دائـــــرة الـــصـــحـــة
DEPARTMENT OF HEALTH

DOH POLICY ON DIGITAL HEALTH

September 2020

دائـــــرة الـــصـــحـــة
DEPARTMENT OF HEALTH

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This Policy should be read in conjunction with related Abu Dhabi and UAE laws, DOH Standards, Policies and Manuals including but not limited to:

- DOH Policy on Health Information Exchange.
- DOH Policy on AI in the Health Sector.
- DOH Quality Policy.
- DOH Regulator Manual.
- DOH Healthcare Provider Manual.
- DOH Health Professional Manual.
- DOH Standard on the Internet of Medical Things.
- DOH Standard on Patient Healthcare Data Privacy.
- Federal Law on Medical Liability.
- Federal Law on the Practice of Human Medicine.

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ABOUT DEPARTMENT OF HEALTH (DOH)

The Department of Health (DOH) is the regulatory body of the health system in the Emirate of Abu Dhabi and seeks excellence in health for the community by regulating and monitoring the health status of the population. DOH defines the strategy for the health system, monitors and analyses the health status of the population and performance of the system. In addition, DOH shapes the regulatory framework for the health system, inspects against regulations, enforce regulations, and encourages the adoption of best practices and performance targets by all health service providers. DOH also drives programs to increase awareness and adoption of healthy living standards among the residents of the Emirate of Abu Dhabi in addition to regulating scope of services, premiums and reimbursement rates of the health system in the Emirate of Abu Dhabi.

The Health System of the Emirate of Abu Dhabi is comprehensive, encompasses the full spectrum of health services and is accessible to all residents of Abu Dhabi. The health system encompasses providers, professionals, patients, Insurers, and the regulator. Providers of health services include public and private services and the system is financed through mandatory health insurance (with the exception of Thiqa) and has three main sources of financing: Employers or Sponsors, the Government and Individuals. The Health Insurance scheme places responsibilities on any Insurer, Broker, Third Party Administrator, Health Provider, Employer, Sponsor (including educational establishments), Limited Income Investors, and Insured Persons to participate in the Health Insurance Scheme.

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Executive Summary

In recent years, there has been a surge in the use of digital health and healthcare stakeholders worldwide have recognized the potential benefits of digital health in healthcare service delivery. Developing and implementing a policy for digital health is therefore crucial for setting the direction for safety, privacy, security and the ethical use of eHealth in healthcare service delivery.
Following a thorough situation analysis, DOH's position on the use of digital health in healthcare service delivery has been captured in this high-level overarching policy that sets out the vision and priority areas for the health sector to enable an environment that leverages digital technology to improve health, healthcare and the performance of the healthcare sector. The four policy priority areas defined in this document are in line with international and national recommendations:

- Person Centricity.
- Infrastructure.
- Legal and Ethical Framework.
- Flexible and Adaptable Regulation.

DOH aims to enable the use of digital health in Abu Dhabi to meet the wide-ranging health needs of the population. This overarching policy therefore sets out the objectives against each policy priority area and the strategies to achieve them. The key policy objectives identified are:

1. Promoting the use of digital technologies to improve the person's health and their informed decision-making.
2. Promoting the use of digital technologies to improve care delivery and health outcomes.
3. Guaranteeing data access, openness, transparency, confidentiality, privacy, and ethical use.
4. Ensuring protected, efficient, interoperable data convergence under one same platform.
5. Enhancing cybersecurity.
6. Protecting data elements under cloud technology
7. Managing disposal of e-waste.
8. Setting out medical jurisdiction and defining medical liability.
9. Enforcing regulation on safe and ethical research and development.
10. Redefining health and medical technology to include platforms and digital applications and technologies as appropriate.
11. Ensuring that every actor and player in an individual's health journey is accounted to from legislative, regulatory and medical malpractice points of view.
12. Ensuring quality and safety of digital healthcare delivered.
13. Financially incentivizing care providers to accelerate adoption and enhancement of their digital maturity and care provision.
14. Creating an enabling ecosystem for innovation.

The health sector in Abu Dhabi needs clear direction to achieve these identified policy priorities and objectives. This means that DOH seeks to ensure the efficient, equitable, ethical, accessible, sustainable, and comprehensive digital health enablement, infusion and leading of the Abu Dhabi healthcare sector while minimizing any potential risk to person and/or data safety, security, protection, person-related health service, outcome, and experience. Formulation of this overarching policy on digital health will lay the foundations for future work in this area. This will ensure that the Abu Dhabi health sector is able to use digital health technology to improve communication, responsiveness, access, quality, and safety of healthcare services.

1. Introduction

The role of digital health (or eHealth) in healthcare service delivery is understood as the cost-efficient, secure and ethical use of information and communication technologies (ICTs) to ensure the improvement of access to efficient and quality health services. In order for digital health to be successful, it should be based on a comprehensive plan to leverage and advance the use of digital technology to improve health and healthcare. This can be enabled through a comprehensive and logical policy and strategy approach that not only details desired points, but also describes the who, how and what are needed in this journey. Such an approach gives digital health the necessary contextual framework with the DOH overall vision for the future of health and healthcare over the next ten years.

Digital health has been driving a revolution in health care worldwide. The UAE, like all other countries, has noticed the extensive potential of digital health to improve the ability to accurately diagnose and/or treat disease and enhance healthcare service delivery. The UAE has also noticed the impact digital health can and does have on access to healthcare during emergencies and pandemics where face-to-face encounters become limited.

The Department of Health has emphasized the need for digital health as an Emirate-wide priority for driving overall healthcare sector improvement and for improving the health and the performance of the healthcare system. To achieve this, DOH has conducted a comprehensive situation analysis including sector wide stakeholder consultations and therefore encouraged development and implementation of health sector policies, strategies and legislation to provide direction and support for the use of digital health in the health sector at the Emirate wide level.

This Policy document is structured as follows:

- Section (2) provides the useful definitions for this policy.
- Section (3) provides the purpose of this overarching policy.
- Section (4) provides the scope of the policy
- Section (5) sets out the vision and goal of this policy. It also highlights what are its key guiding principles.
- Section (6) identifies the policy objectives and strategies against the priority areas to improve health, healthcare and the performance of the healthcare system via digital technology, which lays the foundation for future policy work in the area of digital health.
- Section (7) provides the implementation arrangements for the policy.

1.1. Limitations

Given that it is difficult to predict how digital health policy will look after ten years from now, this policy contains some limitations as to the extent of its scope. The following are policy considerations

to keep in mind from then on after to ensure that this Policy continues being relevant regardless of how quickly technology advances–foresight and looking beyond the current horizon.

The following considerations are based on predictions of what the Policy expectations should be, given how the digitally-led Model of Care is predicted to look like after 2030 and what is needed:

1.1.1. Consideration for the Future1: Care delivery, AI and Machine Learning

1.1.1.1. Extent of care offered over digital health technologies

DOH policy will have to decide the extent to which digital health technologies can be used in care delivery –consultation vs. diagnosis vs. prescription vs. treatment, a combination of some, or all of them. Furthermore, DOH policy will have to acknowledge the ethical considerations for AI and machine-led decision-making and determine who is held liable (at the human and machine/software level) in case of malpractice.

1.1.2. Consideration for the Future 2: Empowered Persons

1.1.2.1. Monetization vs. individual's/patient control

When unimaginable amounts of data become readily available, DOH policy may have to consider the possibility of monetizing the use of certain data to advance research and innovation while at the same time protecting individuals' privacy, ownership and control over their data.

1.1.3. Consideration for the Future 3: Wholesome Governance

1.1.3.1. Integration with other systems and regulators – Smart Cities, Smart Nations

As cities and nations race to become smart in the near future, DOH policy will have to consider how DOH and healthcare in general will be seamlessly integrated with other systems and regulators. Which regulator will have final decision-making power will also have to be considered.

1.1.3.2. Borders are eliminated

Virtual care is currently eliminating potentially inhibiting distances for individuals seeking care. When digital health is advanced and pervasive enough to erase geographical boundaries, DOH policy will have to determine where its jurisdiction begins and ends as well as its alignment with federal policies.

1.1.4. Consideration for the Future 4: Robust Ethical Framework Adaptive to Changing Times

1.1.4.1. Prolonging of life

DOH policy will have to take into consideration questions arising from the redefinition of prolonging of life and "immortality" from a scientific, philosophical and religious/spiritual standpoint. When digital health technologies will allow us to manipulate health at the molecular level and predict and prevent diseases and conditions before they happen, policy will have to consider both an aging population as well as philosophical issues that may arise when extending human power over life beyond what has traditionally been the norm.

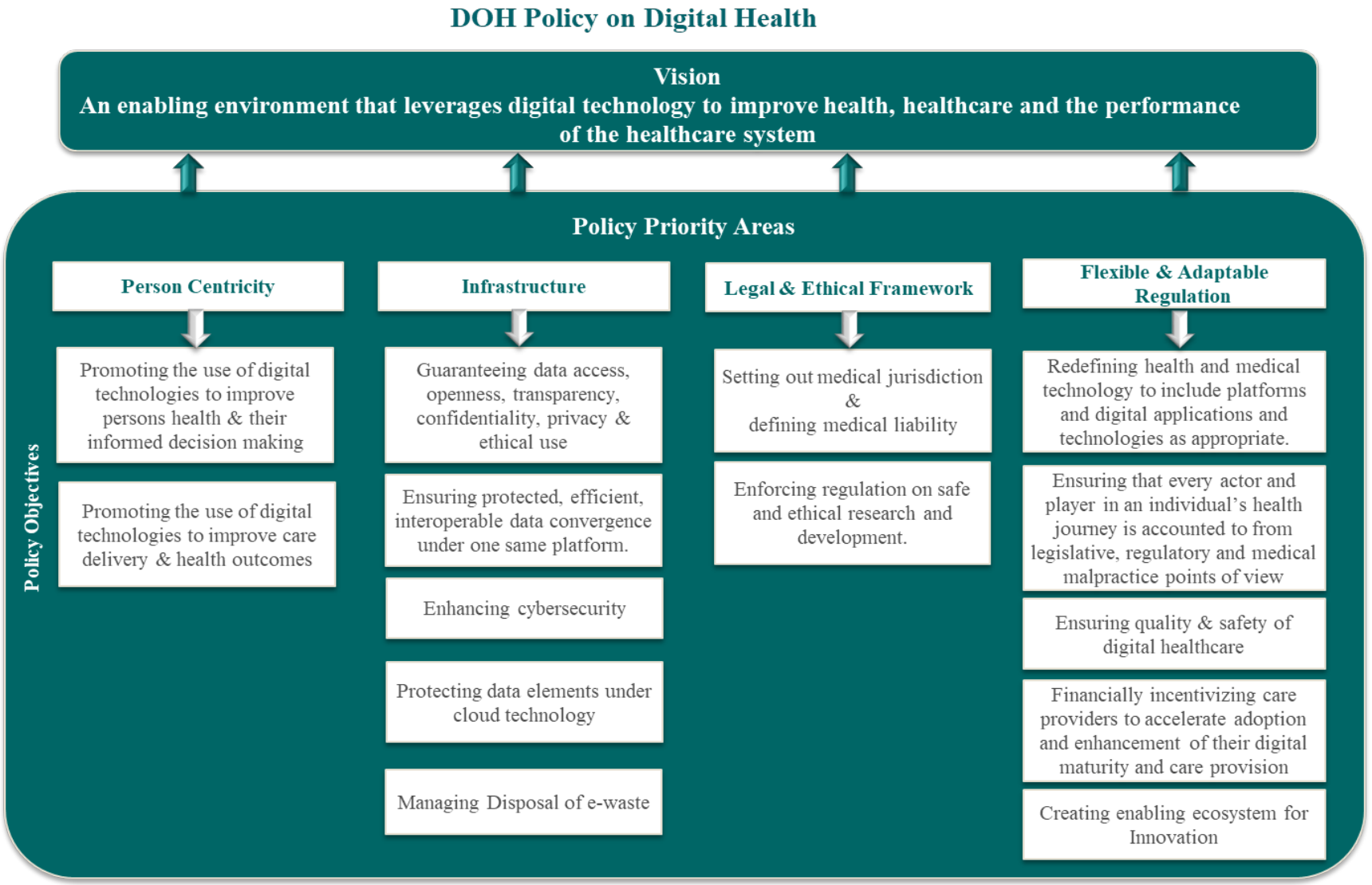
1.1.4.2. Gene editing ethics

DOH policy will have to take into consideration gene editing ethics and determine at which stage of life and development gene editing is acceptable and to what extent.

1.1.4.3. Transhumanism

DOH policy will have to consider the extent to which digital health can enhance human intellect and physiology, whether this will be allowed at all, and, if so, what the limit to it will be. This policy consideration will go hand in hand with that of insertion of devices in the human body (i.e., biochips and biosensors) and to what extent these can be used– convenience, augmentation, life support? Furthermore, if device insertion is considered a medical procedure, who will have the authority to perform it and where, and who will be held liable in case of malpractice?

Figure 1: Overview of the DOH Policy on Digital Health



2. Definitions

Biochip: Relates to a number of technologies that involve the merging of semiconductor and biological sciences. The most common form is based on an array of molecular sensors arranged on a small surface. The underlying mechanism utilizes microfluidic micro-electromechanical systems (MEMS) technology. These devices are used to analyze biological elements such as DNA, ribonucleic acid and proteins, in addition to certain chemicals.

Biosensor: Self-contained integrated device that is capable of providing specific quantitative or semi-quantitative analytical information using a biological recognition element (biochemical receptor) that is retained in direct spatial contact with an electrochemical transduction element.

Digital Health: The cost-efficient, secure and ethical use of information and communication technologies (ICTs) for health to ensure the improvement of access to and efficiency and quality of health services. These technologies include both hardware and software solutions and services, ranging from telemedicine, web-based analysis, email, mobile phones and applications, text messages, wearable devices, and clinic or remote monitoring sensors, and personalized medicine. They may be used by individuals to make better-informed decisions about health and healthcare. They may also support the provision of new options for prevention, early diagnosis of life-threatening diseases, and management of chronic conditions in non-traditional care settings, as well as support physicians in making clinical decisions.

eHealth: *See Digital Health*.

Electronic Waste (e-waste): All types of old, end-of-life or discarded electrical and electronic equipment, such as household appliances; office information and communications equipment and any data stored on them; entertainment and consumer electronic equipment; lighting equipment; electric and electronic tools; toys; and leisure, sports and recreational equipment that are powered by electricity. E-waste contains both valuable and hazardous materials that require special handling and recycling methods.

End-User: The person within the health sector (provider of services, insurer, pharmaceuticals manufacturer, patient and/or medical researcher) who ultimately uses digital technology or intends to use digital technology.

Healthcare Entity:
Entity in Abu Dhabi that is involved in the direct delivery of healthcare and/or supportive healthcare services, or in the financing of health such as hospital, medical clinic and medical center, telemedicine provider, laboratory and diagnostic center, and pharmacy, etc.

Information and Communication Technology (ICT): All the technology used to handle telecommunications, broadcast media, intelligent building management systems, audiovisual processing and transmission systems, and network-based control and monitoring functions.

Smart Nation: People and businesses are empowered through increased access to data, more participatory through the contribution of innovative ideas and solutions, and a more anticipatory government that utilizes technology to better serve citizens' needs.

Transhumanism: Social and philosophical movement devoted to promoting the research and development of robust human-enhancement technologies. Such technologies would augment or increase human sensory reception, emotive ability, or cognitive capacity as well as radically improve human health and extend human life spans. Such modifications resulting from the addition of biological or physical technologies would be more or less permanent and integrated into the human body.

3. Purpose of this Policy

The purpose of this Policy is to:

- Set out the DOH vision for the use of digital health technology in the health sector in Abu Dhabi.
- Promote person-centric healthcare supported by the use of digital health technology to improve communication, responsiveness, access, quality, and safety of healthcare services.

4. Scope

This Policy applies to:

- Populations, individuals, persons seeking care, consumers, and end-users seeking to receive healthcare services in Abu Dhabi physically or via virtual consultations and other non-face-to-face means.
- DOH-licensed healthcare providers and professionals seeking to administer healthcare to individuals in Abu Dhabi or those seeking healthcare in Abu Dhabi via virtual consultation
- DOH-licensed healthcare insurers, Third Party Administrators and insurance brokers.
- Abu-Dhabi-based pharmaceutical manufacturers and providers.
- Health and healthcare-related researchers.

5. Vision, Goal and Guiding Principles

5.1 Vision

An enabling environment that leverages digital technology to improve health, healthcare and the performance of the health sector.

5.2 Goal

DOH wants to ensure the efficient, equitable, ethical, accessible, sustainable, and comprehensive digital health enablement, infusion and leading of the Abu Dhabi healthcare sector while minimizing any potential risk to person and/or data safety, privacy, security, protection, person-related health service, outcome, and experience.

5.3 Guiding Principles

DOH's Policy shall be guided by the following principles, which take into consideration the Emirate of Abu Dhabi, its population and its visitors. The following Guiding Principles of this Policy are as follows:

- **Accountability:** Requires that researchers, developers and providers of digital health technologies be accountable to users and other stakeholders. Digital health researchers, developers and providers should explain and disclose relevant information and maintain adequate communications with stakeholders.
- **Context-sensitive**: While taking into account best practices and existing best models for digital health, this Policy and its implementation shall be driven by local and regional realities and priorities.
- **Continuous improvement:** Meaningful digital technology requires a commitment to continuous improvement of the related policy, programs, practices, and service delivery at all levels of the government.
- **Coordination, collaboration and communication:** Are critical components of effective delivery of digital health at all levels amongst stakeholders. The commitment and active participation of all relevant stakeholders are required to advance and coordinate DOH's effort to improve overall promotion of digital health in the Emirate of Abu Dhabi.
- **Ethics:** Requires that human dignity and individual autonomy, privacy and confidentiality be respected in the research and development of digital health and in its utilization.
- **Evidence-based and forward-looking strategy**: Implementation strategies of the policy shall be evidence-based, forward-looking, and will take into account emerging global trends, local experts' opinions, and local, cultural and physical needs.
- **Financial Sustainability**: Ensuring that technological innovation is incorporated without causing undue financial pressures and promoting the effective and judicious use of resources.
- **Optimize care for better health outcomes**: Central to this policy and its components is obtaining the best care outcome across population groups. All developments of this Policy have the sole and ultimate consideration of providing the best care.
- **Partnership**: Regulators, payers, providers (public and the private sector), emergency medical services, non-healthcare emergency services, patients, UAE-based pharmaceutical manufacturers, frontline workers seeking to administer premium healthcare to individuals in Abu Dhabi or those seeking healthcare in Abu Dhabi via virtual consultation, and others shall be seen as strategic partners driving the development of this policy and its implementation.
- **Person Centricity:** The person is at the center of all policies, being the main priority for all decision-making and care delivery.
- **Privacy:** Requires that privacy be taken into consideration so that digital health does not infringe on the privacy rights of users or third parties.
- **Safety and security:** All digital technologies used in the delivery of healthcare require that safety and security be taken into consideration so that no harm is brought to lives or bodies of users or third parties. It must be ensured that all digital technologies used in the delivery of healthcare are dependable and robust.
- **Sectoral coordination:** It is the responsibility of all Health System Stakeholders at all levels, both local and federal, to work jointly toward the meaningful use of digital technology in healthcare.

- **Sustainability:** Ensuring that solutions are integrated in the system so they can be maintained beyond the short-run.
- **Technology-neutral:** Policies, standards, and guidelines should not prescribe specific technological solutions but rather outline visions and requirements of safe and meaningful use of digital health technologies.
- **Transparency:** All digital technologies used in the delivery of healthcare should be verifiable and explainable in order to make it possible to ascertain the reasons in the event of any failures.

6. Policy Priorities, Objectives and Strategies

6.1 Policy Priority 1: Person Centricity

Use of digital technology by people and for people to improve overall informed decision-making, health status and outcomes of healthcare interventions.
Policy Objectives 1. Promoting the use of digital technologies to improve the person's health and their informed decision-making. 2. Promoting the use of digital technologies to improve care delivery and health outcomes.

Objective 1: Promoting the use of digital technologies to improve the person's health and their informed decision-making.
Strategy 1: Provide awareness and education.

6.1.1 DOH shall:

6.1.1.1 Ensure that the public is educated and made aware of the benefits of digital health technologies for the improvement of their health and informed decision-making for their health-related matters.

6.1.2 All healthcare entities shall:

6.1.2.1 Encourage and engage persons to use approved digital health technologies for their health and well-being.

Objective 2: Promoting the use of digital technologies to improve care delivery and health outcomes.
Strategy 2: Incentivize healthcare providers and institutions to incorporate digital health technologies designed to improve care delivery.

6.1.3 DOH shall:

6.1.3.1 Prompt providers and facilities to use digital health technologies in their service provision.

6.1.4 All healthcare entities shall:

6.1.4.1 Work with professionals and insurers to integrate approved digital health technologies in the care process.

6.2 Policy Priority 2: Infrastructure

Enabling ICT, electronic and physical infrastructures for digital health are safe, secure, sustainable, ethical, and of the best quality to ensure that all patient/health and personal data exchanged via digital health means are private, confidential, secure and protected against possible breaches and tampering but are also open and transparent for the users.
Policy Objectives 3. Guaranteeing data access, openness, transparency, confidentiality, privacy, and ethical use. 4. Ensuring protected, efficient, interoperable data convergence under one same platform. 5. Enhancing cybersecurity. 6. Protecting data elements under cloud technology 7. Managing disposal of e-waste.

Objective 3: Guaranteeing data access, openness, transparency, confidentiality, privacy, and ethical use.
Strategy 3: Have in place the necessary regulations and processes.

6.2.1 DOH shall:
- 6.2.1.1 Ensure implementation of relevant federal laws and regulations.
- 6.2.1.2 Cooperate with other entities, if and where necessary, to establish regulation and guidelines to ensure data access, openness, transparency, confidentiality, privacy, and ethical use.
- 6.2.1.3 Develop regulations, if not already available, to ensure data access, openness, transparency, confidentiality, privacy, and ethical use.

6.2.2 All healthcare entities shall:
- 6.2.2.1 Establish policies and procedures to implement and adhere to federal and DOH regulations with respect to data access, openness, transparency, confidentiality, privacy, and ethical use.

Objective 4: Ensuring protected, efficient, interoperable data convergence under one same platform.
Strategy 4: Have in place regulation that covers proper data convergence processes under one same platform.

6.2.3 DOH shall:
- 6.2.3.1 Ensure implementation of relevant federal laws and regulations.

6.2.3.2 Coordinate with the right national bodies, if and where necessary, Coordinate with the right national bodies to ensure that all health and non-health data is collected, stored, displayed and is interoperable in an efficient manner under the same platform.

6.2.4 All healthcare entities shall:

6.2.4.1 Establish the necessary policies and systems to ensure compliance with regulations on data convergence.

6.2.4.2 Ensure no misuse of all health and non-health related data in the platform that may potentially compromise privacy, confidentiality, security and ethical use of the data.

6.2.4.3 Only access information that individuals have consented to share.

Objective 5: Enhancing cybersecurity.
Strategy 5: Have in place the necessary infrastructure to strengthen cybersecurity and ward off any threats, attacks or risk of theft and misuse of personal health data.

6.2.5 DOH shall:

6.2.5.1 Ensure implementation of relevant federal laws and regulations.

6.2.5.2 Bring forward the right and necessary people, policies, processes, and technologies to protect individuals' personal health data.

6.2.5.3 Develop the necessary regulation to govern anonymization, encryption, and/or tokenization of data.

6.2.6 All healthcare entities shall:

6.2.6.1 Ensure compliance with regulations governing proper and safe anonymization, encryption, and/or tokenization of secure personal health data.

6.2.6.2 Put in place cybersecurity measures to protect personal health data at all costs.

Objective 6: Protecting data elements under cloud technology.
Strategy 6: Coordinate the protection of health data elements housed in servers in Abu Dhabi and data housed in external servers outside the country.

6.2.7 DOH shall:

6.2.7.1 Coordinate with federal and local regulatory entities that have jurisdiction over important IT and Cloud matters.

6.2.8 All healthcare entities shall:

6.2.8.1 Adhere to all Cloud-related and consequent data-privacy laws.

Objective 7: Managing Disposal of e-waste.

Strategy 7: Work with designated spaces and facilities to which all e-waste and potential technology pollution will be delivered for proper disposal and/or recycling.

6.2.9 DOH shall:

6.2.9.1 Develop necessary regulations and guidelines for disposal of e-waste (including data stored on hard drives such as personal computers, mobile devices, cloud storage, local and enterprise services, and medical devices).

6.2.9.2 Work with entities in charge of establishing e-waste sites to ensure that disposal and recycling of e-waste regulations are being adhered to.

6.2.10 All healthcare entities shall:

6.2.10.1 Have in place the necessary policies and systems to dispose of e-waste and medical devices as per DOH regulations.

6.3 Policy Priority 3: Legal and Ethical Framework

All enablement of health and healthcare by, and adoption and use of, digital health is legal and ethical so that the safety, rights and dignity of the individual are not put at risk.
Policy Objectives 8. Setting out medical jurisdiction and defining medical liability. 9. Enforcing regulation on safe and ethical research and development.

Objective 8: Setting out medical jurisdiction and defining medical liability.
Strategy 8: Create rules and legislation that cover healthcare providers and institutions at all points of care and delivery, regardless of geographic location.

6.3.1. DOH shall:
- 6.3.1.1. Develop policies and plans to determine which caregiver, provider or end-user is held liable and at which point they are done so during the individual's digitally enabled care journey.
- 6.3.1.2. Coordinate with federal and local authorities to develop the necessary legislation.
- 6.3.1.3. Work with international partners to ensure legislative and liability alignment with UAE federal and local legislation.
- 6.3.1.4. Define medical liability for digitally delivered care if the law has not previously defined this.

6.3.2. All healthcare entities shall:
- 6.3.2.1. Adhere to any regulations applied to them under DOH's jurisdiction.

Objective 9: Enforcing regulation on safe and ethical research and development on digital health.
Strategy 9: Establish regulations and processes for any research with and on digital health seeking approval and permission.

6.3.3. DOH shall:
- 6.3.3.1. Develop SOPs and regulations for applicable types of research on digital health and/or utilizing digital health technologies.
- 6.3.3.2. Determine whether back-office resources and app developers require Institutional Review Board (IRB) approval for digital health technologies to be used in the aforementioned research.

6.3.4. All healthcare entities shall:
- 6.3.4.1. Comply with established regulations.

6.4. Policy Priority 4: Flexible and Adaptable Regulation

Regulations and policies that cover all aspects of digital health in such a manner that they are adaptable, robust, resilient, and timeless, thereby ensuring the highest quality of care while maintaining the utmost safety of the individual at the center.
Policy Objectives 10. Redefining health and medical technology to include platforms and digital applications and technologies as appropriate. 11. Ensuring that every actor and player in an individual's health journey is accounted to from legislative, regulatory and medical malpractice points of view. 12. Ensuring quality and safety of digital healthcare delivered by: a) Certifying technologies b) Licensing healthcare workers c) Upskilling and reskilling workforce 13. Financially incentivizing care providers to accelerate adoption and enhancement of their digital maturity and care provision. 14. Creating an enabling ecosystem for innovation.

Objective 10: Redefining health and medical technology to include platforms and digital applications and technologies as appropriate.
Strategy 10: Redefining health and medical technology to include platforms and digital applications and technologies as appropriate.

6.4.1. DOH shall:
- 6.4.1.1. Coordinate with federal and other regulators to identify the platforms and digital technologies that will thus be considered as health and medical technologies and to thus include them in the definition of health and medical technologies..
- 6.4.1.2. Ensure that the appropriate and applicable platforms and digital applications and technologies fall under the same oversight, testing and regulation as "traditional" or non-digital health and medical technologies and tools.

6.4.2. All healthcare entities shall:
- 6.4.2.1. Adhere to these new denominations set forth by DOH.
- 6.4.2.2. Ethically choose the type of technology to use in care delivery based on value and outcome.
- 6.4.2.3. Align their liability and malpractice reporting to DOH's new considerations and legislation.

Objective 11: Ensuring that every actor and player in an individual's health journey is accounted to from legislative, regulatory and medical malpractice points of view.

Strategy 11: Determine which new entities (beyond the traditional clinical sense) and under what circumstances are they considered healthcare providers to be held liable for patient safety.

6.4.3. DOH shall:

6.4.3.1. Coordinate with federal and other local regulators to set the criteria for expanding the definition of healthcare provider to include back-office resources and developers of the digital health technologies and mechanisms that will be at the forefront of healthcare delivery;

6.4.3.2. Work with federal and other regulators to thus redefine these non-traditional healthcare providers in the digital health sphere as healthcare providers who can be held legally accountable for patient safety;

6.4.3.3. Coordinate with federal and other regulators to create legislation governing their liability in instances of healthcare delivery.

6.4.4. All healthcare entities shall:

6.4.4.1. Adhere to these new denominations set forth by DOH.

6.4.4.2. Align their liability and malpractice reporting to DOH's new considerations and legislation.

Objective 12: Ensuring quality and safety of the digital healthcare.
Strategy 12: Set the necessary licensing requirements

6.4.5. DOH shall:

6.4.5.1. Coordinate with federal and other regulators to develop robust and flexible professional licensing requirements;

6.4.5.2. Coordinate with federal and other regulators to develop flexible professional licensing requirements for traditional and digitally enabled health and healthcare provision spaces, environments and platforms.

6.4.5.3. Monitor the use and performance of digital health technologies for the purpose of ensuring its ethical medical use. .

6.4.6. All healthcare entities shall:

6.4.6.1. Adhere to DOH regulations and licensing and certification requirements.

Objective 12a: Ensuring regulated use of digital health technologies for healthcare delivery.
Strategy 12a: Use of certified digital technology and platforms for healthcare delivery.

6.4.7. DOH shall:

6.4.7.1. Only allow use of certified systems, platforms and digital health technologies in the delivery of care.

6.4.7.2. Require that all official systems, platforms and digital health technologies for delivery of care to be certified and recertified (with specific certifications being designated to institutions utilizing very advanced digital health technology).

6.4.7.3. Determine which certification process systems, platforms and digital health technologies have to follow. If neither of these exists globally, DOH will work with international and national agencies to create these in-house.

6.4.8. All healthcare entities shall:

6.4.8.1. Enforce certification requirements to the systems, platforms and digital health technologies utilized for delivery of care.

Objective 12b: Ensuring delivery of digitally enabled healthcare by appropriately licensed and trained professionals.
Strategy 12b: Develop the necessary licensing and training policies and requirements for staff who use specific digital health technologies for healthcare delivery.

6.4.9. DOH shall:

6.4.9.1. Coordinate with federal and local authorities to identify the licensing process healthcare professionals have to pursue.

6.4.9.2. Coordinate with federal and local authorities to identify training requirements on digital health technologies and on their appropriate and ethical use.

6.4.10. All healthcare entities shall:

6.4.10.1. Enforce licensing requirements to their employees using digital health for delivery of care.

Objective 12c: Reskilling and upskilling current and future healthcare and ICT workforce.
Strategy 12c: Ensure fit-for-purpose educational training programs.

6.4.11. DOH shall work with academic institutions to:

6.4.11.1. Create training and educational programs and degrees.

6.4.11.2. Develop in-house professional training programs for healthcare institutions.

6.4.12. All healthcare entities shall:

6.4.12.1. Ensure up-to-date skills and training of their employees using digital health technologies for healthcare delivery.

Objective 13: To enhance the adoption and enhancement of digital maturity by providers in their delivery of healthcare.

Strategy 13: Incentivize care providers to accelerate adoption of digital health technology and enhance their digital maturity and care provision.

6.4.13. DOH shall:

6.4.13.1. Work with stakeholders to find sustainable service delivery models with digital innovations and solutions as part of them.

6.4.13.2. Develop financial and nonfinancial incentives for care providers to accelerate adoption of the new business models and enhance their digital maturity and care delivery.

6.4.13.3. Put mechanisms in place to ensure that incentives for healthcare entities should be an ongoing process to encourage ongoing adoption of technologies as well.

6.4.14. All healthcare entities shall:

6.4.14.1. Adopt and enhance their digital maturity and provide safe and ethical digital healthcare.

Objective 14: To foster, invite and push the boundaries of innovation in the Emirate via easy, yet regulated, entry into the Abu Dhabi market for startups, venture capital (VC), etc., as well as for attraction of future talent.

Strategy 14: Eliminate barriers and create opportunities for new businesses to emerge.

6.4.15. DOH shall:

6.4.15.1. Work with other regulators, especially those in finance and ICT to limit barriers to market entry

6.4.15.2. Work with other regulators to enable building, incubating, accelerating, and scaling up of new digital health businesses and technologies.

7. Implementation Arrangements

7.1. Roles and Responsibilities

7.1.1. DOH shall engage with internal and external stakeholder including healthcare facilities and entities, ICT stakeholders, and all other digital health developers to with to agree on the roles and responsibilities of each towards the implementation, operation, adoption, and maintenance of a digitally-led, digitally-infused and digitally-transformed Model of Care and healthcare system.

7.1.2. DOH will provide the necessary stewardship and ensure, where necessary, that the requirements set out in this Policy are met through its regulatory powers.

7.1.3. Healthcare Providers: Must take on a robust approach to meet the requirements as set out by DOH to ensure the safety and wellbeing of persons seeking their services and the privacy, security and confidentiality of their information.

7.2. Enforcement, Compliance and Sanctions

7.2.1. DOH will enforce the compliance of all concerned stakeholders with this Policy.

7.2.2. DOH may impose sanctions in relation to any breach of requirements under this Policy in accordance with the Complaints, Investigations, Regulatory Action and Sanctions Chapter, Healthcare Regulator Manual Version.

7.3. Monitoring and Evaluation

7.3.1. A monitoring and evaluation framework will be developed to monitor the implementation and impact of this Policy vis-à-vis the DOH Model of Care.

7.3.2. When and where necessary, DOH will adopt changes to ensure continuous improvement of this Policy and within the healthcare system, as well as to keep up with rapidly changing and new emerging technologies that will need regulation and oversight.