BACKGROUND GUIDE

WORLD HEALTH ORGANISATION

AGENDA: DISCUSSING STEPS TO ACHIEVE EQUITABLE ACCESS TO HEALTHCARE USING TECHNOLOGY.

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LETTER FROM THE EXECUTIVE BOARD

Esteemed Members of the World Health Organisation (WHO), it is our honour to welcome you to Nath Valley MUN '24. This guide has been curated to serve as a starting point for research and provides an overview of the agenda at hand. We hope that the Study Guide will help you throughout the course of your preparation for the conference from now on. However, the guide only provides a bird's eye perspective of the relevant topics of discussion. We strongly encourage you all to delve deeper into the complexities of the agenda, not letting the guide limit the scope of your research.

This guide will provide you with a background that will form the basis for your research. Apart from the topics covered, delegates must understand the perspective of the allotted country and weave their research based on both- the given agenda and foreign policy. We will firmly seek active participation from all of you in the debate and the committee work. Do not feel overwhelmed by the process of researching and feel free to contact us for anything you may need on our end.

We look forward to a fruitful discussion and a wholesome exchange of ideas during the proceedings in the upcoming meeting of this Association, with a strong emphasis on decorum and diplomatic etiquette. We are certain that these proceedings shall prove to be successful in determining the path to be taken to solve some issues that prove to be a great challenge to the healthcare sector in the global status quo.

All the best!

Shreenija Dandavate
Chairperson
shreenija21@gmail.com

Ishaani Ghughe
Vice Chairperson

INTRODUCTION TO THE COMMITTEE

The World Health Organisation (WHO) is a UN agency that interconnects countries all around the world to promote health and serve the vulnerable. It ensures effective coordination between nations to implement health policies and respond better to health emergencies like pandemics and epidemics. It is the superintendent to prepare appropriate guidelines and set global health standards. The organization also works to ensure improvement when it comes to maternal care, mental health and pertinent nutrition to promote health equality and universal health coverage. Its key areas of focus include communicable diseases like HIV/AIDS, TB, cholera and non-communicable diseases like cancer, diabetes etc.

The W.H.O does not only support countries to predict, prevent and contain health emergencies, it also helps nations when it comes to humanitarian crises and natural disasters. It works to evaluate the safety, feasibility, and potency to ensure the availability of emergency medical products. It ensures the proper arrangement of medical resources to further ensure fair access to vaccines, therapeutics, diagnostics etc.

GOVERNANCE- The World Health Assembly acts as the decision-making body for the W.H.O. This assembly is attended by delegations of all member states of the W.H.O. It focuses on specific, selective health agendas chosen by the Executive Board. The main functions of the World Health Assembly constitute determining the policies of the Organization, appointing the Director-General, overlook financial policies, and review and approve the proposed programme budget. The WHA is held annually in Geneva, Switzerland. WHOs work remains embedded in the basic principles as defined in the 1948 Constitution.

FUNDING- The W.H.O. is funded by 2 main sources; the Member states paying their assessed contributions and voluntary contributions from member states and other partners. Assessed Contributions are a percentage of a country's total gross domestic product (GDP). It is approved by member states every 2 years at the World Health Assembly. The rest of WHOs financing is done through Voluntary Contributions which come from Member states and from other UN organizations and intergovernmental organizations.

The W.H.O was founded on April 7, 1948 and has its headquarters located in Geneva, Switzerland. It currently has 194 members and is working across 6 regions in 150+ countries.
The organization plays a very important role promoting global health and responding to health emergencies on a global scale.

MANDATE AND SPECIFIC CHARACTERISTICS OF WHO

The World Health Organization (WHO), a specialized agency of the United Nations, is dedicated to promoting health, ensuring global safety, and serving vulnerable populations. Established in 1948, its primary goals include:

Mandate of WHO

- Promote Health and Well-being: WHO supports countries in building resilient healthcare systems and advocates for universal health coverage to ensure access to essential services without financial hardship.
- Keep the World Safe: It coordinates international responses to health emergencies, manages disease surveillance, and implements early warning systems to control infectious diseases.
- Serve the Vulnerable: WHO focuses on health equity, reducing disparities, and addressing the needs of vulnerable populations through global health initiatives targeting issues like HIV/AIDS, malaria, and maternal health.

Specific Characteristics of WHO

1. *Global Leadership and Coordination*: WHO sets international health standards, develops global health policies, and provides a framework for health security through the International Health Regulations (IHR).
2. *Research and Evidence-Based Policy*: It conducts and supports health research, collects and analyses health data, and publishes the World Health Report to guide informed decision-making.
3. *Technical Assistance and Capacity Building*: WHO offers technical support and training to enhance healthcare systems and professional skills in member countries.
4. *Global Health Advocacy*: It leads public health campaigns, promotes health policies, and advocates for practices that improve global health and quality of life.
5. *Collaborative Partnerships*: WHO works with UN agencies, governments, NGOs, and the private sector to address global health issues, driven by the collective decisions of its 194 member states.
6. *Funding and Resource Mobilization*: WHO is funded by member states and donors, engaging in partnerships to secure additional funding for health initiatives and emergency responses.

Through these efforts, WHO plays a crucial role in advancing global health and ensuring equitable access to healthcare.

OVERVIEW OF THE AGENDA

In today's rapidly advancing world, technology has the potential to revolutionize healthcare, making it more equitable and accessible for all. However, despite significant technological advancements, disparities in healthcare access persist, particularly affecting underserved populations. To address these disparities, a multifaceted approach integrating innovative tools, strategic policies, and community engagement is essential.

Telemedicine Expansion is a crucial step. By investing in infrastructure, especially in rural and underserved areas, we can improve internet connectivity and provide necessary hardware and software. Policy support is vital to ensure reimbursement for virtual care and facilitate cross-state licensure for healthcare providers. Additionally, training healthcare providers in telemedicine best practices and educating patients on using telemedicine platforms effectively can enhance the reach and quality of care.

Mobile Health (mHealth) Solutions offer significant benefits. Developing health apps that provide services like remote monitoring, appointment scheduling, and health information dissemination can make healthcare more accessible. These apps should be integrated with electronic health records (EHRs) for seamless data sharing and continuity of care. Ensuring the apps are user-friendly and accessible to people with disabilities or limited tech proficiency is crucial for broad adoption.

Electronic Health Records (EHRs) play a pivotal role in achieving equitable access. Developing interoperable EHR systems that allow data sharing across different healthcare providers ensures continuity of care. Empowering patients by providing them easy access to their health records enables them to be more engaged in their healthcare, leading to better health outcomes.

Artificial Intelligence (AI) and Machine Learning can significantly enhance healthcare delivery. Using AI for predictive analytics helps identify at-risk populations and predict health trends, enabling proactive care and resource allocation. AI can also be used for personalized medicine, tailoring treatments to individual patients based on their genetic, environmental, and lifestyle factors.

Remote Monitoring and Wearable Technology are effective in managing chronic diseases. Deploying wearable devices for real-time monitoring of conditions such as diabetes and heart disease allows for timely interventions. These tools can also encourage preventive care by gathering data on patients' daily habits.

Health Information Systems and Data Analytics are essential for understanding and addressing health disparities. Implementing robust health information systems to collect and analyse data on health outcomes informs policy decisions and resource allocation. This data-driven approach enables tailored interventions to meet specific community needs.

Community Engagement and Education are fundamental to ensuring the successful adoption of healthcare technologies. Developing digital literacy programs, particularly in underserved communities, ensures they can access and use healthcare technologies. Employing community health workers to provide assistance and education bridges the gap between technology and patients.

Collaboration and Partnerships among governments, private sectors, and non-profits can leverage resources and expertise to deploy healthcare technologies effectively. Engaging in global partnerships to learn from successful models in other countries and applying best practices locally can further enhance efforts.

Regulatory and Ethical Frameworks must ensure robust data privacy and security measures to protect patient information and build trust in healthcare technologies. Regulations should explicitly aim to reduce health disparities and ensure equitable access.

Funding and Financial Support through subsidies, grants, and insurance coverage is critical for the adoption of healthcare technologies in underserved areas.
By systematically addressing these areas, technology can significantly contribute to more equitable access to healthcare, ensuring that all individuals, regardless of their socio-economic status or geographic location, receive quality medical care.

CASE STUDIES

1. **Project ECHO (Extension for Community Healthcare Outcomes)**
   Location: New Mexico, USA
   Overview: Project ECHO, initiated by the University of New Mexico, uses telemedicine to extend specialist healthcare to rural and underserved areas. The model connects community health providers with specialist teams through videoconferencing.
   Impact: This initiative has significantly improved access to specialty care in remote areas, particularly for chronic conditions like hepatitis C, HIV, and diabetes. By enabling local providers to offer specialized care, Project ECHO has reduced healthcare disparities and improved patient outcomes.

2. **Health for Maternal Health in Kenya**
   Location: Kenya
   Overview: The Mobile for Reproductive Health (m4RH) program in Kenya provides maternal health information through mobile phones. Pregnant women receive SMS messages with vital health information, appointment reminders, and emergency contact numbers.
   Impact: The m4RH program has increased the number of women attending antenatal clinics, improved knowledge about maternal and child health, and reduced maternal and infant mortality rates. Mobile technology has proven to be an effective tool in enhancing healthcare access and education in resource-limited settings.

3. **Babylon Health**
   Location: United Kingdom and Rwanda
   Overview: Babylon Health is a digital health service that uses AI and telemedicine to provide primary care. Patients can consult with doctors via video calls and use an AI-driven symptom checker for preliminary diagnosis.
   Impact: In the UK, Babylon Health has increased access to healthcare by reducing wait times for appointments. In Rwanda, the service has expanded healthcare access to rural and underserved populations, offering affordable and timely medical consultations. This model demonstrates how AI and telehealth can bridge gaps in healthcare access globally.

4. **Aravind Eye Care System**
   Location: India
   Overview: Aravind Eye Care System uses telemedicine to deliver eye care services to rural populations. Through teleconsultations and satellite clinics, they provide screening, diagnosis, and follow-up care for eye diseases.

Impact: Aravind has dramatically increased access to eye care for millions of people in rural India, reducing the incidence of preventable blindness. Their use of technology has enabled efficient service delivery and high-quality care at a low cost.

5. **Amref Health Africa's Leap mHealth Platform**
   Location: Sub-Saharan Africa
   Overview: The Leap platform provides training and continuous professional development for community health workers (CHWs) through mobile phones. The platform offers educational content, quizzes, and peer-to-peer support.
   Impact: Leap has trained thousands of CHWs across Africa, improving their knowledge and skills. This has led to better healthcare delivery in remote areas, as CHWs are crucial in providing primary care and health education to their communities. These case studies illustrate the transformative potential of technology in achieving equitable healthcare access. By leveraging telemedicine, mobile health, AI, and digital platforms, these initiatives have addressed various healthcare challenges and improved health outcomes for underserved populations.

6. **Sehat Kahani**
   Overview: Sehat Kahani, a telemedicine platform in Pakistan, connects underserved communities with qualified female doctors who consult remotely. Patients access services via mobile apps or community telemedicine clinics for video consultations, prescriptions, and health education.
   Impact: Sehat Kahani has significantly improved healthcare access, especially for women and rural populations. It offers convenient and affordable consultations, leading to better health outcomes and early disease detection. By leveraging technology and mobilizing female doctors, Sehat Kahani overcomes barriers to healthcare, empowering both patients and healthcare providers.

CHALLENGES TO ACHIEVING EQUITABLE ACCESS TO HEALTHCARE

Achieving equitable access to healthcare using technology presents several challenges that must be addressed to ensure that all individuals can benefit from digital health innovations. One significant challenge is the technological infrastructure and connectivity gaps, particularly in remote and underserved areas.

Limited internet connectivity, unreliable power supply, and outdated equipment hinder the effective implementation of healthcare technologies. Overcoming these challenges requires substantial investment in infrastructure development, including expanding broadband access and providing necessary hardware and software to healthcare facilities.

Additionally, health inequities and the digital divide pose significant obstacles. Vulnerable populations, such as low-income individuals and those living in remote areas, may face barriers to accessing and using healthcare technologies.

Bridging the digital divide requires targeted efforts to ensure that underserved communities have equitable access to technology-enabled healthcare services. This may involve providing subsidies for internet services and digital devices, offering tailored training and support programs, and designing culturally and linguistically appropriate digital health solutions.

By addressing these challenges, we can work towards a future where technology enables equitable access to healthcare for all individuals, regardless of their socio-economic status or geographic location.

Achieving equitable access to healthcare through technology also demands addressing health inequities and the digital divide. Vulnerable populations, including low-income individuals and those in remote areas, may encounter barriers to adopting digital health solutions. Bridging this gap necessitates targeted interventions and culturally sensitive approaches to ensure inclusivity and accessibility.

SCOPE FOR DISCUSSION IN THE COMMITTEE

1. Assessing the current state of healthcare access disparities globally.
2. Identifying key barriers to accessing healthcare, especially in underserved and marginalized communities.
3. Exploring the role of technology in overcoming geographical barriers to healthcare access.
4. Discussing the impact of digital health interventions on improving healthcare access and outcomes.
5. Addressing concerns related to digital literacy and technology adoption among vulnerable populations.
6. Examining the potential of telemedicine and remote monitoring technologies in expanding access to healthcare services.
7. Discussing regulatory challenges and policy considerations for scaling up technology-enabled healthcare delivery.
8. Exploring innovative financing models for investing in digital health infrastructure and solutions.
9. Analyzing the ethical implications of using technology to deliver healthcare services, particularly regarding data privacy and patient confidentiality.
10. Discussing the importance of cultural competence and linguistic diversity in designing technology-based healthcare solutions.
11. Exploring strategies for ensuring equitable distribution of healthcare resources and services in the digital age.
12. Discussing the role of public-private partnerships in advancing technology-enabled healthcare initiatives.

REFERENCES

- World Health Organization (WHO). (2020). WHO Guideline: Recommendations on Digital Interventions for Health System Strengthening.
- Institute for Healthcare Improvement (IHI). (2020). Achieving Equity in Health Care.
- World Health Organization. (2010). Telemedicine: Opportunities and Developments in Member States: Report on the Second Global Survey on eHealth 2009 (Global Observatory for eHealth Series, Volume 2).
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: a comparison of two theoretical models.
- Kvedar, J., Coye, M. J., & Everett, W. (2014). Connected health: a review of technologies and strategies to improve patient care with telemedicine and telehealth.
- Wac, K., & Tsiourti, C. (2019). Recent Advances in Internet of Medical Things and Wearable Technologies for HealthCare Applications.
- Kushniruk, A., & Borycki, E. (2008). Low-cost rapid usability engineering: designing and customizing usable healthcare information systems.
- International Telecommunication Union (ITU). (2020). ICT Facts and Figures 2020.
- World Health Organization (WHO). (2015). mHealth: New Horizons for Health Through Mobile Technologies.
- National Institute of Health (NIH). (2019). Telemedicine: Opportunities and Developments in Member States.

BIBLIOGRAPHY

1. World Health Organization (WHO). (2020). WHO Guideline: Recommendations on Digital Interventions for Health System Strengthening. Retrieved from https://www.who.int/publications/i/item/9789241550505

2. Institute for Healthcare Improvement (IHI). (2020). Achieving Equity in Health Care. Retrieved from http://www.ihi.org/resources/Pages/IHIWhitePapers/Achieving-Equity-Health-Care-0103.aspx.

3. World Health Organization. (2010). Telemedicine: Opportunities and Developments in Member States: Report on the Second Global Survey on eHealth 2009 (Global Observatory for eHealth Series, Volume 2). Retrieved from https://www.who.int/goe/publications/goe_telemedicine_2010.pdf.

4. World Health Organization (WHO). (2015). mHealth: New Horizons for Health Through Mobile Technologies. Retrieved from https://www.who.int/goe/publications/goe_mhealth_web.pdf.

5. National Institute of Health (NIH). (2019). Telemedicine: Opportunities and Developments in Member States. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK447115/