



UNITY TRANSCENDING BOUNDARIES: PATCHING TOGETHER THE GLOBAL MOSAIC

E. AHAMED MODEL UNITED NATIONS CONFERENCE 2025

UNITED NATIONS HUMAN RIGHTS COUNCIL

AGENDA:

*Promoting Equitable Access To Technological
Advancement: Supporting The Global Rights To
Advanced Healthcare*

BACKGROUND GUIDE

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ABOUT THE COMMITTEE

United Nations Human Rights Council is an intergovernmental body within the United Nations made up of 47 States responsible for the promotion and protection of all human rights around the globe. UNHRC works to make sure that everybody is able to access their right to seek and find safe refuge, having fled violence, prosecution or war.

Its main purpose is to address situations of human rights violations and amend them. Its mandate was established by General Assembly resolution 60/251 from 15 March 2006. UNHRC was originally called United Nations Commission on Human Rights.

Regular sessions are held thrice annually. If required, special sessions are also held. The 47 members of the committee elected have their positions as members for three years and are elected based on a regional group basis. The Council is supported by the Office of the High Commissioner for Human Rights.

The Human Rights Council through 2006 to 2023:

- 54 regular sessions held
- 36 special sessions held
- 9 urgent debates held
- 1,481 resolutions adopted
- 60 Special Procedures mandates established



Introduction to the Agenda

“Of all the forms of inequality, injustice in health is the most shocking and inhumane.”
—Martin Luther King Jr.

The various facets of promoting equitable access to technology in the global health sector will be covered in this background guide. Including:

- Improvements in the healthcare field in developing nations
- Technological advancements in healthcare facilities along with ensuring equitable access to these advancements
- Raising awareness for a transparent healthcare system in which the patients have right to information



Key Points of the Agenda:

1) Strategies for Expanding Healthcare Access in Developing Countries:

- Developing technical tools for emergency situations
- Conducting blood donation, and vaccination camps.
- Establishing hospitals and clinics in underdeveloped and rural areas
- Advancement of the organ donation network



2) Right to Equitable Benefit from Scientific Progress:

- Raising awareness about new technologies and their risks
- Globalising technological advancements
- Ensuring accessibility and affordability of technologies

3) Importance of IT in Healthcare Institutions:

- Implementing patient monitoring software
- Offering online consultation services
- Maintaining electronic patient records and applications

PRIORITIZING TECHNOLOGICAL ADVANCEMENTS IN THE FIELD OF HEALTHCARE IN DEVELOPING COUNTRIES



Healthcare changes dramatically because of technological developments, from antibiotics to magnetic resonance imaging scanners and radiotherapy. Future technological innovation will be continuing to transform healthcare. The present situation shows that developing countries face healthcare technological problems due to severe funding, expertise and infrastructure shortages. Most medical equipment is out of service, and inappropriate equipment donations are sometimes made.

The International Society of Technology Assessment in Health Care (ISTAHC) has defined healthcare technology as The interventions and applied knowledge used by healthcare practitioners. Thus, healthcare technology includes but is not limited to, antibiotics, cardiac drugs, vaccines, cardiac pacemakers, magnetic resonance imaging and diagnostics test kits, gall bladder removal, acupuncture and psychotherapy; electronic patient record systems, critical pathways, and alternative healthcare financing mechanisms and delivery systems.

Healthcare Technology is not simply medical equipment, drugs, financing mechanisms and administration but it is an applied multidisciplinary approach to knowledge including Information Technology (IT), Eco epidemiology (ecology and epidemiology interaction) and medical engineering to be used by healthcare practitioners and systems delivering health care (modern concept of HCT). This definition gives HCT a wider perspective and does not limit it to one field.



IMPLEMENTING BASIC TECHNOLOGICAL INFRASTRUCTURE IN CLINICS AND HOSPITALS TO ENSURE GLOBAL RIGHTS IN ADVANCED HEALTHCARE

The digitization of healthcare services is a major shift in how healthcare services are offered and managed in the modern era. The COVID-19 pandemic has increased the use of technologies in the healthcare sector.

Healthcare is much more than the adoption of digital tools, however; going beyond that, it is a digital transformation of healthcare.

Before the 20th century healthcare was largely a cottage industry, with patients receiving care at home from family members friends or local healers. Healthcare 1.0 was devoted to patient-clinician encounters.

Healthcare become more centralized and digitalized, hence healthcare 2.0 was an era of major development in health, life science and biotechnology, medical equipment and devices. However, there was still issues with data privacy and security. Not all patients had access to these technologies, creating a healthcare environment divided based on people's socioeconomic situation. In addition, there was a need for standardization and interoperability in IT systems.

H4.0 is an era where healthcare delivery is enabled by:

- Medical cyber-physical systems
- Medical robots
- Wearable and ambient sensors
- Intelligent sensors



Patient care is forecast to shift by using AI techniques and big data analytics for proactive treatment, disease prediction and prevention, personalized medicine and enhanced patient-centered care. H4.0 will thus be an era of pervasive, smart and interconnected healthcare community

PRIORITIZING TECHNOLOGICAL ADVANCEMENTS IN THE FIELD OF HEALTHCARE IN DEVELOPING COUNTRIES



APPROPRIATE PATIENT DATA COLLECTION WITH THE HELP OF EFFICIENT TECHNOLOGY

Historically, healthcare data was trapped within the confines of paper records, making access and analysis cumbersome. The digital revolution ushered in a new era, transitioning these records to electronic formats, and enhancing accessibility and utility. The introduction of standards, notably HL7 FHIR, has been a game changer, ensuring seamless data exchange.

Furthermore, the emergence of health informatics has revolutionized data collection, leveraging technology to drive meaningful insights from vast amounts of data. Data collection is fundamental in today's healthcare, supporting evidence-based decisions and enhancing patient care. Patients are now active participants in their health journey. Such data empowered patients to take charge of their health, proving healthcare professionals with additional information to tailor care effectively.



The potential of artificial intelligence (AI) and Machine Learning (ML) in healthcare is vast. These technologies delve deeper than traditional analysis, learning from data and making predictions. For example, the e-med logic NLP tool, powered by AI, can analyse vast amounts of unstructured medical records, identifying trends and anomalies. Such capabilities enhance diagnostics, allowing for early detection of diseases, and aid in treatment planning, ensuring patients receive care tailored to their unique needs.

PROTECTION OF PERSONAL INFORMATION

Formally collected data should be managed by authorized people to safeguard privacy. Strict access controls and authentication measures must be executed to ensure security. Regular training sessions should be conducted to keep workers updated on data handling protocols and monitor the login access to detect unauthorized activities. Reviewing, updating the access permissions and implementing physical security measures to safeguard data storage locations must be pursued continuously.



By limiting access to trained individuals, organizations safeguard sensitive information, reduces the risk of data breaches and privacy violations. Unauthorized handling of data can compromise the security and lead to misuse or unauthorized disclosure, undermining the credibility of the organization. Hence, if formally collected data is handled by authorized persons, it ensures responsible data management practices with regulations and maintaining the confidentiality of collected data.

Patients right to receive and protect their data

The patients have the right to receive the correct data regarding their health. Ensuring consistency and accuracy across platform is paramount to derive meaningful insights. Inaccurate data can lead to misdiagnoses or inappropriate treatments. System complaint with regulation like HIPAA often have built-in checks and balances to ensure data integrity reducing the risk of errors and enhancing patient's safety.

PROTECTION OF PERSONAL INFORMATION

Proper action to be taken against data breaches

Data breaches can be triggered by several factors, and a lot of personal information can be implicated in data breaches, leading to potential risks of harm to individuals and organizations.

1. Contain the data breach to avoid leaking personal data. Act immediately to implement the systems and patch the loopholes which have led to such vulnerability which allowed the breach into the system. Isolate affected systems to prevent further data loss.
2. Evaluate the risks including potential harm to affected individuals and gather facts to assess the data breach.
3. When an organization experiences a data breach, notify law enforcement, other affected businesses, and affected individuals. Keep stakeholders updated with new developments and outline the remedial actions being taken.
4. Boost security to reduce the potential for breaches in the future. Record all parts of the violation and the counter strategy implemented

Transparency

Any processing of personal data should be lawful, fair, and transparent. The right to be informed, under Articles 13 and 14 GDPR, is a key part of any organizations obligations to be transparent. Individuals should be made aware of risks, rules, safeguards and rights in relation to the processing of personal data and how to exercise their rights in relation to such processing. Transparency in handling data breaches involves promptly notifying affected individuals and relevant authorities providing clear and accurate information about the incident. When you think about transparency, this means that you need to tell affected individuals and relevant authorities about your data breaches in a very timely manner and in the right detail.

PROTECTION OF PERSONAL INFORMATION

Obstruct the flow of Misinformation

Misinformation is usually passed on popular social media platforms such as Facebook, YouTube or WhatsApp.

- The best way to stop the spread of misinformation is to communicate quickly and clearly with the public and media. Double check facts before you pass them on; use trustworthy publicists.
- Teaching the public to understand misinformation and promote critical thinking of facts
- Policy actions to enhance transparency.
- Detecting fake news published in digital platforms via technology.
- Encourage media literacy; to help people become informed and separate fact from rumor.

Transparent and proactive efforts are necessary to preserve the quality of the information and cut on the circulation of rumors



DEVELOPMENT OF ORGAN DONATION SYSTEMS

ADVANCEMENTS TO THE ORGAN DONATION NETWORK

The advancement of the organ donation network makes it more efficient, helping it meet the increasing number of organ transplant recipients. These advancements can be made by:

Using Advanced Technology

Implementing advanced technology to track organ availability, match donors with recipients, and monitor the waiting lists.

Strengthening communication through technology

Collaborations among hospitals, organ procurement organizations (OPOs), and transplant centers can be created through technology that enables the storage of organs with ease in case of emergencies. Enhancing communications among the patients, donors, and doctors with technology would help avoid uncertainty and confusion.

Public Awareness and education

Educating the public about the importance of the organ donation network, eliminating misconceptions about the process, convincing them to join the program, organizing seminars in institutions to help raise awareness can take place for a greater response from donors.

Global collaboration

Collaboration with international organizations to share ideas and solutions, addressing global challenges like organ trafficking and more would help take appropriate measures at a larger scale.

Artificial organ donation

It is the use of bioengineered devices or tissues that can be made by doctors and are surgically put into a human body. This is done to replace organs in the human body. These artificial organs are alternatives to the organs taken from human donors. However, they are still facing a lot of challenges, so we need to get these organs by advancing artificial organ technology and reducing our dependence on human donors or other human donors.

Data transparency and governance

For data-driven governance structures to oversee organ allocation policy development, donors and recipients must be informed of the benefits of funded, waiting time, and level of medical match (individual).

organ donors save lives +

DEVELOPMENT OF ORGAN DONATION SYSTEMS

ADVANCEMENTS TO THE ORGAN DONATION NETWORK

PLANS FOR ARTIFICIAL ORGAN DONATION

1. Scientists have developed a bioreactor device that uses human kidney cells that are cultured in the lab. This mimics some key functions of the kidney and has been tested on pigs for a week and it has resulted in no side effects.

2. Plans to try growing custom organs in factories so that there is an unlimited supply of organs which could make transplantation quicker and more common are in discussion.

3. Scientists are finding methods to miniaturize, and implant bioengineered artificial organs. These serve as solutions for organ donor solutions and can be used for medical training.

Addressing organ shortages:

Helps us reduce dependency on human donors (artificial organs can be mass-produced) and increases chances for transplantation for patients in need.

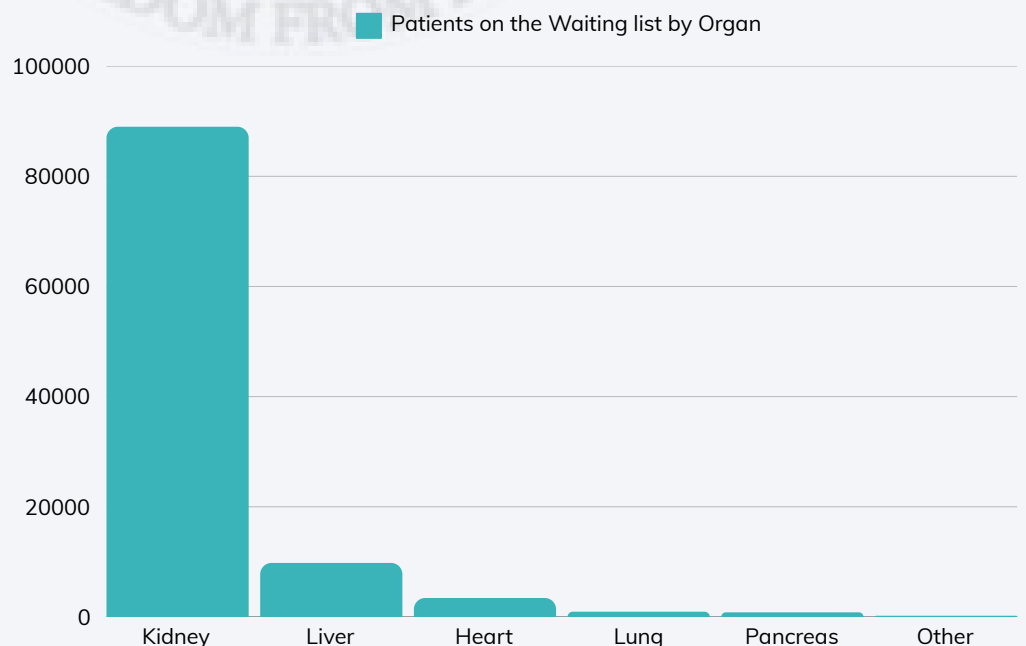
Reduced organ rejection:

These organs can be customized according to the need of the recipient so that organ rejection doesn't happen, and they would not have to wait for the correct match and reduce the use of immunosuppressive drugs.

Improved quality of life: Patients who receive artificial organs are said to have a better, healthier life. It helps extend life and bring better outcomes.

Accessibility:

Artificial organ donation is a complex problem all around the world. Accessibility to artificial organs is not just about the availability, it is also about affordability and the support systems for the post-operation process. It is a challenge that intersects with socioeconomic status, geographic location, insurance coverage, etc.



RIGHT TO EQUITABLE BENEFITS FROM SCIENTIFIC PROGRESS

ENSURING EVERYONE BENEFITS FROM SCIENCE

The right to enjoy the benefits of scientific progress and its application must cover all sciences: life sciences, physical sciences, behavioral sciences, as well as social sciences.

The right to benefit from scientific progress and its application is an important part of article 15 of the International Covenant on Economic, Social and Cultural Rights, and therefore, a fundamental aspect of cultural rights.

This includes:

- The access of everyone, without discrimination, to the benefits of science and its applications necessary to live a dignified life, including scientific knowledge
- Opportunities for all to contribute to the science and scientific research.
- The information necessary in decision-making by individuals and communities in areas of



research and development, and the related right to information.

- An environment that encourages the protection and building up of science and technology, along with the freedom that scientific research really needs.

REPORT ON THE RIGHT TO ENJOY THE BENEFITS OF SCIENTIFIC PROGRESS AND ITS APPLICATIONS (2012)

In her third thematic report to the Council, the Special Rapporteur focuses on the 2012 report to the Human Rights Council focuses on the right to enjoy the benefits of scientific progress and its applications. She says the strong connection between that right and the right to take part in cultural life – as well as other human rights – cannot be overstated. To get important innovations to everyone, states and the private sector must work together to identify the needs of marginalized people with consultative processes, direct funding, and targeted research. She says the private sector will have to prioritize the right to science through corporate social responsibility initiatives.



The report also urges states to make basic technologies available to all – such as the Internet – as well as open access to scientific knowledge and information on the Internet. It also called for states to promote science education at all levels. Preparation of the report and evaluation of the developments and challenges with respect to the right to enjoy the benefits of scientific progress and its applications, the Special Rapporteur prepared and disseminated a questionnaire. A/HRC/20/26.

RIGHT TO EQUITABLE BENEFITS FROM SCIENTIFIC PROGRESS

SPREADING AWARENESS OF NEW TECHNOLOGIES AND THEIR POTENTIAL RISKS

TECHNOLOGY'S DISRUPTIVE POTENTIAL:

There are mounting concerns that these technologies- how they are used will pose serious challenges, including labor force dislocations and other market disruptions, exacerbated inequalities, and new risks to public safety and national security. The technologies are mostly dual use, in that they can be used as much to serve malicious or lethal purposes as they can be harnessed to enhance social and economic development, rendering efforts to manage them much more complex.

Relatively easy to access and use, most of them are inherently vulnerable to exploitation and disruption from both near and far. In parallel, geopolitical tensions around the world are growing, and most countries increasingly view these technologies as central to national security. The potential for misuse is significant, greater economic integration and connectivity means that the effects and consequences of technological advances are far less localized than before and are liable to spread to countries and industries worldwide. Technological innovation is largely taking place beyond the purview of governments. In many cases, the rate of innovation is outpacing states'

ability to keep abreast of the latest developments and their potential societal impacts. And even if one or, a handful of national governments devise policies for managing these effects, the global reach of many emerging technologies and their impacts requires new approaches to multilateral governance that are much more difficult to agree on. A greater number and variety of actors must be involved to initiate, shape, and implement both technical and normative solutions.

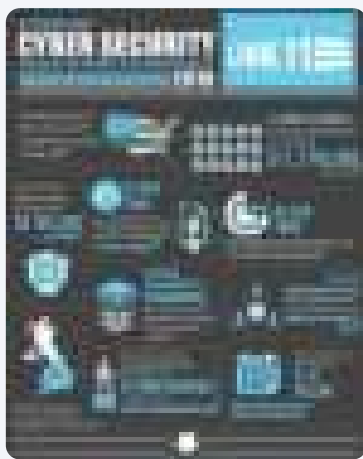
Many entities, like governments, often lack the resources to assess the broader societal impacts of their investments and innovations. When they do, finding the right platforms to discuss these impacts is challenging due to the variety of implications, cross-border reach and differing political systems. This is especially true when technologies are profit-driven and guided by market forces. These technological advances disrupt legal, regulatory, and social orders, potentially disturbing the fundamental values and legitimacy of existing frameworks



Some technologies are governed by complex frameworks. For example, cyberspace is regulated by a mix of international law, political agreements, technical standards, trade and human rights norms, national regulations, and private sector self-regulation. These frameworks involve various actors and span multiple international regimes. They are supported by measures to enhance security and resilience, but key aspects remain contested, especially with emerging risks from technologies like IoT and AI.

WHAT LIES AHEAD?

Improvements in cyberspace governance are evident, but significant challenges remain. Efforts to secure data, privacy, and human rights are progressing in some regions, like the EU's GDPR, which enforces strict data protection standards but allows exemptions for national defense and public safety. Other regions are regressing or rolling back protections.



Divergences in internet governance, with some states advocating for greater control, continue to cause tensions. Some countries plan to develop national alternatives to the global internet, though their feasibility is questionable. New threats and vulnerabilities, especially related to the Internet of Things and AI, are emerging.

Cybercrime remains a major issue with states unable to agree on a common framework to combat it. Some support expanding the Budapest convention, while others call for new agreements. Public and private sectors are slowly addressing technological divides, but inequalities persist, complicating efforts to meet UN sustainable development goals (SDGs)



These developments blur the lines between human and machine agency, raising serious security concerns, critical systems dependent on AI and cloud computing are increasingly vulnerable to manipulation, posing risks to society. Existing security framework will need to adapt to these evolving changes.

- **Digital literacy programs.** Many people may not have the relevant skills to use the technologies effectively. These digital literacy programs will help people know how to use technology to browse the web and enhance their employment opportunities.
- **Inclusive design standards.** All the technology firms have the responsibility for designing their products and services to include

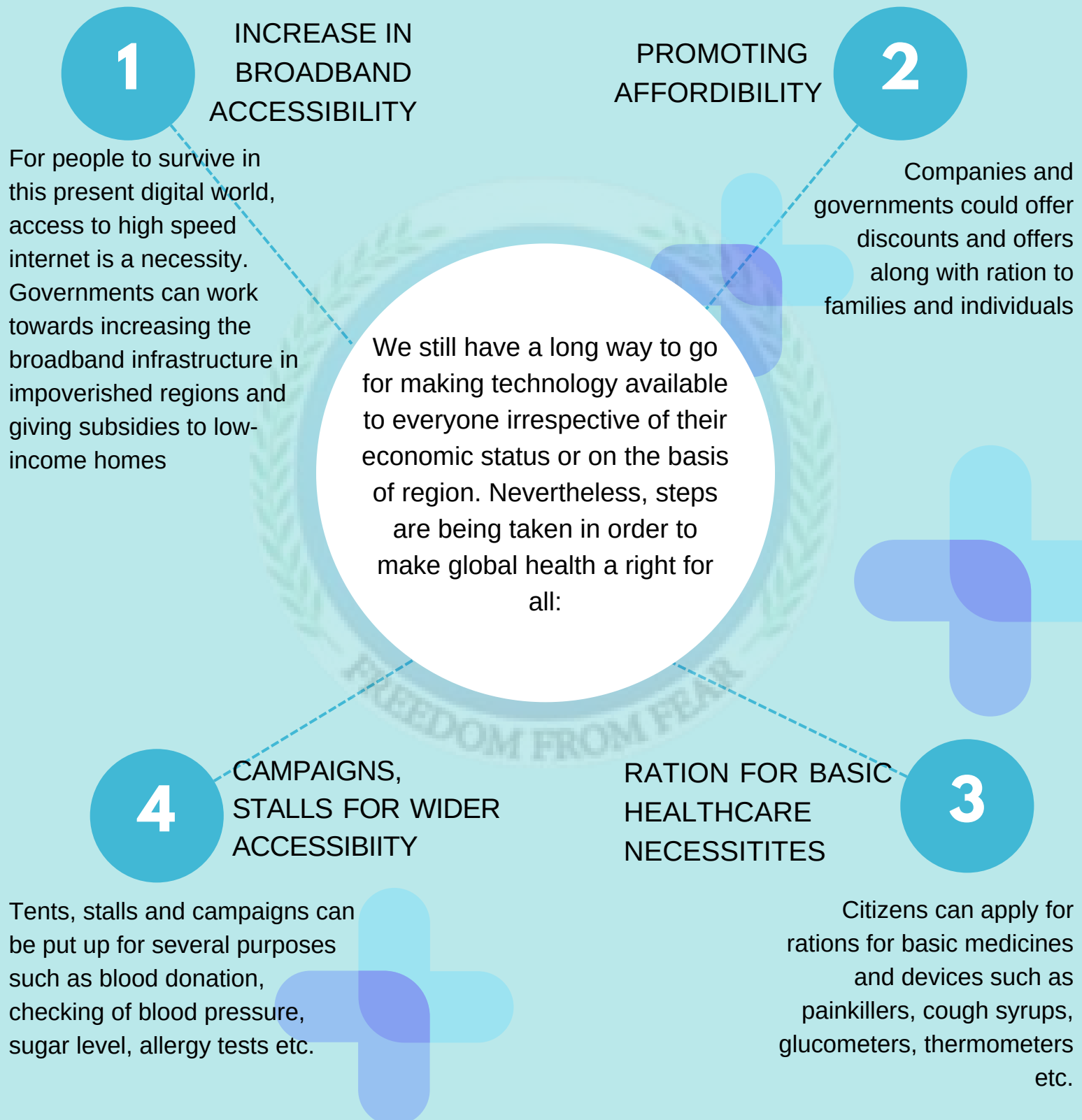


every person, including persons with disabilities. Community-based organizations.

- **Community-based organizations** are vital to giving people in low-income communities the tools for improving their technological skills and digital literacy. The government and private firms can support them through their funding and partnership opportunities

GLOBAL TECHNOLOGICAL ADVANCEMENTS AND ENSURING THE ACCESSIBILITY AND AFFORDABILITY

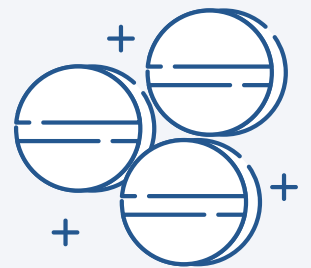
We still have a long way to go for making technology available to everyone irrespective of their economic status or on the basis of region. Nevertheless, steps are being taken in order to make global health a right for all:



DEVELOPING IT DEPARTMENT IN HOSPITALS



Besides managing clinical software, the other processes that help administrative staff keep patient records and admissions systems ticking along, an IT department of a hospital must also ensure that wards, operating rooms, Labor and delivery suites, and emergency departments are functioning at the highest level.



Some of these functions include billing, health information management, ordering, and receiving lab results; and specialist software for things like radiology or IV pumps. This, besides the common tasks an IT department of a hospital performs, such as providing network infrastructure, IT security, server maintenance and so on.

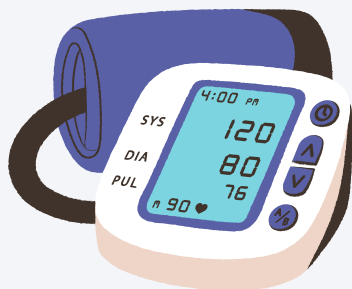
REMOTE PATIENT MONITORING SOFTWARE

RPM technology can be as small as hand-held medical devices or as vast as online websites or programs where patients can record their data. Some of these include:

- Glucose meters for patients with diabetes.
- Heart rate or blood pressure monitors.
- Continuous surveillance monitors that can track patients suffering from dementia and alert healthcare professionals of an event like a fall.
- Infertility treatment and monitoring from home.
- Home tests that can keep patients who have substance abuse issues accountable for and on track with their goals.
- Calorie intake or diet logging programs.

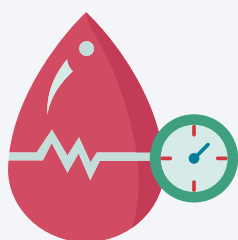
HOW DOES IT WORK?

While RPM techniques vary with devices or conditions under monitoring, much of the technology contains many similar components.



The first is a wireless-enabled sensor, able to measure certain physiological parameters and store the data it collects.

This storage must also include a way to connect with additional sensors, healthcare provider databases and related applications



Applications typically provide users with an interface to track or analyze the data and display treatment recommendations. The data collected by RPM devices is sent to the proper location and stored in a relational database.

This allows health care organizations with wireless telecommunications data to be looked at as individual instances or in the context of an entire health history. Often, the device can alert patients when a healthcare provider has looked over the data or detects an issue that requires the patient to come in.

Developing IT department in hospitals

Online consultation

Online consultation has now made other medical specialties available based on appointment booking. Now, patients can call their doctors via videoconferencing from wherever and whenever according to their convenience. If, in case a specific treatment is required, doctors are equipped and ready to recommend and refer patients to the appropriate specialists and facilities. Telemedicine platform is powered by Cisco and uses state-of-the-art technology for a seamless video conferencing.

Online consultation includes:

Live video consultation: Consult a doctor without an appointment on the telemedicine platform

Appointment booking consultation: If you are certain about the specialist you'd want to consult, arranging a pre-booked video consultation can be possible now

Home lab tests: After running through medical tests, you can request the staff to send the results online.

Order Medication: You can refill your prescription by ordering your medication which will be delivered to your doorstep.



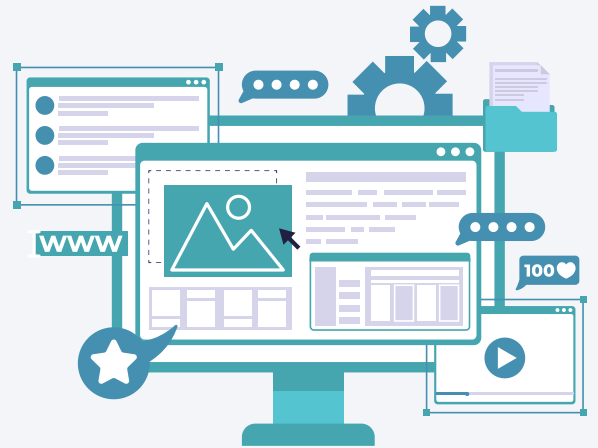
Maintaining Patient records

CPRs can play an important role in improving the quality of patient care and strengthening the scientific basis of clinical practice; they can also contribute to the management and moderation of health care costs. These advanced methods of maintaining patient records must be able to support patient care and improve its quality. CPRs must enhance the productivity of health care professionals and reduce the administrative costs associated with health care delivery and financing along with supporting clinical and health services research. They must also have mechanisms in place to always ensure patient data confidentiality

Computer-based patient records and the systems in which they function are becoming an essential for healthcare since the information management challenges faced by healthcare professionals have been increasing. Technological progress makes it possible for CPRs (Computer based Patient Records) and CPR systems to provide total, cost-effective access to more complete, accurate patient care data and to offer improved performance and enhanced functions that can be used to meet those information management challenges.

Applications

The rapid integration of mobile devices into clinical practice has, been driven by the rising availability and quality of medical software applications, or “apps.” Faster processors, improved memory, smaller batteries, and highly efficient open-source operating systems that perform complex functions have paved the way for the development of a flood of medical mobile device apps for both professional and personal use.



Health care professionals use medical devices and apps for many purposes, most of which can be grouped under five broad categories: administration, health record maintenance and access, communications and consulting, reference and information gathering, and medical education.

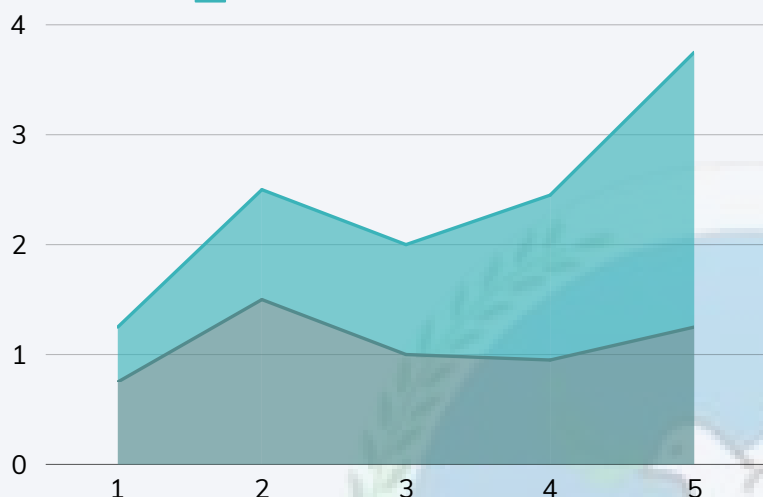
The ability to download medical apps on mobile devices has made a wealth of mobile clinical resources available to HCPs (Health Care professionals). Medical apps for many purposes are available, including ones for electronic prescribing, diagnosis and treatment, practice management, coding and billing, and CME or e-learning. A broad choice of apps that assist with answering clinical practice and other questions at the point of care exist, such as: drug reference guides, medical calculators, clinical guidelines and other decision support aids, textbooks, and literature search portals.



There are even mobile apps that simulate surgical procedures or that can conduct simple medical exams, such as hearing or vision tests. Many mobile apps are not intended to replace desktop applications but are meant to complement them in order to provide a resource that has the potential to improve outcomes at the point of care. The use of medical apps has become frequent and widespread; 70% of medical school HCPs and students reported using at least one medical app regularly, with 50% using their favorite app daily

MOBLIZING ACCESS TO HEALTHCARE

■ Healthcare to Population Ratio
■ Accessibility Index



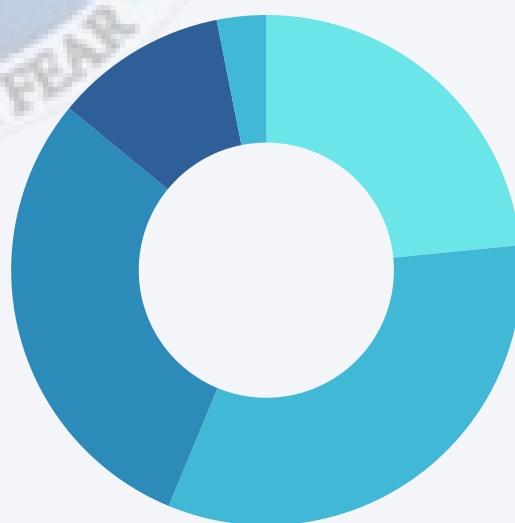
Inconsistent access to healthcare and patient outcomes is related to aspects such as race, first language and social class. The structural and ethical division between educational healthcare systems and marginalized minority communities must be communicated by dependable sources which usually, in majority cases, are community organizations.

The healthcare system significantly impacts both the economy and social life, aiming to improve overall quality of life. Recognizing these factors, the system is now implementing targeted solutions. Once addressed, patients will gain access to adequate healthcare and resources.

Mobilization of healthcare creates more equal access to healthcare by generating resources that can be utilized by all communities and individuals with ease. To mobilize support for healthcare, the public needs to be given sufficient information and be educated about the sector. The public should be able to make this sector their first option when they need healthcare.

Access to healthcare is the capability of a person to receive healthcare services such as treatment, diagnosis and other services on time. Healthcare has to be affordable and favorable for the person for it to be accessible. Access to quality healthcare is crucial for an improved quality of life. This helps to avoid unnecessary disability and premature death and helps to manage and prevent diseases.

■ Did not try to access healthcare services
■ Lack of understanding or knowledge
■ Administrative problems
■ Too Expensive
■ Bad Experience



Accessibility to healthcare is hindered by factors such as limited organ donors, a shortage of healthcare professionals and facilities, isolated patient locations, lack of transport, documentation, insurance, existing medical bills, high medication costs, and long wait times.

HOW TO SOLVE THESE ISSUES



1. Increased efficiency of emergency care:

Increased efficiency the emergency care system is necessary to ensure that the patients get proper intervention from emergency care professionals when they are in dire need of it. The necessity is more prevalent in case of pandemics or epidemics such as the COVID - 19. Some ways to increase efficiency -

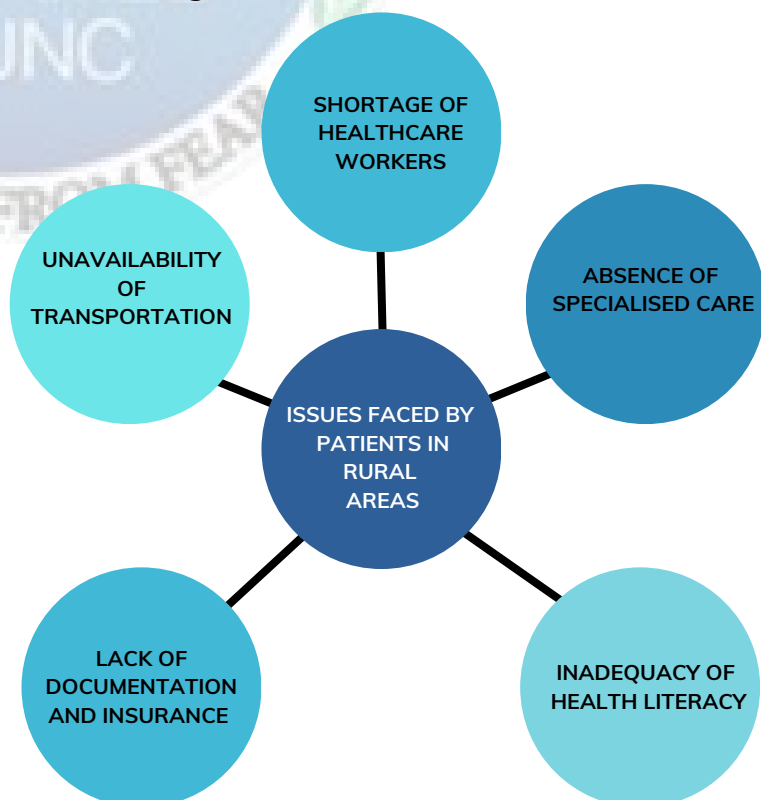
- Stocking up of Ambulances with necessities in case of an emergency
- Setting up of clinics in areas far from the hospital to stabilize the conditions of emergency patients.
- Increased number of emergency physicians and nurses to treat incoming patients immediately.

2. Mobilizing easy access in developing/ remote areas:

Patients residing in remote areas face various challenges when they need healthcare.

3. Digital health brings forth new opportunities:

Digitalization of the healthcare system has helped the system evolve to be more efficient and responsible. AI, data and cloud-based platforms help to bring up new and creative ideas to mobilize healthcare and harbor support. Digitalization of the system has helped to sustain this system. In the past, healthcare was marketed using print, TV and radio. In the present, the system has become more comprehensive. This is necessary as the public has become more proactive about their health. Nowadays patients are able to research online about their illness and they can also judge the service they receive through reviews and ratings. This also helps them make a more informed decision on the healthcare they receive. Every patient should have a right to do so.



ENSURING PROPER AND STRONG BACKUP FOR TECHNOLOGICAL INFRASTRUCTURE AND MEDICAL EQUIPMENT



Medical equipment in particular are pivotal for the prevention, diagnosis, and treatment of illness and disease, as well as patient recovery.

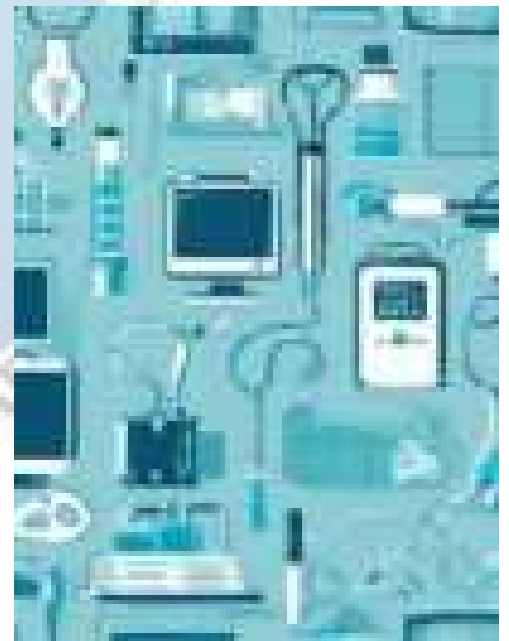
Data is of maximal importance in the healthcare industry. From electronic health records to patient tabulation and billing systems, healthcare corporations heavily depend on technology to lay out productive

and quality care. However, with the ever-expanding volume of data and the increasing threat of cyberattacks and natural catastrophes, it has become important for healthcare organizations to prioritize data backup and disaster rehabilitation. Execution of effective data backup and disaster rehabilitation needs careful planning and observation to the best practices

IMPORTANCE IN HEALTHCARE

Even if the organization has adopted new healthcare applications, generating the best available facility, or securing the service of the best physicians and nurses; a debilitated clinical IT infrastructure base will hold back the organization from accomplishing long term success and will block them from enhancing high priority needs like telehealth. Infrastructure must incorporate the hospital as the center for desperate care and must make way for 7 domains of quality

- Acquaintance with the patient
- Productiveness
- Efficiency
- Timelines
- Protection
- Fairness
- Sustainability



ENSURING PROPER AND STRONG BACKUP FOR TECHNOLOGICAL INFRASTRUCTURE AND MEDICAL EQUIPMENT

Systems and procedures, sustainability initiatives, and manpower– all together, these interconnected facets should enable patients to advance forward with ease and with their solitude and dignity maintained at all times, from their primary referral through local hospitals to specialist tertiary centers and discharged with appropriate care, no matter whatever age, disorder, or social circumstance of the patient.

FLEXIBILITY AND EFFICIENCY

Modification of services may upgrade healthcare efficiency; flexible replicas of care—for example, care in the vicinity of your home via telephone consultations and telemedicine or urgent care at the front door of a hospital reinforced by dedicated core services—would avoid the confusion of inpatient or planned inspections and treatment. Multidisciplinary electronic discharge protocols can begin on the day of admission and are linked to care allocation on discharge.



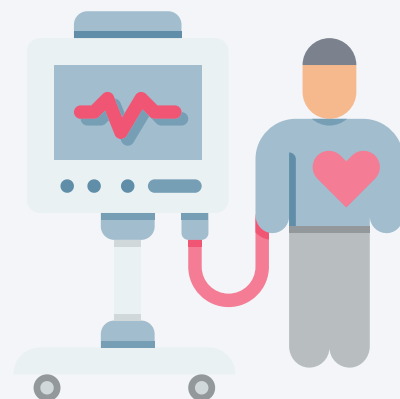
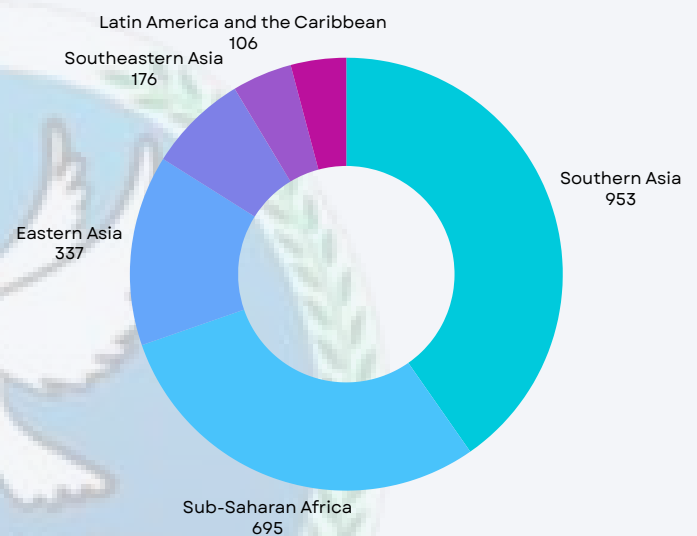
RELIABILITY

New and improved equipment allows for the creation of a more dependable and disposable infrastructure to minimize planned and unplanned outages or downtimes. Hardcoded remedies are becoming a thing of the past as flexible networks and new monitoring equipment allow systems to automatically join active endpoints upon collapse. Recently developed hardware also enables better disaster rehabilitation and solutions for business progression, enabling applications to be recovered rapidly with little to no aftermath.

TECHNOLOGICAL ADVANCES IN INSTITUTIONS SUCH AS SCHOOL, WORKPLACES AND COLLEGES

Education and health are interdependent basic human rights for all, no matter the age. Health-promoting schools, colleges and universities ought to be one of the main goals of these institutions. With the rapid growth in the various kinds of ills, it is important for these healthcare facilities to be improved in every aspect. Ways to bring out technological advancements in educational institutions on grounds of healthcare:

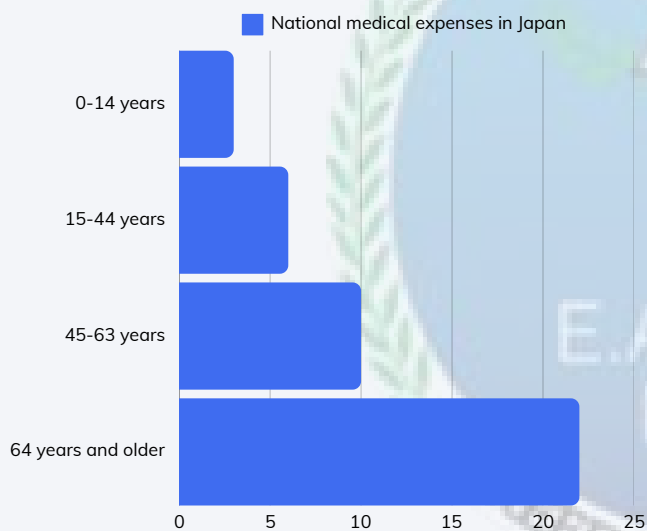
- Improving sanitation, and water services by regular check on water filters and changing of water filters monthly. The World Health Organization (WHO) estimates that improving water, sanitation, and hygiene could prevent at least 9.1% of the global burden of disease and 6.3% of all deaths.
- Installation of vending machines for sanitary napkins, tampons and menstruating cups in girls' washrooms.
- Providing institutions with basic technological needs in healthcare, medical devices such as patient monitors, blood pressure kits, IV start kits etc.
- Installing or regular checks of elevators for the disabled.



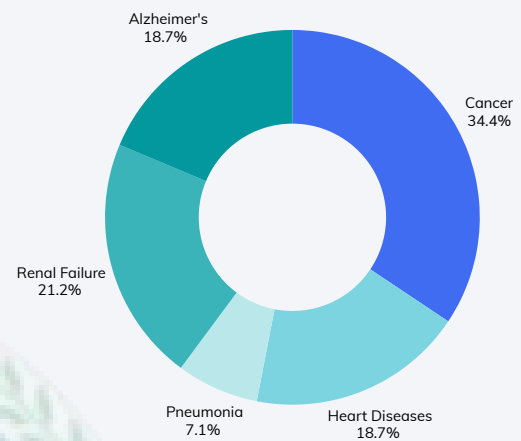
CASE STUDY 1

JAPAN

In Japan, significant strides have been made in the field of health and medicine, particularly in areas such as iPS cells, owing to the nation's robust academic and research infrastructure. However, the pace of technological advancement resulting from this research lags behind that of the US and Europe. It's crucial to bolster the clinical trial system to ensure broader patient access to emerging pharmaceuticals, medical devices, and regenerative medicine. To address this, the Kanagawa Prefecture has devised two strategies.



Firstly, they are in the process of establishing the Kanagawa Clinical Research Strategy Research Center (tentative name). This hub aims to assist companies seeking approval for medical products by leveraging regulatory science research to enhance human resources, refine clinical trial procedures, and streamline the application process. Preparations for this facility are currently underway.



Secondly, they are extending support to medical institutions conducting clinical trials, potentially even conducting trials on their behalf. By aiding both companies and medical institutions in conducting clinical trials, Kanagawa Prefecture aims to expedite the transformation of research initiatives into tangible outcomes.

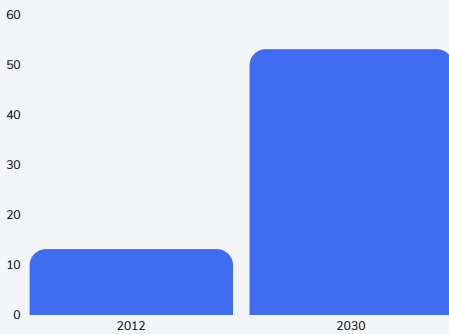
While Japan ranks among the wealthiest nations globally, its healthcare system is positioned at a modest 26th place in the 2022 World Index of Healthcare Innovation, showing slight improvement from previous years. However, Japanese companies are introducing innovative solutions in telemedicine, robotic surgery, and IoT health devices, spurred by recent regulatory changes. Japan, renowned for its prowess in robotics, is paving the way for unique healthcare innovations, especially in the post-Covid era.

CASE STUDY 1

JAPAN



■ Japan's Health Market (in \$Bn)



Japan's Advanced Medical Care Program (AMCP) seeks to expand patient access to promising healthcare technologies through National Health Insurance (NHI) coverage. This endeavor requires a strategic approach, involving careful selection of target therapeutic technologies and expedited frameworks.

The burgeoning digital health industry in Japan is driven by various factors, including large and aging population, advanced IT infrastructure, and accelerated digital adoption due to the Covid-19 pandemic. With healthcare spending on the rise, the government is seeking ways to reduce costs by boosting R&D investment and refining regulations for digital health goods and services. Recent trends suggest a growing interest among Japanese consumers in cutting-edge offerings from US digital health companies, presenting exciting opportunities for exporters.

The global Covid-19 crisis has highlighted the urgent need for prompt data collection, analysis, and utilization. In Japan, rising medical expenses, an aging population, and shortages in medical staff are widening disparities in healthcare. The increasing integration of new digital technologies like AI, IoT, and robotics in the medical sector offers hope for addressing these challenges.

The development of Japan's digital health industry is empowering patients by providing them with access to a wealth of information and making healthcare more accessible and convenient. Through wearable devices, patients can monitor their health status, freeing them from the constraints of traditional medical care settings. As telemedicine and remote monitoring using IoT become more prevalent, we anticipate a shift towards healthcare delivery in homes, potentially reducing labor costs for medical institutions.

100%
insurance
covered

95%
non-profit

26th
position in
IHI

27%
suffer from
cancer

15%
have heart
diseases



CASE STUDY 2

EFFECTS OF CLINICAL TRIALS

Throughout history, clinical trials and medical experiments have been fundamental in advancing our knowledge of human health and improving healthcare practices. These endeavors, spearheaded by dedicated physicians and researchers, have played crucial roles in elucidating the intricacies of the human body's response to various treatments and interventions. By conducting rigorous investigative experiments, medical professionals have sought not only to treat illnesses but also to prevent them and enhance overall well-being.

The evolution of patient rights in clinical trials signifies a significant milestone in medical ethics. Modern ethical standards dictate that participants must be fully informed about the trial's procedures, potential risks and benefits, time commitments involved, and the use of their samples post-trial. The concept of informed consent, which emerged following the Nuremberg trials in the aftermath of World War II, laid down fundamental principles for the ethical conduct of human research, emphasizing the principles of autonomy, beneficence, and justice.

Presently, regulatory bodies worldwide oversee clinical trials, imposing stringent guidelines aimed at upholding ethical standards and safeguarding the safety and well-being of participants. Despite these regulatory measures, historical incidents such as the Tuskegee Syphilis Study and the Cincinnati Radiation Experiments serve as stark reminders of past ethical lapses and the devastating consequences of unethical research practices. These incidents underscore the ongoing imperative for vigilance and ethical oversight in medical research to prevent similar tragedies from recurring.

Initiatives like the International Clinical Trials Registry Platform (ICTRP) enhance transparency and accessibility in clinical trial data, promoting accountability and public trust in medical research. While ethical frameworks and regulatory oversight have improved, challenges in medical experimentation persist. Continued efforts are needed to address these issues and uphold the rights and dignity of research participants, ensuring that the pursuit of scientific knowledge remains rooted in respect, transparency, and accountability.

While medical laboratories serve as hubs for pioneering research into innovative medical techniques and interventions, the transition from laboratory experiments to human trials introduces multifaceted ethical considerations and potential risks. Experimental trials encompass a diverse range of methodologies, with randomized trials emerging as a predominant approach. In such trials, participants are meticulously allocated to different treatment groups, with one group typically receiving the standard treatment while others undergo experimental procedures. Control groups may be administered placebos, especially in cases where no established standard treatment exists, allowing researchers to assess the psychological effects of treatment. Blind and double-blind trials further augment the validity of results by ensuring that neither participants nor researchers are aware of the treatment administered, thereby minimizing bias.

ORGAN TRAFFICKING SYSTEM



INTRODUCTION

Organ trafficking is an unseen and undiscussed form of human trafficking due to its stealth nature. The increase in organ trafficking is linked with the high demand for organs and low law enforcement rate. It is not as thought of among policy leaders and organisations compared to other forms of human trafficking. Trafficked organs are extremely expensive.

Organ trafficking has been reported in North Africa, South and South-East Asia, Central America and Europe.

Organ transplantation using trafficking organs accounts for up to 10% of all transplantations performed. The system earns high profit even though it is illegal in a majority of the countries. Profits are estimated to be between US\$840 million to US\$1.7 billion annually.

IMPACT

Its destructive nature is only felt by the donors and recipients due to the unhygienic and unsterile environment in which the transplantation is carried out. The patients in dire need of organs fall into the deception of traffickers. Donors eventually have to go to the hospital due to health conditions related to the transplant and recipients can go into organ rejection or have an infection due to the equipment used. Donors agree to donate organs due to their vulnerable situation. Some of these donors may not be healthy enough to donate organs leading to them having various complications post-surgery. If the organ is not healthy and it is transplanted into the recipients then the recipient will also have serious conditions.

ORGAN TRAFFICKING SYSTEM

These organs can be transplanted into recipients in well-renowned hospitals in prominent cities or even in a temporary operating room set up in a house.

ORGANS

Kidneys are the most sold organs on the black market. The World Health Organisation estimated that 10,000 kidneys are sold every year on the worldwide black market. With kidneys being high in demand among patients and low supply the patients tend to approach the black market for the organ. Accompanying this, the wait time for the organ is also extremely high with some patients even having to wait for 7 years.



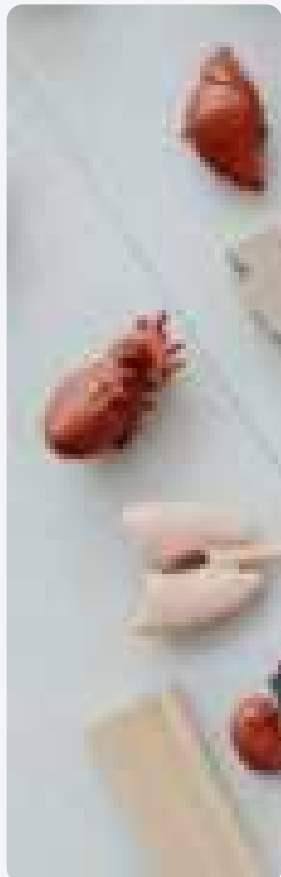
ORGAN HARVESTING

Organ harvesting is an illegal process by which a person's organ is removed for selling with or without their consent. Even if they are aware of the harvesting they agree to do so because they are forced into it due to their situation. Organ Harvesting is carried out by any of these forceful methods –

- Victims are kidnapped and sedated
- Victims are persuaded into believing they need a surgery for their illness and their organ is removed whilst they are sedated.
- Human Trafficking victims are exploited and their organs are trafficked.
- Victims are murdered and their organs are sold.

Steps to prevent Organ trafficking –

- 1) Advancement of artificial organ system to increase supply of organs.
- 2) Law enforcement against organ trafficking
- 3) Increasing awareness to prevent patients from falling into the traps of traffickers.



CONCLUSION

Technology in Healthcare

- Technological developments, have fundamentally changed healthcare and will do so in the future. lack of finance, experience, and infrastructure presents a technological barrier for developing nations, resulting in outdated technology and unsuitable donations.
- Multidisciplinary in nature, healthcare technology integrates IT, eco-epidemiology, and medical engineering to provide a comprehensive view that extends beyond the realm of medical equipment and administration.

Privacy of personal information

- For the protection of privacy, formally gathered data should be handled by authorized individuals under strict access restrictions and authentication procedures.
- Updating data handling protocols requires regular training, and monitoring on login access makes it easier to spot illegal activity.

Right to advancements in healthcare

- All sciences and professions are covered by the right to profit from the advancements in science, guaranteeing equal access to the knowledge that advances research .
- It also promotes an atmosphere that safeguards and advances technology and science while maintaining the independence required for scientific research.
- This broad approach encourages diversity and the critical role that research plays in raising standards of living and progressing society.

Role of a hospital's IT department

- A hospital's IT department manages clinical software, patient records, and admissions systems while ensuring optimal operation of wards, operating rooms, labor and delivery suites, and emergency departments
- The IT department also handles common tasks like network infrastructure, IT security, server maintenance, and software deployments implementing

These comprehensive roles are crucial for the seamless functioning of hospital operations and patient care.

QUESTIONS A RESOLUTION MUST ANSWER

- 1.What role does the UNHRC play in advocating for the protection of individuals' rights to access and benefit from technological advancements in healthcare?
- 2.How does the UNHRC collaborate with other international organizations and stakeholders to advance the global right to healthcare through technological innovation?
- 3.Can you provide examples of specific resolutions or initiatives introduced by the UNHRC aimed at promoting equitable access to healthcare technologies?
- 4.How does the UNHRC address ethical considerations and human rights implications associated with the development and deployment of healthcare technologies?
- 5.How does the UNHRC prioritize marginalized or vulnerable populations in its efforts to promote equitable access to technological advancements in healthcare?
- 6.In what ways does the UNHRC address challenges related to the affordability of healthcare technologies, particularly in low-income countries?
- 7.How does the UNHRC ensure that advancements in healthcare technologies do not exacerbate existing inequalities or disparities in healthcare access?
- 8.Can you provide examples of how the UNHRC supports capacity-building efforts in developing countries to enhance their utilization of healthcare technologies?
- 9.How does the UNHRC advocate for the inclusion of marginalized voices and communities in decision-making processes related to the development and implementation of healthcare technologies?
- 10.What role does the UNHRC play in promoting research and development initiatives that prioritize the needs of underserved populations and address neglected health issues?
- 11.How does the UNHRC leverage international cooperation and diplomacy to address cross-border challenges in accessing healthcare technologies?
- 12.Can you outline any future strategies or priorities of the UNHRC in advancing equitable access to technological advancements supporting the global right to healthcare?

POSITION PAPER GUIDELINES

Format:

Font: Times New Roman

Font Size: 12

Position Paper Page Limit: One page (excluding bibliography)

Page One

Delegate Name: _____

Country: _____

Institution: _____

Topic: _____

"A quote is preferred, not compulsory"

Paragraph one:

Introduction to the topic and steps taken by the UN on the topic at hand.

Paragraph two:

Elaboration on the country's laws and policies regarding the topic, how it is affected by the topic at hand, and measures incorporated by the country to combat the problem. Statistical Data is preferred.

Paragraph three:

Unique solutions suggested by the delegate to combat the problem.

Page Two

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