

- | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none">• Electronic copy is controlled under document control procedure. Hard copy is uncontrolled & under responsibility of beholder.• It is allowed ONLY to access and keep this document with who issued, who is responsible and to whom it is applicable.• Information security code: <input type="checkbox"/> Open <input checked="" type="checkbox"/> Shared -Confidential
<input type="checkbox"/> Shared-Sensitive <input type="checkbox"/> Shared-Secret | <ul style="list-style-type: none">• النسخة الإلكترونية هي النسخة المضبوطة وفق إجراء ضبط الوثائق. النسخ الورقية غير مضبوطة وتقع على مسؤولية حاملها.• يسمح بالوصول وباحتفاظ بهذه الوثيقة مع مصدرها أو مع المسؤول عن تطبيقها أو مع المطبق عليهم.• تصنيف امن المعلومات: <input type="checkbox"/> بيانات مفتوحة <input checked="" type="checkbox"/> مشارك -خاص
<input type="checkbox"/> مشارك -حساس <input type="checkbox"/> مشارك -سري |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Guideline for Electronic Medical Record Transition in Healthcare Facilities

Version (1)

Issue date: 25/06/2024

Effective date: 25/09/2024

Health Informatics and Smart health Department (2024)

INTRODUCTION

Dubai Health Authority (DHA) is mandated by [Local Law No. \(14\) Of 2021 on amending the local Law No. \(6\) of 2018 concerning the Dubai Health Authority](#) amending some clauses of [Local Law \(6\) of 2018 Concerning Dubai Health Authority](#), to undertake several functions including but not limited to:

- Developing regulation, policy, standards, guidelines to improve quality and Data Subject/Patient safety and promote the growth and development of the health sector.
- Licensure and inspection of Healthcare Facilities as well as Health professionals and ensuring compliance to best Facility.
- Governing of health informations, e-health and promoting innovation.

The “Guideline for Electronic Medical Record Transition in Healthcare Facilities” aims to fulfil the following overarching DHA Strategic Priorities (2022-2026):

- Pioneering Human-centered health system to promote trust, safety, quality and care for Data Subjects/Patients and their families.
- Leading global efforts to combat epidemics and infectious diseases and prepare for disasters.
- Become a global digital health hub.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	2/1

ACKNOWLEDGMENT

The Health Informatics and Smart Health Department (HISHD) developed this Guideline in collaboration with Subject Matter Experts and would like to acknowledge and thank these health professionals for their dedication toward improving quality and safety of healthcare services in the Emirate of Dubai.

Health Regulation Sector

Dubai Health Authority

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	3/1

TABLE OF CONTENTS

ACKNOWLEDGMENT	3
DEFINITIONS	7
ABBREVIATIONS	10
1. BACKGROUND	11
2. SCOPE	11
3. PURPOSE	12
4. APPLICABILITY	12
5. GUIDELINE ONE: SELECTION OF NEW ELECTRONIC MEDICAL RECORD	12
6. GUIDELINE TWO: TIMELINE OF ELECTRONIC MEDICAL RECORD TRANSITION	19
7. GUIDELINE THREE: IMPLEMENTATION TEAM FOR EMR TRANSITION	20
8. GUIDELINE FOUR: DATA MIGRATION/TRANSFER TO NEW EMR	22
9. GUIDELINE FIVE: RETENTION OF ALL ELECTRONIC MEDICAL RECORDS	24
10. GUIDELINE SIX: TESTING OF NEW EMR AND QUALITY ASSURANCE	25
11. GUIDELINE SEVEN: GO-LIVE AND IMPLEMENTATION OF NEW EMR	28
12. GUIDELINE EIGHT: BUSINESS CONTINUITY PLANS FOR EMR	29
13. GUIDELINE NINE: DEVELOP PROCEDURES FOR WHEN THE EMR IS DOWN	29
14. GUIDELINE TEN: POST-IMPLEMENTATION SUPPORT	30
15. GUIDELINE ELEVEN: INTEGRATION OF NEW EMR WITH NABIDH	31
16. GUIDELINE TWELVE: CUSTOMIZATION AND TRAINING ON NEW EMR FOR ALL USERS	31

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	4/1

EXECUTIVE SUMMARY

The purpose of this document is to assure the transition from one Electronic Medical Record (EMR) to another is accomplished as per requirements of Dubai Health Authority (DHA); and the shift of records is performed smoothly while maintaining the integrity, security, privacy and accessibility of Data Subject/Patient data. The guideline has been developed to align with the evolving health information necessities and international best practices. This document should be read in conjunction with other Health Information Governance regulations released by DHA:

- [Standards for Clinical Data Coding and Terminology](#)
- [Health Data Quality Policy](#)
- [Health Data Classification Policy](#)
- [Policy for Health Information Assets Management](#)
- [Policy for Health Data Protection and Confidentiality](#)
- [Incident Management and Breach Notification policy](#)
- [Subject of Care Rights](#)
- [Consent and Access Control](#)
- [Incident Management and Breach Notification Policy](#)
- [Data Management and Quality Policy \(Primary and Secondary Use\)](#)
- [Health Information Audit Policy](#)

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	5/1

- [Identity Management Policy](#)
- [Authentication and Authorization Policy](#)
- [Information Security Standards](#)
- [Interoperability and Data Exchange Standards](#)
- [Technical and Operational Standards](#)
- [Artificial Intelligence Policy](#)

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	6/1

DEFINITIONS

Audit Trail: Collection of Audit Records from one or more Audit Logs relating to a specific Data Subject/Patient or a specific electronic health record.

Authentication: The process of reliable security identification of subjects by incorporating an identifier and its authenticator.

Authorization: The granting of rights, which includes the granting of access based on access rights.

Current Procedural Terminology (CPT): is a uniform coding system consisting of descriptive terms and identifying codes that are used primarily to identify medical services and procedures furnished by physicians and other health care professionals. These health care professionals use the CPT to identify services and procedures for which they bill public or private health insurance programs.

Data Accuracy: Dimension of data quality referring to the degree to which the data correctly describe the condition it was designed to measure.

Data Subject: A person who is the subject of protected health information.

Electronic Medical Record (also known as Electronic Health Record): A digital version of Data Subject/Patient's paper medical chart and personal information that contains a patient's medical history, diagnoses, medications, treatment plans, immunization dates, allergies,

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	7/1

radiology images, laboratory test results, etc. . It conforms to nationally recognized interoperability standards and enables information to be used and shared over secure networks.

Facility: DHA licensed healthcare Facility that performs medical examinations on patients, diagnosing their diseases, treating or nursing them, admitting them for convalescence, or assuming any activity related to treatment or to rehabilitation after treatment, whether it is owned or managed by natural or juridical persons.

Health Information Exchange: is the electronic transmission of health data and information among health care Facilities according to national guidelines. Electronic health information exchange (HIE) allows doctors, nurses, pharmacists, other health care providers and Data Subject/Patients to appropriately access and securely share a Data Subject/Patient's vital medical information electronically—improving the speed, quality, safety and cost of patient care.

Health Insurance Portability and Accountability Act (HIPAA) compliance: is a living culture that healthcare organizations must implement within their business to protect the privacy, security, and integrity of protected health information.

International Classification of Diseases (ICD): is a system used by physicians and other healthcare providers to classify and code all diagnoses, symptoms and procedures recorded in conjunction with hospital care.

ISO 27001: is the international standard for information security.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	8/1

Legacy EMR: An EMR that is retired becomes a legacy system if the Facility continue to use it to extract data for the release of information and continuity of care.

NABIDH: A health information exchange platform by the Dubai Health Authority that connects public and private Healthcare Facilities in Dubai to securely exchange trusted health information.

Systematized Nomenclature of Medicine Clinical Terms (SNOMED-CT): is a systematically organized computer-processable collection of medical terms providing codes, terms, synonyms and definitions used in clinical documentation and reporting.

Vendor: Electronic Medical Record provider.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	9/1

ABBREVIATIONS

CPT	:	Current Procedural Terminology
DHA	:	Dubai Health Authority
EMR	:	Electronic Medical Record
FSU	:	Facility Super Users
HIE	:	Health Information Exchange
HIPAA	:	The Health Insurance Portability and Accountability Act
HISHD	:	Health Informatics and Smart health Department
HRS	:	Health Regulation Sector
ICD	:	International Classification of Diseases
ICT	:	Information and Communications Technology
KPI	:	Key Performance Indicator
RCM	:	Revenue Cycle Management
SME	:	Subject Matter Expert
SNOMED-CT	:	Systematized Nomenclature of Medicine Clinical Terms
SSO	:	Single Sign On
UAE	:	The United Arab Emirates

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	10/1

1. BACKGROUND

Health Regulation Sector (HRS) forms an integral part of Dubai Health Authority (DHA) and is mandated by [Local Law \(6\) of 2018 Concerning Dubai Health Authority](#) and [Local Law No. \(14\) Of 2021 on amending the local Law No. \(6\) of 2018 concerning the Dubai Health Authority](#) to undertake several functions including, but not limited to Developing regulation, policy, standards, guidelines to improve and promote the growth and development of the health sector in the Emirate of Dubai.

The "Guideline for Electronic Medical Record Transition in Healthcare Facilities" aims to fulfil health information requirements for Healthcare Facilities in transition of the EMR and re-integrating to NABIDH Health Information Exchange (HIE); in order to position Dubai as a global medical destination by introducing a value-based, comprehensive, integrated and high-quality service delivery system.

2. SCOPE

2.1. All DHA licensed Healthcare Facilities planning transition from one EMR to another.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	11/1

3. PURPOSE

- 3.1. To ensure provision of standardized process while transferring from one EMR to another in Healthcare Facilities in the Emirate of Dubai.
- 3.2. To ensure the steadiness flow and exchange of health information during EMR transition.
- 3.3. To provide necessary guidelines in order to maintain the care being given to Data Subjects/Patients in DHA licensed Healthcare Facilities during this transition.

4. APPLICABILITY

- 4.1. All DHA Licensed Healthcare Facilities.

5. GUIDELINE ONE: SELECTION OF NEW ELECTRONIC MEDICAL RECORD

- 5.1. Before considering transition of the EMR, the Facility should initiate an exercise to strategize and plan for the proposed change to develop a compelling case for organizational change in form of a vision and business capability roadmap. This exercise can be executed internally or through hiring an experienced business management consultant to review the current situation and determine the source of the problems, key challenges, potential threats/risks and possible regulatory non-

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	12/1

compliance in the existing EMR; and what are the most important features needed in the new EMR. Such an exercise should document lessons learned from the previous EMR, objectives of the change, business capability roadmap, stakeholders' readiness, foundation governance and expected financial burden.

- 5.2. The software for capturing, storing, retrieving, viewing, and analysing health records should follow the DHA specified regulations, standards and requirements; including but without limiting:

5.2.1. [DHA Information Governance Regulations](#) and [DHA Nabidh Requirements](#)

- a. [Standards for Clinical Data Coding and Terminology](#)
- b. [Interoperability and Data Exchange Standards](#)
- c. [Technical and Operational Standards](#)
- d. [Identity Management Policy](#)
- e. [Authentication and Authorization policy](#)
- f. [Information Security Standards](#)
- g. [Consent and Access Control](#)
- h. [Health Data Quality Policy](#)

5.2.2. [Dubai Health Insurance Corporation Requirements](#)

5.2.3. [Dubai Health Licensing System \(Sheryan\) Requirements](#)

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	13/1

5.2.4. DHA Public health requirements.

- 5.3. The Facility must sign Data and Health information Sharing Agreement/Contract with new EMR Vendor and comply with the requirements of DHA [Policy for Data and Health Information Protection and Confidentiality](#). Data and health information Sharing Agreement/Contract must include appropriate clauses setting out responsibilities for data and health information protection and confidentiality, consistent with relevant UAE and DHA legislative and regulatory requirements, including this policy. If no such clause exists within the data and health information sharing agreement/contract, the Vendor/supplier must complete and sign a separate Confidentiality Agreement.
- 5.4. The Facility must make sure the new EMR vendor is storing health information within the UAE; as per [UAE Federal Law no. \(2\) of 2019 on Information and Communication Technology in the Health Field ICT Health Law](#).
- 5.5. The new EMR system shall not store, process, or handle health data with a Cloud Service Provider (CSP) outside the legal jurisdiction or geographical boundaries of the United Arab Emirates. The facility must ensure that the new EMR vendor utilizes the cloud services from The Dubai Electronic Security Center (DESC)- approved/certified Cloud Service Providers, with documented agreements between

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	14/1

the EMR vendor and CSP. Additionally, the cloud solutions provided by the vendor should support seamless integration with other healthcare systems and applications, such as laboratory information systems (LIS), radiology systems, billing software and NABIDH.

- 5.6. The Facility must make sure that the new EMR Vendor has a locally registered representative in the UAE that guarantees the provision of installation and support services.
- 5.7. Facility shall conduct a security assessment of the new EMR, including evaluating vendor's security practices, certifications, and compliance with the regulatory standards.
- 5.8. Before the data migration or transfer to the new EMR, the Facility should conduct a risk assessment to identify potential risks and challenges associated with the migration, including its impact on hospital operations, data integrity, Health Information Security Standards (HISS), and Health Information compliance requirements. The outputs of the risk assessment should support / guide the implementation team in proactively managing and mitigating any identified risks throughout the migration process (Prior, during and after Data Migrations).

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	15/1

- 5.9. The new EMR should align with all regulatory requirements including both clinical and revenue cycle; Key Performance Indicator (KPI) reports and respective logics. Facility must ensure all the significant functions are well covered and conveyed to the new Vendor to avoid any dispute during implementation.
- 5.10. The new EMR should align with Facility's unique needs, serving as a tailored tool that enhances efficiency, matches the specialty and preferences, streamlining data entry and documentation.
- 5.11. It is recommended to document in the contract that the new Vendor is responsible for managing and updating the code sets revisions as required (e.g. Current Procedural Terminology (CPT), International Classification of Diseases (ICD), Systematized Nomenclature of Medicine Clinical Terms (SNOMED-CT), Nabidh Data standards, etc.).
- 5.12. It is recommended that the new EMR includes an electronic consent management module or be able to seamlessly integrate to it to streamline the processes of generating and documenting all sorts of consents, including information sharing consents.
- 5.13. Some EMRs might not be outfitting to all specialties requirements. This should be understood well in advance and project plan should be designed with respective

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	16/1

strategy around the risk. If EMR does not cover specific module, the project should be scoped to procure a separate solution and to have integration scope considered.

5.14. The new EMR should have the capability of Single Sign On (SSO) to connect to Nabidh platform. For full information on “Identity and Access Management Single Sign-On using ISAM for EMR” email Nabidh team on: Nabidh@dha.gov.ae.

5.15. It is recommended to have SSO with previous EMR as well, to provide a seamless experience during go lives while users has to refer old documentations from legacy systems.

5.16. The new EMR should be interoperable, especially in terms of syntax and semantics of the information being exchanged.

5.17. The new EMR should at minimum:

5.17.1. Be able to ensure user authentication and authorization. It is recommended to implement strong user authentication mechanisms, such as multi-factor authentication (MFA), to prevent unauthorized access.

5.17.2. Be able to support privacy, confidentiality and audit trail.

5.17.3. Have a view only audit position to provide capabilities and to support file auditing without any chance / risk to make changes in the EMR.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	17/1

- 5.17.4. Have advanced search, merge, and demerge functionality for Medical Record Number (MRN) to ensure that duplicates are prevented/ or robustly resolved.
- 5.17.5. Be able to support digital archiving and retrieval of medical records of a Data Subject/Patient for the total duration as specified by DHA [Policy for Health Information Assets Management](#) .
- 5.17.6. Be able to construct a medical/clinical summary based on available records from the very first visit to current/most recent and provide a printout of or an electronic extract of.
- 5.17.7. Be able to support rapid data capture, storage, retrieval, and display of data.
- 5.18. It is highly recommended that new EMR includes role based access mechanisms (e.g. users are granted only the necessary level of access based on their roles) supported by active directory and preferably SSO mechanism.
- 5.19. It is also recommended that new EMR includes location based access mechanism for “Break the Glass” option in emergency situations.
- 5.20. The new EMR should have the capability to integrate with other solutions/systems/portals including Nabidh.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	18/1

- 5.21. The new EMR should have the capability to detect certain risks linked to the potential for data breaches and other cybercrimes; and preferably licenced for ISO27001 certification and HIPAA compliance to ensure security/privacy by design.

6. GUIDELINE TWO: TIMELINE OF ELECTRONIC MEDICAL RECORD TRANSITION

- 6.1. Transition of EMR includes data migration and connectivity with all governmental portals including Nabidh, eClaim, and public health systems. Most of Healthcare Facilities should be able to complete the transition process within 60 days, while large hospitals may take 6-9 months. The whole timeline for replacement of EMR should not exceed three months for small Facilities and 9 months for large hospitals.
- 6.2. Timelines for hardware environment, migrating data, end-user training, change management, software implementation, testing and go-live should also be established accordingly.
- 6.3. The timeline should be agreed with both legacy and new EMR Vendors, and the process should begin early to ensure that Facilities can gain access to the new EMR with enough time for sufficient training.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	19/1

7. GUIDELINE THREE: IMPLEMENTATION TEAM FOR EMR TRANSITION

By following a well-defined process and involving key stakeholders at each step, the Facility can make the transition gracefully, with minimal disruptions to work and patient's services.

- 7.1. It is recommended to have a Project Steering Committee with senior leadership members and project manager/leads who will approve/guide on the project goals and timelines and handle escalations. The committee should have regular (at least monthly) meetings with Vendor's representatives to ensure momentum.
- 7.2. Under the project steering committee, there should be information and communications technology (ICT) technical team, including clinical/ Revenue Cycle Management Subject Matter Experts (SME), infrastructure, network, and hardware support team leads/managers from ICT. This team should have weekly scheduled meetings to ensure technical readiness. It is preferable to have this meetings with Vendors technical team as well.
- 7.3. It is recommended to identify a technical lead who will be held responsible for ensuring all legacy systems data migration validations, testing and readiness. The technical lead will work with respective Vendors and EMR technical team to ensure migration as expected and mitigate risks associated.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	20/1

- 7.4. It is recommended to check the legacy data accuracy by the technical lead and team to ensure the legacy data qualifies for migration or recommend business to perform cataloging process to ensure accurate data without duplicates.
- 7.5. It is recommended to build up FSU (Facility Super Users) identified from various departments who would be accountable in all stages of project as well as they will be helpful to use as first line of support early days of go live.
- 7.6. During the early planning stage, the Facility should identify their in-house project manager to “own” the migration process; and loop him/her into conversations with the new EMR migration support team. If the Facility has executive-level leadership, these leaders should also contribute to the planning stages to ensure alignment with organizational goals. It is also recommended to identify KPIs for measuring successful implementation in each area.
- 7.7. Project managers should work with representatives from the old and new EMR Vendors to begin the data migration process and identify the right providers and staffs to help transmission of Data Subject/Patient data.
- 7.8. The project manager should also keep the project organized, see that tasks are executed on schedule, and guide others involved; working closely with the Vendors

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	21/1

and all staff in the Facility to keep stakeholders focused on their timelines, track the progress of projects and manage day to day issues.

- 7.9. A transition team should be formed in the Facility including physicians, nurses, receptionists, medical assistants, compliance office staff and administrative staff. Clinical members play dual roles by teaching EMR skills to colleagues and also bringing clinical challenges back to the implementation team. The Clinical members also guide the Facility throughout implementation, serving as a link between the front-line users and the technical and administrative staff.
- 7.10. The transition team should also include a lead super user who functions as the in-house expert in the new EMR. The lead super user configures the EMR software, creates templates and order sets, and also develops revised workflows or guideline operating procedures to address issues raised by front-line users.

8. GUIDELINE FOUR: DATA MIGRATION/TRANSFER TO NEW EMR

- 8.1. Facility should work closely with the new EMR Vendor to ensure a smooth data migration process, from mapping data fields to testing data integrity post-migration.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	22/1

- 8.2. Facility should determine the approach for migrating data from the old EMR to the new EMR.
- 8.3. Facility should carefully and attentively monitor the EMR transition procedure and ensure the seamless flow of Data Subject/Patient care and uphold the authenticity of the records.
- 8.4. Facility should prevent or at least minimize service interruptions, to maintain care quality and patient safety throughout the process of medical record transition.
- 8.5. Facility and EMR Vendor should have a cutover plan which contains managing all Data Subjects/Patients data during the interruption period for business continuity.
- 8.6. Since Data Subject/Patients are typically seen during normal business hours, the ideal time for a system update/transition is overnight or weekend or during off-peak business hours.
- 8.7. Facility should prepare a checklist of items to be entered into the new EMR. This should ensure that no critical information is missed during the transition. This Go Live readiness checklist must be signed-off by all stakeholders before Go Live
- 8.8. Facility should upload all Subject/Patient's data including demographics, medical history, prescriptions, diagnostic results, social, family and medication histories as per DHA requirements in [Health Data Quality Policy](#)

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	23/1

- 8.9. Facility should verify the accuracy and completeness of transferred data.
- 8.10. Facility should make sure that all insurance data has been transferred appropriately to the new EMR as per Dubai health insurance corporation requirements.
- 8.11. Facility should make sure all medical records are maintained as per [Policy for Health Information Assets management](#)
- 8.12. The Facility should attain extra care to maintain data privacy and confidentiality during the transition process.

9. GUIDELINE FIVE: RETENTION OF ALL ELECTRONIC MEDICAL RECORDS

- 9.1. The new EMR should provide appropriate system control measures for data backup and data recovery to prevent data loss.
- 9.2. All records must compulsorily be retained according to the United Arab Emirates (UAE) laws [UAE Federal Law no. \(2\) of 2019 on Information and Communication Technology in the Health Field ICT Health Law](#) and DHA regulations [Policy for Health Information Assets Management](#).
- 9.3. Facilities may decide the timing of making a record inactive, however, it is preferable to follow the “five (5) year rule” where all records of a deceased/absent Data Subject/Patient are made inactive after five years as per [Policy for Health](#)

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	24/1

[Information Assets Management](#). Yet, all medical records must remain visible and accessible by the end-users as and when required.

- 9.4. It is recommended to have processes and system prerequisites in place to ensure that health related data recorded in the new EMR is adequately archived. This should include the retention of audit trails and associated metadata. It is essential that all archived data remain retrievable upon request and readable by human beings.
- 9.5. Suitable archiving systems and processes have to be implemented to protect data integrity from unintended manipulation or deletion. Regular backups should be made. Appropriate quality checks should be in place to confirm that archived data (including metadata) are available, complete and readable.
- 9.6. Facilities must ensure, that the records are never destroyed or removed permanently before their retention timeline as per DHA requirements [Policy for Health Information Assets Management](#).

10. GUIDELINE SIX: TESTING OF NEW EMR AND QUALITY ASSURANCE

- 10.1. The transition to an EMR requires an effective data quality program that incorporates documentation improvement and/or data integrity processes. A well-developed program should help monitor and manage data throughout the transition

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	25/1

to reduce error, risk, and potential harm. For this reason, it is important for the Facility to determine what functionality a given EMR offers for gathering, accessing, and transferring quality data.

- 10.2. The Facility should thoroughly test the new EMR before implementation, to ensure a seamless transition; and identify and address any issues, glitches, or discrepancies that could disrupt the Facility's operations.
- 10.3. It's essential to conduct testing with actual Data Subject/Patient data, simulating real-world scenarios to validate the system's performance under various conditions.
- 10.4. Separate integration test cases should be developed and validated for all systems that are being integrated. Integration with regulatory systems are also to be documented and validated with acceptance criteria.
- 10.5. Comprehensive quality assurance must be conducted to identify potential problems and demonstrate the commitment to deliver safe and effective health services by ensuring the system's reliability and accuracy. Application performance should be validated through stress testing, which should be done either in house or by assigning the responsibility to the Vendor, or to a third party to perform stress/load testing to ensure system stability.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	26/1

- 10.6. The new EMR has to be validated with respect to its purpose, the fulfilment of regulatory and user requirements, and operational testing.
- 10.7. Tests should be performed to check for data transfer completeness, correct allocation, and to exclude any alterations during data migration. Appropriate documentation should be in place to ensure that migrated data was not changed. These records should be kept to be provided to the auditors and inspectors upon request.
- 10.8. For the entire life cycle of the EMR, a change management process should be in place with change control procedures documenting the reason, impacts, and release of the changes made to the EMR.
- 10.9. Facility must decide what data to clean up, how far back to go, and how long the transition should take. The information should be tracked and reviewed regularly for accuracy so that incorrect data are not entered or passed through interfaces into the EMR. The overall plan and implementation for entering data needs to be clearly defined to ensure the integrity and validity of health information.
- 10.10. The Facility should focus on quality with attention to record completeness, timeliness, and authenticity as they are important factors for data integrity, validity, and reliability.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	27/1

- 10.11. Facility should establish policies and procedures to manage and maintain data and information needs through the transition to ensure data integrity and validity.
- 10.12. The policies and procedures should include proper guidelines on access to information, addendums, amendments, corrections, audit process, record completion, retention and destruction.
- 10.13. Policies and procedures should be clearly defined and readily accessible to all staff.

11. GUIDELINE SEVEN: GO-LIVE AND IMPLEMENTATION OF NEW EMR

- 11.1. Facility should set a well-defined go-live date for implementing the new EMR.
- 11.2. To ensure a smooth transition, Facility should prioritize equipping the staff with comprehensive guidance and unwavering support to alleviate concerns and facilitate their adjustment to the new system.
- 11.3. It is recommended to bring Facility super users to deploy for support during initial days of go live.
- 11.4. Facility should anticipate potential disruptions during the initial phase and have contingency plans in place.
- 11.5. The facility shall have a comprehensive incident response plan to address security incidents or breaches during the transition process.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	28/1

- 11.6. Facility must vigilantly monitor the system's performance, addressing any issues promptly to ensure that Data Subject/Patient care remains seamless and uninterrupted during go-live.
- 11.7. Facility should have a roll back plan in case the go live wasn't successful to avoid disruptions of patient care.

12. GUIDELINE EIGHT: BUSINESS CONTINUITY PLANS FOR EMR

- 12.1. Documentation about the data backup, recovery processes, and applied systems; with risk-based disaster recovery plan together with emergency procedures in case of data and/or data entry unavailability should be in place.
- 12.2. It is preferable that a Disaster Recovery be opted for in an offsite location as part of the project and be included in the EMR budget /cost estimates.

13. GUIDELINE NINE: DEVELOP PROCEDURES FOR WHEN THE EMR IS DOWN

- 13.1. Facility must develop procedures for periods when the EMR is down so that physicians and staff have clear instructions about workflows. Some key components of downtime procedures include how the downtime should be communicated to physicians, staff and Data Subject/Patients and how the Data Subject/Patient care flow should continue (e.g., check-in and visit documentation).

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	29/1

13.2. Facility should consider below questions when developing downtime procedures:

13.2.1. How should physicians and staff be notified of downtime?

13.2.2. How should the Data Subject/Patient care flow continue?

13.2.3. How should Data Subject/Patient check-in occur?

13.2.4. How should physicians and staff document the visit?

13.3. Facilities should also consider Data recovery plan (e.g. storing copies on a secure cloud within the UAE, etc.).

14. GUIDELINE TEN: POST-IMPLEMENTATION SUPPORT

14.1. The Facility should be committed to maintain a vigilant eye on system performance, continually gather feedback from staff, and promptly address any concerns.

14.2. The Facility should ensure that enough technical staffs are existing to provide any post-implementation support. Issues/problems identified during/post Go-Live should be resolved at earliest.

14.3. It is recommended that the Facility conducts Post-Go Live Lessons learned workshops with key stakeholders and share experience with Steering committee and utilize it in next rollouts.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	30/1

- 14.4. It is also recommended that the Facility performs benefit realization to assess whether the Projects' KPIs defined initially are met by the transition to the new EMR.

15. GUIDELINE ELEVEN: INTEGRATION OF NEW EMR WITH NABIDH

- 15.1. The Facility should inform Nabidh team in advance when they are planning to change their EMR by sending email to nabidh@dha.gov.ae
- 15.2. The notice should be sent at least one month before transition of EMR.
- 15.3. Facility must ensure that Nabidh team is notified on the closure of the old EMR to ensure all the connectivity and port opened can be closed/terminated.
- 15.4. Re-Integration to Nabidh must be supported at earliest post transition.

16. GUIDELINE TWELVE: CUSTOMIZATION AND TRAINING ON NEW EMR FOR ALL USERS

Appropriate training for all users, including the leadership team, is a crucial step for any implementation to meet short and long-term needs. By equipping the staffs with the skills to navigate the new EMR effortlessly, the Facility minimizes errors, and maximizes productivity, enabling the Facility to fully leverage the benefits of the new EMR and deliver optimal Data Subject/Patient care.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	31/1

- 16.1. Proper organizational change management team should be developed while migrating to a new EMR. This requires members from planning, governance, marketing, and communication sections.
- 16.2. Facility should provide staffs proper training before launching new EMR. Specialized training must be provided to super users, system administrators, data management coordinators and finance staffs.
- 16.3. Cybersecurity awareness training for staff members involved in the transition process should be provided.
- 16.4. Dedicated training team should be formed to ensure adequate rounds of training for clinical and revenue cycle department users. During each iteration of training (online/class room), proficiency of trainee should be assessed and recommended for further sessions if required. Training certificate should be issued to affirm confidence to the user and post training there should be some system made available for users to continue their practice until go live.
- 16.5. The Facility should identify at least one change champion staff who can be trained to provide onsite expertise and who can, when required, train new staff. Vendors who personalize training and offer more flexibility in how training is offered can be a advantage.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	32/1

16.6. A well-designed training program should:

16.6.1. Streamline communications.

16.6.2. Establish individual and organizational expectations.

16.6.3. Enforce accountability of actions.

16.6.4. Change user attitudes and behaviours during the transition from one EMR to another.

16.7. Staff should have ongoing access to online training modules to refresh knowledge, and supplement training for new staff or staff with new responsibilities.

16.8. The training should be initiated at least 30 days prior to the EMR Go Live date.

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	33/1

REFERENCES

1. Jason J. Saleem and Jennifer Herout. Transitioning from one Electronic Health Record (EMR) to another: A Narrative Literature Review.
<https://doi.org/10.1177/1541931218621112>
2. EMR Implementation Planning Guide A Ten-Step Guide to Planning for Successful Implementation of an Electronic Medical Record (EMR) System.
3. American Health Information Management Association. Managing Existing Patient Records in the Transition to new HER. Available on: [American Health Information Management](#).
4. AHIMA e-HIM Workgroup on Assessing and Improving Healthcare Data Quality in the EMR. “Assessing and Improving EMR Data Quality.” Journal of AHIMA 78, no. 3 (Mar. 2007): 69–72. Available on: www.ahima.org
5. Isomi M Miake-Lye, Alison M. Cogan OTR/L, Selene Mak. Transitioning from One Electronic Health Record to Another: A Systematic Review. available on: <https://link.springer.com/article/10.1007/s11606-023-08276-3>
6. AHIMA e-HIM Work Group on Electronic Document Management as a Component of EMR. “Electronic Document Management as a Component of the Electronic Health Record.” October 2003. Available on: www.ahima.org
7. Ram Krishnan. Making a smooth transition: EMR migration best practices. Available on:

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	34/1

<https://www.physicianspractice.com/view/making-a-smooth-transition-ehr-migration-best-practices>

8. Chunya Huang, Ross Koppel, John McGreevey. Transitions from One Electronic Health Record to Another: Challenges, Pitfalls, and Recommendations. Available on: [Transitions from One Electronic Health Record to Another Challenges Pitfalls and Recommendations](#)
9. AHIMA e-HIM Workgroup on Assessing and Improving Healthcare Data Quality in the EHR. “Assessing and Improving EHR Data Quality.” Journal of AHIMA 78, no. 3 (Mar. 2007): 69–72. Available on: www.ahima.org
10. Summary of the HIPAA Privacy Rule. Available on: <https://www.hhs.gov/hipaa/for-professionals/privacy/laws-regulations/index.html>
11. ISO/IEC 27001:2022: Information security, cybersecurity and privacy protection requirements. Available on: <https://www.iso.org/standard/27001>

ID	Issue#	Issue Date	Effective Date	Revision Date	Page#
HISHD/GD-03	01	June 25, 2024	Sep 25, 2024	June 25, 2029	35/1