

The EDISON Alliance



Shared Guiding Principles for Digital Health Inclusion

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Contents

| | |
|---|----|
| Foreword | 3 |
| Executive summary | 4 |
| 1 The Principles for Digital Health Inclusion | 5 |
| Contributors | 10 |
| Endnotes | 11 |

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Foreword



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The Principles for Digital Health Inclusion set out in this report complement the larger principles of the EDISON Alliance in order to encourage thoughtful action in its focus areas of finance, education and health. The principles serve as a guide for partnerships in digital healthcare, with the intent of raising questions of inclusion at the inception of a project, rather than as an afterthought.

As in finance and education, COVID-19 has accelerated the digitalization of healthcare delivery, bringing a qualitatively different world of care much closer. As a result, an explicit system approach to inclusion is the responsibility of all.

This white paper was developed as an initiative of the World Economic Forum's EDISON Alliance, and would not have been possible without the contribution of the EDISON Alliance partners' teams at Apollo Hospitals, Dell, Jefferson Health and the United Nations Economic Commission for Africa (UNECA), whom we would like to thank for their efforts and commitment to shaping an inclusive healthcare system, as well as the broader members of the EDISON Alliance for their ongoing support and guidance.

Executive summary

Creating models of healthcare delivery in a connected world.

“ Using digital tools to provide connected care creates an unprecedented opportunity to bridge gaps and reduce health disparities.

The EDISON Alliance has developed the following principles to guide organizations to explore sustainable, effective, public-private partnerships as one of the avenues to find solutions for some of the inherent challenges that exist in providing healthcare services across the globe. Creating digital products and connected care platforms in healthcare is a proven step in this direction to ensure continuum of care.

The opportunity: Using digital tools to provide connected care creates an unprecedented opportunity to bridge gaps and reduce health disparities. The pandemic has accelerated the use of digital technology in healthcare throughout the globe at a rapid pace compared to the pre-COVID-19 era. This has included the adoption of information and communication technology in healthcare, such as telemedicine services and remote care in all formats of primary, specialty and emergency services. In response to the pandemic, many governments have encouraged, reimbursed, or permitted synchronous and asynchronous virtual engagement between clinicians and patients, which, in turn, has built confidence among caregivers and care seekers in using this technology.

Investments have rapidly increased to reach notable levels in all spheres of health technology advancement, such as:

- Telehealth platforms and application developments
- The Internet of Medical Things
- Artificial intelligence (AI) and machine learning
- The delivery of technology-enabled healthcare services beyond brick-and-mortar boundaries
- Connected care links between patients and medical providers of care
- Hospital at Home and other initiatives to support care at any address

Technology intervention has enabled communities to mitigate the outbreak and support life-threatening situations of COVID-19 infection in communities and has made significant contributions in saving lives, giving hope for a new future of healthcare quality assurance.

Due to this digital acceleration and development, the gap has widened between those who can benefit from digital tools and those who cannot. This gap includes issues of **access** – the sheer lack of broadband connectivity for millions of people – and **adoption**, due to social determinants of health and the lack of digital readiness and skills, as well as an issue of **trust** in the use of digital solutions for healthcare delivery.

While these gaps in access and adoption are clear, the use of digitally-connected care creates an unprecedented opportunity to bridge the divides. Digital tools provide new ways to overcome transport barriers, monitor and triage, and take advantage of new advances in precision medicine across populations in a cost-effective manner.

The challenge: To ensure ethics and equity in this rapidly developing field, empowering communities with choice and knowledge-based decision-making.

The following principles are designed to maximize the opportunities for digitally-connected medicine and chart a course for responsible and inclusive innovation in connected care that improves equitable healthcare access and outcomes.

While many organizations have developed parallel principles for issues such as human rights, AI in medicine¹ and data governance for research, the principles in this document represent the EDISON Alliance’s broad coalition across private industry in collaboration with its public partners.

These principles function as a parallel to the [core principles for financial inclusion](#) developed by the EDISON Alliance.

1

The Principles for Digital Health Inclusion



Principle 1: Inclusive by design, prioritizing equity and access

Multiple international organizations call for healthcare as a fundamental human right. For digital healthcare, this means embedding inclusion and equitable access as a principle in the design of all products, services, policies, regulations, supervisory practices, security procedures, technologies and infrastructure.

Action areas

- People centric: focusing on the fundamental rights of every individual to wellness and good health with a commitment to healthcare for all, irrespective of creed, gender and place of birth.
- Giving special attention to equity for individuals and communities who are unserved and underserved.
- Working across sectors to match health expertise with expertise in connectivity, enabling the development of hardware and software options for all.
- Putting ethics and equity at the centre of technology development to ensure it is inclusive and democratic.
- Using economic and societal value created by the digital delivery of healthcare to support digital health inclusion.
- Taking an inclusive approach by meaningfully engaging population groups, including marginalized populations and young people, in the design, development, decision-making, rollout and evaluation of products and policies.





Principle 2: Putting trust first

Building trust by putting ethics first in product design, understanding users' needs, priorities and preferences, and ensuring transparency and inclusion.

Action areas

- Designing solutions to create trust and prioritize a mindset of ethical development that protects the individual.
- Promoting trust by understanding and assisting digital readiness and literacy, including among underserved or marginalized groups, with particular attention to vulnerable populations.
- Working closely with health regulators to support transparency, ensure informed consent and minimize risk.
- Providing security by design for all products and services with particular attention to last-mile solutions, and encouraging innovation in authentication, authorization and fraud prevention.
- Increasing trust by ensuring the availability of outcome data at all levels.
- Using design principles that are user centric and appropriate to the context where they will be used in order to build trust.
- Avoiding the recurring failures in health products that come from an inability to build trust and ensuring meaningful engagement with and among communities and patients.



Principle 3: Creating connected care through integration

Interoperability and health identity: Enabling the integration of digital health products on platforms that allow providers and patients to access each individual's health record with checks and balances in place.

Action areas

- Creating an enabling environment for interoperability across different health services providers based on open industry standards.
- Promoting platforms for solutions to validate these solutions against standards.
- Using the connected care model for seamless healthcare delivery and to bridge current gaps between primary, preventive, promotive, secondary and complex tertiary and quaternary care.
- Promoting digital citizenship to give patients and their caregivers the ability to understand their own health records and care plans.
- Focusing on a health identity (ID) to maintain and access longitudinal individual health records, which are essential for connected care and continuum of care, portability of health records, interoperability and patient control. The health ID should allow individuals to be uniquely identified, authenticated, and linked to their health records, with informed consent. The ID should enable improved access to care in different geographies, for all levels of care (primary to tertiary), as well as for different disease conditions and in government health programmes.



Principle 4: Focusing on the health needs of women and girls

Gender equity: Placing women at the centre of societal growth. Women are, in most cases, society's primary caregivers, but experience to date indicates women are left out of the development and funding of new companies, and women's issues are often neglected when it comes to technology-based products for their virtual care.

Action areas

- Ensuring women participate in the governance, design, development, evaluation and rollout of products and platforms.
- Ensuring that the targets of new product development include the medical concerns of mothers and women of all ages, especially in the reproductive and geriatric age groups.
- Promoting awareness to end stigma and taboos around the issues of adolescence, including mental health, menstruation and more, which continue to lead to the exclusion and discrimination of women and girls.
- Educating and empowering women means empowering and educating a family and subsequently, society at large.





Principle 5: Developing responsible, long-lasting solutions

Ensuring that new healthcare programmes are resilient and scalable, as well as financially sustainable, preventing the sudden cancellation of medical programming on which people have become dependent.

Action areas

- Ensuring commercial viability and economic sustainability by balancing the needs and capabilities of participants with the benefits of value creation to society.
- Understanding the capital requirements and continuing payment cycles to ensure the long-term viability of health programmes offered to the public.
- Promoting affordability by enabling technological and business model innovation to lower the cost of healthcare services to the poor, and providing affordable and reliable digital infrastructure.
- Ensuring that AI-powered products and services, when used to solve information asymmetry and lower the cost of services, minimize algorithmic bias and adhere to ethical standards and governance frameworks that ensure they are trustworthy, transparent, explainable, fair and just.
- Making data available for research with a high degree of protection and anonymization.
- Taking the costs of scaling, futureproofing, cybersecurity, fraud prevention and data protection into account when designing and procuring for infrastructure modernization.
- Minimizing environmental harm.



Principle 6: Evidence based and data secure

Using health data safely and responsibly to ensure inclusion while safeguarding informed consent, privacy and confidentiality. Caregivers and patients should remain in control of medical decisions. Machine-learning tools should augment medical decision-making, not replace it.

Action areas

- Setting high standards for the responsible collection, storage, sharing and use of data that adhere to the principles of security, privacy, transparency, accountability, integrity, patient ownership and choice, protection and “do no harm”.
- Incorporating the patient’s clear right to opt out.
- Requiring informed consent, including clear articulation of the complexities of informed consent.
- Ensuring the collection of data is purpose driven, clearly defining specific data needs.
- Enabling cross-border data flows across ownership boundaries.
- Protecting the system against cybersecurity threats and misuse of health records, including transparency when there are data breaches.
- Adhering to industry-standard data protection, encryption and storage, including control over who has access to data.
- Using high standards of evidence for efficacy when marketing new digitally-enabled products.



Principle 7: Effectively regulated

Adopting a non-discriminatory technology-neutral, principle-based and risk-based approach to regulation and supervision that is committed to the standard of proportionality and transparency.

Action areas

- Implementing clear frameworks for jurisdiction-specific and due diligence procedures, applied proportionally to all providers in the industry.
- Adopting a regulatory framework that encourages innovation and creates a culture of experimentation in the interest of inclusion. Such a framework must balance the ownership of data and intellectual property derived from that data.
- A framework of committed policy with accountability and responsibility across all governing and governance for creators, co-creators, solution providers, users, providers and enablers, and particularly government entities.
- Recognizing investments in terms of time, effort and monetary resources under the aegis of government goals for the public good.
- Addressing the need for equitable access to low-cost digital infrastructure for healthcare delivery.
- Building the system with citizens in control and having ownership of data in a true sense.



Contributors

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More details about the EDISON Alliance can be found at <https://www.weforum.org/the-edison-alliance>



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Endnotes

1. "WHO issues first global report on Artificial Intelligence (AI) in health and six guiding principles for its design and use", *World Health Organization*, 28 June 2021, <https://www.who.int/news/item/28-06-2021-who-issues-first-global-report-on-ai-in-health-and-six-guiding-principles-for-its-design-and-use>.



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