hours or required breaks. Instead, the AMA developed a risk assessment guide that helps identify the risk level regarding an individual's shift length. If the level of the Fatigue Risk Assessment suggests that the working conditions are unsafe, the physicians are encouraged to reach out to the AMA or the hospital's management about their concerns. On top of this, the AMA audits the work habits of physicians and residents every five years.<sup>28</sup> The data collection from hospital audits can be mechanized to identify gaps and concerns in the system.

<sup>24</sup> Asaad Abduljawad, and Assaf F Al-Assaf. 2011. "Incentives for Better Performance in Health Care." *Sultan Qaboos University Medical Journal* 11 (2): 201. https://pmc.ncbi.nlm.nih.gov/articles/PMC3121024/.

<sup>&</sup>lt;sup>25</sup> "Limiting Resident-Physician Work Hours Improved Patient Safety Outcomes." 2022. Sleep.hms.harvard.edu. May 16, 2022.https://sleep.hms.harvard.edu/news/limiting-resident-physician-work-hours-improved-patient-safety-outcomes.

<sup>&</sup>lt;sup>26</sup> "Risks from Not Getting Enough Sleep: Impaired Performance | NIOSH | CDC." 2021. Archive.cdc.gov. June 28, 2021. https://archive.cdc.gov/www cdc gov/niosh/emres/longhourstraining/impaired.html.

<sup>&</sup>lt;sup>27</sup> Lin, Grace A., David C. Beck, Anita L. Stewart, and Jane M. Garbutt. 2007. "Resident Perceptions of the Impact of Work Hour Limitations." *Journal of General Internal Medicine* 22 (7): 969–75. https://doi.org/10.1007/s11606-007-0223-3.

<sup>&</sup>lt;sup>28</sup> "NATIONAL CODE of PRACTICE - HOURS of WORK, SHIFTWORK and ROSTERING for HOSPITAL DOCTORS." 2016. https://ama.com.au/sites/default/files/documents/FINAL NCP Hours of work 2016.pdf.

With global collaboration and government intervention- improving capacity and promoting equity in healthcare systems is well within reach. Non-governmental organizations help mechanize needed changes by organizing medical missions, promoting health education, advocating for policy, conducting research, fostering innovation, capacity building, and helping communities that need additional support. Examples of a few of these nonprofits are Doctors Without Borders, the World Health Organization (WHO), the American Red Cross (ARC), the American Heart Association (AHA), the Program for Appropriate Technology in Health (PATH), and Partners in Health. Despite the countless programs dedicated to improving healthcare, these organizations aren't necessarily the end-all-be-all solution to our healthcare concerns. These programs are susceptible to limitations regarding sovereignty, policy, resources, high dependence on funding, and potential corruption.<sup>29</sup>

#### The Blood Crisis

About every two seconds, someone in the United States requires a blood transfusion. A blood transfusion is a life-saving measure involving donated blood, or components of blood, being injected into an individual's bloodstream to replace lost blood. This is necessary in cases of trauma, anemia, cancer, and surgery- amongst other cases. Although scientists are making progress in synthetically creating blood, they have not yet created a viable artificial blood product.<sup>30</sup> Until that fact changes, donors are the only solution to meeting the growing need for blood.<sup>31</sup> In January of 2024, The American Red Cross declared an emergency blood shortage.<sup>32</sup> There are several factors creating challenges that contribute to this shortage, including the short shelf-life of blood, heat from the climate crisis threatening blood supply, 33 viruses like the flu and Covid-19, and what doctors, researchers, and patient advocates call "blood deserts." Blood deserts are regions where blood is unavailable 75% of the time it's needed. These blood-scarcity zones are especially prevalent in Sub-Saharan Africa and South Asia- leaving more than half of the population with no access to critical care interventions.<sup>34</sup> The WHO gathered data in 2023 that indicates that about 40% of the global blood donations are collected in high-income countries, which house only 16% of the world population.<sup>35</sup> This sheds light on the inequities and disparities related to access to blood and medical care as a whole.

Although the code to cracking the secret of creating synthetic blood has yet to be revealed or approved by many countries, there have been immensely innovative technologies and

<sup>&</sup>lt;sup>29</sup> Lawrence, Pareena, and Sheila Nezhad. 2009. "Accountability, Transparency, and Government Co- Option: A Case Study of Four NGOs." *International NGO Journal* 4 (3): 76-083. https://academicjournals.org/journal/INGOJ/article-full-text-pdf/8821E5237466.

<sup>&</sup>lt;sup>30</sup> Benjamin Plackett. 2021. "What's Stopping Scientists from Making Viable Synthetic Blood?" AIP. December 15, 2021. https://ww2.aip.org/inside-science/whats-stopping-scientists-from-making-viable-synthetic-blood.

<sup>&</sup>lt;sup>31</sup> Thomas, Krista. 2021. "Artificial Blood: The Future of Patient Care?" Stanford Blood Center. November 3, 2021. https://stanfordbloodcenter.org/pulse-artificial-blood-the-future-of-patient-care/.

<sup>32</sup> d'Red Cross Declares Emergency Blood Shortage, Calls for Donations during National Blood Donor Month." 2024. Redcross.org. 2024. https://www.redcross.org/about-us/news-and-events/press-release/2024/red-cross-declares-emergency-blood-shortage-calls-for-donations-during-national-blood-donor-month.html?srsltid=AfmBOorAU-QhdBckqtuwLp-3N2pswl7ueXOTCJ9YZKhxxXghkQq0Nrqv.

<sup>&</sup>lt;sup>33</sup> Thomas, Krista. 2021. "Artificial Blood: The Future of Patient Care?" Stanford Blood Center. November 3, 2021. https://stanfordbloodcenter.org/pulse-artificial-blood-the-future-of-patient-care/.

<sup>&</sup>lt;sup>34</sup> Martin, Miles. 2024. "Experts Suggest Innovations to Address Global Blood Crisis." Harvard.edu. 2024. https://hms.harvard.edu/news/experts-suggest-innovations-address-global-blood-crisis.

<sup>&</sup>lt;sup>35</sup> World Health Organization. 2023. "Blood Safety and Availability." Who.int. World Health Organization: WHO. June 2, 2023. https://www.who.int/news-room/fact-sheets/detail/blood-safety-and-availability.

developments that highlight progression in the right direction. One of these innovations is the Intraoperative cell salvage, also known as the "Cell Saver." The Cell Saver is a device that collects the blood that would have been lost during a surgical procedure and returns it to the patient after filtering out surgical and cellular debris.<sup>36</sup> Innovations like these reduce the need for donors and consequently increase the blood that can be reallocated to others in need. However, it is crucial to consider that this device, despite its convenience, is not the most efficient in some situations, like in obstetrics, patients with hemoglobinopathies,<sup>37</sup> or in regions where they cannot afford this technology. There are few limits regarding the potential of solutions that research, innovation, and technology can solve. There are talks of civilian or walking blood banks, drone-based blood delivery,<sup>38</sup> and bio-synthetic blood products that can be freeze-dried to maintain a longer shelf-life.<sup>39</sup> Research, innovation, and technology don't merely pose potential solutions to this global blood crisis—they provide the means to improve healthcare equity and enhance the overall capacity of medical systems to address critical needs efficiently and sustainably.

#### Innovation

Computing pioneer Alan Kay says, "The best way to predict the future is to invent it." In the medical field, innovation and invention manifest from research to create things like medications, vaccines, procedures, and technologies that have the potential to change the pace and capacity of medical practices around the world. For example, the introduction of laparoscopy in 1901<sup>41</sup> eventually led to minimizing tissue damage, risk of infection, patient pain, time under anesthetics, and hospital stays in regard to many surgical procedures. Laparoscopic, or minimally invasive, surgery is a procedure that replaces a more extensive surgical incision with a smaller incision where a thin, flexible tube with a light and camera is inserted into the abdomen as a means of visualizing a patient's inner anatomy. Laparoscopic surgery has become the standardized method for many surgeries like appendectomies (involving the removal of the appendix,) cholecystectomies (the removal of the gallbladder,) tubal ligations, gastric bypasses,

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<sup>&</sup>lt;sup>36</sup> "Cell Saver - an Overview | ScienceDirect Topics." 2004. Www.sciencedirect.com. 2004. https://www.sciencedirect.com/topics/medicine-and-dentistry/cell-saver.

<sup>&</sup>lt;sup>37</sup> Carroll, C., and F. Young. 2021. "Intraoperative Cell Salvage." *BJA Education* 21 (3): 95–101. https://doi.org/10.1016/j.bjae.2020.11.007. <sup>38</sup> Raykar, Nakul P, Vanitha Raguveer, Yetmgeta Eyayou Abdella, Asma Ali-Awadh, Harshit Arora, Lucy Asamoah-Akuoko, Linda S Barnes, et al. 2024. "Innovative Blood Transfusion Strategies to Address Global Blood Deserts: A Consensus Statement from the Blood Delivery via Emerging Strategies for Emergency Remote Transfusion (Blood DESERT) Coalition." *The Lancet Global Health* 12 (3): e522–29.

https://doi.org/10.1016/s2214-109x(23)00564-8.

<sup>39</sup> Kotz, Deborah. 2023. "2023 News - Artificial Blood Product One Step Closer to Reality with \$46 Million in Federal Funding | University of Maryland School of Medicine." Www.medschool.umaryland.edu. January 31, 2023.

 $https://www.medschool.umaryland.edu/news/2023/Artificial-Blood-Product-One-Step-Closer-to-Reality-With-46-Million-in-Federal-Funding.ht\ ml.$ 

<sup>&</sup>lt;sup>40</sup> Kay, Alan. n.d. "Alan Kay | Speaker | TED." Www.ted.com. https://www.ted.com/speakers/alan kay.

<sup>&</sup>lt;sup>41</sup> Alkatout, Ibrahim, Ulrich Mechler, Liselotte Mettler, Julian Pape, Nicolai Maass, Matthias Biebl, Georgios Gitas, Antonio Simone Laganà, and Damaris Freytag. 2021. "The Development of Laparoscopy—a Historical Overview." *Frontiers in Surgery* 8 (December). https://doi.org/10.3389/fsurg.2021.799442.

<sup>&</sup>lt;sup>42</sup> Jr, Mihir Patil, Pankaj Gharde, Kavyanjali Reddy, Krushank Nayak, Mihir Patil, Pankaj Gharde, Kavyanjali Reddy, and Krushank Nayak. 2024. "Comparative Analysis of Laparoscopic versus Open Procedures in Specific General Surgical Interventions." *Cureus* 16 (2). https://doi.org/10.7759/cureus.54433.

hernial repairs, and many other surgical procedures.<sup>43</sup> The innovation of laparoscopic surgery has streamlined what can otherwise be a considerably invasive procedure.

#### Big Pharma

Pharmaceuticals, like medicines and vaccines, also mechanize an extensive amount of innovation, research, and technology to develop the treatment options available today. Take vaccines, for example; they typically take 10 to 15 years of laboratory research during the developmental stages. However, in 2020, during the Covid-19 outbreak, it took less than a year to develop, manufacture, and authorize the mRNA Covid-19 vaccines. Many sources attribute this speed in development to new technology, past vaccine experience, better funding, and global collaboration. At the time, academic centers and governments partnered with the industry to further development and progress. Additionally, regulatory agencies, like the U.S. Food and Drug Administration (FDA), Health Canada, and the European Medicines Agency, also collaborated to expedite the approval of the vaccinations. The combination of innovation and collaboration reduced the time it takes to develop a vaccine from about a decade to about a year.

The largest pharmaceutical companies in the world, also referred to as Big Pharma, are businesses that research, develop, market, and produce medications on the global market. With companies involved in medicine, it is vital to balance the profit-seeking aspect of the business and the healthcare side of things- however, that is not always the case. <sup>47</sup> Purdue Pharma, a pharmaceutical company, was reported to have a prominent role in the opioid epidemic due to the development and marketing of its drug, Oxycontin. The marketing of this opioid-involved paying physicians and people with influence to talk about the benefits, safety, and 'non-addictive' nature of Oxycontin. As a result of their profit-seeking marketing strategies- the medication was overused, misprescribed, and consequently contributed to the epidemic that killed over 450,000 people. <sup>48</sup>

Additionally, about 30% of Americans have reported noncompliance with their medication due to its cost. <sup>49</sup> A pharmaceutical companies' business-based orientation contributes to the high and inaccessible costs of medications- further increasing the gap in healthcare equity, access, and capacity. The United Kingdom has an agreement between the government and pharmaceutical agencies known as the Pharmaceutical Price Regulation Scheme. In this agreement, the profits a pharmaceutical company can make through product sales are overseen

 <sup>43</sup> Cleveland Clinic. 2024. "Laparoscopy." Cleveland Clinic. January 3, 2024. https://my.clevelandclinic.org/health/procedures/4819-laparoscopy.
 44 CDC. 2024. "How Vaccines Are Developed and Approved for Use." Vaccines & Immunizations. August 10, 2024. https://www.cdc.gov/vaccines/basics/how-developed-approved.html.

<sup>&</sup>lt;sup>45</sup> NIH. 2024. "Decades in the Making: MRNA COVID-19 Vaccines | NIAID: National Institute of Allergy and Infectious Diseases." Www.niaid.nih.gov. April 4, 2024. https://www.niaid.nih.gov/diseases-conditions/decades-making-mrna-covid-19-vaccines.

<sup>&</sup>lt;sup>46</sup> Kuter, Barbara J., Paul Offit, and Gregory A. Poland. 2021. "The Development of COVID-19 Vaccines in the United States: Why and How so Fast?" *Vaccine* 39 (18). https://doi.org/10.1016/j.vaccine.2021.03.077.

<sup>&</sup>lt;sup>47</sup> Iheanacho, Ike. 2006. "Big Pharma: How the World's Biggest Drug Companies Control Illness." *BMJ : British Medical Journal* 332 (7542): 672. https://pmc.ncbi.nlm.nih.gov/articles/PMC1403244/.

<sup>&</sup>lt;sup>48</sup> Gale, Arthur. 2022. "Sacklers Sacked but Purdue Still Caused Opioid Epidemic." *Missouri Medicine* 119 (2). https://pmc.ncbi.nlm.nih.gov/articles/PMC9339402/.

<sup>&</sup>lt;sup>49</sup> Diener, Matthew. 2024. "Drug Prices and Shortages Jeopardize Patient Access to Quality Hospital Care | AHA News." Www.aha.org. May 22, 2024. https://www.aha.org/news/blog/2024-05-22-drug-prices-and-shortages-jeopardize-patient-access-quality-hospital-care.

and dictated by the government to control national drug bills.<sup>50</sup> Meanwhile, some pharmaceutical companies have taken advantage of drug patenting to monopolize drugs for years by delaying the introduction of newer, cheaper alternatives. These companies do this through a technique known as evergreening, where they slightly modify a pre-existing drug and patent it as a new medication- legally protecting that company's monopolization of the medication for the next few years. 51 These loopholes allow pharmaceutical companies to increase the price of their medications and products, reducing the accessibility of these treatments. Where money-making is involved in health care, and where the companies and organizations with the most to gain have a significant influence on policy and development, people begin to grow skeptical of the ethical integrity of the system designed to help them. There are reports that suggest conflicts of interest between regulatory agencies, like the FDA, and the industries that they are designed to regulate. like pharmaceutical companies. In 2009, an FDA panel was discussing whether an antipsychotic medication developed by Astrazeneca, a pharmaceutical company, should be approved to treat a more extensive range of symptoms. A health policy expert presented to the panel that when this antipsychotic is paired with other specific medications, it has the potential to cause sudden cardiac death. On top of this, the health policy expert identified a statistical error in the data that the pharmaceutical company pooled from their trials and presented to the committee. Despite the presentation, the committee approved the drug without a label that warns of the potential for sudden cardiac death. In 2011, the FDA added a label that warns of the risks, but only after evidence suggested that these risks are more than just a 'potential problem.' It turns out the director of psychotic products at the FDA at the time had left the agency not much later to get paid to consult for psychiatric drug makers, including Astrazeneca- consequently revealing a common conflict of interest between the regulated and the regulators.<sup>52</sup> It is transparent that serious reforms are needed, especially those regarding regulating drug pricing, ensuring transparent research practices, and balancing corporate interest with public health.

#### **Operational and Financial Capacity**

The World Health Organization (WHO) has recently tracked the progression of the spread of diseases since the COVID-19 outbreak in 2020, further tracking efforts taken to reach the health-related goals of the Sustainable Development Goals. While being behind schedule to achieve Universal Health Coverage (UHC), according to a 2018 baseline, "585 million more people are expected to have access to essential health services without incurring catastrophic health spending by 2025, well short of the one billion UHC target". <sup>53</sup> Although there is an expected increase in accessible healthcare, the World Health Organization is still finding its

<sup>&</sup>lt;sup>50</sup> Iheanacho, Ike. 2006. "Big Pharma: How the World's Biggest Drug Companies Control Illness." *BMJ : British Medical Journal* 332 (7542): 672. https://pmc.ncbi.nlm.nih.gov/articles/PMC1403244/.

<sup>&</sup>lt;sup>51</sup> Collier, Roger. 2013. "Drug Patents: The Evergreening Problem." *Canadian Medical Association Journal* 185 (9): E385–86. https://doi.org/10.1503/cmaj.109-4466.

<sup>&</sup>lt;sup>52</sup> PILLER, CHARLES. 2018. "FDA's Revolving Door: Companies Often Hire Agency Staffers Who Managed Their Successful Drug Reviews." Www.science.org. July 5, 2018.

https://www.science.org/content/article/fda-s-revolving-door-companies-often-hire-agency-staffers-who-managed-their-successful.

<sup>&</sup>lt;sup>53</sup> "World Health Statistics 2024 - World Health Organization." World Health Organization, 2024, iris.who.int/bitstream/handle/10665/376869/9789240094703-eng.pdf?sequence=1.

struggle within insufficient funding, political divides, and disagreements over where to maintain focus. In light of COVID-19, the impact of the pandemic was seen to vary across regions and different income groups. For example, between 2019 and 2021, "By World Bank income groups, life expectancy was cut by 0.6 years in low-income countries and by 2.4 years in lower-middle-income countries, and half cut by 0.6 years and 2.0 years". The recent pandemic revealed many holes within many organizations and funding geared towards alleviating gaps within healthcare.

#### Issue in Venezuela

The ongoing issue in healthcare among Venezuelans has given rise in recent years. With an economic issue arising in 2008, Venezuela has suffered greatly, straining its healthcare system and funds to keep it afloat. With a decline in economic stability that has lasted for years, Venezuela's morbidity and mortality continue to rise. In an effort to provide relief, the United Nations Security Council attempted to vote on and pass two resolutions that would push towards alleviating the economic and financial stress pressing on the healthcare system. Either failed to pass with arguments arising from the United States of America, Russia, and China over the issue in March of 2019. Furthermore, as disagreements still arise over the economic strife among Venezuelans, conditions continue to worsen.

Regarding the failed discussion on March 1, 2019, "the USA recognized John Guaido...as [Venezuela's] president, whereas China and Russia continue to recognize Nicolás Maduro as leader of the country". <sup>56</sup> With the disputes over the presidential election for Venezuela, hunger and curable diseases rapidly prevail. However, on Friday, January 10th, 2025, Nicolás Maduro was officially sworn into the presidency in Venezuela for his third consecutive term. Although he has taken office, he seems to stand alone on the international stage as the United States of America and the European Union now accuse him of fraud. <sup>57</sup> With a controversial leader for Venezuela still in office, concerns have been raised over the well-being of the people and what will be done to solve funding disputes and an increase in hunger and treatable diseases.

#### Spread of Tuberculosis

In 2002, the WHO recorded and monitored the necessary funding for treatment for the spread of Tuberculosis. In September 2023, at the second meeting on Tuberculosis (TB) for the United Nations, "Member states committed to mobilizing at least US\$22 billion per year for TB prevention, diagnostic and treatment services by 2027, and US\$ 35 billion per year by 2030; a

<sup>&</sup>lt;sup>54</sup> "World Health Statistics 2024 - World Health Organization." World Health Organization, 2024, iris.who.int/bitstream/handle/10665/376869/9789240094703-eng.pdf?sequence=1.

<sup>&</sup>lt;sup>55</sup> Daniels, Joe Parkin. "Venezuela Disorder Worsening Health Services.", *The Lancet*, 10 August, 2024, volume 404, Issue 10452. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(24)01639-8/abstract.

<sup>&</sup>lt;sup>56</sup> Rueda, Manuel. "Venezuela's Maduro Begins New Term as US Raises Arrest Bounty." NPR, NPR, 10 Jan. 2025, www.npr.org/2025/01/10/nx-s1-5256219/venezuelas-maduro-begins-new-term-as-us-increases-bounty-for-his-arrest.

<sup>&</sup>lt;sup>57</sup> Rueda, Manuel. "Venezuela's Maduro Begins New Term as US Raises Arrest Bounty." NPR, NPR, 10 Jan. 2025, www.npr.org/2025/01/10/nx-s1-5256219/venezuelas-maduro-begins-new-term-as-us-increases-bounty-for-his-arrest.

target of US\$ 5 billion per year by 2027 was set for investment in TB research". About 76% of the funding for tuberculosis comes from The Global Fund, where the United States Government provides much of its support. In 2023, much domestic funding was from the BRICS group (Brazil, Russia Federation, India, China, South America). Much of the international funding went towards 26 high tuberculosis countries and two others on the watchlist (Cambodia and Zimbabwe). 59

However, over the recent years, funding gaps have been reported in many tuberculosis burden countries, along with a few on the tuberculosis watchlist. These include Indonesia, Bangladesh, Nigeria, Viet Nam, and Kenya. Much of the reported gaps stem from countries within the African and South-East Asia regions. In 2024, "the combined total of the funding gaps reported by 60 countries…amounted to US4 1.7 billion". <sup>60</sup> Currently, only 43% of the estimated requirements in the Global Plan are funded and supported by the total budget. Less than half of the funding for tuberculosis has been acquired, proving a significant setback in research, treatment, and prevention.

#### Misaligned Aid Allocation

The allocation of development aid for health (DAH) has proven a failure in many areas, namely the beginning of the Covid-19 Pandemic Fund. As a highly donor-driven organization, DAH has come up short when making major decisions about allocating funding for global health issues. The donor-driven strategy has put its focus on so-called "pet projects", being poorly integrated into national health strategies. Because of this, DAH's overseas section is used to support international funding for political goals, focusing more on political gains rather than global health goals. Furthermore, external funders want funding to be allocated towards their own geographic areas within their home countries. The donor-driven aspect puts the funding decisions in the hands of the donors, seemingly providing a mismanagement of funding allocation.

According to the Covid-19 Pandemic Fund (PRR) financing research, Overseas Development Aid (ODA) and the national budget have been reallocated away from other areas of subsystems. This has proven to impact the priorities of specific organizations because according to past funding issues, "implementing agencies face challenges to align funding conditionalities and funder needs with their mission". 62 With an inability to distribute funds equally or based on a necessary basis, the Covid-19 Pandemic Fund faced a considerable failure and setback at the

<sup>58 &</sup>quot;4.1 Financing for TB Prevention, Diagnostic and Treatment Services." World Health Organization, World Health Organization, www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2024/tb-financing/4-1-financing-for-tb-prevention--diagnostic-and-treatment-services.

<sup>&</sup>lt;sup>59</sup> "4.1 Financing for TB Prevention, Diagnostic and Treatment Services." *World Health Organization*, World Health Organization, www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2024/tb-financing/4-1-financing-for-tb-prevention--diag nostic-and-treatment-services. Accessed 25 Jan. 2025.

<sup>&</sup>lt;sup>60</sup> "4.1 Financing for TB Prevention, Diagnostic and Treatment Services." *World Health Organization*, World Health Organization, www.who.int/teams/global-tuberculosis-programme/tb-reports/global-tuberculosis-report-2024/tb-financing/4-1-financing-for-tb-prevention--diagnostic-and-treatment-services. Accessed 25 Jan. 2025.

<sup>&</sup>lt;sup>61</sup> Brown, Garrett Wallace, et al. "Challenges in International Health Financing and Implications for the New Pandemic Fund." *Globalization and Health*, U.S. National Library of Medicine, 5 Dec. 2023, pmc.ncbi.nlm.nih.gov/articles/PMC10696881/.

<sup>&</sup>lt;sup>62</sup> Brown, Garrett Wallace, et al. "Challenges in International Health Financing and Implications for the New Pandemic Fund." *Globalization and Health*, U.S. National Library of Medicine, 5 Dec. 2023, pmc.ncbi.nlm.nih.gov/articles/PMC10696881/.

very beginning of its origin. However, with a new focus on emergency funding, health system investments, and correct reallocation of sources needed towards those impacted by COVID-19, the Pandemic Fund was able to restart and reach a level of success.

#### Covid-19 Pandemic Fund (PRR)

Although the misaligned aid allocation from DAH created a significant setback within the Pandemic Fund, in 2024, success began to arise. According to the statistics recorded, "as of November 2024, the Pandemic Fund had awarded two rounds of grant funding, totaling US\$ 885 million, which catalyzed an additional US\$6 billion in funding from international and domestic partners for 47 projects that strengthen capacity within and across borders in the areas of disease surveillance, laboratories and diagnostics, and health workforce, covering 75 low- and middle-income countries in six geographical regions". 63 With financial support from the World Bank and 24 supporting countries, the Pandemic Fund has been able to work towards a third round of funding, creating another milestone within pandemic preparedness. These supporting countries include Australia, Austria, Canada, China, Denmark, France, Germany, India, Indonesia, Italy, Japan, Netherlands, Republic of Korea, New Zealand, Norway, Saudi Arabia, Singapore, South Africa, Spain, Switzerland, United Arab Emirates, United Kingdom, United States, and the European Commission. With funding put towards 47 projects and 75 countries in need, the Covid-19 Pandemic Fund has been able to increase its financial volume, a far step from where it began back in 2022. With US\$ 1.6 billion in funding from just the 24 countries listed as the financial contributors, officials expect to see an increase in support, funding, and results within the third round of funding, established on December 19th, 2024.<sup>64</sup> As the PRR has proven to overcome the issue of aid allocation, WHO and supporters hope to see the same across other organizations and funding programs.

#### Conclusion

#### Sustainable Development Goal 3

In September 2015, the UN Member States developed the 2030 Agenda of Sustainable Development, which aims to accomplish 17, written out, goals by the year 2030. These 17 Sustainable Development Goals focus on the most pressing issues happening globally, deemed by the United Nations. In accordance with WHO's framework and agenda, SDG 3 is most in accordance.

Sustainable Development Goal 3 is labeled as "Good Health and Well-Being" because according to the UN and World Health Organization, "SDG 3...calls on countries to ensure

<sup>&</sup>lt;sup>63</sup>Brown, Garrett Wallace, et al. "Challenges in International Health Financing and Implications for the New Pandemic Fund." *Globalization and Health*, U.S. National Library of Medicine, 5 Dec. 2023, pmc.ncbi.nlm.nih.gov/articles/PMC10696881/.

<sup>&</sup>lt;sup>64</sup> "The Pandemic Fund." *The Pandemic Fund* | *The Pandemic Fund*, www.thepandemicfund.org/.

healthy lives and promote well-being for all at all ages". 65 As this goal holds a major task, it is split into nine different sections. Each section targets a detrimental issue that was highlighted throughout this guide. The nine targets include: maternal mortality, end preventable deaths of newborns and children under 5 years of age, communicable diseases, non-communicable diseases and mental health, substance abuse, road traffic injuries, sexual reproductive health, achieve universal health coverage (UHC), and mortality from environmental pollution. <sup>66</sup> Each target aims to cut a certain form of mortality by a quarter, if not by a half, focusing on increasing health insurance opportunities and providing funding for treatments and patient care in target areas. It has been analyzed that "the COVID-19 pandemic erased nearly a decade's progress made in improving healthy longevity". 67 With this major setback, the United Nations and WHO are scrambling to attain these 9 target areas of SDG 3, along with the 16 other Sustainable Development Goals that are aimed to be achieved by 2030. While WHO plays a major role in SDG 3, it also provides its efforts in areas of SDG 1, SDG 2, SDG 5, SDG 6, SDG 7, SDG 11, and SDG 16. With much of WHO's efforts needed to accomplish the 2030 Agenda, it is vital to attain the necessary funding, government assistance, and overall support of the UN to accomplish just that.

#### What is Being Done Now?

In May 2010, WHO established its policy on global health partnerships during the World Health Assembly. This establishment led to the development of many partnerships over the next fifteen years, namely the UHC Partnership, the SDG3 Global Action Plan, the Primary Health Care Performance Initiative, the Global Fund to Fight Aids, the Vaccine Alliance (GAVI), and the Paris Declaration on Aid Effectiveness and Accra Agenda for Action. Each program has established its own agenda to contribute to solving the rising issues of financial distribution, disease targeting, government support, and educational awareness. With the support of over 190 Member States, WHO has been able to work towards the 2030 Agenda, along with the support from many organizations and partnerships. Due to setbacks from COVID-19, however, WHO is scrambling to make up for lost time and reach achievement in association with the targets of the 2030 Agenda.

On January 20, 2025, the president of the United States announced that he will be pulling the U.S. out of the World Health Organization. The U.S. is the largest funder of the WHO, responsible for about 18% of funding.<sup>69</sup> In the year 2022-2023 alone, the United States contributed around 1.284 Billion USD to the organization which was used to respond to health emergencies, stop the spread of disease, and tackle global health priorities. This withdrawal of

<sup>65 &</sup>quot;Sustainable Development Goals." World Health Organization, World Health Organization, 2024,

www.who.int/data/gho/data/themes/sustainable-development-goals.

66 "Sustainable Development Goals." World Health Organization, World Health Organization, 2024, www.who.int/data/gho/data/themes/sustainable-development-goals.

<sup>&</sup>lt;sup>67</sup> "World Health Statistics 2024 - World Health Organization." World Health Organization, 2024, iris.who.int/bitstream/handle/10665/376869/9789240094703-eng.pdf?sequence=1.

<sup>68 &</sup>quot;Who Collaboration: Partnerships." *World Health Organization*, World Health Organization, www.who.int/about/collaboration/partnerships.
69 Reuters. 2025. "Factbox-Trump's Withdrawal of U.S. From WHO to Impact Global Health." US News & World Report. U.S. News & World Report. 2025. https://www.usnews.com/news/top-news/articles/2025-01-21/factbox-trumps-withdrawal-of-u-s-from-who-to-impact-global-health.

support was unforeseen, especially since the U.S. and the WHO had renewed their five year partnership back in 2024, allowing the Global Health Security Agenda (GHSA) to be extended to the year 2028. This sudden and substantial loss of funding raises a concern in the WHO's ability to respond to future outbreaks, emergencies, and support the health of vulnerable populations. The WHO is reviewing its priorities in preparation to lose their largest donor. It is transparent that major adjustments and compromises are needed to both maintain the WHO's relationship with the U.S. or find other avenues to receiving funds. Collaboration is the foundation of global health care projects and initiatives, so action must be taken to ensure that the most valuable resource isn't compromised, alliances.

#### **Guiding Questions for research**

- 1. What policies or frameworks does your country currently have in place to promote healthcare equity?
- 2. What are the main barriers to achieving healthcare equity in your country (e.g., socioeconomic disparities, geographic distribution, infrastructure)?
- 3. How does healthcare inequality manifest within your country (e.g., differences between urban and rural areas, marginalized communities, or demographic groups)?
- 4. How prepared is your country to respond to healthcare crises, such as pandemics or natural disasters, given its current healthcare capacity?
- 5. How does your country address the financial barriers that limit access to healthcare (e.g., high out-of-pocket expenses, lack of insurance)?

#### **Guiding Questions for debate**

- 1. What technologies or innovations have been introduced to improve healthcare capacity?
- 2. What examples of international best practices could be adapted to address healthcare inequities in your country?
- 3. How can technology, such as telemedicine or mobile health (mHealth), artificial intelligence, data collection, and analysis play in improving healthcare systems and reducing disparities?
- 4. What strategies can be employed to build a resilient and adaptable healthcare system for future challenges?
- 5. How can healthcare equity and capacity improvements be aligned with sustainable development goals (SDGs), particularly SDG 3 (Good Health and Well-being)?

<sup>&</sup>lt;sup>70</sup> World Health Organization. 2022. "The United States of America and the World Health Organization: Partners in Global Health." Www.who.int. May 19, 2022. https://www.who.int/about/funding/contributors/usa.

<sup>71 &</sup>quot;World Health Organization Already Cutting Back on Hiring, Travel as Trump Withdrawal Set to Hit Funding." 2025. Cbsnews.com. CBS News. January 24, 2025. https://www.cbsnews.com/news/world-health-organization-who-cutbacks-trump-withdrawal-us-funding/.

#### A Message From The Authors

Pandemics, epidemics, and health crises of the past have highlighted significant gaps in the healthcare sector that urgently need to be addressed. Additionally, the Sustainable Development Goals (SDGs) serve as a vital framework, outlining numerous challenges that demand solutions—ideally before 2030. While these past challenges and the 2015 SDGs provide a clear direction— innovation, research, technology, and collaboration are the essential tools for achieving these objectives.

We encourage you to examine the challenges within your country and explore what has been done—or what can still be done—to address them. Leverage your unique perspective and academic background to drive meaningful solutions. For instance, political science students might focus on policies and governmental roles in driving progress, while future medical professionals could delve into the clinical aspects of solutions. Similarly, many countries have innovative implementations and experience that can be invaluable at a large scale.

As long as your ideas align with your country's values and policies, don't hesitate to propose innovative solutions or unorthodox partnerships that may prove effective. Identify the gaps, and use partnerships, research, innovation, and technology to bridge them. Together, we can create a more equitable and resilient healthcare future.