



Next Generation Electronic Medical Record (NGEMR)

Alexandra Hospital is moving to the Next Generation Electronic Medical Record (NGEMR) system on 26 February 2022.

1. What is the Next Generation Electronic Medical Record (NGEMR)?

Next Generation Electronic Medical Record (NGEMR) is an initiative by the Singapore Ministry of Health to put in place an advanced centralised electronic medical record system for the Singapore population. The NGEMR platform records the entire patient journey from the point of admission to discharge, to outpatient appointments, including both medical and administrative data. The NGEMR single patient health record will bring about a more efficient care management and delivery. For instance, NGEMR can reduce the cost and necessity for repeat tests when patients switch care providers as authorised members of the patient's care team across NGEMR institutions would be able to view the results of any recent blood tests, x-rays and investigations online without having to specifically request for the records from another institution.

As an integrated system with harmonised processes across the **National Healthcare Group (NHG)** and the **National University Health System (NUHS)**, the system will provide healthcare providers who are involved in patients' treatment with quick access to the latest medical records. With harmonised workflows, healthcare providers will be able to record content in a more cohesive and efficient manner which will enable improved reporting of healthcare data across both clusters, ensuring similar patient experience. The NGEMR platform also provides an integrated platform for the two clusters so that there is lesser need for each cluster to maintain their legacy systems.

The first wave of NGEMR was implemented successfully at JurongHealth Campus in April 2020. It was followed by the second wave of implementations at National University Polyclinics (NUP) between September and November 2020, with Bukit Panjang Polyclinic implemented in October 2021. NGEMR was also implemented across the six National Healthcare Group Polyclinics progressively from 27 Feb 2021 to 3 May 2021, with Kallang Polyclinic implemented in October 2021. It will be fully on boarded in both clusters by 2023.

2. What are Electronic Medical Records (EMR)?

EMR stands for electronic medical records, which are the digital equivalent of paper records, or charts at a doctor's office. EMRs typically contain general information such as treatment and medical history about a patient as it is collected by the individual medical practice. Every time a patient visits a doctor, a detailed record of the encounter, such as diagnoses, test results and medication prescribed is created and maintained by the doctor at the clinic or hospital. These notes make up the patient's medical record and also enables data analytics to provide greater insights to enhance patient care. EMRs are designed to help organisations provide efficient and precise care.

3. What is the difference between NGEMR and National Electronic Health Records (NEHR)?

The NGEMR platform serves to record the detailed patient journey from the point of admission to discharge, to outpatient appointments, including both medical and administrative data. Selected information from NGEMR contributes to the summary displayed in NEHR, which

aggregates and displays the summary of the patient's health records across the different healthcare provider systems.

4. Who can access NGEMR?

Only authorised doctors and public healthcare staff who are involved in a patient's treatment will have access to his/her records in NGEMR. Strict access controls and security safeguards have been put in place.

5. What is the longer term plan for NGEMR?

With National University Health System (NUHS) fully on boarded, NGEMR will be rolled out in different phases in National Healthcare Group (NHG) public healthcare institutions between 2022 and 2023, benefiting around 5.5 million patients.

6. How do you keep the records safe?

The NGEMR system incorporates a wide range of security measures to protect the confidentiality, integrity and availability of patient data. Examples include encryption of data at rest and in transit, role-based access control, two-factor authentication for system administrators, anti-malware and advanced threat protection, intrusion detection and prevention, and automated monitoring to detect suspicious activity.

In addition, all medical staff are bound by law and professional ethics to keep personal data in NGEMR strictly confidential.

Unauthorised access is an offence under section 3 (1) of the Computer Misuse Act, Cap 50A1.