

CDMX STATEMENT

Artificial Intelligence

in the

Health and Social Security Systems

Background

The weaknesses that most of health systems of different countries have shown to have evidence through negative impact generated by Covid-19 pandemic. It was on January 30th, 2020 when World Health Organization (WHO) established that "*the outbreak of severe acute respiratory syndrome (SARS) constitutes a public health emergency of international importance.*" According to PAHO-WHO, at the moment more than 250 million people infected by this virus have accumulated and more than 5 million have died.

This pandemic has also taught us this: it has created a clear opportunity to reflect and has placed us in a true dimension of who we are and what we have; the pandemic has affected social, economic and environmental spheres, in other words, sustainable development; highlighting impact on sectors such as education, science and culture, industry, employment, energy, mobility and transport, housing, cities and countryside development.

Health and social security systems have not been the exception and they have had to readjust complex range of their models, structures, care and policies, physical and economic resources, through complex, slow and trial-error processes. Trying to adapt to a permanent social questioning about best practices, both in planning and in management and budget sufficiency. Just a few public policies of some countries have been successful in crossroads of this pandemic, while most governments and authorities suffer and struggle to improve their public image, credibility and reputation, trying to find solutions that reduce or minimize relentless rates of mortality, indicators of spread, infections and levels of infrastructure occupation.

Justification

The short-term challenge, towards post-pandemic recovery (new normality), in addition to vaccination process, is to continue reducing contagion and fatality rates, while accommodating the accumulated ordinary care deficit during this pandemic. As medium and long-term challenges, health systems must improve imbalances accumulated over decades in provision of health care services, prepare for next pandemics and continue to orient themselves to the ODS-2030.

These challenges must be approached with a new mentality, strategies for change and innovation that border on disruption, establishing public policies that move away from a limited *human intelligence*, demerited by struggle for political power, subordinated by economic interests of a few, by ideological imposition of several social groups and by general indifference in the fight against climate change.

This pandemic shows us the urgent need to reorient and rethink legal framework for international ties and its application as public policy in health and social security systems, becoming a window of opportunity for a paradigm shift towards our common futures.

As a trend line, technological development has evolved exponentially, consolidating the so-called Revolution 4.0, and accelerating a path to 5.0, a stage that envisions astonishing transformations in science and their respective impact on styles and life quality, directly influencing in state of people's health. The high-speed production of Covid vaccine is an example of this. This stage has a future bearer who is alien or little influenced by human weakness and that even when his philosophical questioning is current, maintains a dynamic and efficient development. The greatest bearer of futures known to date is Artificial Intelligence (AI).

Artificial intelligence

Currently there are various interpretations about the meaning of artificial intelligence (AI) concept, from those early interpretations that focus their discourse on the autonomy of machines to learn, understand, reason, make decisions and forge an idea of reality, to those who they identify it as the accelerated evolutionary process towards singularity and trans-humanism. However, today, the common denominator focuses on characteristic of integrating an ordered data system, called algorithms, which under a sequential, logical and methodical process, has a particular goal of solving a certain problem. Thus, under the framework previously exposed:

Considering:

- That since 1942 Issac Asimov raised the first Robotic Laws;
- That Montreal Declaration, issued in 2018, established 10 Principles to frame AI in an ethical and responsible manner;
- That in May 2018, OECD Principles on Artificial Intelligence were established;
- That European Union (EU) published the Commission's White Paper on AI in 2020;
- That European Union (EU) published in April 2021 new Legal Framework on AI;
- That OMS issued in June 2021, a First World Report on AI applied to Health;
- That PAHO presented in September 2021, a Roadmap for Digital Transformation and data science application policy in public health;
- That UNESCO, this November, present a Recommendation on Ethics of AI;
- And that some countries and governments have AI, Digital information or Data policies and strategies.

Due to above considerations, from international civil society, we build and develop a space for reflection, thought and high-level prospects, multidisciplinary and futures vision, structured under International Forum-Seminar on Prospective and the XVIII International Congress "Hospital of the Future" 2021, under slogan "Regenerate Health with Intelligence...but Artificial", an event held during the months of July to November, with the purpose of cooperating in scaffolding guide, control and surveillance of AI, as public interest, presenting the following:

STATEMENT MEXICO CITY “4 by 4”

We urge global and regional institutions integration, States, their powers, their different levels of government and public and private institutions related to health and social security, to contribute from international cooperation, with the development, positioning and ethical, responsible, safe and sustainable application of artificial intelligence, under the following recommendations:

In relation to AI and support capacity:

Understanding *support capacity* as a concept that integrates systems, models, structures and public policies to protect, promote and guarantee the right to health and social security.

- Position at international level, a route free of ideologies and nonpartisan, so that access to artificial intelligence will be recognized as a new human right. As a great bearer of futures, AI will be a binding right, predominantly of ethical, bio-ethical use and enabler of other rights.
- In order to contribute poverty reduction, avoid risks and improve people's quality of life, Artificial Intelligence should be included, as an international transversal public policy, being incorporated as soon as possible in each and every one of the Objectives and Sustainable Development Goals of United Nations 2030 Agenda.
- States, their powers and their different levels of government, will promote within their constitutive and legal framework, independent and autonomous artificial intelligence systems (AIS) in their management and financing, as part of the governance, public administration and counts surrender structures.
- States, their powers and their different levels of government, will promote within their health and social security systems, structures, models and programs of public policies, associated and binding to their corresponding artificial intelligence system.

In relation to AI People:

Understanding *people* as all human being, regardless of race, culture, creed, age, gender, social, economic or political position.

- Artificial intelligence systems (AIS) will articulate public policies for preventive medicine and more human health care with quality and for everyone, based on a diversity of characteristics, approaches and circumstances such as: age, gender, diet, climate, morbidity and cultures, among others.
- Health and social security systems will incorporate into their human development policies and programs, development of continuous education, training and technological literacy in use and application of artificial intelligence.

- Health and social security systems, supported by artificial intelligence system, will recognize in their policies and programs associated with traditional medicine, spiritual relationship with health, according to values, customs and traditions of different native peoples.
- States, their powers and their different levels of government, will promote within their health and social security systems, awareness programs and public policy, associated and binding to equity vision and gender equality to the corresponding artificial intelligence system, that covers lag gaps such as employment, salary and equal opportunities.

In relation to AI and infrastructure for health and social security:

Understanding *infrastructure for health and social security*, as the habitat where people perform and exercise their rights on a daily basis, particularly environments built or enabled to promote, protect or restore health.

- Develop within artificial intelligence system (AIS), IA sub-system for sustainable and geo-population development, which includes land use planning, urban development, infrastructure, equipment and services, particularly infrastructure related to comprehensive management, risk, health and social security.
- Develop within the IA sub-system of sustainable and geo-population development, management or health care models (with or without walls), where appropriate, including prototypes with their own program, their integration as a network, their hyper - connectivity and the physical and human resources to incorporate or associate the characteristics related to artificial intelligence.
- Incorporate a gradual, progressive and staggered manner, characteristics associated with artificial intelligence sub-system on existing infrastructure for health and social security, in order to improve performance and efficiency in conservation, maintenance and sustainability programs, always with a view to contributing to the fight against climate change.
- Artificial intelligence systems will include sub-systems for programming, investment, spending, control and accountability of public finances. This will strengthen the culture of transparency and legality of the administration in turn.

In relation to AI and appropriate technologies for health and social security:

Understanding *appropriate technologies for health and social security*, such as a set of instruments, equipment, devices or software, etc. that directly or indirectly contribute to promoting, protecting or restoring health and well-being.

- Promote appropriate technologies that incorporate or associate characteristics related to artificial intelligence, in democratic frameworks, for privacy protection, interculturality and diversity, to recognize and accelerate empirical evidence registration, related to use and application of traditional medicine, oriented to a state of integral body health, mind, spirit and nature.

- Develop appropriate technologies that incorporate or associate characteristics related to artificial intelligence, within frameworks of equity and inclusion, which are aimed at covering population lags in vulnerable situations, particularly those that are located in remote or inaccessible places, moving towards universal coverage.
- Strengthen appropriate technologies that incorporate or associate characteristics related to artificial intelligence in multilateral, borderless and spatial frameworks, to collaborate in preventing, anticipating and avoiding, in humans and their environment, not only risks originated by nature itself, risks related to diseases or outbreaks that have the potential profile of becoming pandemics, but risks of AI itself on issues such as responsibility, bias, transparency, lethality, market and reliability, among others.
- Establish new normative and regulatory frameworks that guarantee transparency, clarity, privacy, intelligibility and a correct use of instruments, equipment, devices, hardware or software, among others, that incorporate or associate characteristics related to artificial intelligence, including respective phases or testing periods and certification before its public application.

Statement Presentation:

Mexican Society of Specialized Health Architects (SMAES)
Mexican Society of Artificial Intelligence Engineering (SMIA)
Mexican Society of Biomedical Engineers (SOMIB)
International Union of Architects (UIA)

Statement Supports:

International Federation of Health Care Engineering (IFHE)

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