

ENSURING GLOBAL ACCESS TO VACCINES AND MEDICINE

Topic Background for the General Assembly on Access to Vaccines and Medicine

No topic is as relevant or pertinent to the world today as that of vaccines...we must finish what we started." – Volkan Bozkir, President of the UN General Assembly

The Health of Our World

The United Nations Declaration of Human Rights (UNDHR) states that every person has the right to health and well-being, which includes access to medical care. The UN reports that before the pandemic, significant progress was made towards improving global public health. People were living longer, more people were able access medicines, and diseases declined.

However, the COVID-19 pandemic erased much of this progress: the United Nations states in its 2022 SDG report that COVID-19 halted more than 4 years of global health progress. Life expectancy



A child in Latin America receives a measles vaccination from the World Health Organization (WHO).

has decreased, and health services were disrupted in 92% of the world's countries. 22.7 million children missed basic **immunizations** in 2020, which is a 3.7 million difference from 2019. Diseases such as tuberculosis also saw an increase in cases for the first time since 2005.

These challenges most impact **developing countries**, where systems are often not strong enough to support making and distributing **vaccines** and medicines on a country-wide level. These countries are trying to build better systems, but can struggle with funding, geographical challenges, labor power, and in some cases **corruption**. In more developed countries, the structure of healthcare systems vary, but each comes with its own sets of benefits and challenges, including **inequality**. Governments must also cooperate with **pharmaceutical companies** and care providers to make sure people get the medicine they need.



Sustainable Development Goal 3

The United Nations' Sustainable Development Goals (SDGs) aim to eliminate poverty by 2030. **SDG 3** aims to **ensure good health and well-being for all people**. A key target to achieving this goal is called Target 3.b: **supporting research, development, and universal access to affordable medicines and vaccines.** In other words, good health and well-being for all cannot be achieved unless everyone is able to get the medicines and vaccines they need.¹



As a result of the challenges above, it is likely that SDG 3 will not be achieved by the 2030 deadline. A separate report concludes that there is some progress being made on SDG 3, but that much of it has been held back by the growing role of private parties in health, inequality, and a lack of cooperation between nations.²

3 Key Challenges

Challenge 1: Supply Chain Issues

A supply chain is how a product is made and sold, which includes everything from making the item, to shipping it across the country, to someone finally buying it. The supply chain for medicine and vaccines includes producing a drug, shipping it to a certain country, shipping it to a region in that country, and then finally distributing the drug to that country's people.

Issues can occur at any stage of the supply chain flow: making the medicine, shipping it across the country, or when a doctor is prescribing it. Medicine must be safe, which means the ingredients have to be high quality. Sometimes, these ingredients are hard or impossible to find, which can completely stop the production of a drug. Other times, delays can occur due



The vaccine supply chain. Image: PATH

¹ "The Sustainable Development Goals Report 2022." United Nations. United Nations, 2022. https://unstats.un.org/sdgs/report/2022/.

² "II.3 the 'Health SDG': Some Progress, but Critical Concerns Remain." 2030 Spotlight. United Nations 3, 2016. https://www.2030spotlight.org/en/book/605/chapter/ii3-health-sdg-some-progress-critical-concerns-remain.



to safety or quality concerns. Shipping drugs internationally can be even more complicated since shipping takes longer, the medicine is harder to store, and governments need to make sure the medicine is delivered to the right place.

Some areas lack the **infrastructure** needed to produce and distribute medicines and vaccines. For example, countries without reliable electricity can have a hard time storing vaccines that need to be kept cold. Countries that have poorly developed roads may have challenges getting medicine across the country. It's important for countries to consider these obstacles when they make distribution plans for how to get medicines and vaccines to their citizens.

Challenge 2: Costs and Healthcare Models

Many ingredients that go into medicine are expensive. They can be hard to find and hard to produce. They require skilled workers to actually put them together, and the cost of creating medicines influences the final price to get them. Supply chain issues can affect pricing too. If a medicine is harder to find in a certain country, it will cost more because it is rare.

Since countries use many different systems, it can be harder to access and afford medicines in some parts of the world compared to others. The question then becomes, who picks up the bill? Most countries' healthcare systems are based on one of three general models:³

Model 1: Single Payer Healthcare

The first model is single payer health care, where the cost of all medicine is covered by one public system, usually paid for by the government (National Health Insurance system or Beveridge system). For example, in the United Kingdom, every citizen is entitled to health care at no direct cost to them. A central organization called the National Health Service (NHS) pays for all medicines and vaccines and manages distributing them to the UK's people. The NHS's ability to pay for medicines depends on how much the government funds it. When the NHS is well funded, patients receive access to a larger variety of medicines and treatments. When the NHS is poorly funded, patients might have less treatment options available.

Model 2: Universal Health Coverage

The second model is called universal health coverage, where **most medical costs are paid for by the government or public health system**. Examples of countries who use this system are Japan or Italy. Sometimes citizens pay for some expenses, but at a much cheaper rate. Universal systems might fully cover some expenses and split others, or split all expenses but at a fair and affordable rate for citizens.

³ "Health Care Systems - Four Basic Models." Health Care Systems - Four Basic Models | Physicians for a National Health Program, 2010.

https://www.pnhp.org/single_payer_resources/health_care_systems_four_basic_models.php.



Like in a single payer system, the affordability of any medication depends on how much money the government spends on the national health system. Universal systems can be fully funded by the government or have a mix of government and private payers, but the important thing to remember is that like a single payer system, **healthcare coverage** is provided to all citizens.

Model 3: Privatized Healthcare

The last model is a privatized system often referred to as the out-of-pocket model, where **the government pays for very few medical costs**, or only pays for a certain part of the population. An example of a country that uses a privatized system is the United States. In this system, most citizens pay a **private company** to cover their medical expenses. These companies can choose to pay for some or all of the expense, but the individual must pay them a fee each month first. People who do not have **insurance** must pay the entire cost for their medical care.

In many privatized systems, the private companies that make the medicines can also charge as much as they want for them. In some countries, **regulations** prevent companies from charging too much, but in others, very few or no regulations exist. This is one of the main reasons why the same medicine might cost a lot more in one country than another. For example, insulin is a lifesaving medicine for people with type I and II diabetes. A country with a privatized system can expect to pay more than a country with a universal or single payer system.

Challenge 3: Keeping Up with Demand

Sometimes the number of people who need a medicine or a vaccine is much greater than the amount of medicine a country is able to buy or make. For example, in fall of 2022, so many children were getting sick with RSV, COVID-19 and the flu that there was a shortage of children's pain medication like Tylenol. In this case, the supply (or how much medicine there was) could not keep up with the demand (how much medicine was available).



Shelves at Walgreens carrying children's pain and cold medicine are empty as a result of 2022 shortage. Image: Forbes



The Four "A"s Principle

There are many factors that countries need to keep in mind when delivering vaccines and medicines to their citizens. To help as many people as possible use a medicine or vaccine, countries should follow the four "A"'s principles: Availability, Accessibility, Affordability, and Acceptability.

1. Availability

Availability means that a medicine or vaccine simply exists in the country that needs it. Sometimes, governments assume that once care is available, everybody can and will use it. In reality, availability is only the first step towards ensuring use across a country.

2. Accessibility

Accessibility refers to **the ability of the population to get a hold of the medicine**. This means that a medicine should not just be available; there should also be enough of it that everyone who needs it can get it. For medicine to be accessible, a country must have the required infrastructure to distribute the medicine to every citizen, or an appropriate support for a plan that will deliver it.

3. Affordability

The third "A" is for affordability, which is **the ability of people or a government to pay for medicines and vaccines**. Even when a country has enough medicine, people might not be able to actually buy it. Some countries have healthcare systems where the government pays for medicine for its people, but other countries require citizens to pay the full cost of that medicine. Sometimes, medicine costs can be so high that very few people are able to buy it.

4. Acceptability

The last "A" means acceptability, which is **whether or not a population feels comfortable with using a vaccine or medicine**. Citizens might feel concerned about a medicine's safety, confused what the medicine or vaccine does, or uncomfortable with how the medicine is taken. Pharmaceutical companies and governments should address these concerns by explaining how a specific medicine or vaccine works in order to increase its acceptability.

⁴ Collin-Lefebvre, Thomas, and Jayasree Iyer. "How Do We Make Sure Everybody in the World Has Access to Medicines?" Frontiers for Young Minds, March 25, 2020. https://kids.frontiersin.org/articles/10.3389/frym.2020.00035.



Possible Solutions

The hardest part of drafting resolutions is coming up with solutions that all countries can agree to. In this briefing report, you learned about the purpose of SDG 3, its current progress, four key challenges, and the four "A"'s principles that should be applied to every medicine and vaccine rollout. This section covers the possible solutions that are already being looked at by countries and United Nations diplomats such as yourselves.

One of the most expensive parts of the supply chain is **import tariffs**, **which are taxes placed on a good when it travels from one country to another.** Lowering or getting rid of tariffs on medicines and vaccines could make medicines more affordable to everybody. Countries with more medicine than they need can share vaccines with other countries who don't have enough which can greatly bridge inequalities and create availability. Additionally, if the countries giving supplies can help the receiving countries by setting up **distribution** plans, they can greatly increase accessibility. These actions not only assist those who need support the most, but also help strengthen bonds between countries.

The United Nations could also recommend all countries implement **price ceilings** on medication, which means **limiting the amount of money companies can charge for a drug**. They can also ask governments to crack down on unfair healthcare practices and pricing. Unequal access to medicines and vaccines remains a critical issue which is only worsened by growing inequalities, uneven systems, and unfair practices. Student delegates in this committee will come together to find a solution to achieve equal global access to vaccines and medicines, where they can work to reduce economic challenges, limit supply chain issues, help develop infrastructure, and ensure that global supply of medicine can meet global demand.



Glossary of Terms

Term	Definition
Corruption	Dishonest behavior by people in power.
Developed Countries	Countries with high levels of economic activity where people often have high income.
Developing Countries	Countries with a low level of economic activity where people often have low income.
Distributing	The act of sharing or giving out something.
Ensure	To make sure; guarantee.
Healthcare Coverage	Paying for a person's medical needs.
Immunizations	A way to create immunity against diseases; also called "vaccinations."
Inequality	When some people have much more money, resources or power than others.
Infrastructure	Structures and facilities (i.e. buildings, roads) needed for a society to operate.
Insurance	Something that protects you against a loss. For example, health insurance will help pay for treatment if you get sick.
Pharmaceutical Companies	Companies that make and sell medicines (also called "pharmaceuticals").
Private Company	A company that is owned by one person or a small group of people.
Producing	The act of making something.
Public Health	Efforts to keep a whole community healthy
Regulations	A rule or law that controls people's actions
RSV	Respiratory Syntactical Virus; a respiratory illness that is most severe in children.
Supply Chain	How a product is made and sold.
Universal	Something for everyone.
Vaccines	Shots that help protect people against illness or disease.



Helpful Resources

<u>Sustainable Development Report 2022 (sdgindex.org)</u> This Report includes a visual map with progress on every SDG in each country.

CIA World Factbook (Online Resource for Country Statistics) A helpful resource that provides information and statistics on a country's history, people, government, economy, geography, and more.

• World Health Organization Map of Essential Medicines

This World Health Organization model lists essential medicines and contains information on what they are. It also includes a relevant database and map of countries sorted by what medicines on the list they have and what their availability is.

The Journey of a Vaccine

This video details the life of a vaccine from concept, to testing, to distribution, and administration.

• Vaccine Distribution Challenges

This video from Yale School of Medicine speaks about the distribution and accessibility challenges the world has had and how they can be addressed.

The Importance of Vaccine Distributions

This video from the United Nations talks about the differences between vaccine access in developed and developing countries, and the dangers a lack of accessibility poses to the globe.

How We Ensure Global Access

This article outlines the issue of access to vaccines and medicines ways and proposes a four step approach for pharmaceutical companies to work with governments to improve the situation: availability, accessibility, affordability, acceptability.