NORAV medical

ECG Excellence

NEMS-Web

INSTRUCTIONS FOR USE

VERSION: 1.0.1.0

DATE: 25.02.2026

CE 2797

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General Information

NEMS-Web. Instructions for Use.

For software version: 1.0.1.0 Software release date: 12.10.2025

For device models: NR-302/314/1207/1207-3/1207-E/314-P, DL800/900, NBP-24 NG, NBP One, Oscar 2

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Item(s)	Basic UDI-DI
Software: NEMS-Web v1.0.1.0	426049856DE55252NMKEYVQ
Devices: NR-302/314/1207/314-P	426049856DE55252NMAMBTG
Devices: NR-1207-E and NR-1207-3	426049856DE55252NMNRSX2
Devices: NBP One	08409351000000000250D92
Devices: Oscar 2	084093510000000000002507E

Copyright Information

The most recent version of this document can be downloaded from our website:
https://www.noravmedical.com/support-center/

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Compliance Information

This product (software) complies with the applicable requirements of Regulation (EU) 2017/745 of the European Parliament and of the Council on medical devices, as well as the UK Medical Devices Regulations 2002 (Statutory Instruments 2002 No. 618 Consumer Protection), as amended.

CE 2797 UKCA 0086

This product (software) is intended for installation on equipment that meets the applicable edition of IEC 62368-1. Medical devices used in conjunction with this product must comply with the relevant IEC 60601 series standards, as appropriate. In addition, any electromagnetic interference generated by devices in this configuration must conform to Directive 2014/30/EU of the European Parliament and of the Council of 26 February 2014.

⚠Caution: Federal Law restricts this device to sale by or on the order of a licensed physician or healthcare provider.

Disclaimer

This product (software) is intended solely as a decision support system for individuals who have received appropriate medical training, and must not be used as the sole basis for making clinical decisions pertaining to patient diagnosis, care, or management. Any application of medical information from the product, other than its original design or intended use, is not advised and is considered misuse of the product.

Important Usage Notice

Like in all medical (including but not limited to ECG) data processing systems, noise or artifacts may produce false-positive events. Therefore, patient data must be reviewed and edited only by a qualified technician or physician who has received appropriate training. Norav Medical and its staff shall not be held liable for patient data reviewed or edited by an unqualified person, or by a qualified person acting outside the scope of appropriate medical judgment.

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Norav Medical products are warranted to be free from manufacturing and material defects for a period of two (2) years from the date of shipment by Norav Medical or an authorized dealer to the original purchaser.

Expendable supply items, including but not limited to electrodes, lead wires, and patient cables, are excluded from this warranty. This warranty does not apply to any product that Norav Medical determines has been modified or damaged by the customer.

Except for the express warranties stated above, Norav Medical disclaims all warranties, including implied warranties of merchantability and fitness. The stated express warranties are in lieu of all obligations or liabilities on the part of Norav Medical for any damages, including but not limited to special, incidental, indirect, or consequential damages, arising out of or in connection with the use or performance of Norav Medical products.

Any action for breach of warranty must be commenced within one (1) year of the alleged breach or be forever barred. Any repairs made to the product that are not covered by this warranty shall be billed to the customer.

For service or technical support, please contact your local supplier or Norav Medical.

Table of Contents

1. Introduction

Document Conventions

Warnings Cautions and Notes

Pay particular attention to specific points in a procedure when one of the following messages is displayed:

Warning

Warnings call attention to possible hazards involving potential damage or injury to persons.

Caution

Cautions refer to practices necessary to protect against potential damage or loss of equipment. Pay careful attention to instructions.

Note

Notes provide pertinent information to help obtain optimum software performance or signify an important step or procedure requiring special attention.

Abbreviations and Acronyms

Abbreviation	Meaning
NEMS	Norav ECG Management System
ECG	Electrocardiogram
ID	Identification
ABPM	Ambulatory Blood Pressure Monitoring
LQTS	Long QT Syndrome
USB	Universal Serial Bus
ST Segment	The ST segment encompasses the region between the end of ventricular depolarization and beginning of ventricular repolarization on the ECG (see https://en.ecgpedia.org/wiki/ST_Morphology)
QT Interval	Time taken for ventricular depolarization and repolarization, effectively the period of ventricular systole from ventricular isovolumetric contraction to isovolumetric relaxation (see https://litfl.com/qt-interval-ecg-library/)
FTP	File Transfer Protocol
EHR	Electronic Health Record
EMR	Electronic Medical Record
DICOM®	Digital Imaging and Communications in Medicine
PACS	Picture Archive and Communication System
HL7	Health Level Seven
ORM	HL7 Order Entry Message
QT	Time from the start of the Q wave to the end of the T wave
HRV	Heart Rate Variability
MI	Myocardial Infarction
BP	Blood Pressure
MWL (DMWL)	Modality Worklist (DICOM Modality Worklist))
GDPR	General Data Policy Regulations
HIPAA	Health Insurance Portability and Accountability Act
Record	Can be REST/STRESS/HOLTER ECG/ABPM test

Intended Use

NEMS-Web Intended Use

The NEMS-Web Management System software is intended to be marketed to medical professionals and for point-of-care use. The software is designed to work with local/remote Norav management database, which commonly stores, retrieves, displays, edits, and prints high-resolution records data received from devices.

NEMS-Web is used as an archive system allowing managing tests and patients as well as displaying real-time status of tests including reports confirmed by a physician, unconfirmed reports, and worklist displaying tests to be performed by nurses.

NEMS-Web allows creating new patients, viewing existing patients and their test records, opening a test through the Norav Testing Tools, and performing additional operations like comparing tests, analyzing tests, etc.

NEMS-Web can be integrated with EHR systems via HL7 and DICOM®.

PC-ECG 1200 Intended Use

ECG Intended Use

ECG is intended to disclose either normal condition or patterns of arrhythmia, myocardial ischemia, rate abnormalities, or features of prognostic value in the following cases:

- Patients with suspected cardiac abnormalities
- Populations of patients at an age or period in which a routine baseline evaluation of ECG characteristics is desired.

QT analysis is useful in the assessment of Long QT Syndrome (LQTS). In some instances, LQTS can be corrected by pharmacological therapy. QT analysis is also used to measure QT dispersion, which is the difference between maximal and minimal QT values.
QT dispersion is a measure of the inhomogeneity of ventricular repolarization.

PC-ECG 1200 has been tested to measure Heart Rate Variability and Late Potential within a tolerance of 1 millisecond. The clinical significance of Heart Rate Variability and Late Potential measures should be determined by a physician.

STRESS Testing Intended Use

Angina Pectoris (chest pain) is a clinical syndrome resulting from myocardial ischemia, indicative of reduced blood supply to the cardiac muscle.

The Electrocardiogram may establish the diagnosis of ischemic heart disease if characteristic changes are present. STRESS testing is the most widely used method to decide whether this chest pain is related to myocardial ischemia, and thus to coronary artery disease.

In STRESS testing, the contractile capability of the heart muscle is monitored by ECG during patient exercise. Patients exercise using bicycle, treadmill, or other means while the ECG is continuously monitoring. Exercise loads are determined by predefined protocols.

ECG signals are recorded for the rest, exercise, and recovery phases of the exercise protocol. The changes in ECG waveforms are compared with the resting ECG records.

Most commercial STRESS test systems control the bicycle or treadmill automatically according to the requirements of the chosen protocol, although this is not essential.

ST segment monitoring is intended as an aid in the evaluation of myocardial ischemia in patients with known or suspected coronary artery disease.

The ST segment algorithm has been tested for accuracy of the ST segment data, and a database is used as a tool for performance testing.

The significance of the ST segment changes must be determined by a physician.

Holter NH-301 Intended Use

The Holter NH-301 analysis system is intended for patients requiring ambulatory (Holter) monitoring from 1 to 336 hours.
Such monitoring is most frequently used for the following indications:

- Evaluation of symptoms suggesting arrhythmia or myocardial ischemia
- Evaluation of ECG documenting therapeutic interventions in individual patients or groups of patients
- Evaluation of patients for ST segment changes
- Evaluation of a patient's response after resuming occupational or recreational activities, e.g., after MI or cardiac surgery
- Clinical and epidemiological research studies

The Holter NH-301 analysis system contains Heart Rate Variability (HRV).

The clinical significance of Heart Rate Variability measures should be determined by a physician.

Norav Uploader Intended Use

Norav Uploader intended use is to upload test records to NEMS-Web, independently of communication problems due to uploading fragmentally enabling to continue the upload process from the instance of communication break rather than starting the process from the beginning.

Norav Uploader functions like a pipe transferring a test record from point A to point B, thus allows uploading test records to the Server using Internet/LAN network.

Norav Uploader also prepares the recorder and downloads from the recorder.

Norav Uploader can work in two modes:

- Running in Client-side System Tray as service
- Running standalone in clinic

Norav Uploader is included in the NEMS-Web package.

Norav Bridge Intended Use

Norav Bridge intended use is to mediate between the Browser, the Testing Tools (e.g., REST/STRESS/Holter ECG), and NEMS-Web.

Internet browser is closed for external interaction with software (sandbox), this medicator allows us to perform the required interaction based on Microsoft Certified Signal-R communication protocol.

Norav Bridge (with the interaction of Norav Uploader) allows to open new test or existing test, updates existing test, deletes test, scans services, checks if devices exist, prepares devices, and compares test records.

Norav Bridge is a service that runs in the background.

Norav Bridge is included in the NEMS-Web package.

ABPM Devices Intended Use

The NBP One, Oscar 2, and NBP-24 NG devices are noninvasive oscillometric ambulatory blood pressure monitors that are intended to be used with NEMS-Web for the recording and displaying of up to 250 measurements (or 24/48 hours) of systolic and diastolic blood pressure and heart rate.

They are intended for use as aids or adjunct to diagnosis and treatment when it is necessary to measure an adult and pediatric (over 4 years) patient's systolic and diastolic blood pressures over an extended period.

The systems are only for measurement, recording, and display to assist a licensed physician in making a diagnosis.

Norav Recorder (NR) Intended Use

Norav Recorder is intended for recording ECG Tests, REST, STRESS, and HOLTER.

2. Overview

Compatible Applications

- NEMS-A (ABPM Console Mode)
- PC-ECG 1200 (Rest, Stress)
- Holter NH-301
- Norav Uploader
- Norav Bridge

Note

PC-ECG and Holter NH-301software does not support VPN connections.

Compatible Devices

- Norav Recorders (NR-302, NR-314, NR-1207, NR-1207-3, NR-1207-E, NR-314-P)
- DL900, DL800 (Braemar)
- NBP One
- Oscar 2
- NBP-24 NG

Recommended System Specifications

Component	NEMS-Web Client	NEMS-Web Server
CPU	i5 @ 2.0 GHz	i5 @ 2.0 GHz or VCPUx2
RAM	8 GB	16 GB
Free Disk Space	More than 100 GB	More than 1 TB
Operating System	Windows 10 Pro 32/64 bit or Windows 11 Pro	Windows Server 2019 Essentials or higher
Extra USB Ports	1	–
VMware	–	ESXi 6.5
HTTP/HTTPS TCP Ports Opened for Outside IN/OUT Access	–	80 or 443,8080
MS SQL Server Version Installed by Default on Virtual Image	–	SQL Express 2019
SSL, Domain, etc. Certificates to Install on Server OS	–	SSL certificate required for HTTPS connection
Antivirus Installed by Default on Virtual Image	–	Windows Defender or any other

Cloud (AWS) Specifications

Specification	Instance Type	vCPUs	Architecture	Memory	IP
Minimum	t3a.large	2	x86_64	8 GB	Elastic IP
Recommended	t3.xlarge	4		16 GB	

3. NEMS-Web Installation

Server Installation

Norav provides the NEMS-Web Server installation that usually includes one of the following:

- **Virtual Machine (VM)** – Deployment of **ESXi Image (VMWare)**
- **Virtual Machine (VM)** – Deployment on **Cloud (e.g., AWS)**
- **Physical Workstation** – Includes installation of NEMS-Web, configurations, and definitions on the client's network **(Blackbox)**

Client Installation

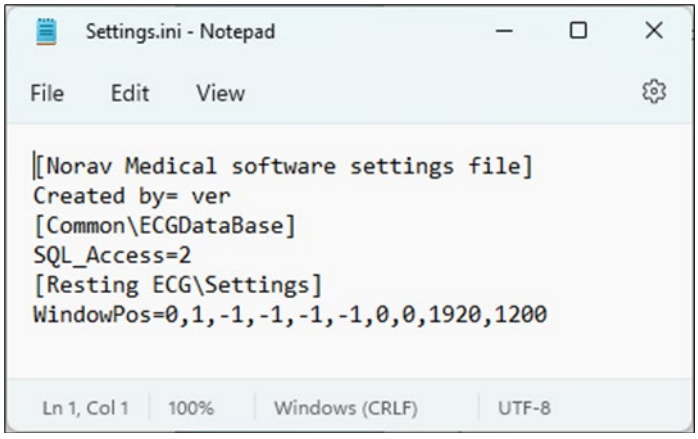
Installing NEMS-Web on a client's PC includes the following:

- Installing packages according to client's needs (PC-ECG, Holter NH-301, and NEMS-A for ABPM).
- Installing Norav Uploader, which uploads tests to the Server.
- Installing Norav Bridge, which allows communication between browser and software on client PC.

All the applications can be installed using one of the following:

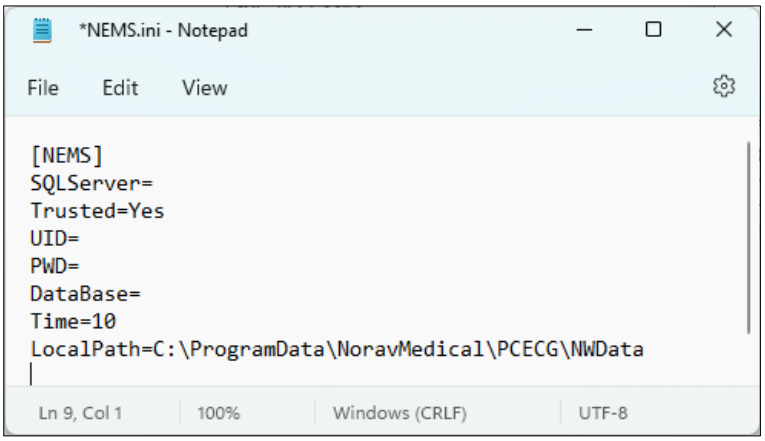
- From installation packages provided separately
- From NEMS-Web (see Section Software Download)

1. After the installation of Norav applications, verify the following settings:
   - **PC-ECG**
     a. Open the Stress or Rest application that creates the Settings folder.
     b. Verify that the Settings folder is created in C:\ProgramData\NoravMedical.
     c. Open the **Settings.ini** file from the Settings folder.
     d. Set the following (see following Figure):
        - **[Common\ECGDataBase]**
        - **SQL_Access=2**

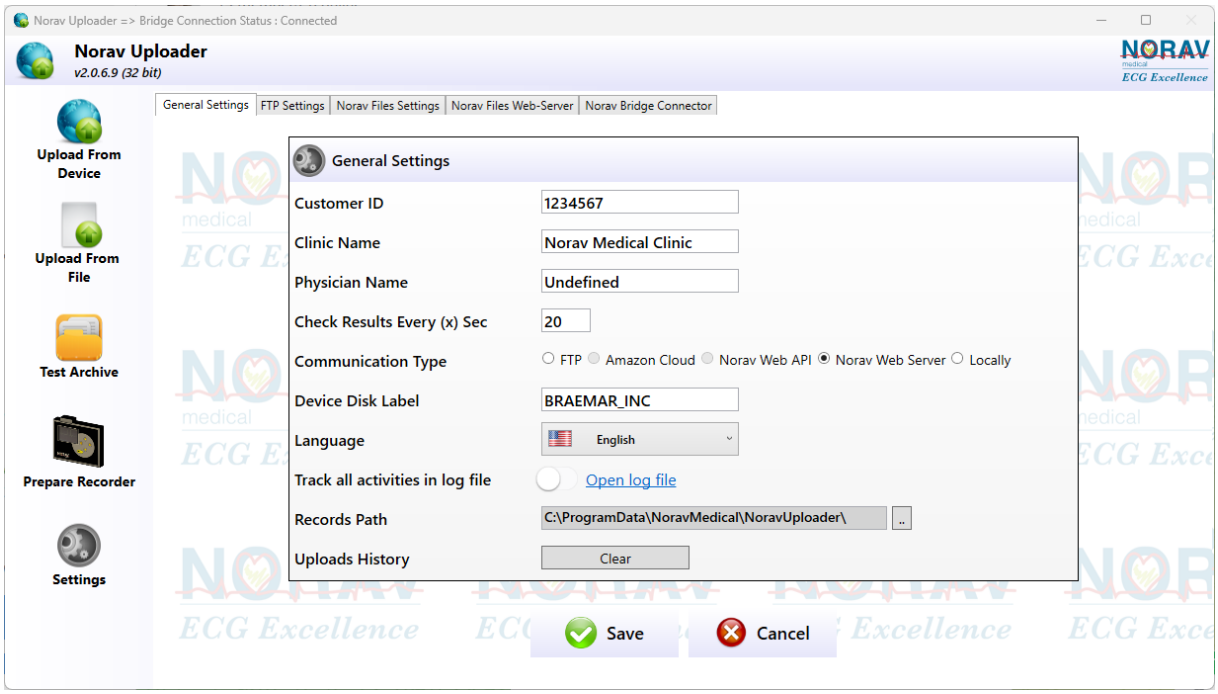


     e. Create **Nems.ini** file (if nonexistent) in the same Settings folder.

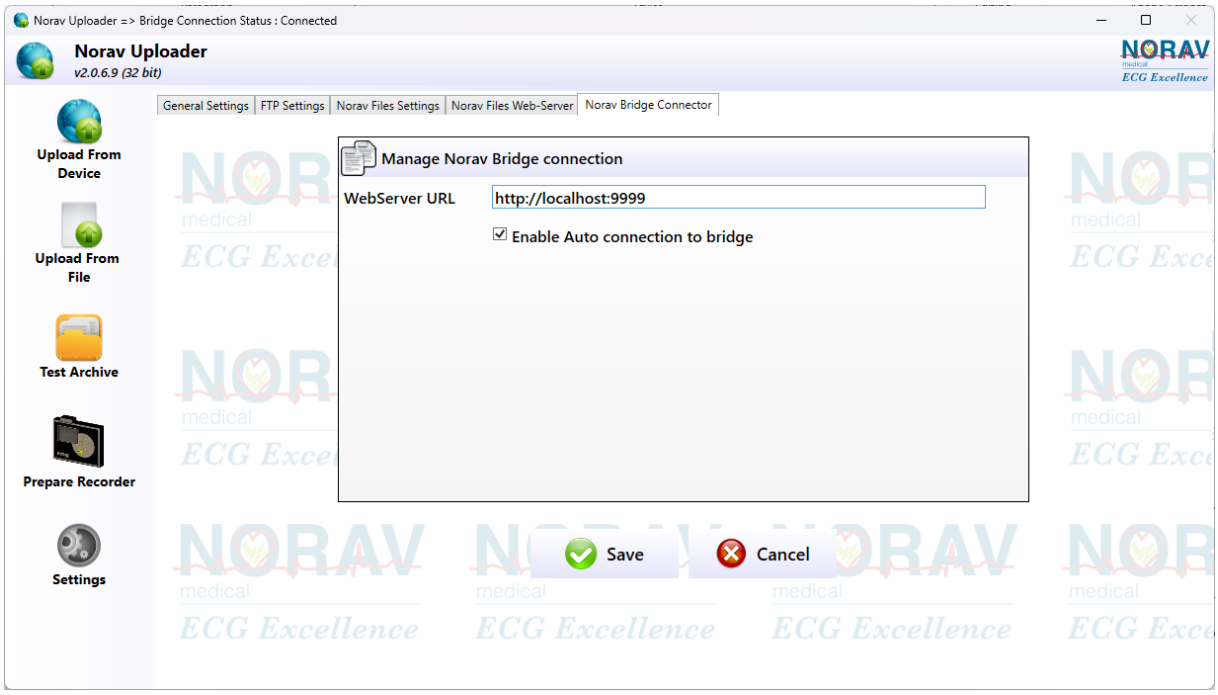
f. Set **LocalPath = C:\ProgramData\NoravMedical\PCECG\NWData** (see following Figure). You can set another folder where PC-ECG data is to be saved.



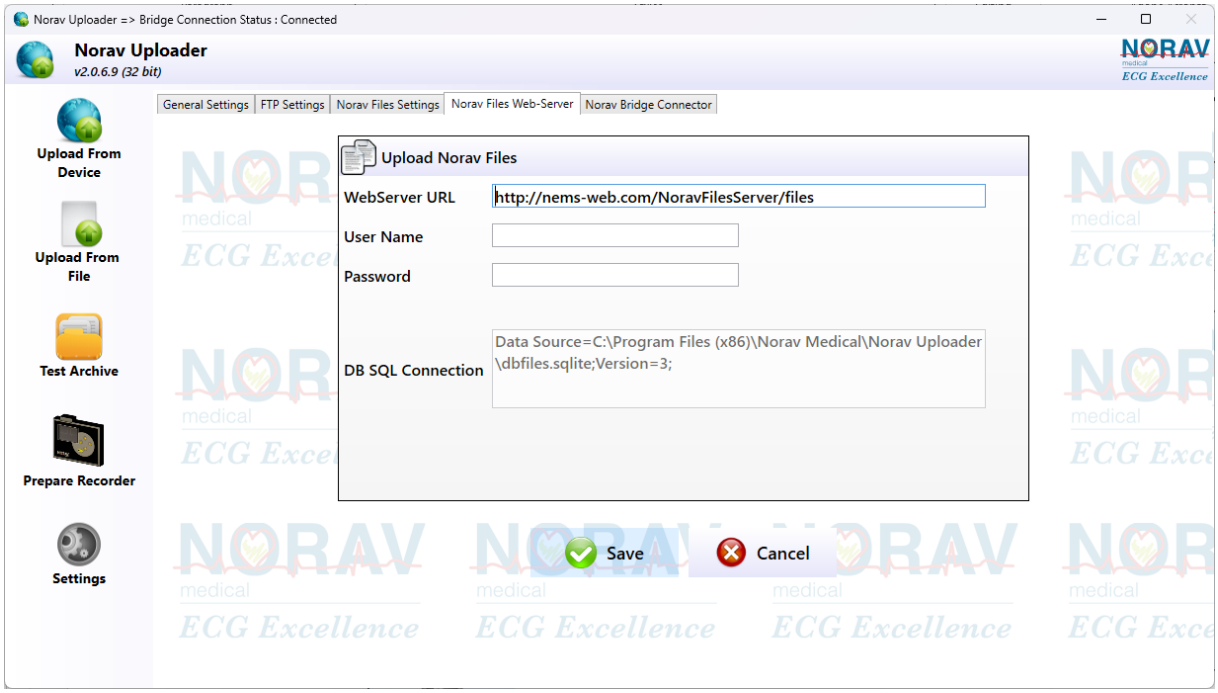
- **Norav Uploader**
  a. Open Norav Uploader (password is **noravadmin**)
  b. Click the **General Settings** tab, and then click the **Norav Web Server** radio button (see following Figure).



c. Click the **Norav Bridge Connector** tab, and then set the **WebServer URL** to http://localhost:9999 and select the **Enable Auto connection to bridge** checkbox (see following Figure).



d. Click the **Norav Files Web-Server** tab, and then set the **WebServer URL** (see following Figure).

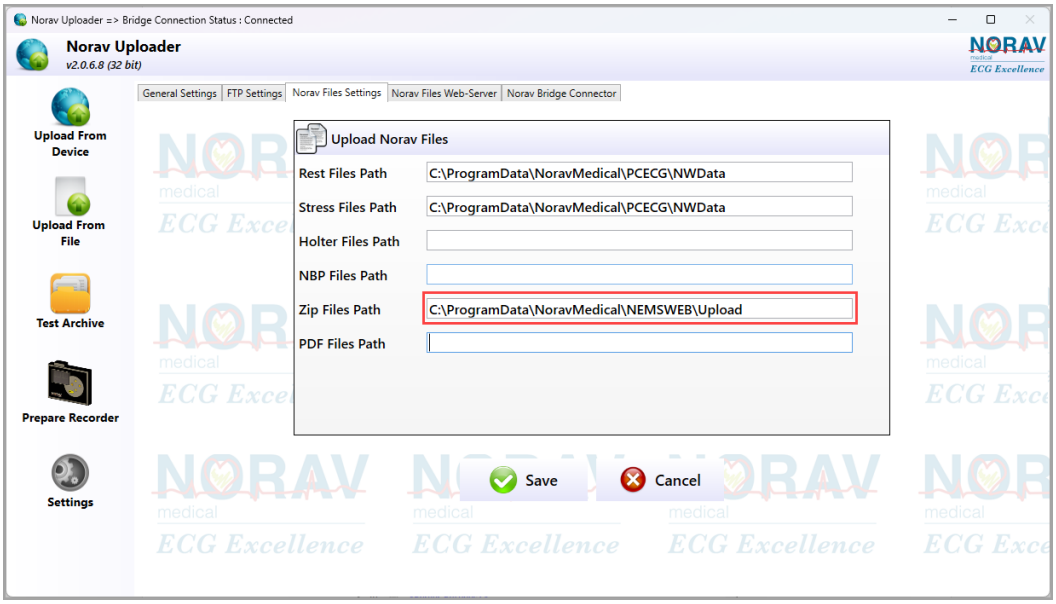


e. Click the **Norav Files Settings** tab and set the folders where Norav Uploader checks the files for uploading (see following Figure).
All found files are uploaded to the **Sent Subfolder** of the Folder.
For Rest and Stress files, set the same folder, which was set as **LocalPath** in the **Nems.ini** file (see PC-ECG Settings).

f. Set the **Zip Files Path** to **C:\ProgramData\NoravMedical\NEMSWEB\Upload** (see following Figure). It is used for Holter files (do not change the path).
Create the following folders first (if nonexistent) – **NEMSWEB** and **Upload**.

Note

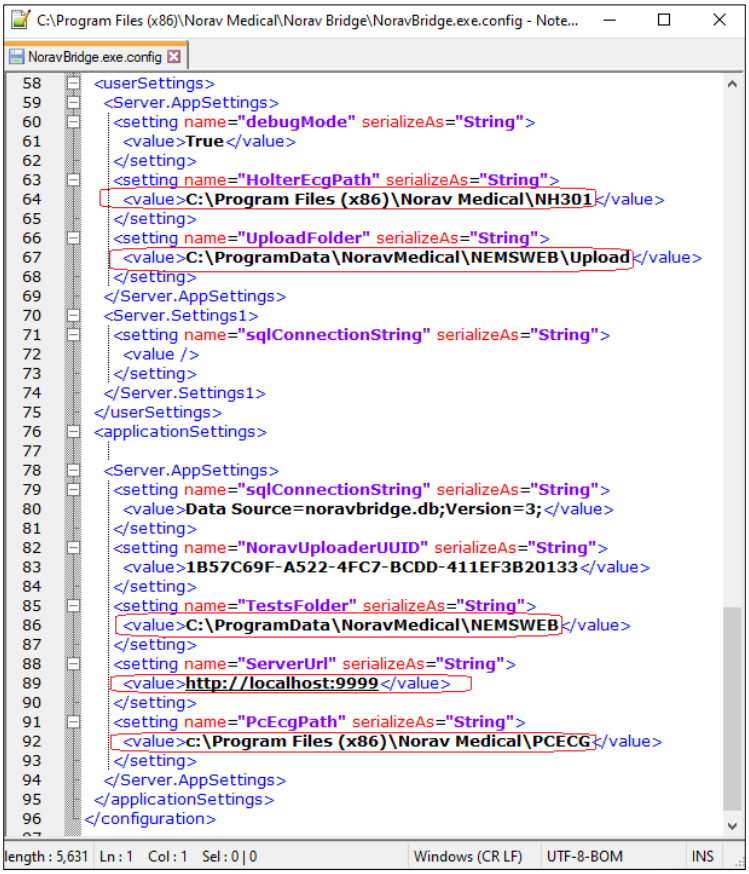
Norav Uploader validates folder paths. Use unique paths for all file types, except for **Rest** and **Stress** files, which can share the same path by default..



2. Norav Bridge

The settings are configured **automatically** and located in C:\Program Files (x86)\Norav Medical\Norav Bridge (see following Figure).

Usually there is **no need** to change anything manually in this configuration.



Before working with NEMS-Web, start Norav Bridge that starts Norav Uploader. Both applications run all the time in the background.

Connecting NEMS-Web to Hospital Information System (HIS)

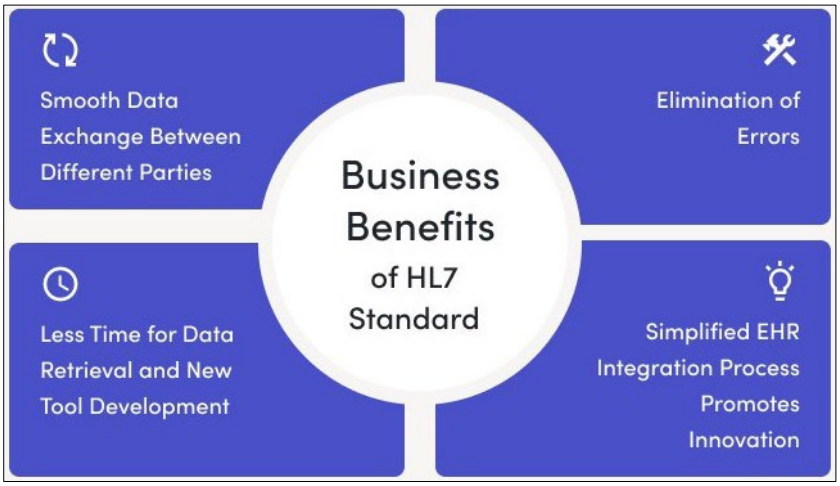
Overview

HIS (Hospital Information System) is a comprehensive software system used by hospitals to manage both patient information and various administrative functions within the facility. It serves as a central hub that collects, stores, analyzes, and distributes patient data across various departments.

Key Functionalities of HIS:

- **Electronic Health Records (EHR):** Maintaining a centralized electronic repository for each patient's medical history.
- **Clinical Data Management:** Storing and managing clinical data such as lab results, radiology reports, and physician notes.
- **Order Entry and Results:** Facilitating electronic ordering of tests and procedures and capturing results electronically.
- **Billing and Revenue Cycle Management:** Managing patient billing and revenue cycle activities.
- **Reporting and Analytics:** Generating reports and performing data analysis to support clinical decision-making and administrative tasks.

Electronic Health Records (EHR) is a core component of HIS designed for the electronic documentation of a patient's medical history, facilitating efficient information exchange among hospitals, physicians, and patients.



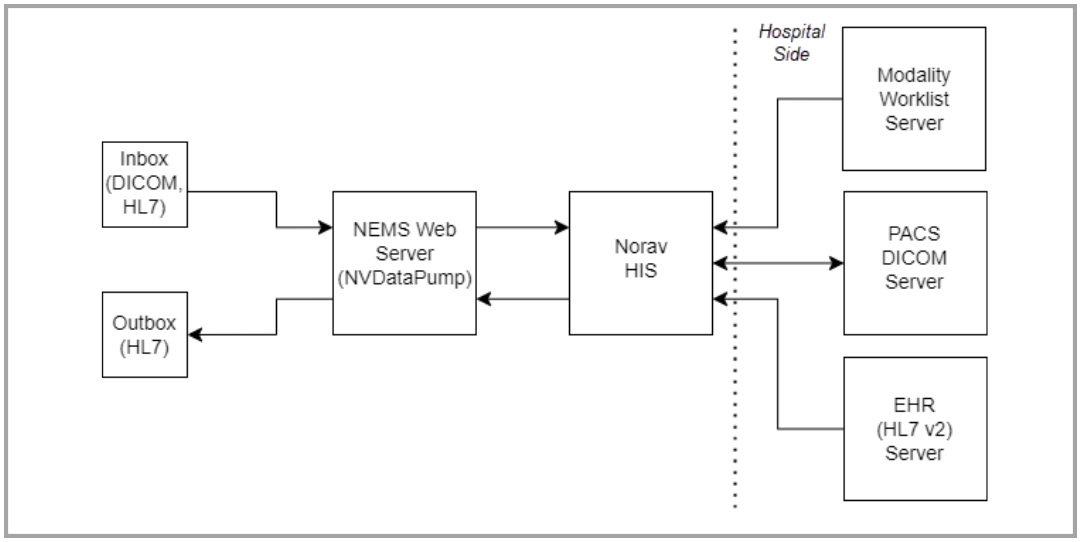
To work with EHR, medical facilities are required to use either HL7 or DICOM® (Digital Imaging and Communications in Medicine) communication protocols.

DICOM® is the international standard for medical images and related information, defining the formats for medical images that can be exchanged with the data and quality necessary for clinical use.

Integration Architecture of NEMS-Web with HIS

The Norav HIS Interface (NHIS) bridges the HIS database and the NEMS-Web database using HL7 and DICOM protocols.

The NHIS consists of two main modules: the Sender and the Receiver. These modules utilize HL7 for communicating with multiple receiver and sender entities and DICOM for accessing the PACS (Picture Archiving and Communication System) Imaging server. With this functionality, the NHIS can transmit DICOM files containing test data and receive orders using the DICOM Modality Worklist (DMWL).



NHIS employs Inbox and Outbox folders for managing incoming HL7 messages or DICOM files and outgoing messages from NEMS-Web to HIS, ensuring efficient and integrated data exchange.

In summary, integration facilitates worklist creation and processing, patient demographic retrieval, patient data updates, and report sending as either encapsulated PDFs or Secondary Image Capture (SIC) image objects.

Integration workflows:

- **[HL7/ DICOM®] Work order for a worklist:** When a patient arrives at a hospital for an ECG test, the staff inputs the patient's details, and these details are sent to our system (**ORM**).
- **[HL7/DMWL] Patient Query:** The staff enters the patient's name and ID to retrieve the patient's demographic data from the EHR (using HL7). It allows us to get the details of a specific patient (**QRY19**).
- **[HL7] Updating patient data:** A request to change a patient's data (Name, Sex, Date of birth, etc.) in the EHR system, which automatically changes the patient's data in NEMS-Web (**ADT A08**).
- **[HL7] Merging patients:** A request to merge a patient's data and tests with another patient's data and tests in the EHR system, which automatically changes the patient's data (including ID) in NEMS-Web (**ADT A40**).
- **[HL7/DICOM®] Sending test reports:** A test report with the entire test data, including the encapsulated PDF, is sent within the message (**ORU**).

NEMS-Web supports both HL7 and DICOM® server-side interfaces for integration with hospital systems:

- **HL7 Integration:** Requires the customer's HL7 Conformance Statement to verify compatibility with the EHR system.

- **DICOM® Integration:** Requires the customer's DICOM® Conformance Statement to ensure compliance with the PACS system standards for medical image exchange.

NEMS-Web also supports importing third-party medical data files using SCP and third-party PDFs. PDFs should follow the file name format:

```
ORDER_ID_LastName_FirstName_Birthday(YYYY-mm-DD)_Sex_Testday(YYYY-mm-DD-HH-MM)_TestType.pdf
```

The `TestType` parameter can have the following values: REST, STRESS, ABPM, or HOLTER.

4. Getting Started

NEMS-Web is an Electronic Medical Records (EMR) archive.

It includes patients' information, medical history, test results, medication, and physician diagnosis.

The system allows easy access from PC, Tablet, or Smartphone, as well as working in internal network when the company implements safety definitions **without** external access.

Performing tests requires a PC and connection to the Internet.

Norav provides two packages:

- **Physical PC/Blackbox** – A PC with all NEMS-Web solutions (includes installation and service).
- **Cloud** – Includes deployment of NEMS-Web image on customer VM.

NEMS-Web Server is provided with a licensing mechanism for both Blackbox (physical dongle) and VM/Cloud (virtual license).

License types:

- **Perpetual License (PL)** – Permanent license without expiration that can be limited by number of users.
- **Annual Subscription License (AS)** – License for one year for required number of users, available for all product configurations (Blackbox, Cloud, and VM).

  AS expiration behavior:

  a. Two months before the AS license expires, the system starts notifying the system administrator about the license expiration. The notification is repeatably sent via email, SMS, or visual popup in the admin client browser UI.

  b. Upon the AS expiration, the system switches to operate in "read-only" mode:
  Thus, new entities such as Patients/Tests/Organizational Units/Users/Groups cannot be created/updated/deleted. In addition, tests arriving to NEMS-Web are not added.

  c. To generate a new AS (for initial installation or continued annual subscription), the customer sends the current system fingerprint (using a utility that Norav provides).
  The utility generates fingerprint text for the current hardware configuration on the NEMS-Web Server. The customer sends this text to Norav support.
  Norav support generates a new AS using the given fingerprint text. Then, the AS is sent to the customer to be installed on the NEMS-Web Server.

5. Operation

Login to the NEMS-Web System

When opening the NEMS-Web site, you are prompted to provide login information that includes username and password you received from your system administrator (see Figure 1).

1. Type your username (default username: sysmaster).
2. Type your password (provided after installation).
3. Click **Log In**.

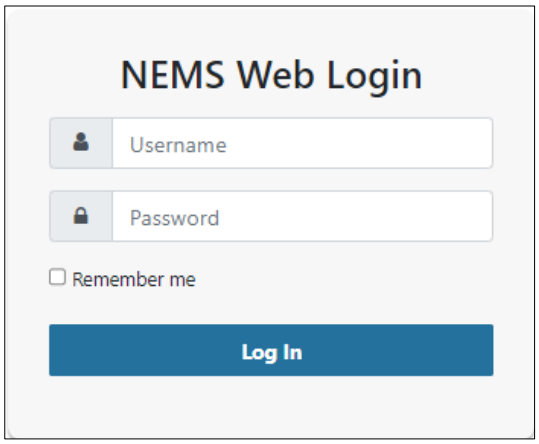


Figure 1: NEMS-Web Login Dialog Box

Note

Access to NEMS-Web features is role-based. Depending on your user role, some functions may be unavailable and may be hidden or blocked. If you attempt to access a restricted function, NEMS-Web displays a warning message.

NEMS-Web Menu Bar

NEMS-Web **Menu Bar** is shown in Figure 2.

Each Screen is described in Table 1.

Figure 2: NEMS-Web Menu Bar

Table 1: NEMS-Web Menus

Action	Menu	Description
Open the **Dashboard** Screen	Dashboard	Displaying the dashboard screen (see Section Dashboard Screen on page 24).
Open the **Patients** Screen	Patients	Displaying the patients screen for searching patient(s), viewing patient's details, adding a patient, and deleting a patient (see Section Patients Screen on page 27).
Open the **Records** Screen	Records	Displaying the records screen for viewing and searching for specific records (see Section Records Screen on page 28).
Open the **Devices** Screen	Devices	Displaying the devices screen for searching tests, viewing test details, adding test details, and updating patient's demographic information, and deleting existing tests (see Figure 12 on page 31).
Open the **Worklist** Screen	Worklist	Displaying the worklist screen for managing the patients' queue. Also containing a list of all the patients waiting for their turn that can be filtered according to patient's needs (see Section Worklist Screen on page 32).
Open the **Analytics** Screen	Analytics	Displaying the analytics screen for statistics of records, orders, and devices, pie charts of tests, and bar charts comparison of overall tests by test types (see Section Analytics Screen on page 34)
Open the **Reports** Screen	Reports	Displaying the reports screen for selectable types of reports, performing actions on reports, and exporting reports to PDF or Excel (see Section Analytics Screen on page 34).
Open the **More** Drop-Down List	More	All options that appear under this menu are given according to user permissions (see Figure 14 on page 33).
Open the **Personal Settings** Dialog Box		Displaying the personal settings dialog box for changing password (see Section Changing Password from the Dashboard Screen on page 99).
Sign Out	Sign Out	Hovering over the username Demo User and clicking Sign Out.

After first login, the **Dashboard Screen** is displayed with the **Confirmed Report**, **Unconfirmed Reports**, **Worklist**, and **Patients** sections blank.

After using NEMS-Web, the **Dashboard Screen** is displayed as follows (see Figure 3).

The **Dashboard Screen** allows quick view of the current state in the NEMS-Web system.

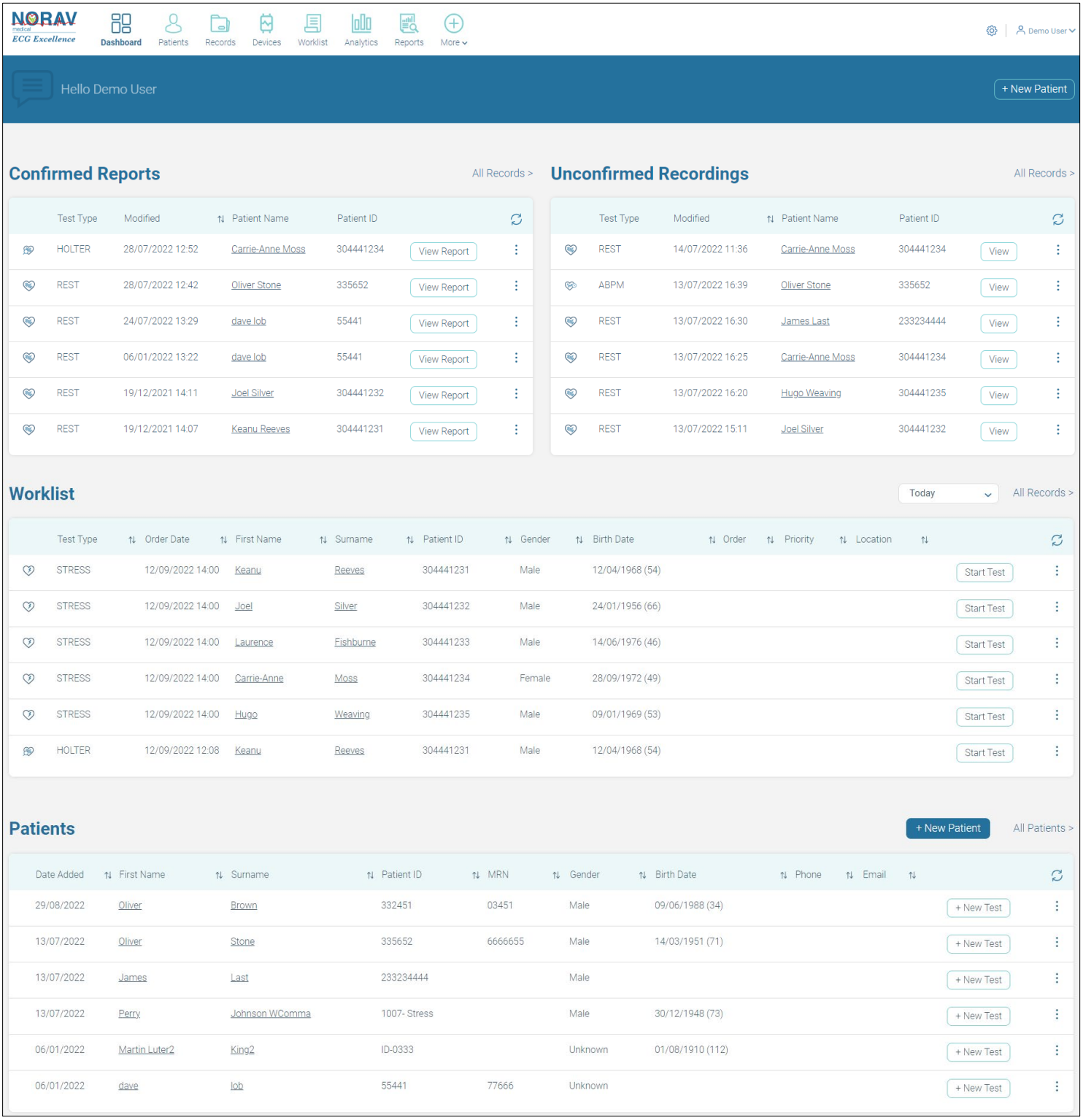


Figure 3: Dashboard Screen

Dashboard Screen

The Dashboard Screen includes four sections (see Figure 3).

1. **Confirmed Reports** on page 24
2. **Unconfirmed Recordings** on page 25
3. **Worklist** on page 25
4. **Patients** on page 26

Confirmed Reports

This section includes the latest reports confirmed by a physician (see Figure 4).

Confirmed reports are test reports that have been **reviewed** by a physician or technician and approved by the physician.

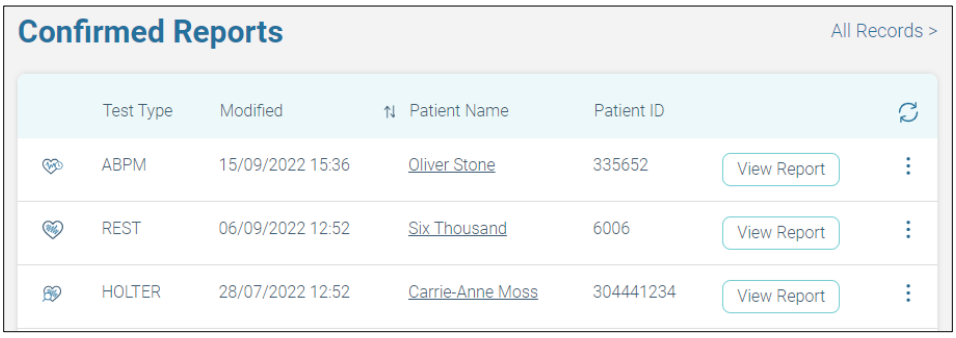


Figure 4: Confirmed Reports Section

Confirmed Reports Table Columns:

- **Test Type** column displays the test types as follows:
  - **HOLTER** – Preparing Holter recorder first, hooking up the patient to the Holter recorder, and then starting the test (see Section Preparing a Holter Recorder on page 55)
  - **REST** and **STRESS** – Starting the test directly – see Section Starting ECG Test (Rest, Stress) on page 68
  - **ABPM** – Preparing Holter recorder first, hooking up the patient to the ABPM recorder, and then starting the test (see Section Preparing an ABPM Recorder on page 63)
- **Modified** column displays the date and time of test modification.
- **Patient Name** column displays the patient's name.
- **Patient ID** column displays the patient's ID.

Unconfirmed Recordings

This section shows the records that have **yet to be confirmed** (in New, Viewed, In Review, and Reviewed statuses) – see Figure 5.

Like the previous section, you can navigate by clicking on the relevant icon or button.

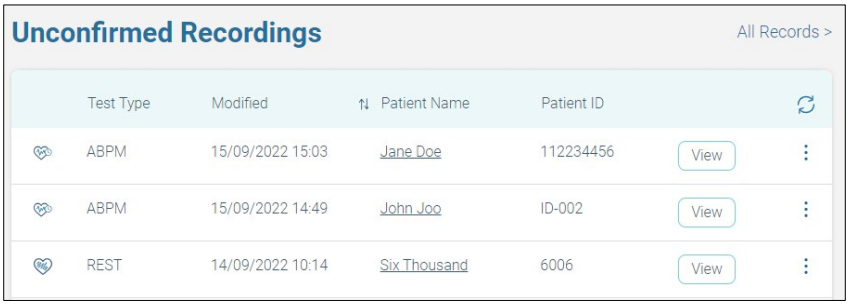


Figure 5: Unconfirmed Recordings Section

Unconfirmed Recordings Table Columns:

- The **Test Type** column displays the test types as follows:
  - **HOLTER** – Preparing Holter recorder first, hooking up the patient to the Holter recorder, and then starting the test (see Section Preparing a Holter Recorder on page 55)
  - **REST** and **STRESS** – Starting the test directly – see Section Starting ECG Test (Rest, Stress) on page 68
  - **ABPM** – Preparing Holter recorder first, hooking up the patient to the ABPM recorder, and then starting the test (see Section Preparing an ABPM Recorder on page 63)
- The **Modified** column displays the date and time of test modification.
- The **Patient Name** column displays the patient's name.
- The **Patient ID** column displays the patient's ID.

Worklist

Modality Worklist (MWL) makes patient demographic information from an EHR Information System (RIS) available in modality, eliminating dual data entry and providing data integrity.

This section contains the list of patients pending a test (see Figure 6).

The Worklist shows which **test is pending per patient** and allows initiating the test by clicking the Start Test button.

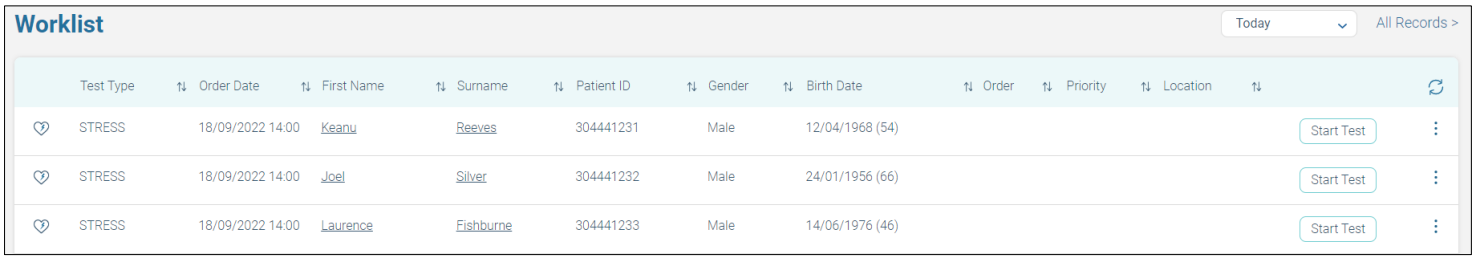


Figure 6: Worklist Section

Worklist Section Table Columns:

- The **Test Type** column displays the test types as follows:
  - **HOLTER** – Preparing Holter recorder first, hooking up the patient to the Holter recorder, and then starting the test (see Section Preparing a Holter Recorder on page 55)
  - **REST** and **STRESS** – Starting the test directly – see Section Starting ECG Test (Rest, Stress) on page 68
  - **ABPM** – Preparing Holter recorder first, hooking up the patient to the ABPM recorder, and then starting the test (see Section Preparing an ABPM Recorder on page 63)
- The **Order Date** column displays the date and time of the order.
- The **First Name** column displays the patient's first name.
- The **Surname** column displays the patient's last name.
- The **Patient ID** column displays the patient's ID number.
- The **Gender** column displays the patient's gender.
- The **Birth Date** column displays the patient's birth date.

Patients

Here **you can find the latest patients added to the system** (up to 6 patients) – see Figure 7.

You can also start a new test for each patient by clicking the + New Test button.

In addition, at the top right corner of the **Dashboard Screen**, you can add a new patient by clicking the + New Patient button.

To refresh the data in each section and view the complete list of records, click .

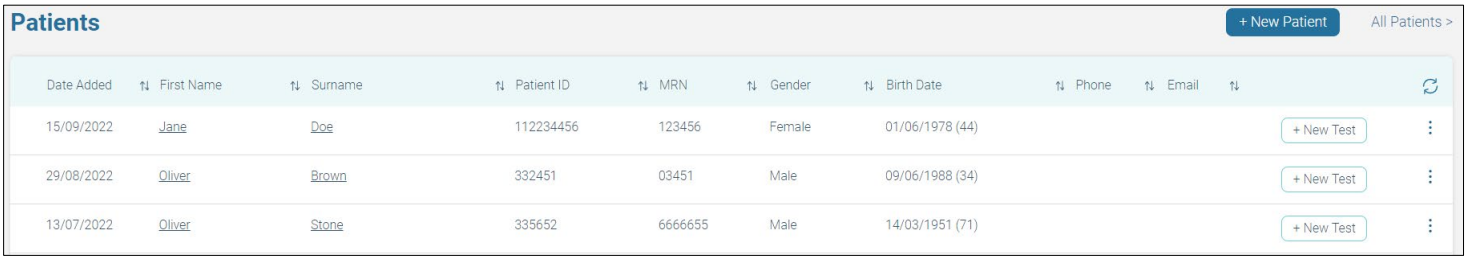


Figure 7: Patients Section

Patients Section Table Columns:

- The **Date Added** column displays the date of adding the patient.
- The **First Name** column displays the patient's first name.
- The **Surname** column displays the patient's last name.
- The **Patient ID** column displays the patient's ID number.
- The **MRN** column displays the patient's Medical Record Number.
- The **Gender** column displays the patient's gender.
- The **Birth Date** column displays the patient's birth date.
- The **Phone** column displays the patient's phone number.
- The **Email** column displays the patient's email.

Patients Screen

The **Patients Screen** is used for searching for patients, viewing patient information and records history. It also allows updating existing patient information, comparing existing tests, and creating new tests.

To open the **Patients Screen**, click 

on the **Menu Bar** (see Figure 8).

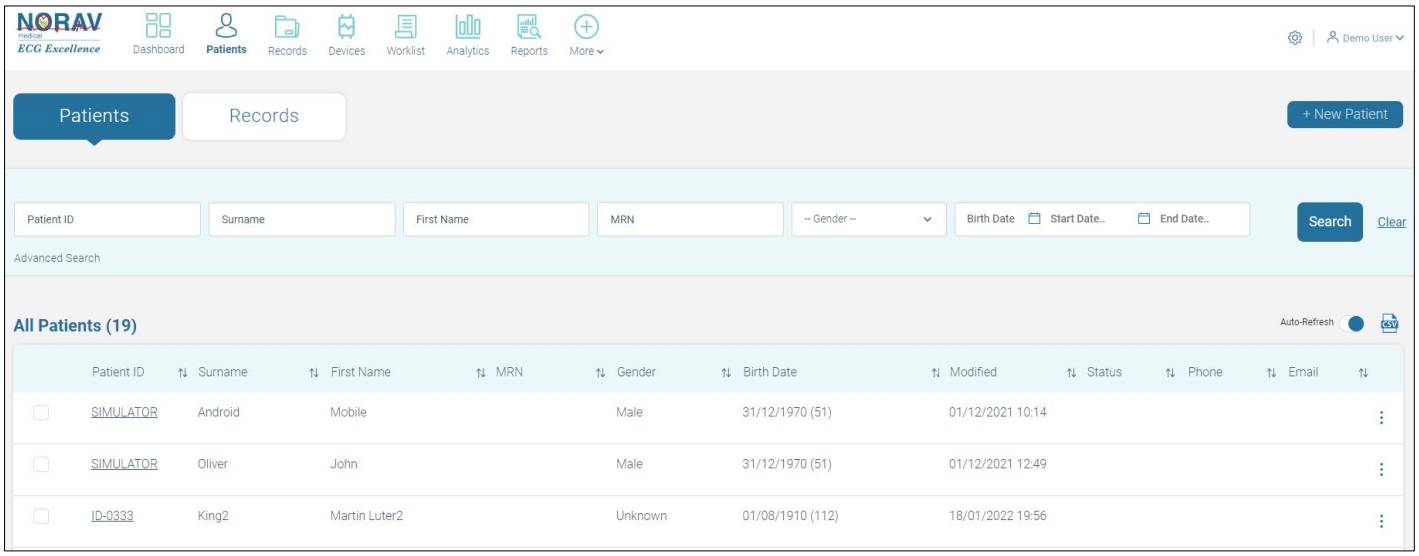


Figure 8: Patients Screen

The search engine at the top allows **searching patient(s)** according to search criteria.

The user can search for a patient by entering:

- **Patient ID**: Type patient ID (or scan patient ID barcode)
- **Name** (Surname/First Name)
- **MRN** (Medical Record Number)
- **Gender** (Male/Female/Unknown)
- **Birth Date** Range (Start Date – End Date)

You can find multiple patients that have common criteria (for example, all patients with the same name or from the same gender).

Advanced Search Criteria:

- Groups (Patient Groups)
- Status (Patient Status)
- Phone Number (Patient Phone Number)

Patients Section Table Columns:

- The **Patient ID** column displays the patient's ID number.
- The **Surname** column displays the patient's last name.
- The **First Name** column displays the patient's first name.
- The **MRN** column displays the patient's Medical Record Number.
- The **Gender** column displays the patient's gender.
- The **Birth Date** column displays the patient's birth date.
- The **Modified** column displays the date of patient's modification.
- The **Status** column displays patient's status.
- The **Phone** column displays the patient's phone number.
- The **Email** column displays the patient's email.

Also available on the **Patients Screen** is the option to add a new patient by clicking the + New Patient button at the top right corner.

To view the **Patient Screen**, click the Patient ID button or hover over the ⋮ and click View (see Figure 8).

The **Patient Screen** is displayed (see Figure 9).

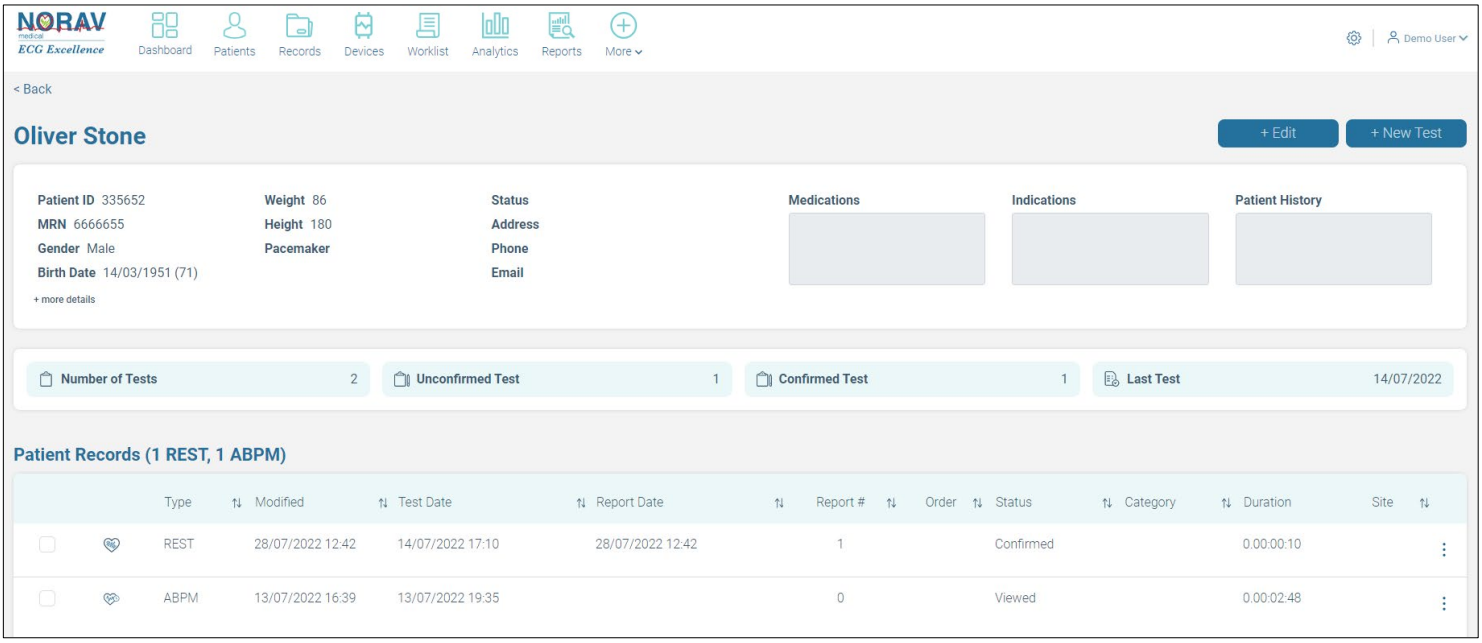


Figure 9: Patient Screen

The **administrator** or user with such permissions can **delete a patient** by hovering over the ⋮ and clicking Delete or delete multiple patients by selecting the checkboxes ☑ at the left of the **Patient IDs** and clicking Delete.

Patient Records Table Columns:

- The **Test Type** column displays the test types as follows:
  - **HOLTER** – Preparing Holter recorder first, hooking up the patient to the Holter recorder, and then starting the test (see Section Preparing a Holter Recorder on page 55)
  - **REST** and **STRESS** – Starting the test directly – see Section Starting ECG Test (Rest, Stress) on page 68
  - **ABPM** – Preparing Holter recorder first, hooking up the patient to the ABPM recorder, and then starting the test (see Section Preparing an ABPM Recorder on page 63)
- The **Modified** column displays the date and time of test modification.
- The **Test Date** column displays the date and time of the test.
- The **Report Date** column displays the date and time of the report.
- The **Report #** column displays the report number.
- The **Order** column displays the order number.
- The **Status** column displays the report status.
- The **Category** column displays the test category.
- The **Duration** column displays the test duration.
- The **Site** column displays the test site.

Records Screen

The Records Screen allows **Searching** and **Viewing** records (tests).

To open the **Records Screen**, click Records on the **Menu Bar** (see Figure 10).

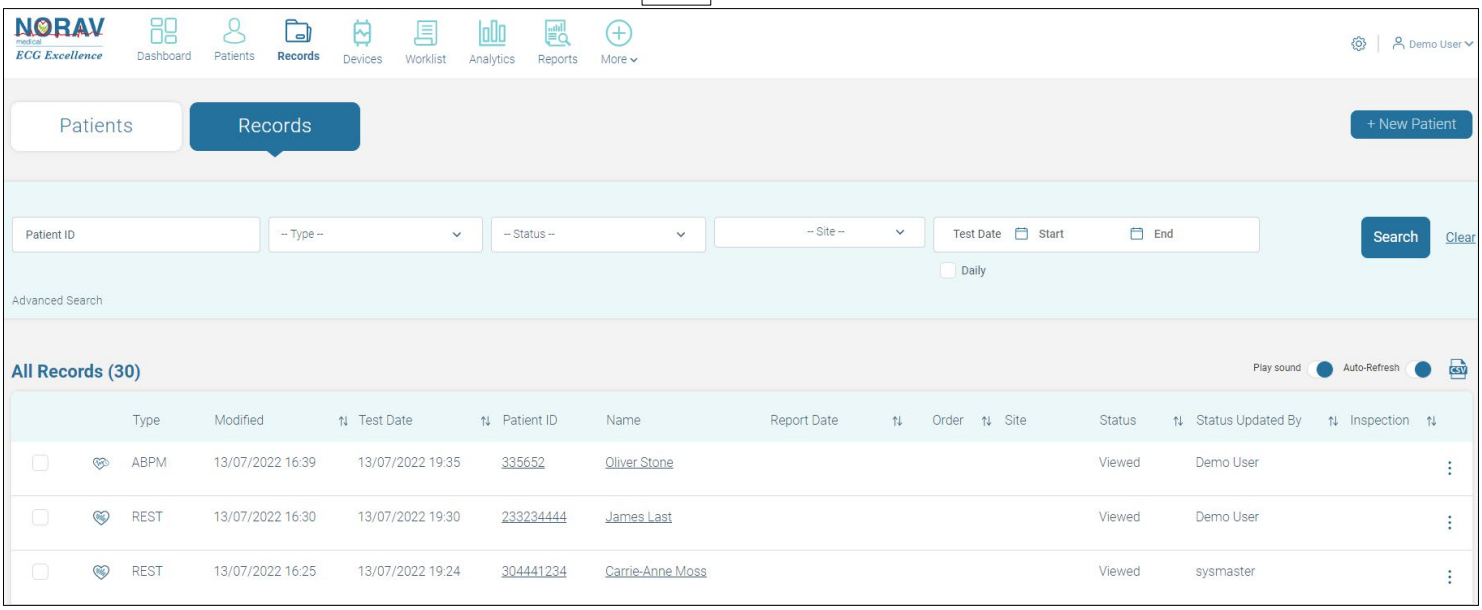


Figure 10: Records Screen

Like the **Patients Screen**, you have a **search engine** section at the top followed by a section with a list of all records.

The user can search for record using the search panel that includes multiple filters:

- **Patient ID**: Type patient ID or scan patient ID barcode.
- **Test Type**: REST/STRESS/HOLTER/ABPM
- **Record Status**: New/Viewed/In Review/Reviewed/Confirmed/Unconfirmed Only
- **Site** (Test Site): Click the **Site** field and type the site name in the **Search** field or select the **Select all** checkbox or the **Undefined** checkbox and click Search.
- **Test Date**: To search by test date range, select the **Start Date** and **End Date** or select the **Daily** checkbox and click Search.

Advanced Search Criteria:

- Patient Name
- Category (user-created category common for tests)
- Order (Order Number)
- Status Updated By (search/User/Physician/Nurse/Username/Select all)

Note

Your search settings are stored for your next login. To clear search settings, click the Clear button at the right of the Search button.

The **All Records Section** underneath the search lists all the filtered records (see Figure 10).

To open the patient's records, click **Patient ID** or **Name**.

To **open and view** the actual test in the ECG application, hover over the ⋮ and select Open.

To delete a record, hover over the ⋮ and click Delete.

To delete multiple records, select the checkboxes ☑ at the left of the **Patient IDs**, and click Delete.

At the top right of the list, you can turn On/Off Auto-Refresh of the records and Play sound when a new record arrives.

To open the record details and the report, click the icon on the left or hover over the ⋮ and select View (see Figure 10).

The **Record Screen with the Confirmed Report** is displayed (see Figure 11).

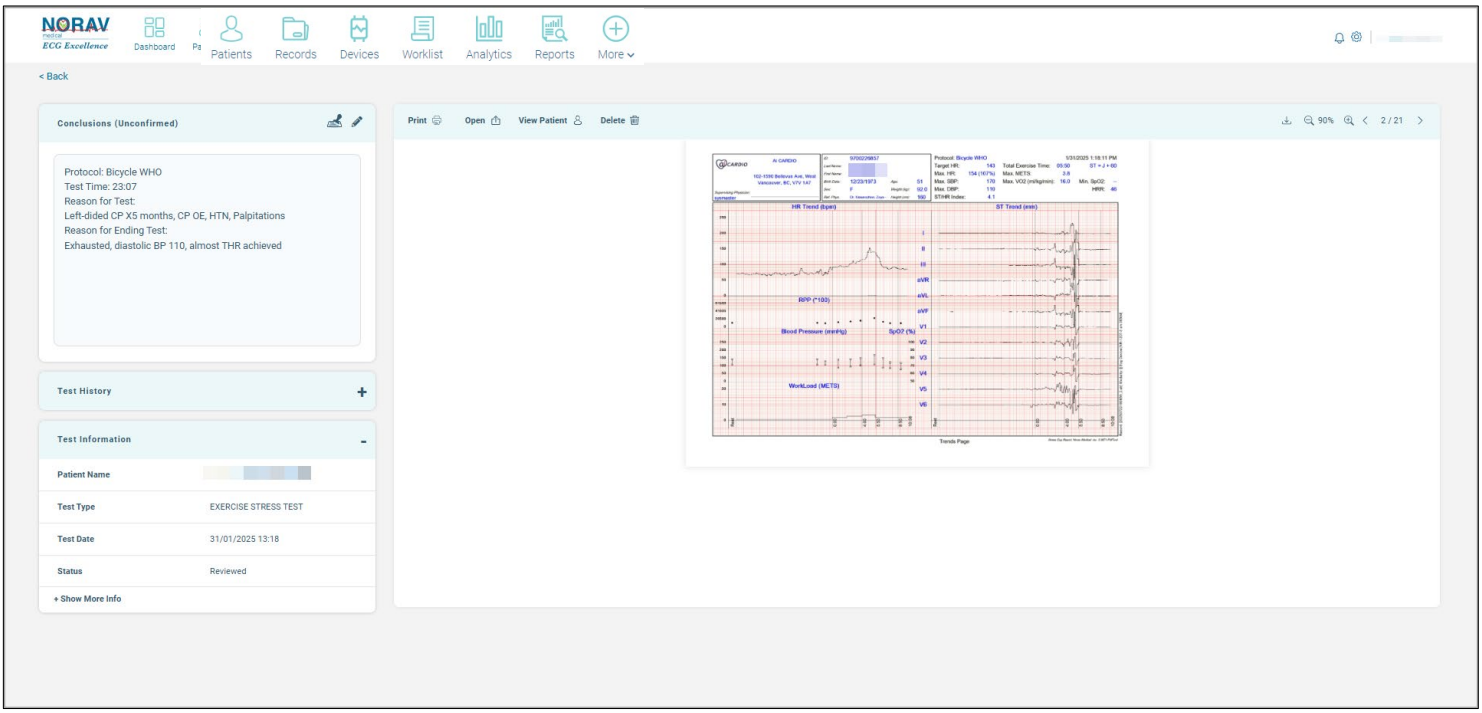


Figure 11: Record Screen with the Confirmed Report

The **Record Screen** includes two parts:

- The PDF Report Section on the right displays the actual test results. You can navigate its pages using the arrows in the top-left corner or your keyboard's arrow keys.
- The Patient and Test Information Section on the left allows finding relevant information.

To open the **Test History** and/or the **Test Information** section, click + (see Figure 11).

Devices Screen

The **Devices Screen** allows downloading patient records from the connected recorder and storing the results in the NEMS-Web database and allows preparing the Holter recorder before the test.

Then the record is uploaded to the Server and displayed on the Records Screen (see Section Preparing an ABPM Recorder on page 63 – from Step 7 onward.

To open the **Devices Screen**, click 

on the **Menu Bar** (see Figure 12).

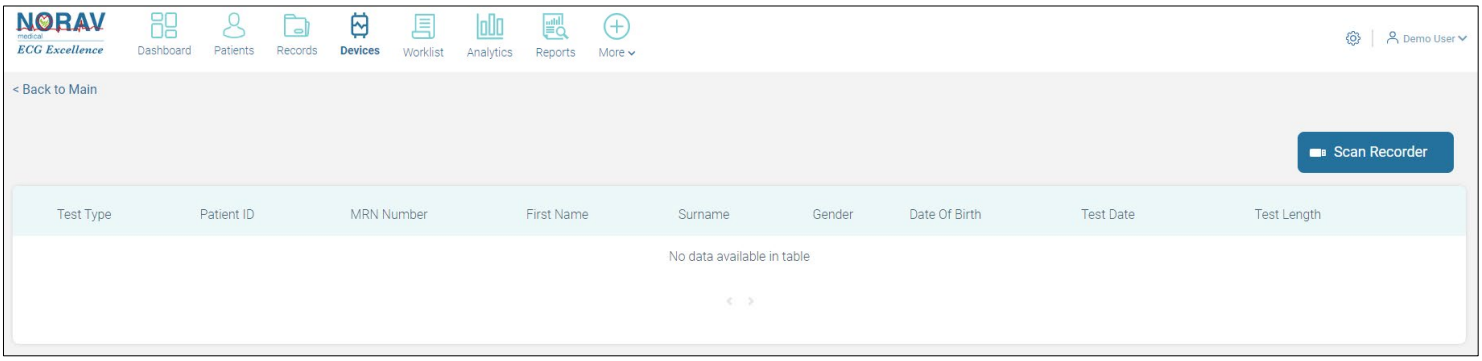


Figure 12: Devices Screen

To download the test from Holter/ABPM recorder, see Section Preparing an ABPM Recorder on page 63 – from Step 6 onward.

Devices Screen Table Columns:

- The **Test Type** column displays the test type (REST/STRESS/HOLTER/ABPM).
- The **Patient ID** column displays the patient's ID number.
- The **MRN Number** column displays the patient's Medical Record Number.
- The **First Name** column displays the patient's first name.
- The **Surname** column displays the patient's last name.
- The **Gender** column displays the patient's gender.
- The **Date of Birth** column displays the patient's birth date.
- The **Test Date** column displays the date of the test.
- The **Test Length** column displays the test duration.

Worklist Screen

The **Worklist Screen** contains a list of scheduled pending tests waiting for execution on a defined date, which are usually retrieved from the hospital EHR/external service.

The worklist contains the Order Date, Patient Information, and Test Type. When executing the test, it automatically opens the predefined testing tool with all required information (patient demographic data, and test info) thus saving time and preventing typos.

Like the previous screens, you have the search engine at the top with the filtering options and the **Worklist Section** below.

To open the **Worklist Screen**, click 

on the **Menu Bar** (see Figure 13).

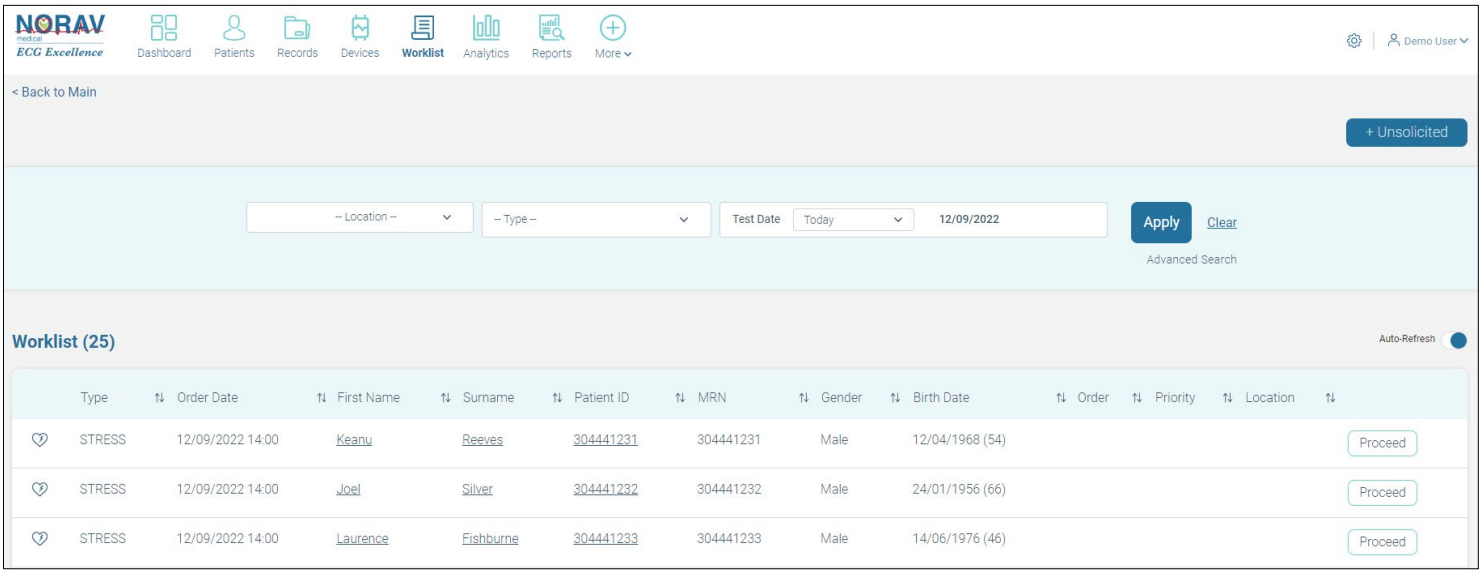


Figure 13: Worklist Screen

Worklist Screen Table Columns:

- The **Type** column displays the test types as follows:
  - ◊ **HOLTER** – Preparing Holter recorder first, hooking up the patient to the Holter recorder, and then starting the test (see Section Preparing a Holter Recorder on page 55)
  - ◊ **REST** and **STRESS** – Starting the test directly – see Section Starting ECG Test (Rest, Stress) on page 68
  - ◊ **ABPM** – Preparing Holter recorder first, hooking up the patient to the ABPM recorder, and then starting the test (see Section Preparing an ABPM Recorder on page 63)
- The **Order Date** column displays the date and time of the order.
- The **First Name** column displays the patient's first name.
- The **Surname** column displays the patient's last name.
- The **Patient ID** column displays the patient's ID number.
- The **MRN** column displays the patient's Medical Record Number.
- The **Gender** column displays the patient's gender.
- The **Birth Date** column displays the patient's birth date.

View each patient's details from the worklist by clicking the **First Name**, **Surname**, or **Patient ID**.

In addition, you can start the relevant test by clicking the 

button on this screen.

At the top right, you can look up any patients who, for any reason, are not displayed in the filtered search.

Any patient who has not been scheduled for an appointment can be selected for a new test.

All options that appear under the 

drop-down list are available only to the administrator or to user with such permissions (see Figure 14).

Figure 14: More Drop-Down List

Analytics Screen

The **Analytics Screen** is a comprehensive dashboard, presenting operational performance statistics across your healthcare facility. It offers a real-time display of diverse statistical views based on the selected period.

The **Analytics Screen** features:

- **Statistics Data**: Includes metrics on records (tests), work orders, and devices (Figure 16).
- **Pie Charts**: Present percentages related to tests, sites, and department efficiency, referring physicians, and other staff (Figure 17).
- **Overall Tests Comparison:** Provides bar charts that compare test types by various periods (Figure 22).

To open the **Analytics Screen**, click 

on the **Menu Bar** (see Figure 15).

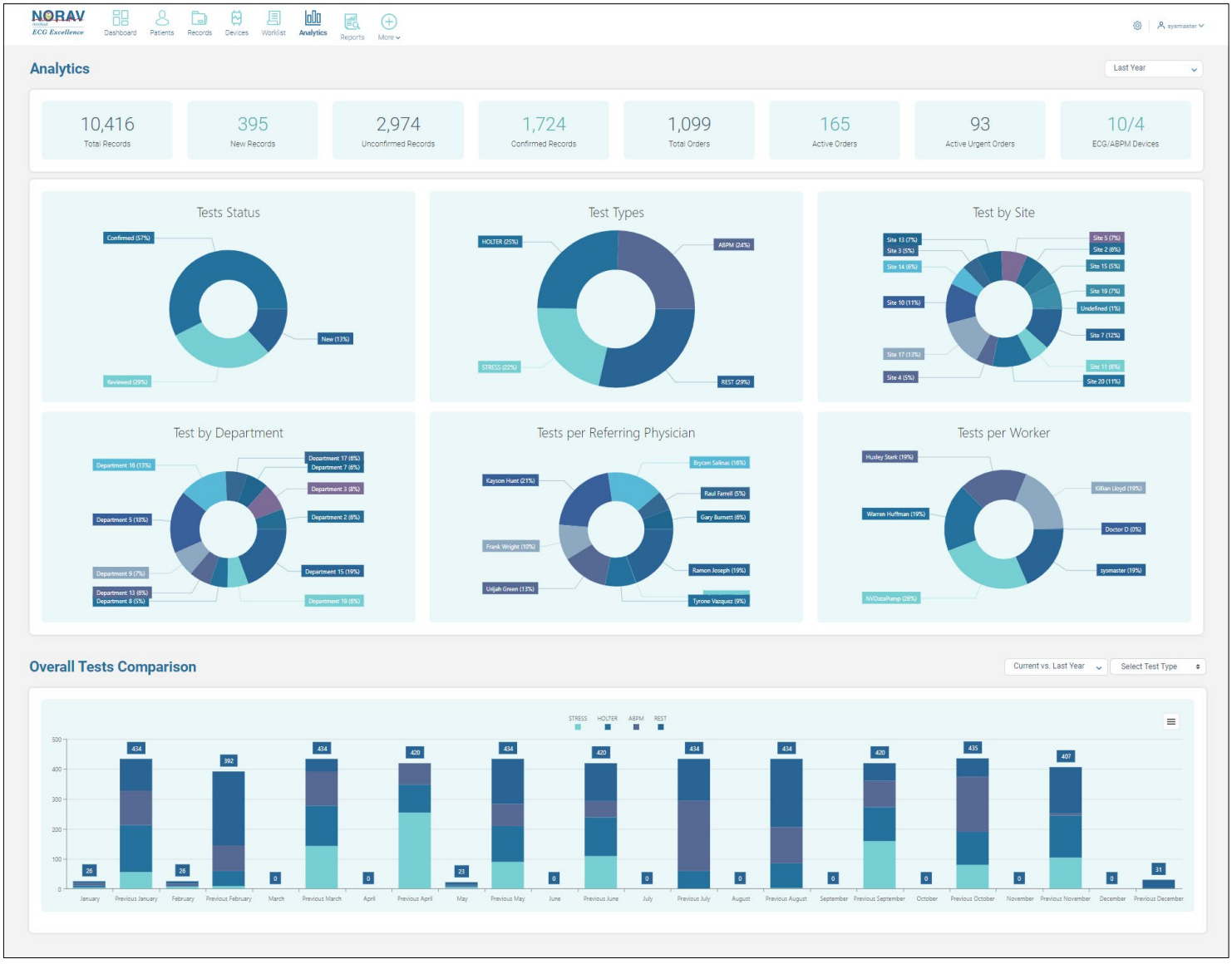


Figure 15: Analytics Screen

Statistics Data

Statistics encompasses the following data for the given timeframe (see Figure 16):

Figure 16: Statistics

- **Record** statistics:
  - **Total Records:** Total number of patient records (tests) in the system.
  - **New Records:** The number of new test records (tests) in the system, never been viewed or reviewed.
  - **Unconfirmed Records**: The number of records (tests) that haven't been confirmed yet (includes records with the "New", "Viewed", "In Review" and "Reviewed" statuses).
  - **Confirmed Records**: The number of records (tests) confirmed by a medical specialist (i.e., with the "Confirmed" statuses).
- **Order** statistics:
  - **Total Orders:** The total number of work orders in the system—tests scheduled for execution on a defined date.
  - **Active Orders:** The quantity of currently scheduled pending tests waiting for execution on a defined date.
  - **Active Urgent Orders:** The number of currently scheduled tests waiting for execution and labelled with a high priority status in the Worklist.
- **Device** statistics: The number of ECG Devices and ABPM Devices ever used for tests and identified in the network of your medical facility.

Pie Charts

Pie Charts provide insights into (see Figure 17):

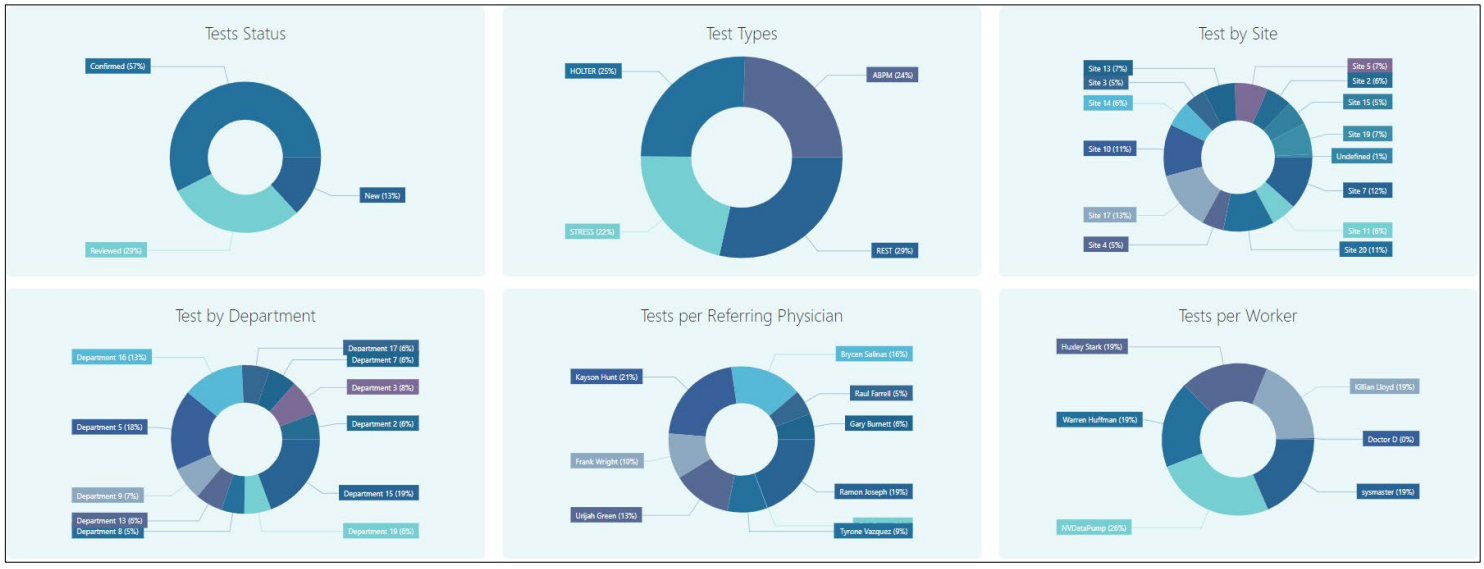


Figure 17: Pie Charts

- **Tests Status:** Percentage of **Confirmed** Tests, **Reviewed** Tests, and **New Tests**, enabling you to assess the operational landscape and workflow efficiency.
- **Test Types**: Percentage of **Holter ECG** Tests, **ABPM** Tests, **Stress** Tests, and **Rest** Tests, allowing you to assess the popularity of different types of tests.
- **Test by Site**: Percentage of tests per individual medical facility site if there are more than one. Allows assessment of site capacity and more.

- **Tests by Department**: Percentage of performed tests per department within your institution, indicating department performance and capacity.
- **Tests per Referring Physician:** Percentage of tests per referring physician, displaying physicians' workload data.
- **Tests per Worker**: Percentage of tests per worker, encapsulating all personnel involved in test performance, review, and confirmation.

Filtering Statistics Data and Pie Charts

All data displayed is confined to the selected period. Utilize the filter in the top-right corner of the Analytics Screen to choose specific timeframes, such as today/yesterday or current/previous quarter or year (Figure 15). Note that the **ECG/ABPM** Devices parameter remains constant, reflecting all devices ever used for tests by your medical facility.

To view **Statistics Data** and **Pie Charts** for a predefined period of time:

1. Select a predefined standard time period from the drop-down list 

in the top right of the **Analytics Screen** (Figure 18).

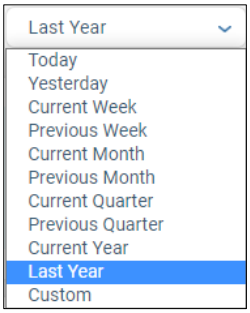


Figure 18: Selecting Periodic Pie Charts

To view **Statistics Data** and **Pie Charts** for a custom period of time:

1. Select the **Custom** option from the drop-down list (see Figure 18). The **Custom** period selection boxes will be displayed (see Figure 19).

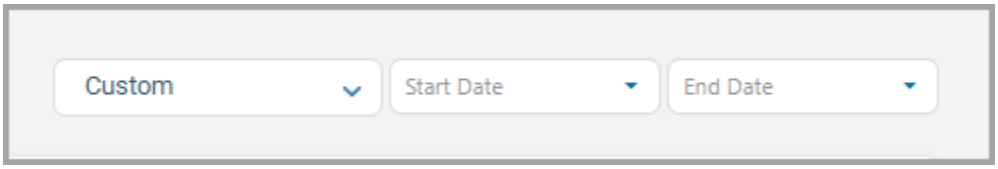


Figure 19: Custom Period Selection

2. Select the **Start Date** from the drop-down, choose the date via scrolling, and click **OK** to confirm (see Figure 20).

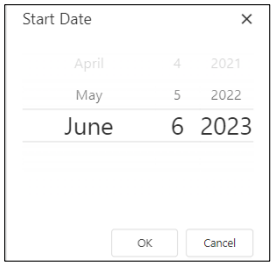


Figure 20: Start Date Dialog Box

3. Select the **End Date** from the drop-down, choose the date via scrolling, and click **OK** to confirm (see Figure 21).

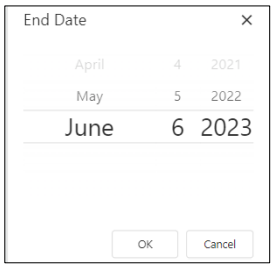


Figure 21: End Date Dialog Box

Upon selecting the **End Date**, all **Statistic Data** numbers, and **Pie Chart** visualizations will adjust to present information for the requested timeframe.

Overall Tests Comparison

Overall Tests Comparison includes bar charts of **each month compared to the same month from the previous** year, breaking down by test types (REST, STRESS, HOLTER, or ABPM) performed during the respective months (see Figure 22). This feature enables **assessment of trends related to particular test types** and gauges the performance and capacity of your medical facility in delivering testing procedures.

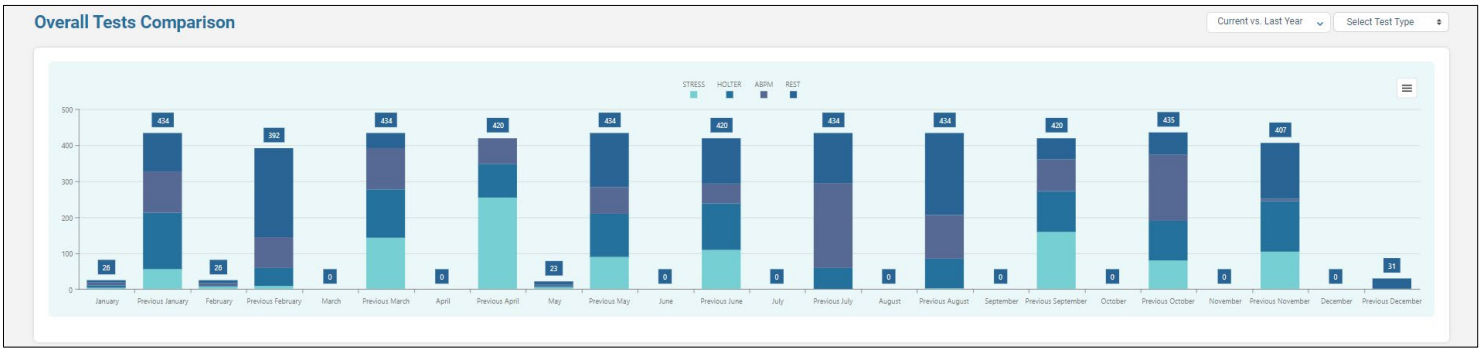


Figure 22: Overall Tests Comparison Bar Charts

To compare a predefined current period versus a previous one:

1. Select a predefined standard period from the Current vs. Last Year drop-down list (see Figure 22).

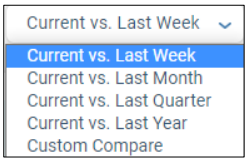
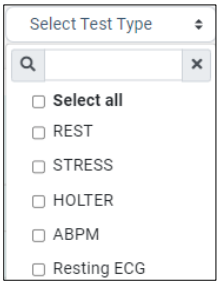


Figure 23: Selecting Periods for Comparison

Click Select Test Type check all the relevant checkboxes (test types) in the drop-down list or click **Select all** to mark all checkboxes at once (see Figure below).

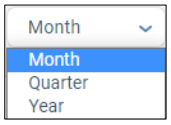


To compare custom time periods:

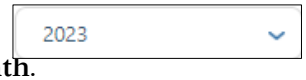
1. Select **Custom Compare** from the drop-down list (see Figure 23).
   The **Custom Compare** selection boxes will be displayed (see Figure 24).

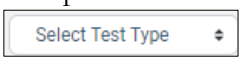
Figure 24: Custom Compare Selection

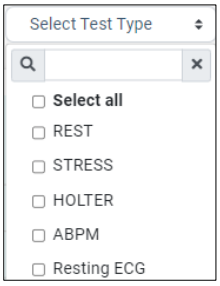
2. Select the comparison period from the  drop-down list (see following Figure).



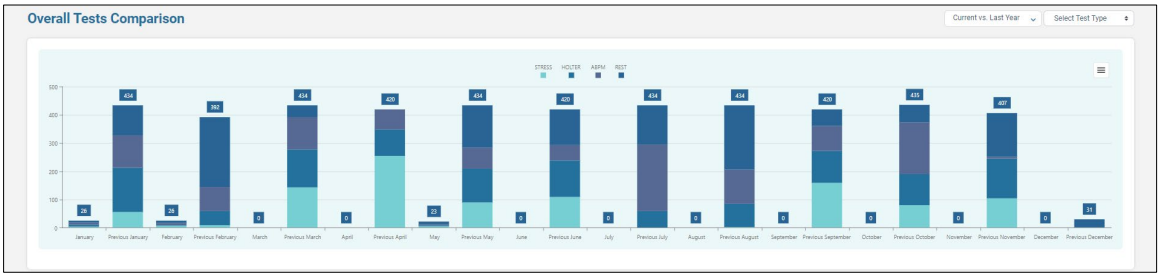
3. Click  on  .
4. To compare between months of the same year, select a **Month** (see Figure below).

5. For inter-year comparisons, select the year from the  drop-down list (see Figure below) and then select the **Month**.

6. Click  on  .
7. Repeat Steps 4-5.
8. Click  and then check all the relevant checkboxes (test types) in the drop-down list or click **Select all** to mark all checkboxes at once (see Figure below).



After you complete setting the parameters, a set of bar charts compared to the same period in the past will be displayed. Bar charts will have a breakdown by test types (REST, STRESS, HOLTER, or ABPM) performed during respective time periods.



You can also print or export to PDF the **Overall Tests Comparison**:

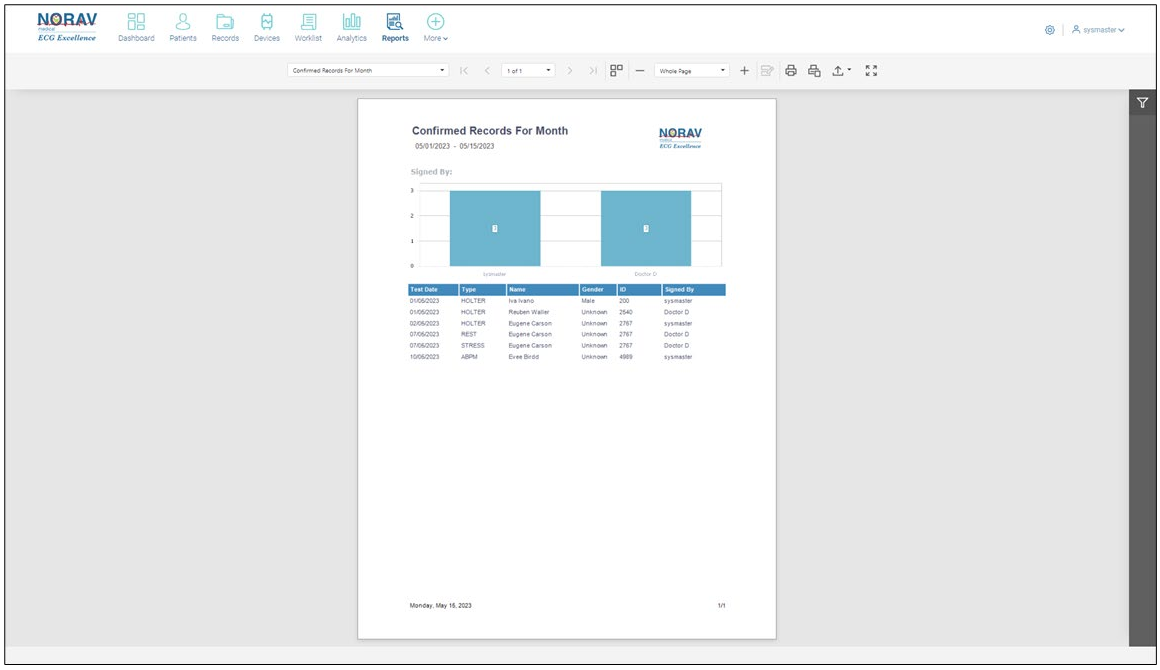
1. Click the menu icon button  to expand the menu.
2. Choose the **Print** option to print or the **PDF file** option to export the graph to the PDF file.

Reports Screen

The **Reports Screen** provides access to **Norav Reports**, which are based on collected data items related to patients, tests, devices, test worklists, and so on. The functionality of the **Reports Screen** delivers actionable, easy-to-understand data that is valuable for planning, ROI (Return on Investment) assessment, trend analysis, processing of statistics, and operations tracking.

All data displayed on this screen is aggregated for a selected time period. You can adjust this time period by clicking the Filter icon located at the top-right corner of the scroll bar (see Figure 25).

Figure 25: Reports Screen



The report types available on this screen encompass various data sections, enabling them to provide tangible insights and assist in making informed decisions about patient care.

Table 2: Report Types

Report Type	Description
Confirmed Reports For Month	Displays a monthly report of confirmed records for the specified time period.
Confirmed Reports For Today	Displays a report of confirmed records for the current day.
Records by Test Types	Shows records by test type over the specified time period.

Records General Report	Provides general statistics, including data on medical personnel, records, test device types, and more.
Today's Confirmed By Signing Physician	Displays a report of records (tests) confirmed by a medical professional during a specific day.
Today's Reviewed Records (Preliminary)	Shows the number of reports reviewed but not yet confirmed by a physician during a specific day.
Total Daily Records	Indicates the total number of daily processed records for the chosen time period.
Total Monthly Records	Displays the total number of monthly processed records for the chosen time period.
Unconfirmed Records	Presents the number of unconfirmed records for the chosen time period.

Generating Reports

To generate, review and retrieve a report:

1. Click 

on the **Menu Bar** to open the **Reports Screen** (see Figure 25).
2. Click the drop-down on the left side of the **Reports Screen Toolbar** (see Figure 31) to expand it.
3. Select the type of report to generate. Refer to **Table 2: Report Types** for further details on the available report types.
4. Click the **Filter** icon at the top-right corner of the scroll bar to expand the **Preview Parameters Sidebar** (see Figure 26).

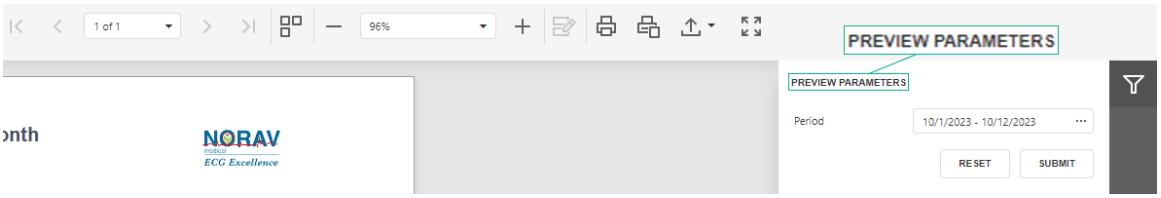


Figure 26: Preview Parameters Sidebar

5. Click the **Period** box on the right containing the default date to open the date picker/calendar (see Figure 27). For all the report types, excluding **Records by Test**

Types and **Records General Report**, you can only select the period and submit or reset it. **Records by Test Types** and **Records General Report** contain additional configurable fields affecting the output (refer to **Step 10** below to get additional information).

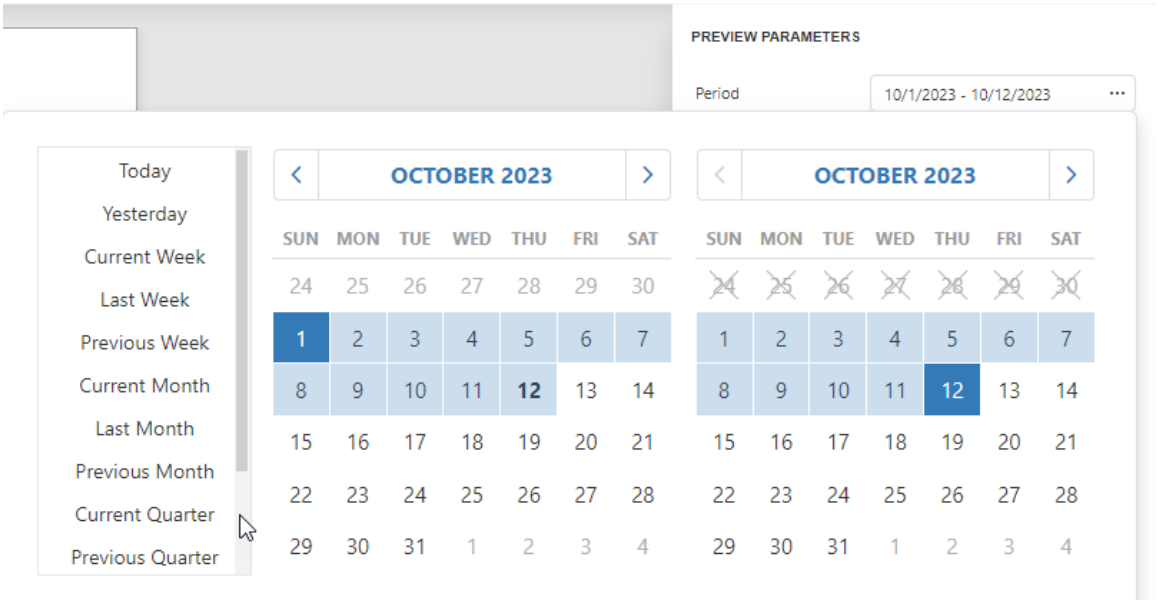


Figure 27: Setting Period

6. Choose a required time period using one of two methods:
    1. Scroll to select a predefined time period from the list on the left (see Figure 27).
    2. To select a custom time period, follow these steps:
        1. **To set the start date:** Click the arrow icons in the title of the left calendar section to toggle between months or click the **MONTH/YYYY** box in the title to select from the current year's month grid (see Figure 28).
        2. **(Optional)** For year or decade selection, click the **MONTH/YYYY** box in the title **again** and choose accordingly, if needed.
        3. **To set the end date:** Repeat Steps 1-2 explained above on the right calendar section (see Figure 28).

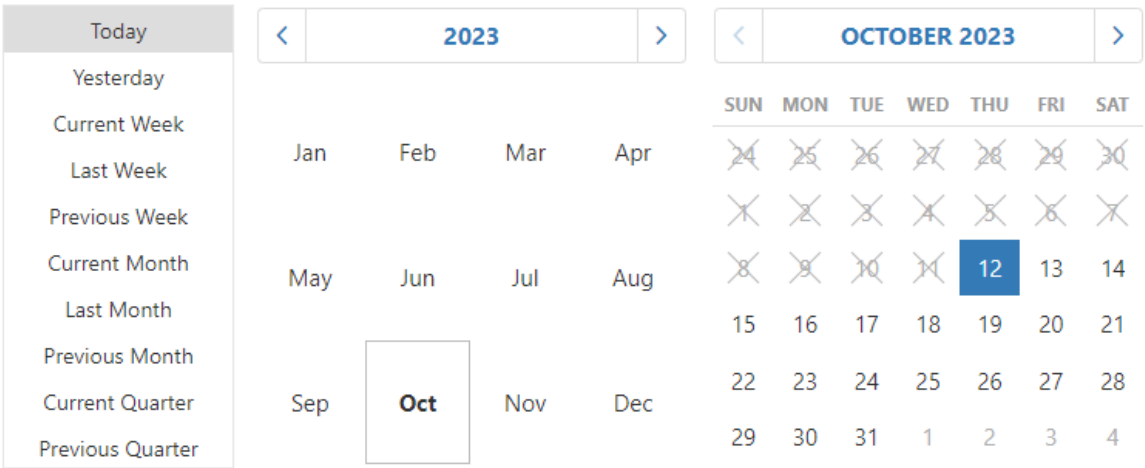


Figure 28: Choosing Date

7. Click anywhere on the screen to finalize the date setting and collapse the sidebar.

8. **(Optional)** Click **Reset** to undo all modifications and start the configuration process anew.
9. Click **Submit** to generate the report according to your specified parameters.
10. **(Optional) Configure additional Preview Parameters:** This step is applicable solely for the **Records by Test Types** and **Records General Report** categories.
    1. Select the **Status ID** of the records you want to include in the report (see Figure 29):
        - **Select All:** Check to include records across all statuses described below.
        - **New:** Check to include records marked with the **New** status.
        - **Viewed:** Check to include records marked with the **Viewed** status.
        - **In Review:** Check to include records marked with the **In Review** status.
        - **Reviewed:** Check to include records marked with the **Reviewed** status.
        - **Confirmed:** Check to include records marked with the **Confirmed** status.

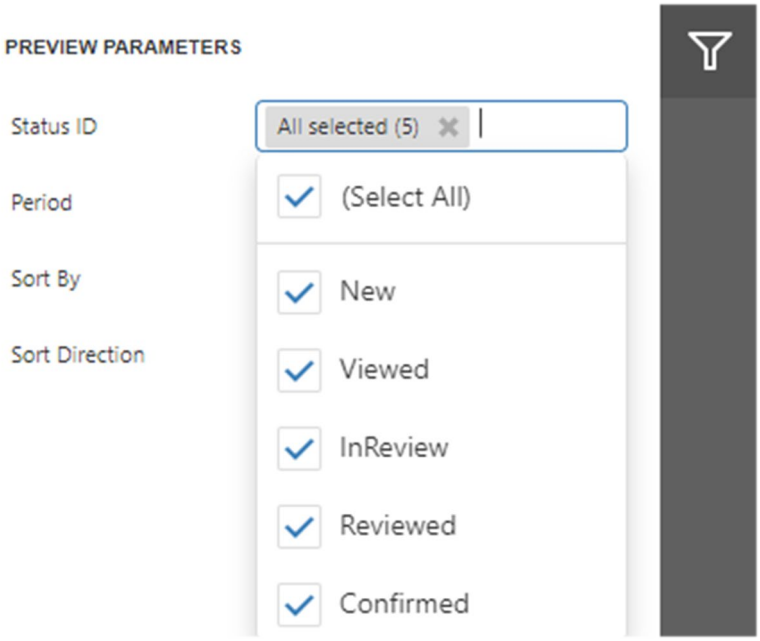


Figure 29: Select Status ID

    2. Choose a sorting option from the **Sort By** drop-down list (see Figure 30):
        - **Test Date:** Sort according to the date the test was performed.
        - **Type:** Sort by the test type.
        - **Name:** Sort by the patient's name.
        - **Gender:** Sort by the patient gender.
        - **ID:** Sort by the patient ID.
        - **Modified By:** Sort by the name of the last individual to modify the record.
        - **Status:** Sort by the status listed in the previous **Step** (New, In Review, Confirmed, etc.).

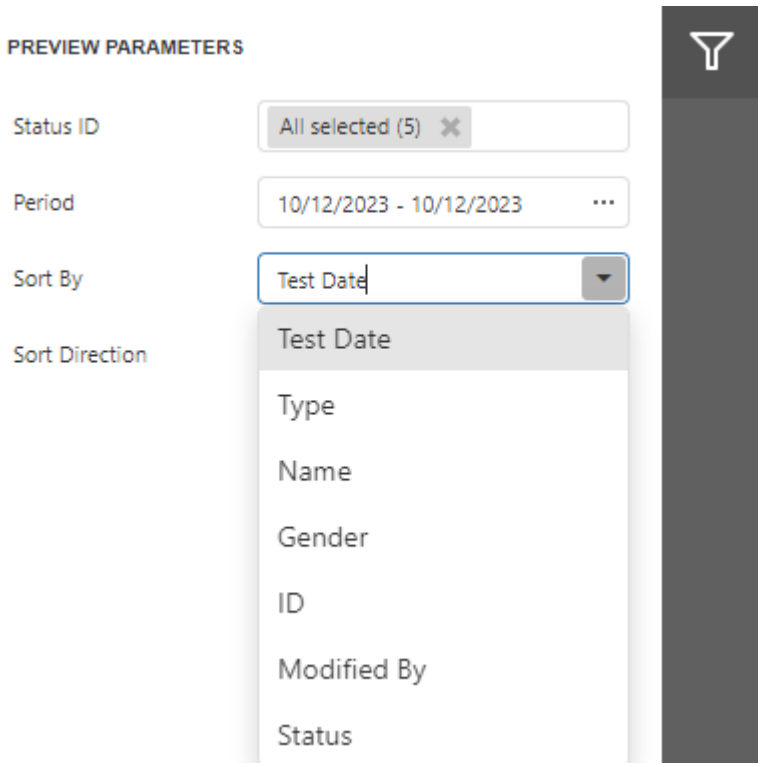


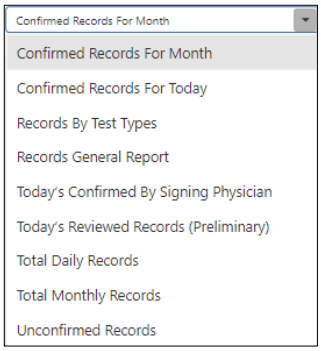
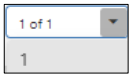
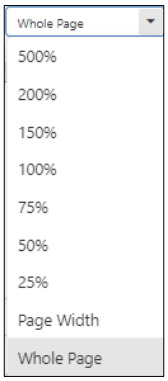
Figure 30: Select Sort By Option

3. Choose between ascending or descending order for the sorting option you selected in **Step 2** above.

After generating the requested report, you can review and manage it using the **Reports Screen Toolbar** (see Figure 31). For more information, refer to **Table 3: Reports Screen Toolbar Description** below.

Figure 31: Reports Screen Toolbar

Table 3: Reports Screen Toolbar Description

Tool	Function
	Click to select a report type.
	Click to navigate to the first page of the generated report
	Click to navigate to the previous page of the generated report. You can also use the left arrow key on your keyboard.
	Click to expand the scrollable drop-down and select a specific page number
	Click to navigate to the next page of the generated report. You can also use the right arrow key on your keyboard.
	Click to navigate to the final page of the generated report
	Click to toggle **ON Multipage Mode**, which displays only one report page on the screen. To access more report pages, use pagination tools explained above.
	Click to toggle **ON Single Page Mode**, allowing for scrolling through report pages. With this option **ON**, you can access report pages also by scrolling.
	Click to zoom out.
	Click to open a drop-down for zoom scale selection.
	Click to zoom in.
	Click to highlight the editable fields of the report, if applicable.
	Click to print the report.
	Click to print only the visible report page.

Tool	Function
	Click to expand the drop-down and choose a report export format: PDF or Excel.
	Click to activate **Full-Screen Mode**.
	Click to exit **Full-Screen Mode**.

To export a generated report:

1. Click the **Share** icon button  in the **Reports Screen Toolbar** to expand the drop-down list.
2. Select either the **PDF** or **XLSX** option to export the report as a PDF or Excel file.

Patient Records Management

This section provides an overview of the patient records and management module and includes the following topics.

Adding a New Patient

Adding a new patient to the system is required for performing any action related to testing.

1. To add a new patient, open the **Dashboard Screen** and click the + New Patient button. The **Patient Details Dialog Box** is displayed (see Figure 26).

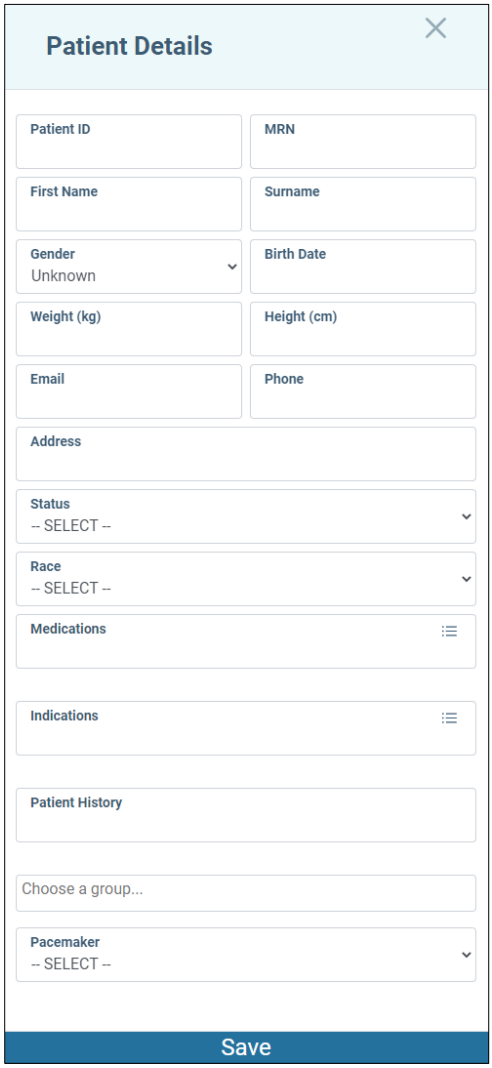


Figure 26: Patient Details Dialog Box

2. Type the **Patient ID**, **First Name**, and **Surname** (mandatory fields).
3. Click the Save button at the bottom of the dialog box (see Figure 26).

   When the patient is created, you are redirected to the **Patient Screen** (see Figure 27).

The **Patient Screen** contains demographic information about this patient, including personal details at the top, a summary of patient's test status in the middle, and the patient's test records at the bottom.

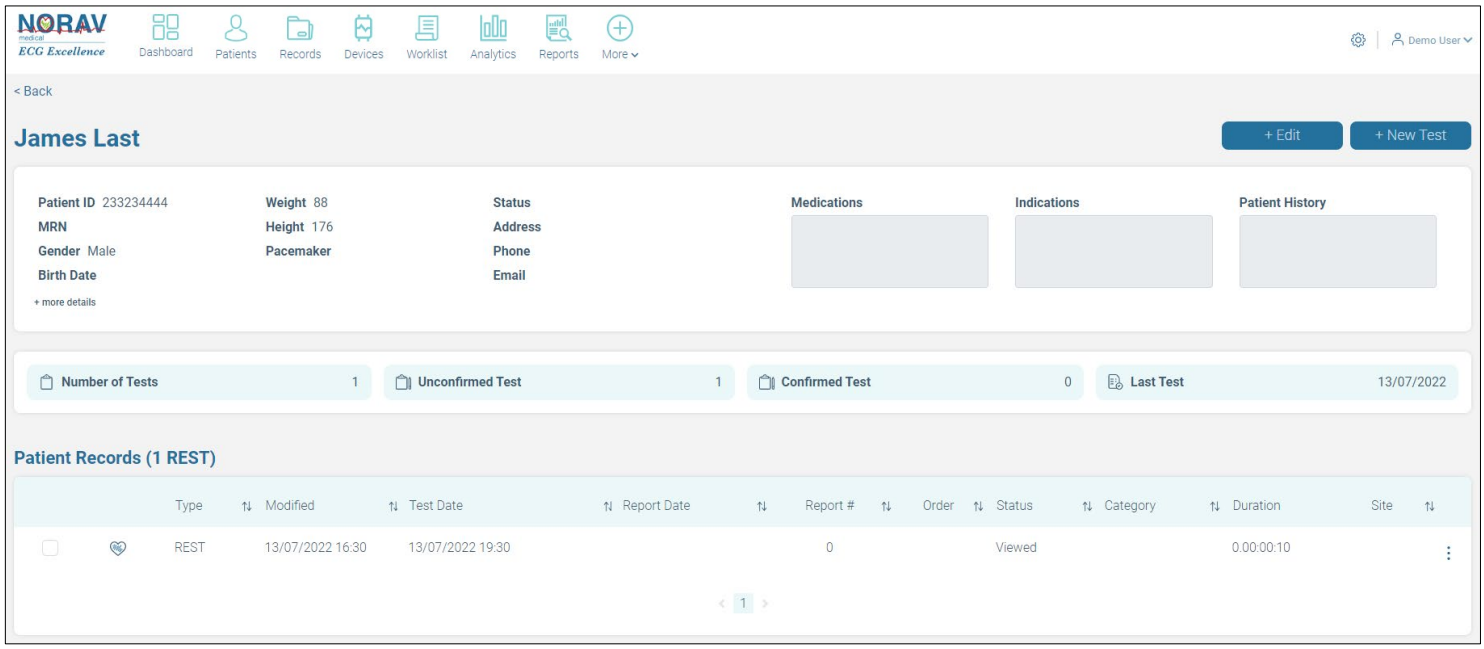


Figure 27: Patient Screen

4. To edit the patient's information, click the + Edit button.
5. To create a new test, click the + New Test button.

Editing Existing Patient

To edit an existing patient, you need to find the relevant patient first.

Patient search can be done in two ways:

- Using the **Patients Section** at the bottom of the **Dashboard Screen** (see Figure 28).

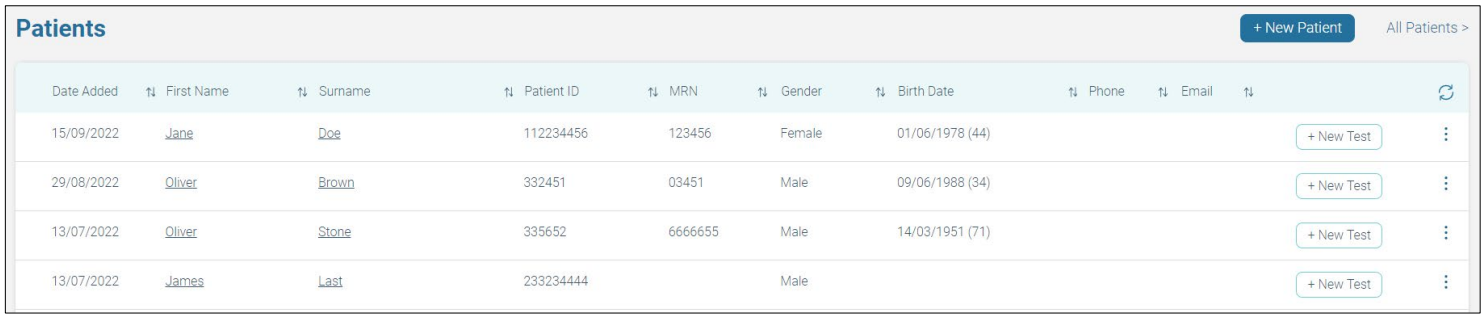


Figure 28: Patients Section

This section displays the recent patients created in the system.

a. To select any patient, click the patient's **First Name** or **Surname** (**James Last** for example).

The **Patient Screen** is displayed (see Figure 29).

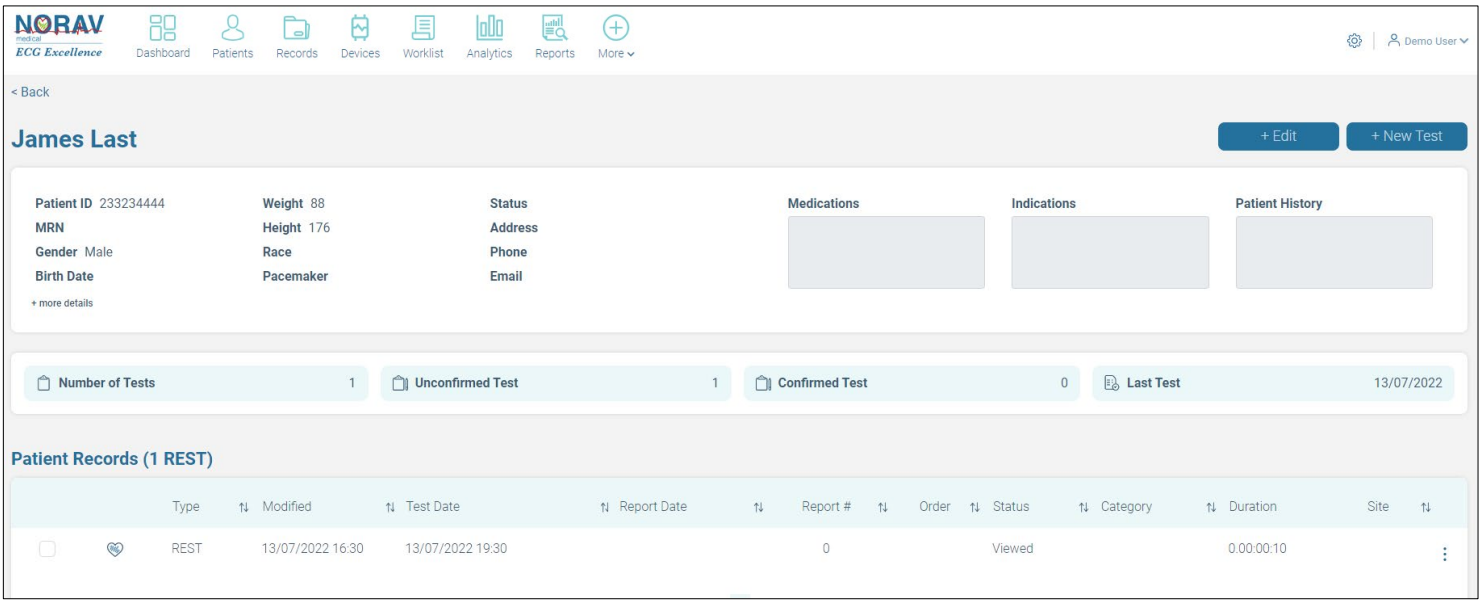


Figure 29: Patient Screen

b. Click the + Edit button.
The **Patient Details Dialog Box** is displayed (see Figure 30).

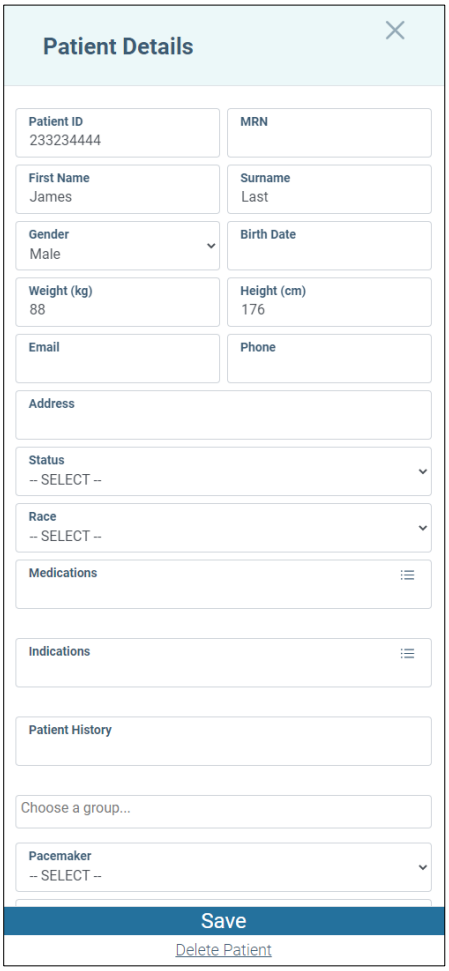


Figure 30: Patient Details Dialog Box

c. Edit all fields and click Save.

- Clicking Patients on the **Menu Bar** of any screen in the system to open the **Patients Screen** (see Figure 8).
  By default, this screen is updated with new records (Auto-Refresh button **ON**).
  a. To disable this option, turn **OFF** the Auto-Refresh button.
  b. To obtain the search results after filling in the search fields, click the Search button.
  c. To open the **Patient Screen** when you find the relevant patient, click the **Patient ID** or hover over the ⋮ button and then click View.
  The **Patient Screen** contains demographic information about this patient, including personal details at the top, a summary of patient's test status in the middle, and the patient's test records at the bottom (see Figure 31).

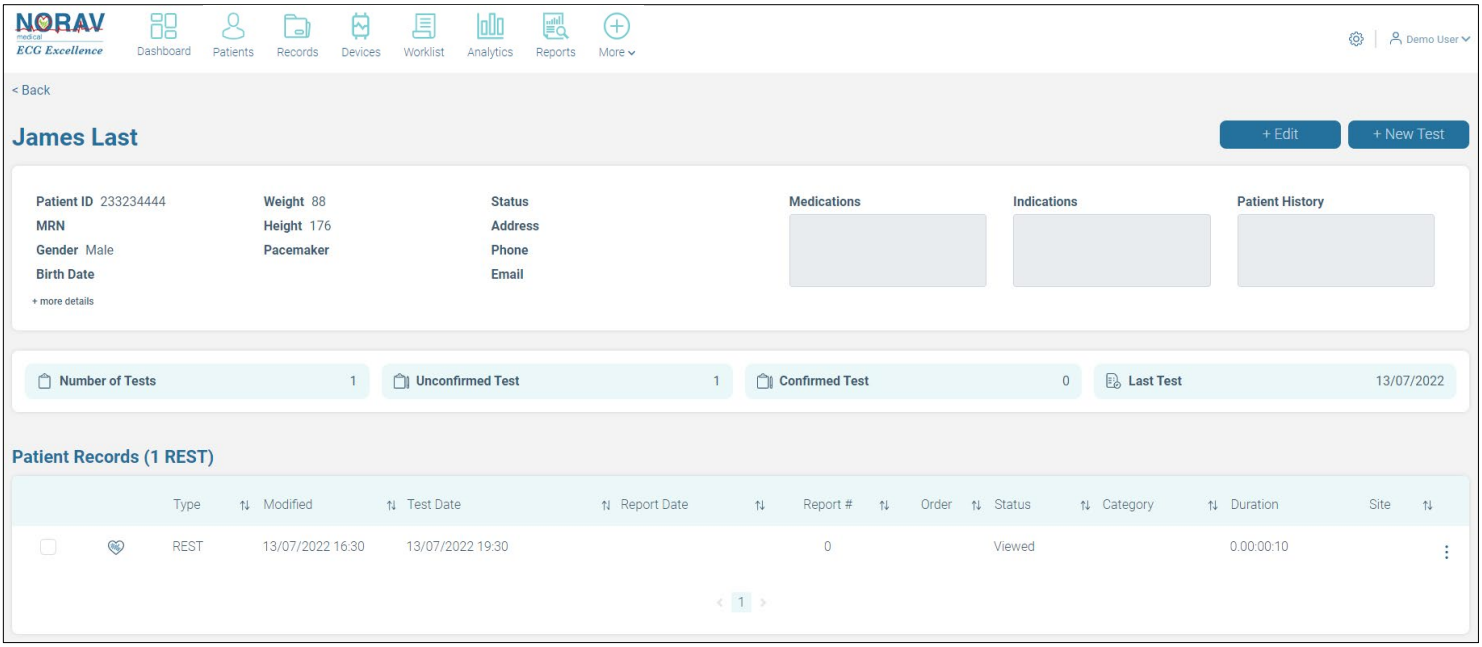


Figure 31: Patient Screen

Filtering Patients' Records

See Section Records Screen on page 28.

Editing Existing Patient Details

1. To edit the patient details within the **Patient Screen**, click the + Edit button at the top right of the screen.

   The **Patient Details Dialog Box** is displayed, ready for editing (see Figure 32).

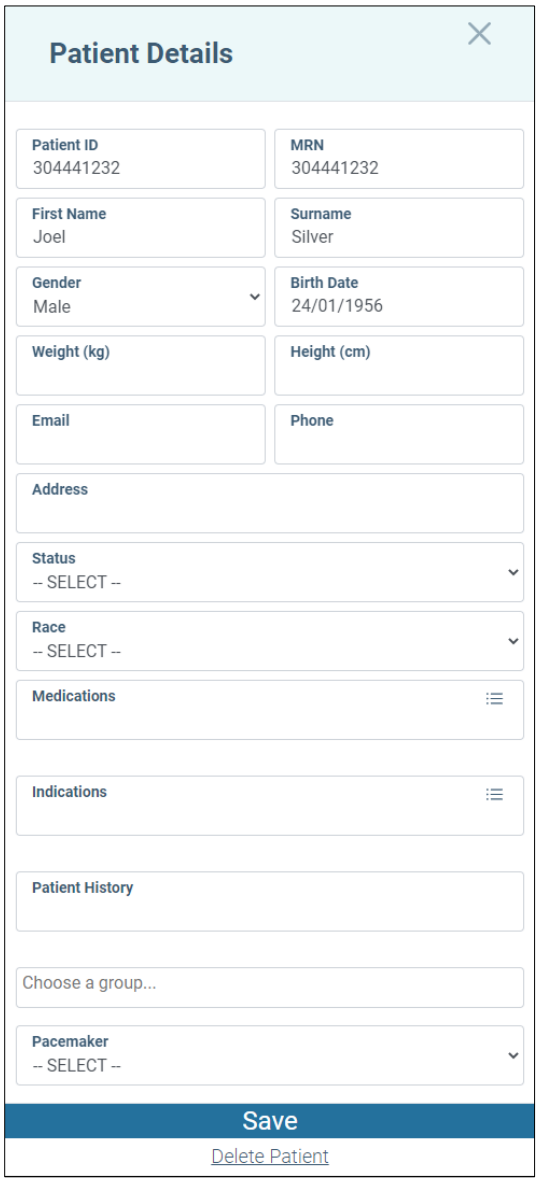


Figure 32: Patient Details Dialog Box

2. Edit the contents of all the displayed fields.
3. When completed, click the Save button at the bottom of the screen.

Deleting Existing Patient

You can delete a patient by clicking the Delete Patient button (see Figure 32).

For another way to delete a patient, see Section Administration Management on page 95.

Performing New Test

This section describes the new test process and includes the following topics.

Creating a new test can be done from the **Worklist Screen** or from the **Patient Screen**.

Creating a New Test from the Worklist

This is a list of scheduled tests (for the **next 7 days** in this example) – see Figure 33).

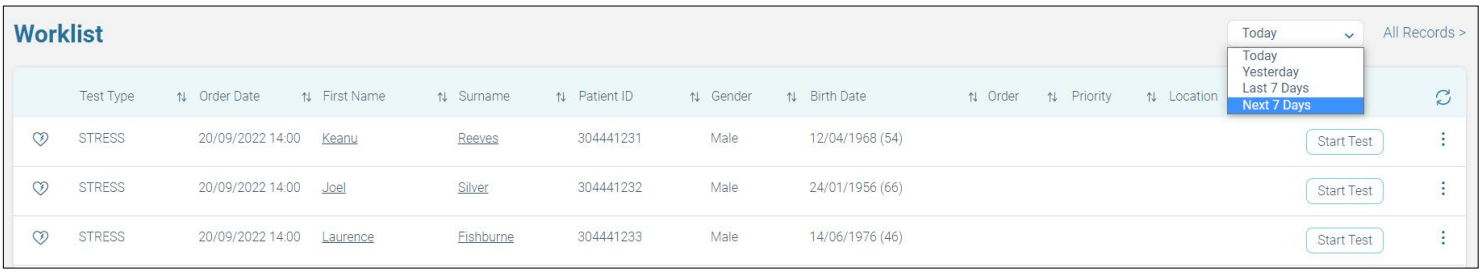


Figure 33: Scheduled Test List (next 7 days)

1. To open the **Worklist Screen**, click Worklist on the **Menu Bar** or click All Records > in the **Worklist Section**.

   The **Worklist Screen** is displayed with a search engine section at the top, followed by the **Worklist** that includes a list of scheduled tests (see Figure 34).

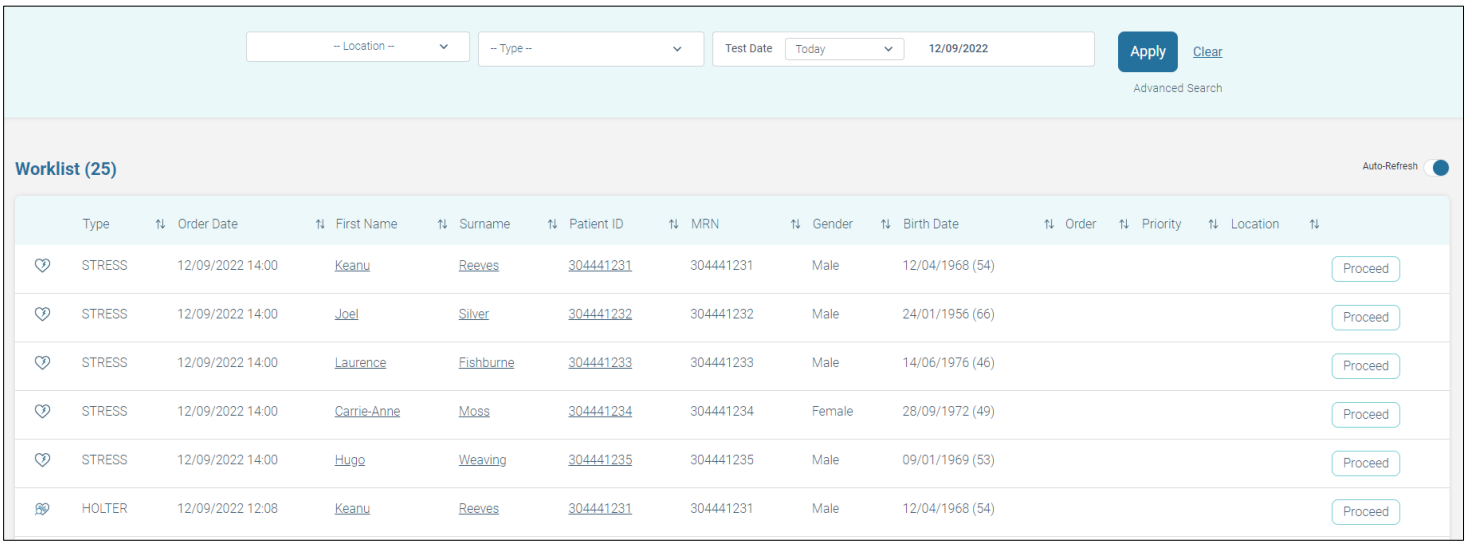


Figure 34: Worklist Screen & Search Engine

2. **For Holter or ABPM test** – Start by connecting the recorder to the computer using a USB cable or Bluetooth® connection.

   Or

   For REST or STRESS test – When you find the relevant scheduled test, click the Proceed button to begin the test.

   The **Start New REST Test Dialog Box** is displayed (see Figure 35).

   This dialog box contains the test type, patient information including demographic data, medications, indications, test category, and test details.

This data is transferred and attached to the specific REST test in the PC-ECG application upon clicking Proceed.

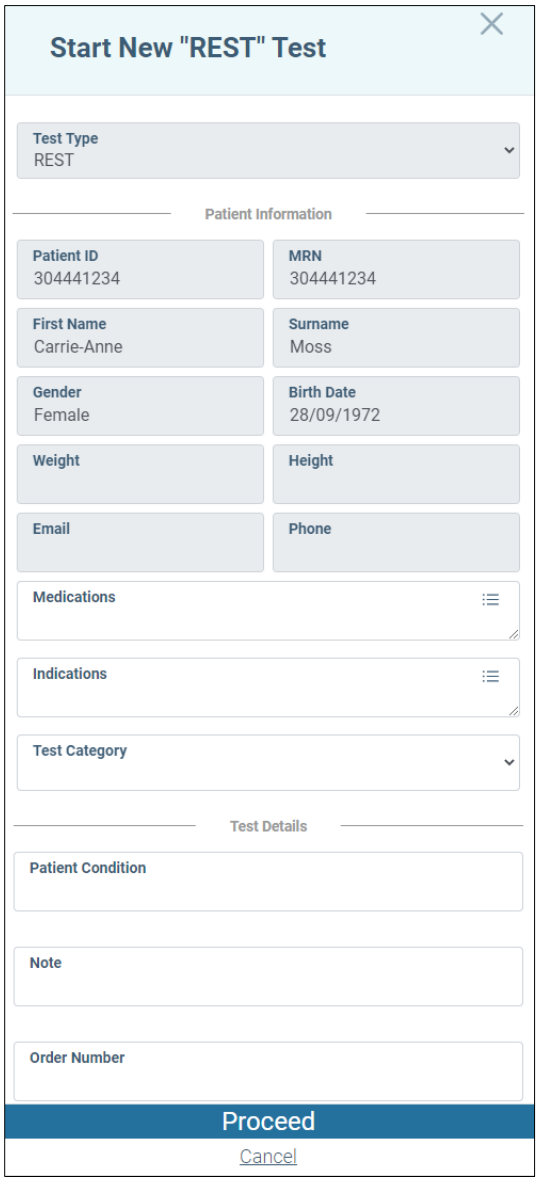


Figure 35: Start New REST Test Dialog Box

3. To start the test, click Proceed.

The PC-ECG application is opened displaying the REST test running (see Figure 36).

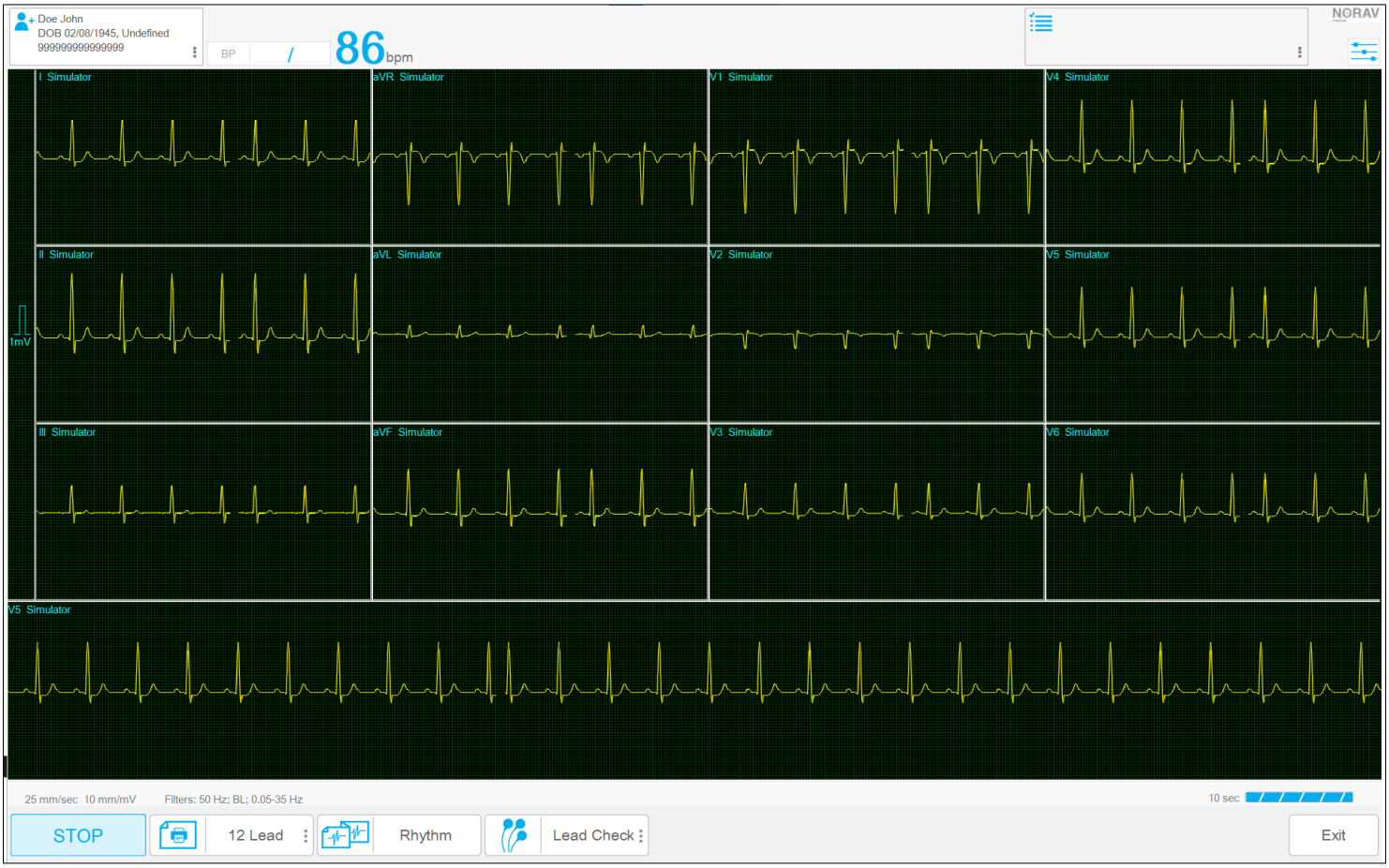


Figure 36: REST Test Running in PC-ECG Application

4. When the test is complete, click Exit to close the PC-ECG application.

   The test results are displayed on the patient's page, and the scheduled test line is removed from the **Worklist**.

5. Continue to the next test in line.

Preparing a Holter Recorder

Preparing a Holter recorder involves sending patient data to the recorder before starting the test.

The NEMS-Web application supports two preparation flows:

- **Via USB connection** – used when the recorder is physically connected to the PC or when its memory card is inserted via a card reader.
- **Via Bluetooth connection** – used when the recorder is paired with the PC via Bluetooth. This method enables the **Check ECG** function, which allows users to verify the quality of the ECG signal and the electrode connections in real time before sending data to the recorder.

Both methods follow similar steps for selecting a patient and assigning test details, but the Bluetooth-based flow includes optional signal verification using the Check ECG button.

To prepare the recorder using a USB connection:

1. To perform the test from the **Worklist**, select a patient, and then click + New Test on the **Patient Screen** (see **Error! Reference source not found.**).
   Or
   To perform the test from the **Patients Screen**, click the **Patient ID** (see Figure 8), and then click + New Test on the **Patient Screen** (see **Error! Reference source not found.**).

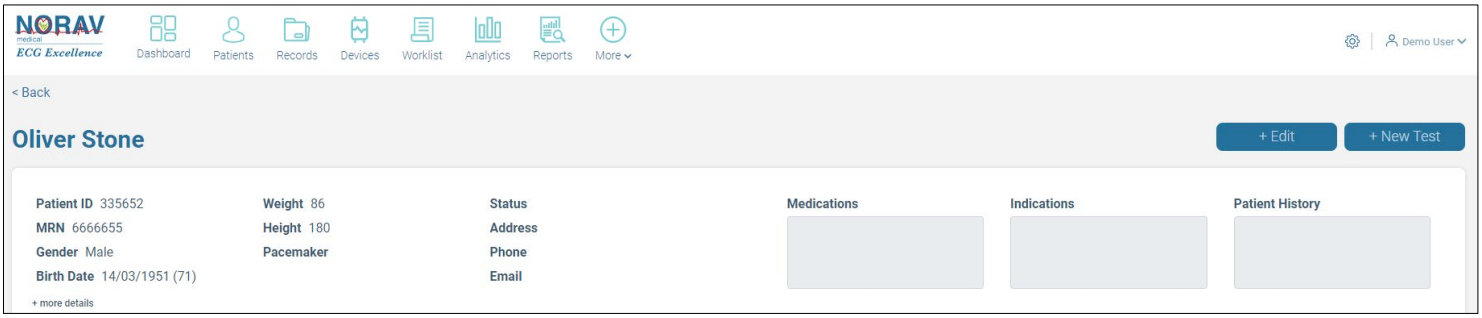


Figure 37: Patient Screen

The **Start New Test Dialog Box** is displayed (see Figure 38).

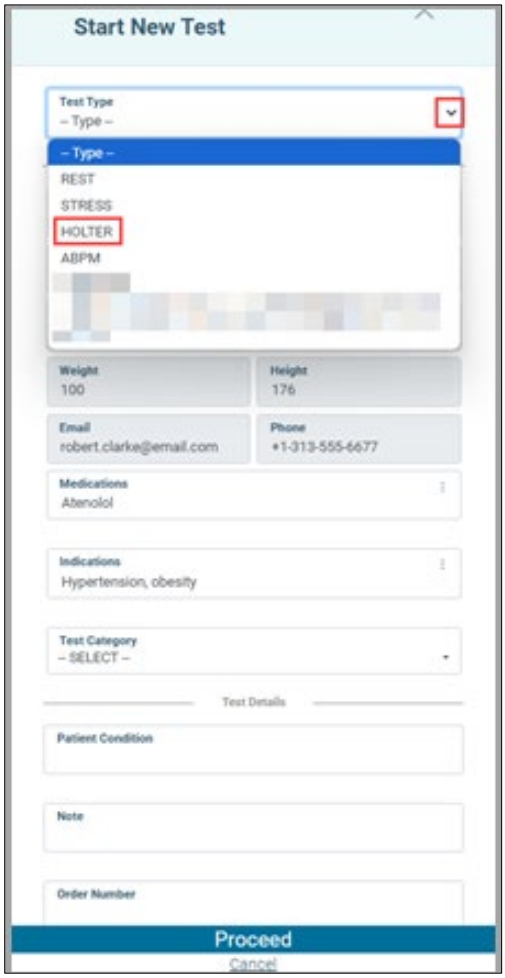


Figure 38: Start New Test Dialog Box

2. Click the **Test Type** drop-down list to expand it and select **HOLTER**. The **Prepare Device** interface is displayed.

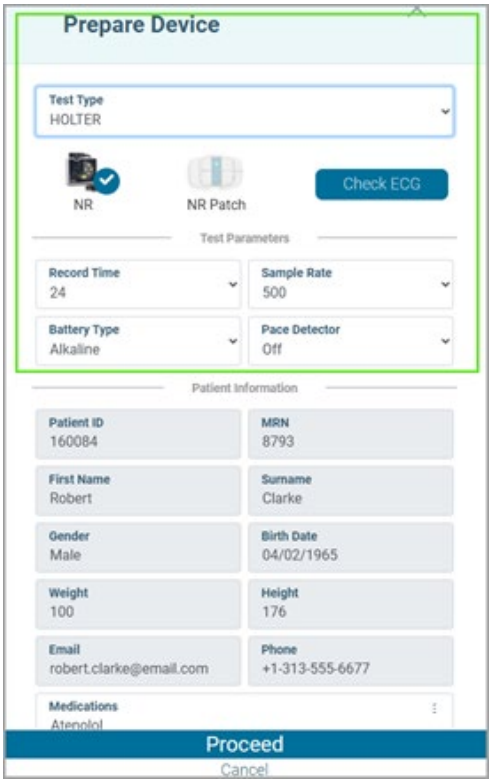


Figure 39: Prepare Device Interface

3. To select the model of the device you want to prepare, click **NR** to prepare any of the NR recorder models except NR-314-P, or click **NR Patch** to prepare specifically the **NR-314-P** recorder model.

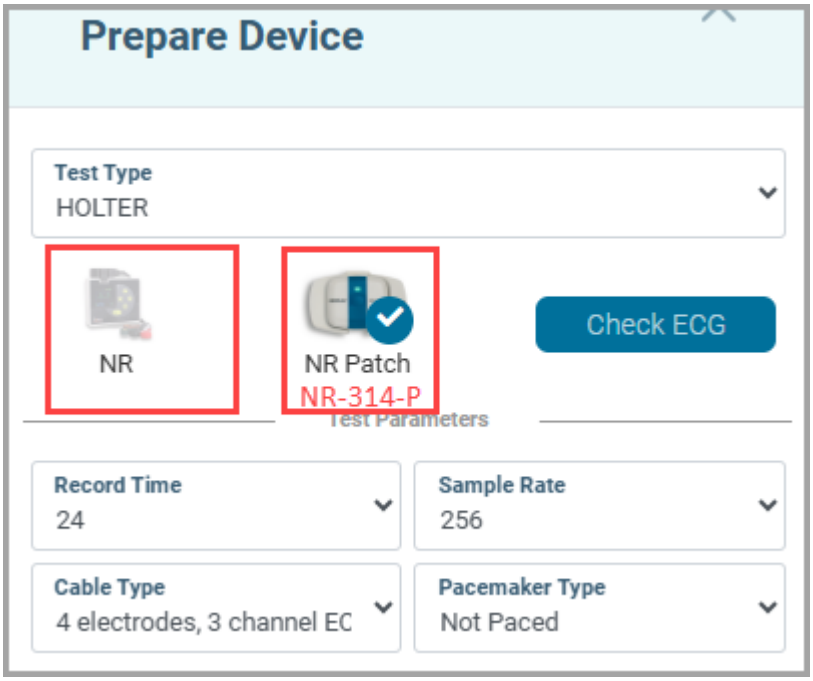


Figure 40: Selecting Recorder Model

4. Select the test parameters from the following drop-down lists: **Record Time**, **Sample Rate**, **Battery Type**, and **Pace Detector** (for NR), or **Record Time**, **Sample Rate**, **Cable Type**, and **Pacemaker Type** (for NR Patch, the NR-314-P model).

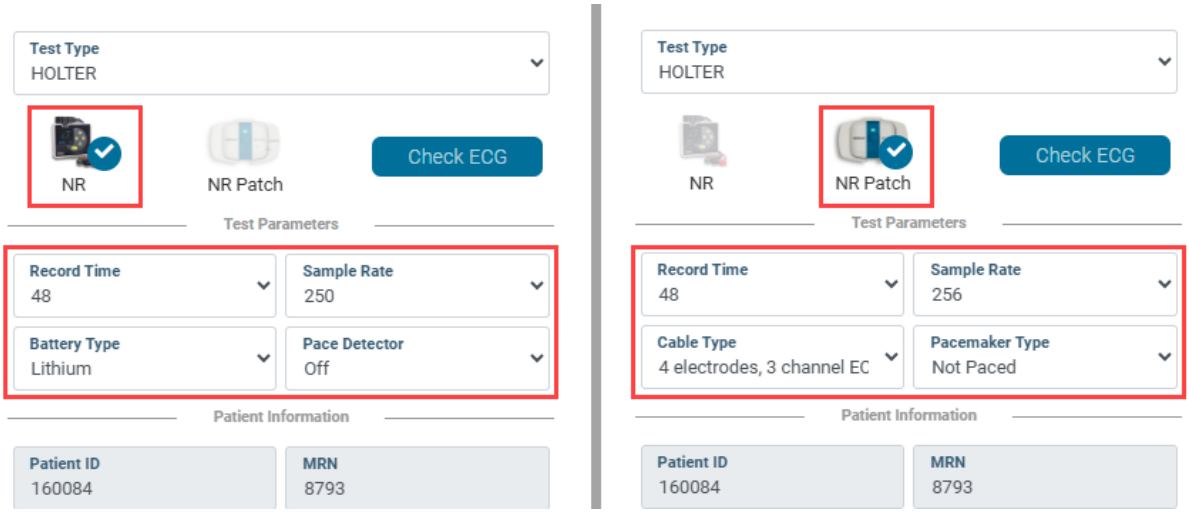


Figure 41: Select Test Parameters

5. **(Optional)** Enter additional test details in the **Test Details** section.

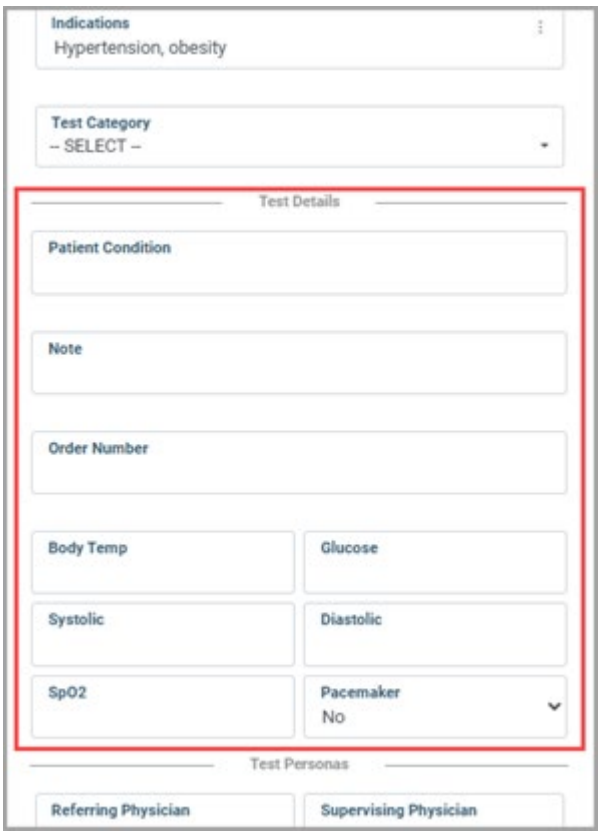


Figure 42: Test Details Section

6. **(Optional)** Select additional test parameters in the **Test Personas** and **Test Properties** sections. Expand the relevant drop-down lists to select the **Referring Physician**, **Hookup Technician**, or other roles. Use the **Search** field at the top of any drop-down list to filter results. As you type, the list narrows to entries matching your input. Click the desired entry to proceed.

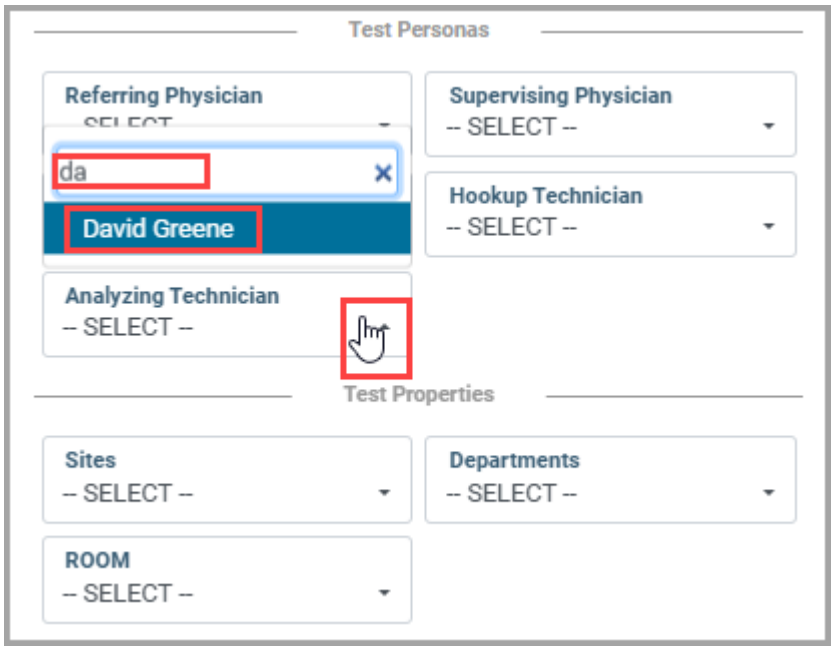


Figure 43: Select Additional Test Parameters

7. To complete the Holter recorder preparation, click **Proceed**. The data is sent to the connected Holter recorder, and a success message is displayed.

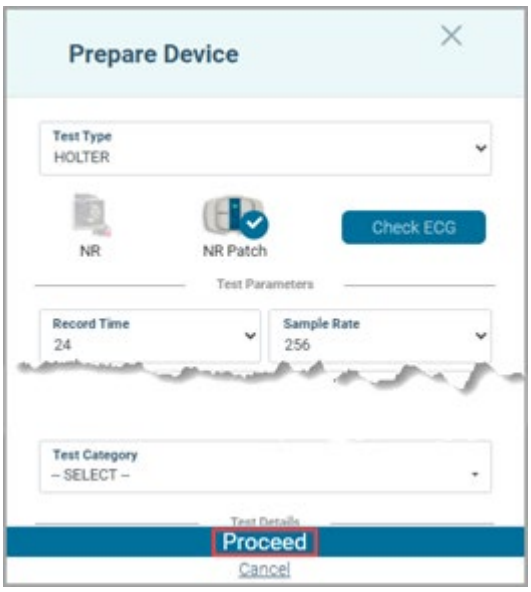


Figure 44: Click Proceed to Prepare Recorder

8. Hook up the patient. Once everything is ready, start the test.

To prepare the recorder using a Bluetooth connection:

1. Connect the recorder via Bluetooth, and follow **Steps 1-4** of the instructions above for preparing the recorder using a USB connection. Optionally, select additional test parameters in the **Test Personas** section.
2. If you have connected the Recorder to your PC via Bluetooth, you may hook up the patient at this Step and click the **Check ECG** button to verify that the electrodes are properly connected, and that the ECG signal will be recorded correctly:

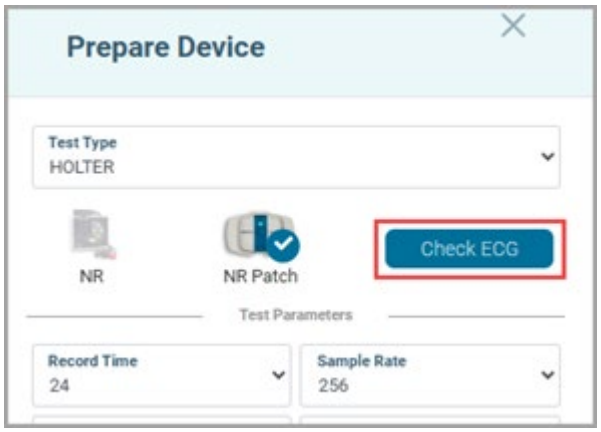


Figure 45: NEMS-Web Check ECG Button

1. Click **Check ECG**. Either the **Norav NH-301 Holter analysis system** or the **Norav Holter Device Manager** must be installed for this function. If the NH-301 system is installed, it opens and displays the recorder selection screen. If not, the Device Manager opens instead. Wait until the app loads and the recorder selection screen appears.
2. Select the required **Bluetooth-connected** recorder from the list of the available recorders. If the required recorder is not in the list, click **Refresh** in the bottom-left corner and then select the recorder. If refreshing doesn't help, check your Bluetooth connection.

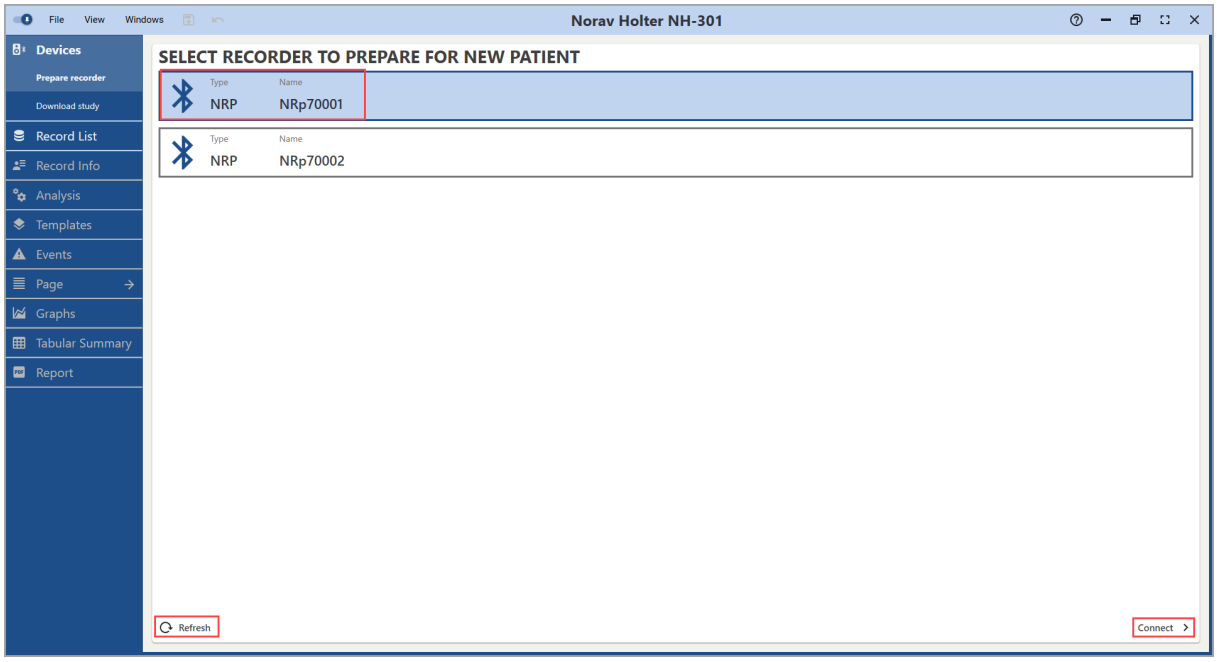


Figure 46: Select Recorder

3. Click **Connect** in the bottom-right corner. The **Record Information** screen will appear. Enter any additional information, including medications and indications, if needed.

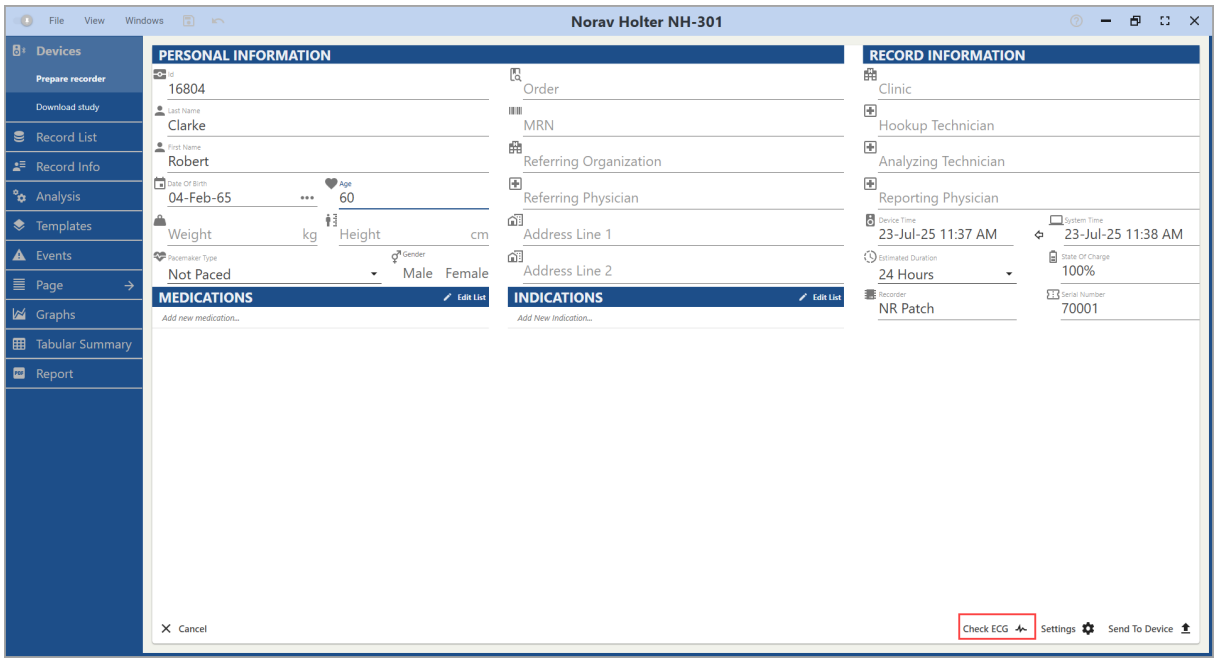


Figure 47: Click Check ECG

4. Click the **Check ECG** button in the bottom-right corner to begin ECG streaming in the pop-up window. The ECG stream will display the ECG signal and electrode connections health check. If any of the electrodes has an **OFF** indicator and the signal is absent or distorted, check and rectify the connection as needed.

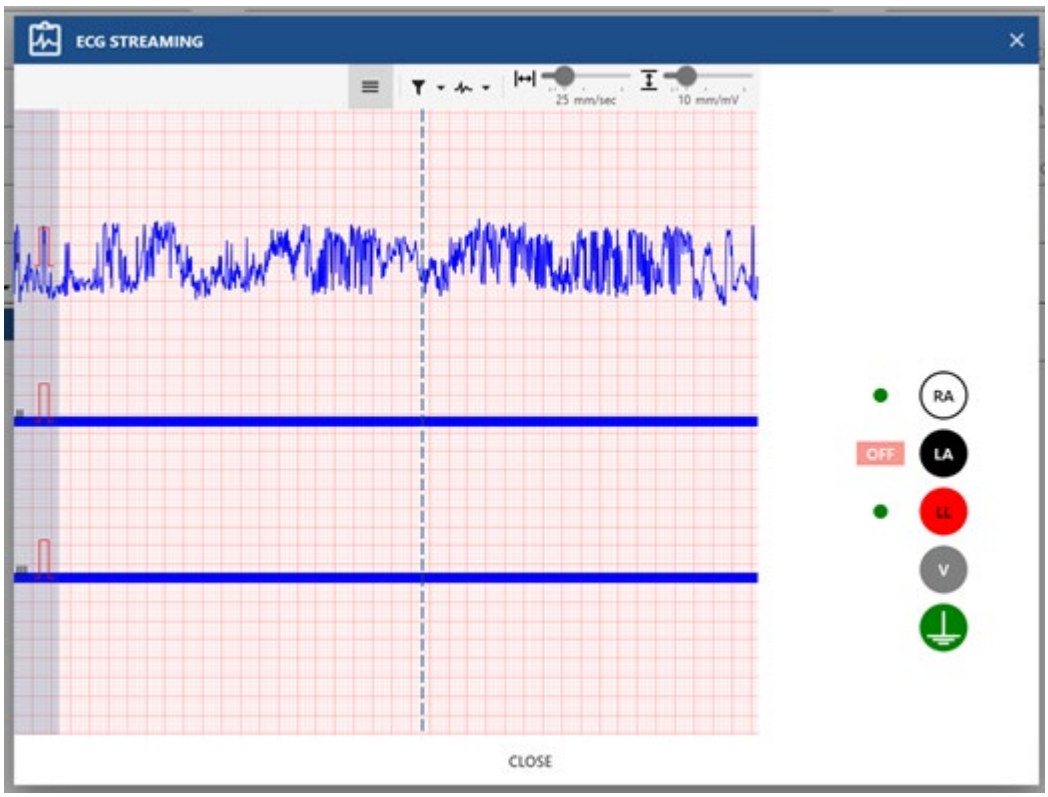


Figure 48: ECG Streaming

3. Close the **ECG Streaming** window, and then click **Send To Device**.

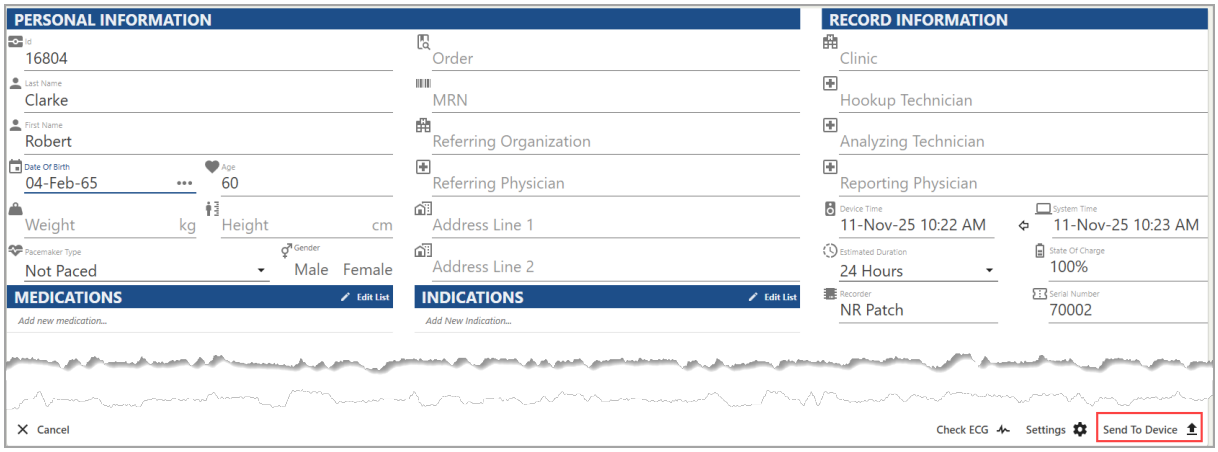


Figure 49: Click Send To Device

4. Wait until the recorder preparation is complete. When the status message appears, click **OK** to close it.

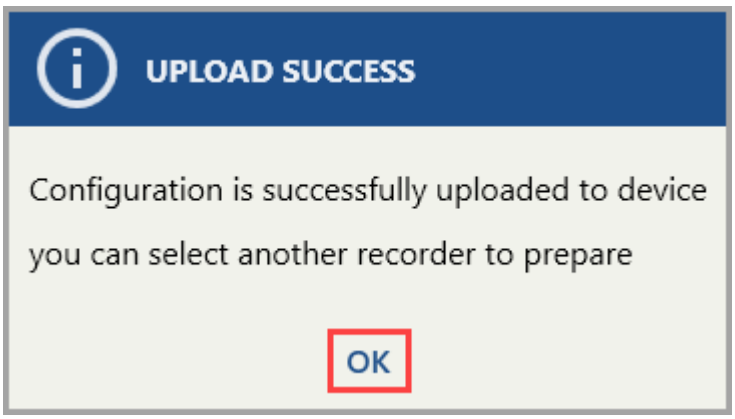


Figure 50: Close Status Message

5. You will be switched to the **Send to Device Confirmation** pop-up in NEMS-Web, asking you to confirm that the recorder preparation was successful. Click **Confirm** to proceed, or click **Retry** to repeat the preparation.

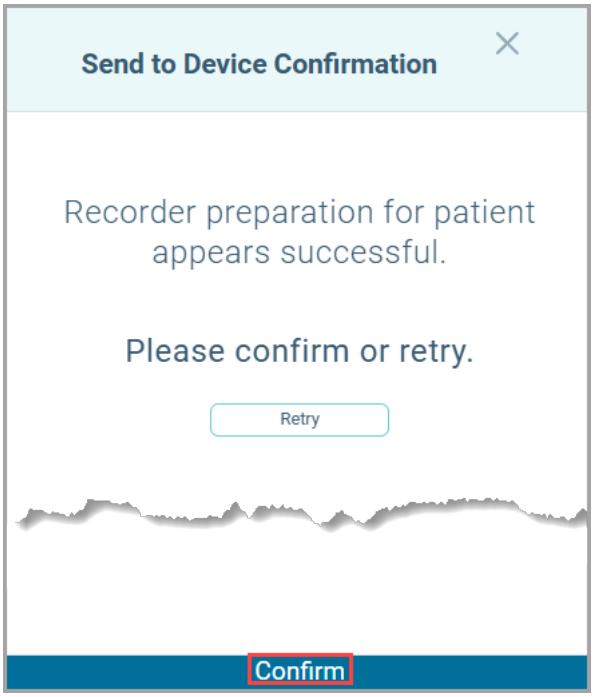


Figure 51: Confirm Recorder Preparation in NEMS-Web

6. Once everything is ready, start the test.

Preparing an ABPM Recorder

Preparing an ABPM recorder involves selecting the ABPM recorder model and sending patient data to it before starting the test.

1. To prepare an ABPM recorder, select a patient, click + New Test, and then select **ABPM** from the **Test Type** drop-down list (see Figure 52).

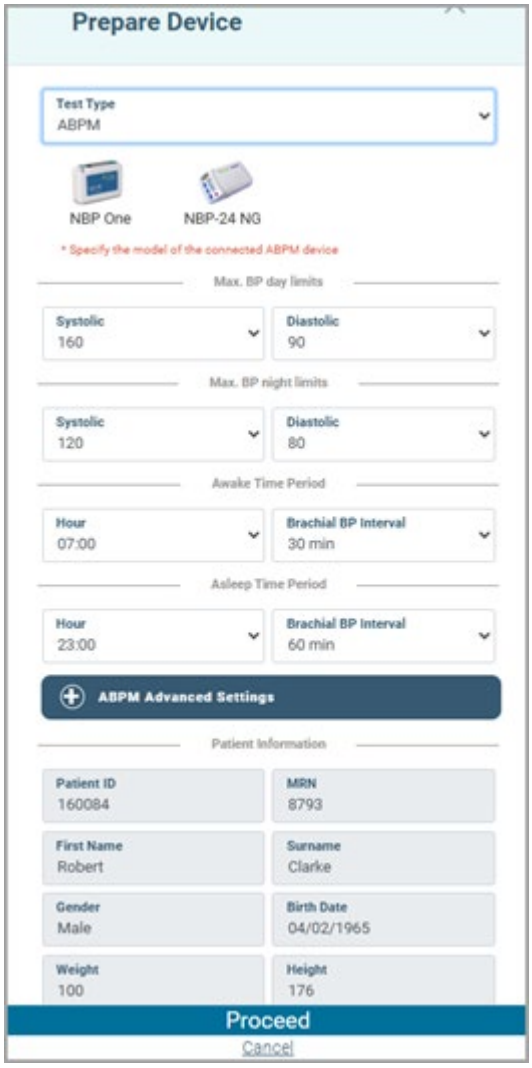


Figure 52: Start New ABPM Test Dialog Box

2. Select a connected ABPM recorder (for Oscar 2, select NBP One).
   The recorder settings are imported from the **ABPM Settings** under **Organizational Units**. These settings can be edited on the screen.
3. Fill in all remaining data. Click on the ABPM Advanced Settings to expand the advanced settings, and adjust the default values if needed.

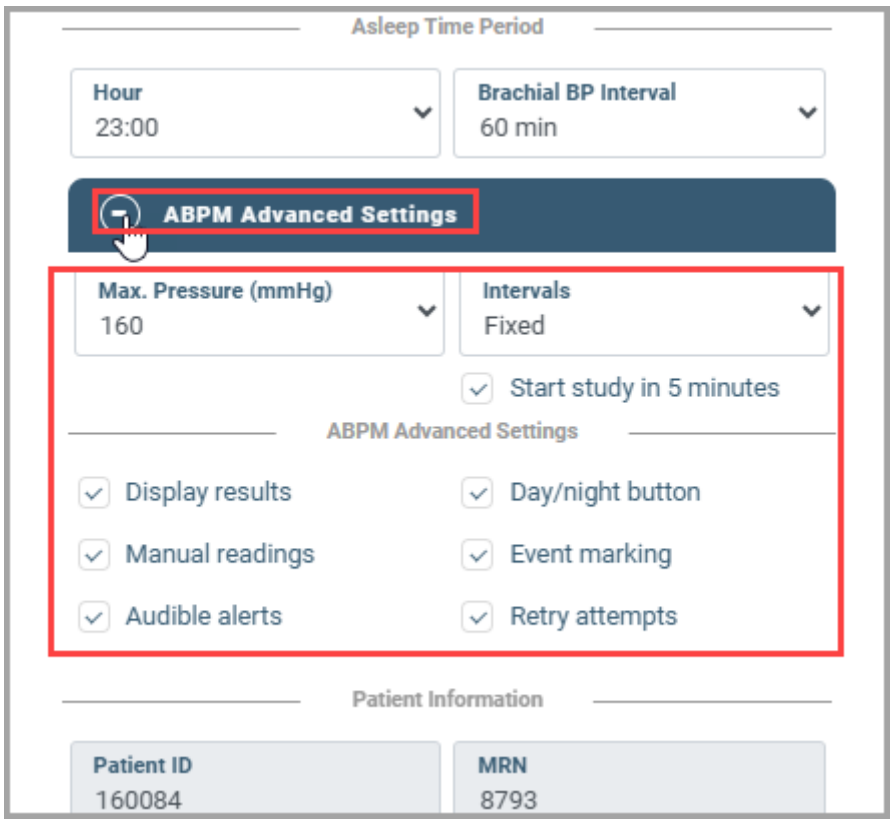


Figure 53: ABPM Advanced Settings

4. Click Proceed.
   Data is sent to the connected ABPM recorder, followed by displaying a success message.
5. Hook up the patient to the ABPM recorder, and then start the test.
6. When the patient returns with the recorder after recording, proceed to the download process.
   As always, make sure the recorder is connected to the computer via a USB cable or use the memory card (for HOLTER test).
7. Click Devices on the **Menu Bar**.
   The **Devices Screen** is displayed without data (see Figure 54).

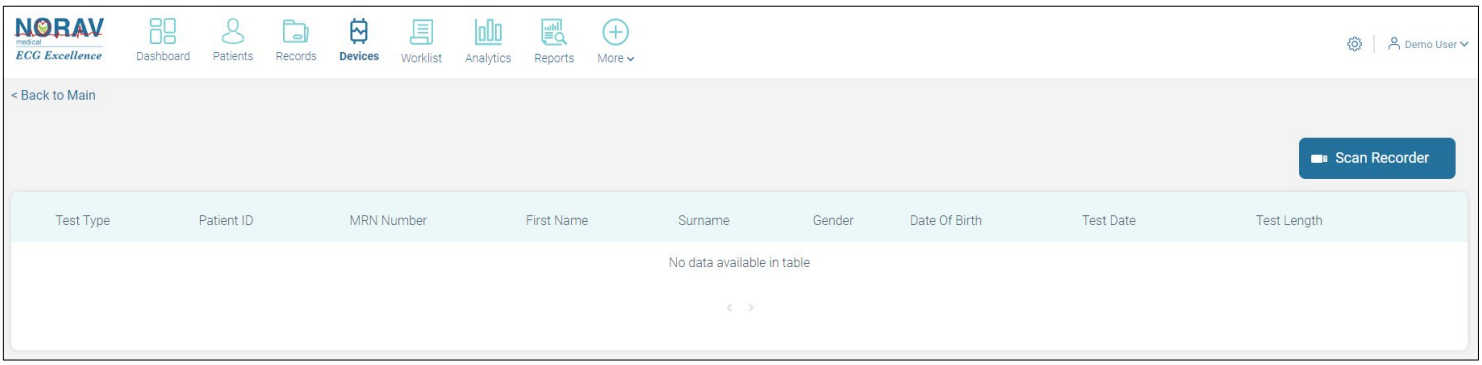


Figure 54: Devices Screen

8. Click the Scan Recorder button.
   This screen displays the test details stored in the ABPM recorder when it is connected (see Figure 55).

Figure 55

9. To view the test and patient's details, click the Download button.

   The **Record Details Dialog Box** is displayed, including demographic and test details (see Figure 56).

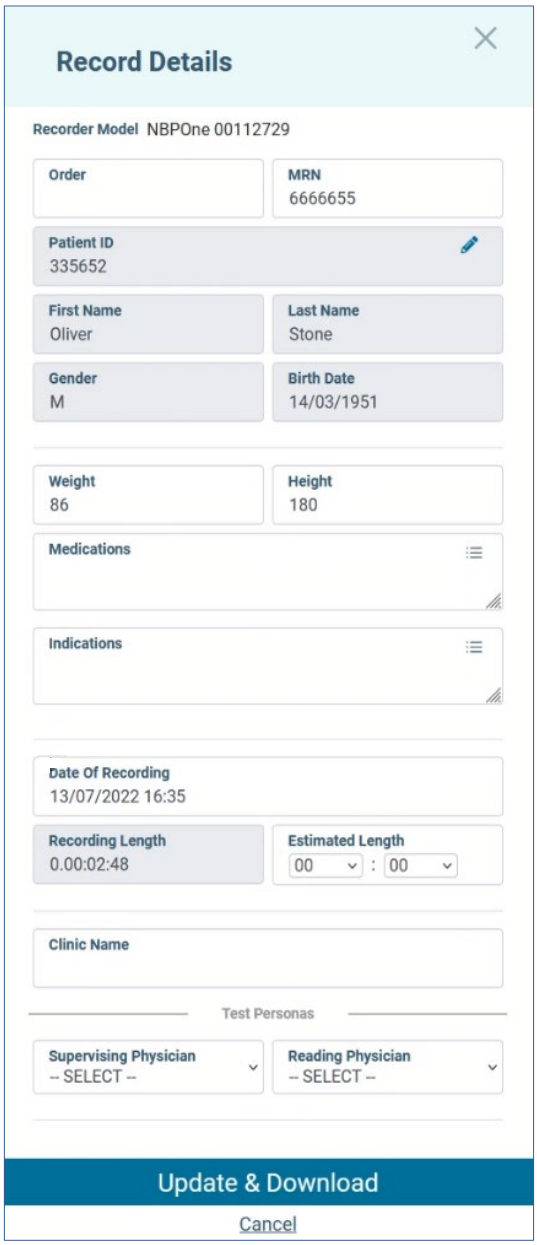


Figure 56: Record Details Dialog Box

10. Add further details except for the gray fields that cannot be edited.

    You can select another existing patient from the database.

11. To store the record in the database, click the Update & Download button.

    The **Downloading Data Window** is opened (see Figure 57).

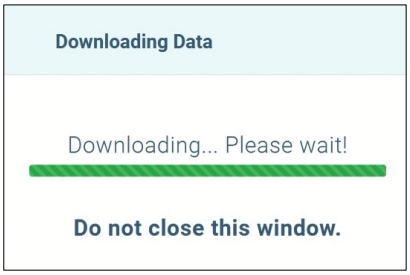


Figure 57: Downloading Data Window

When the data is downloaded successfully, you are prompted to delete the existing test from the recorder (see Figure 58).

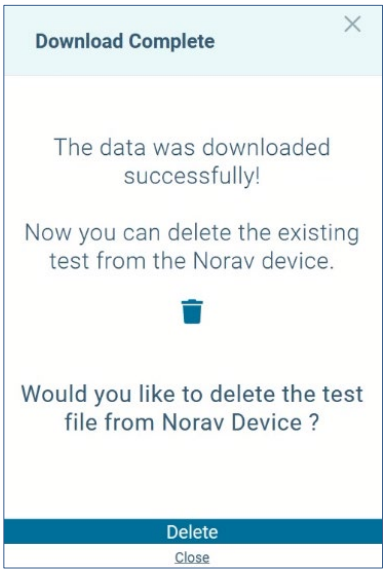


Figure 58: Download Complete Dialog Box

12. Either Delete the test or Close the dialog box.

    After deleting the recording from the recorder, the **Delete Completed Dialog Box** is displayed (see Figure 59).

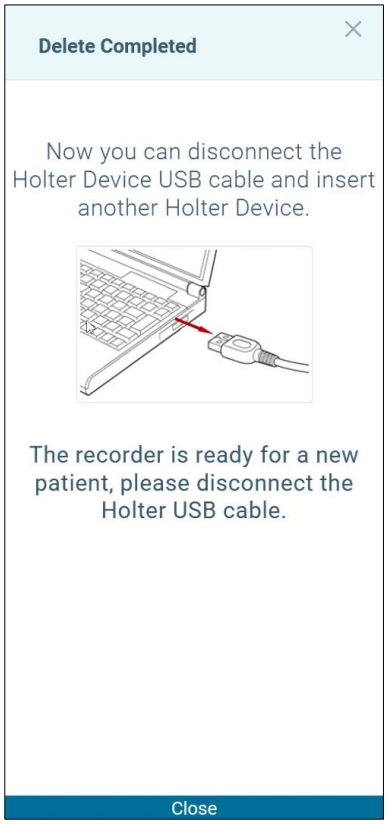


Figure 59: Delete Completed Dialog Box

13. Click **Close**.

Proceed to the next test by following the same steps.

Starting ECG Test (Rest, Stress)

You can create a new test directly from the **Patient Screen** (see Figure 9) or from the **Worklist Screen** by clicking on the Proceed button next to the patient's details (see Section Creating a New Test from the Worklist on page 52).

1. Open the **Patient Screen** and click + New Test.

   The **Start New Test Dialog Box** is displayed (see Figure 60).

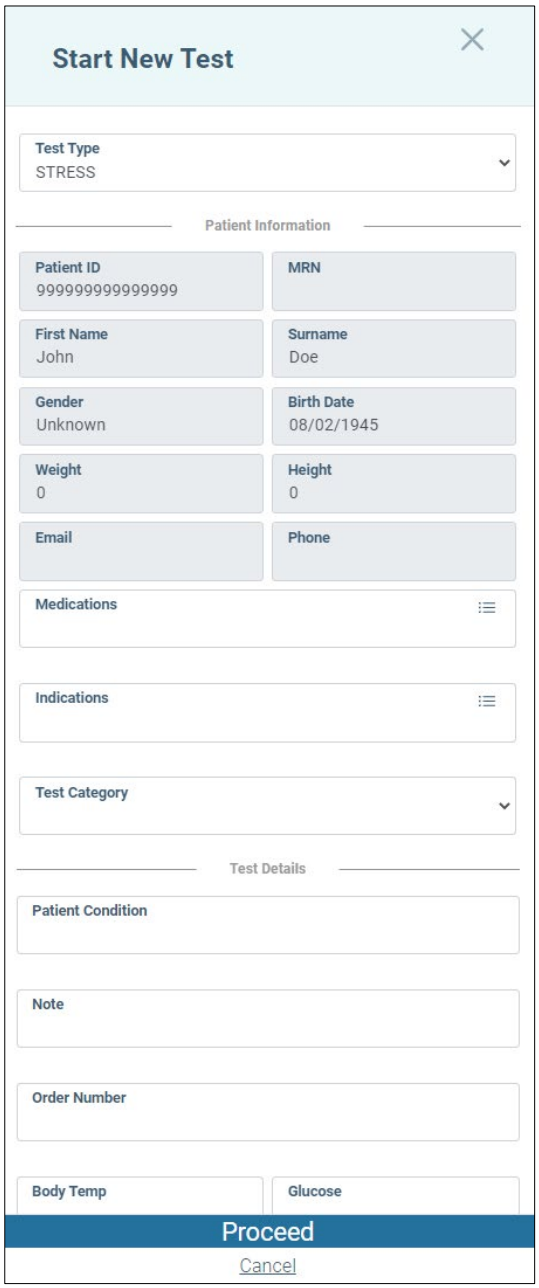


Figure 60: Start New Test Dialog Box

2. Select **STRESS** (for example) from the Test Type drop-down list.
3. Fill all blank fields accordingly.
4. To start the test, click Proceed.

The PC-ECG application is opened displaying the STRESS test running (see Figure 61).

Figure 61: STRESS Test Running on PC-ECG Application

5. When the test is complete, close the PC-ECG application.

Note

A few seconds may pass before the new test appears on the records list or on the **Patient Screen**.

The test results are displayed on the **Patient Screen**, and the scheduled test line is removed from the **Worklist** if the test was started from the Worklist.

Alternatively, the test results are also available on the **Records Screen**.

Note

NEMS-Web also supports offline Rest and Stress test modes for environments where the internet connection might be unstable. In this case, the tests are performed according to the instructions, and test files are automatically transferred to the NEMS-Web server when the connection is reestablished.

Actions on Existing Tests

This section describes the following topics:

Reviewing Existing REST Test

This action allows reviewing test interpretations that have been generated automatically according to the system definition or manually added.

1. Select any **REST** record (see Figure 62).

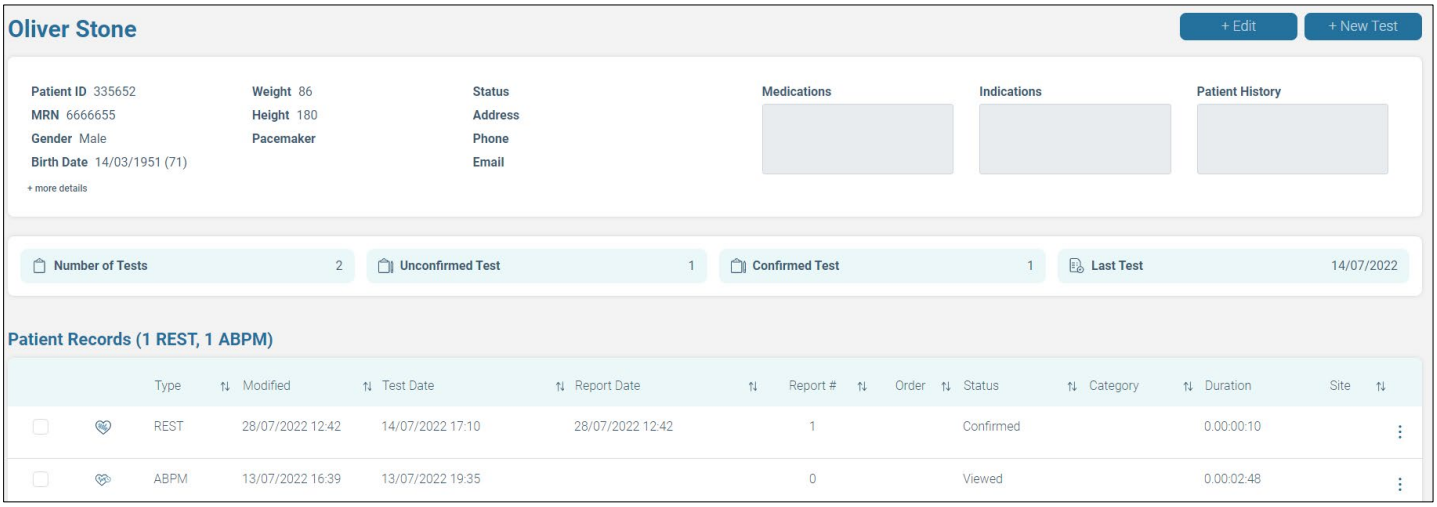


Figure 62: Patient Screen

2. To open the **Rest Record Screen**, click the  icon.

   The **Rest Record Screen** is displayed (see Figure 63).

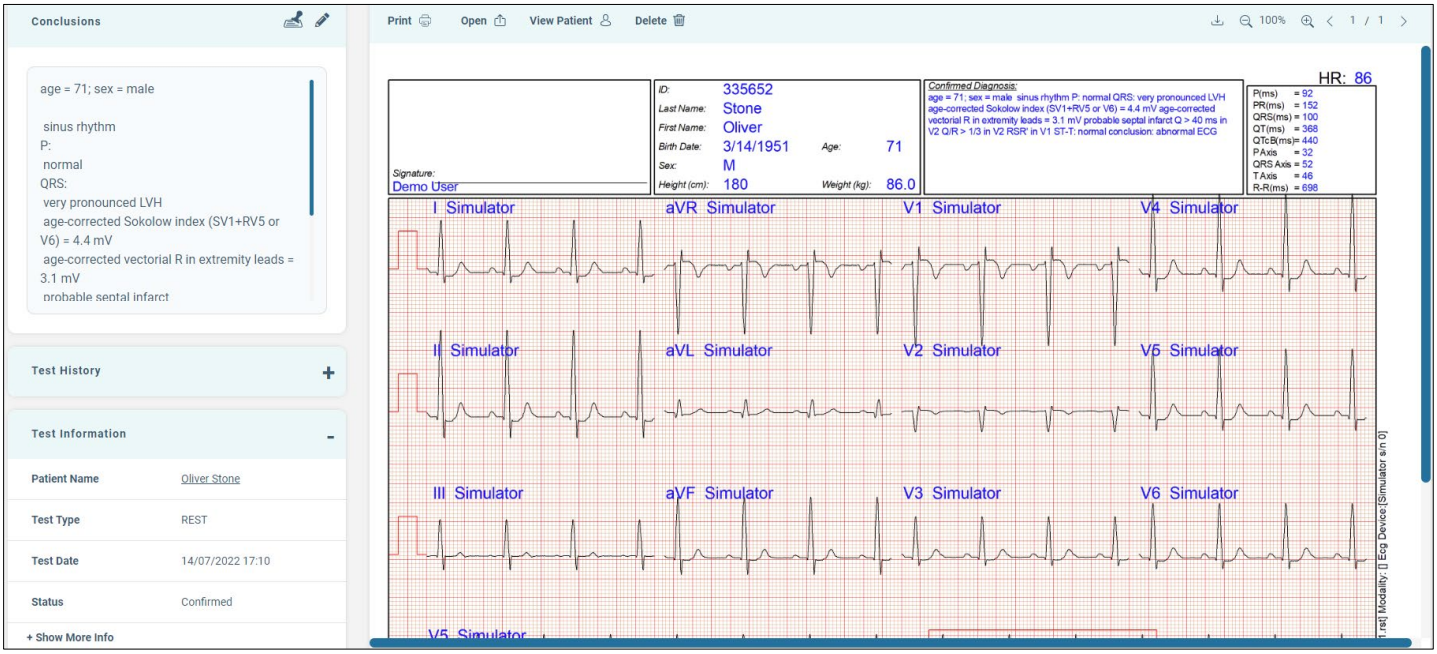


Figure 63: Rest Record Screen

The **Rest Record Screen** includes two parts:

- ◊ The PDF Report Section on the right displays the actual test results.
- ◊ The Patient and Test Information Section on the left allows finding relevant information.

3. To open the **Test History** and/or the **Test Information** section, click  .

Test Results Section

You can perform the following actions in the test results section:

- To print the test results, click Print.
- To open the ECG or BP test via the related Norav application, click Open.
- To open the **Patient Screen**, click View Patient.
- To delete the current test record, click Delete (only by administrator).
- To download the test results as PDF, click .

Patient and Test Information Section

The patient and test information section includes three sections.

1. The **Conclusions Section** includes unconfirmed conclusions and allows reviewing, editing, or deleting the test interpretation for REST test only (see Figure 64).

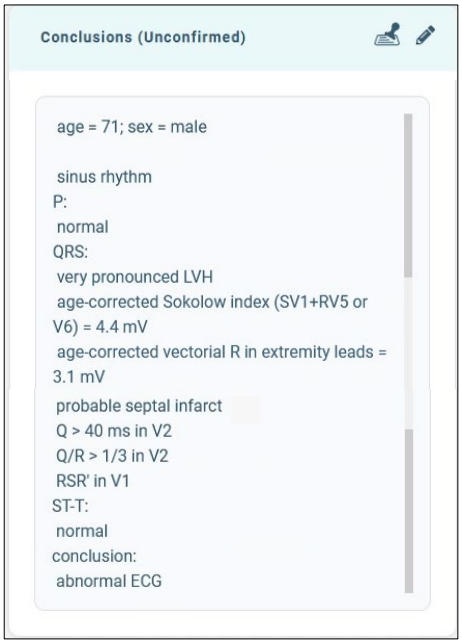


Figure 64: Conclusions Section

2. The **Test History Section** includes modification date, test status, and modifier details and allows reviewing the test cycle and test status (see Figure 65).

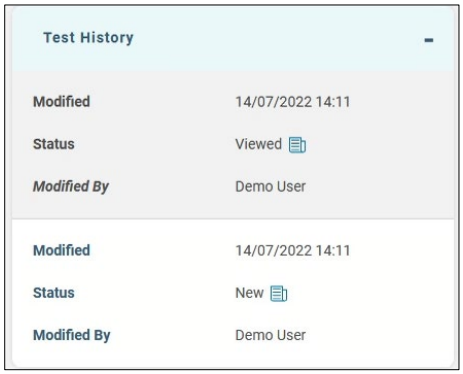


Figure 65: Test History Section

3. The **Test Information Section** displays the most important information about the test (see Figure 66).

Figure 66: Test Information Section

4. To view the entire test information, click + Show More Info and scroll down.

Reviewing Test History Statuses

The history of tests represents the approval cycle of the test. The information is sorted from new to old, and statuses are categorized by approval times and users (see Figure 67).

1. To expand the section, click Test History +.

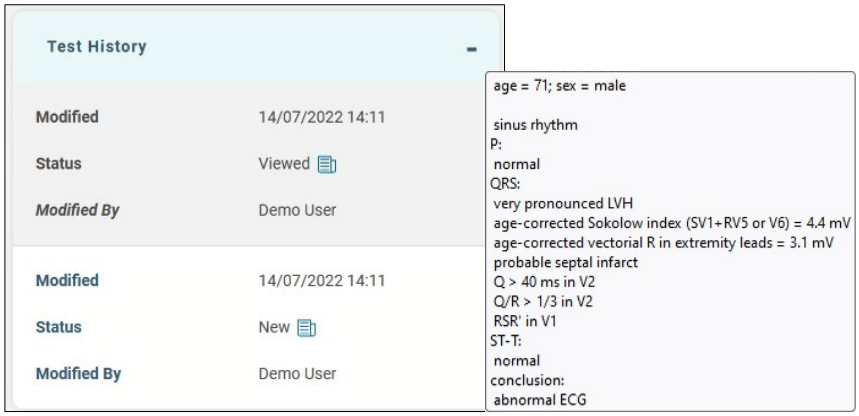


Figure 67: Test History Status

2. To open the conclusion text, hover over the icon (see Figure 67 on the right).
3. To obtain the entire information, scroll down to the bottom of the section.

Reviewing Adding and Confirming REST Test Conclusion by Physician

A physician or technician can review, add only REST test interpretations that have been generated automatically according to the system definition or manually added, and only a physician can confirm REST test conclusions.

1. To open this section, click the **Conclusions** header at the top left (see Figure 68).

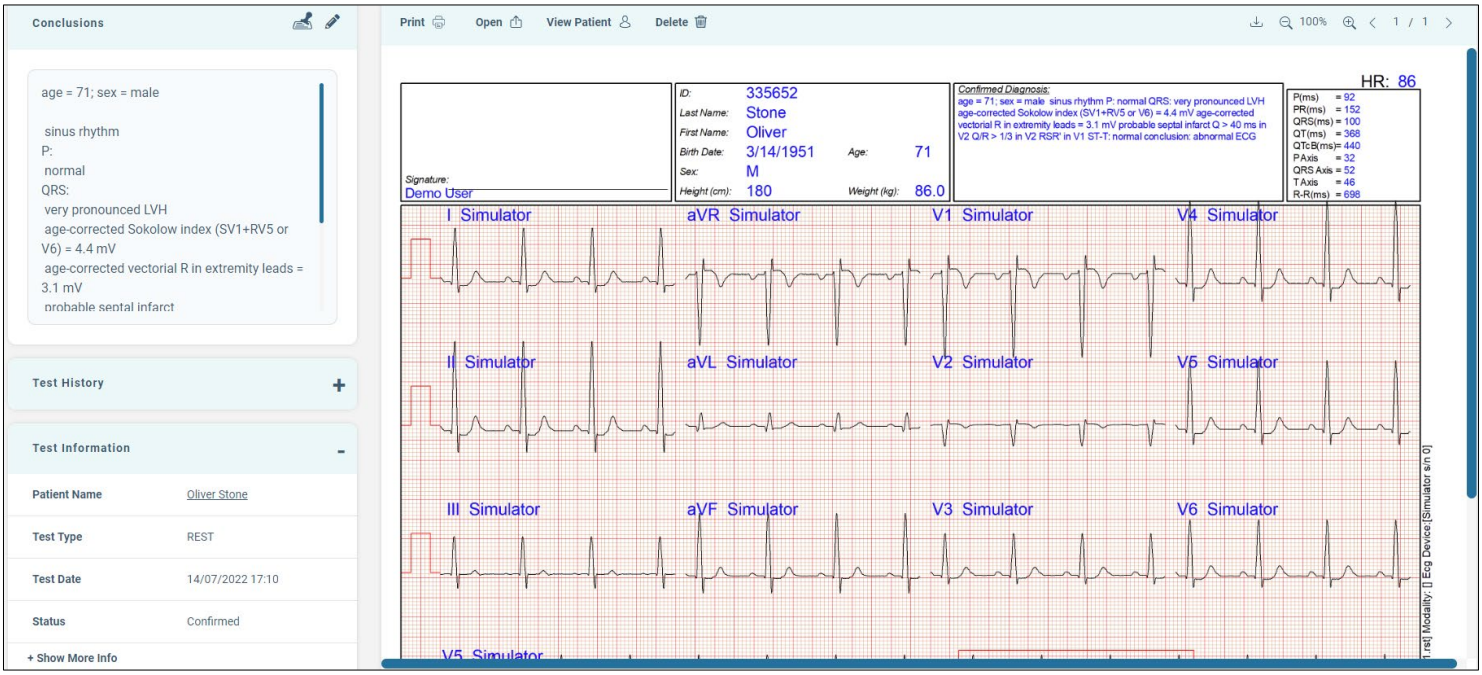


Figure 68: Rest Record Screen

The **Conclusions (Unconfirmed) Section** is displayed (see Figure 69).

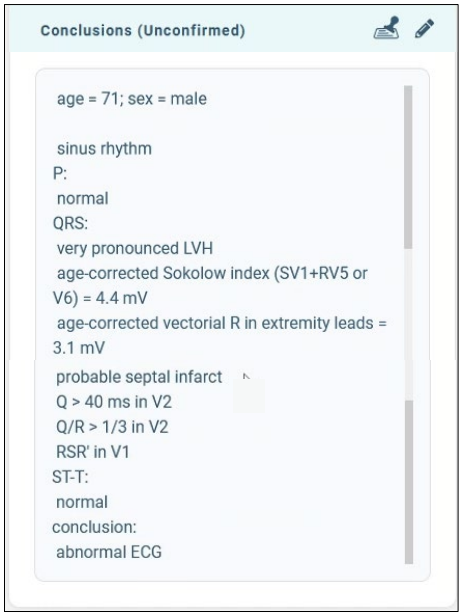


Figure 69: Conclusions (Unconfirmed) Section

2. To confirm the conclusions, click the icon.

The **Confirm Review Dialog Box** is displayed (see Figure 70).

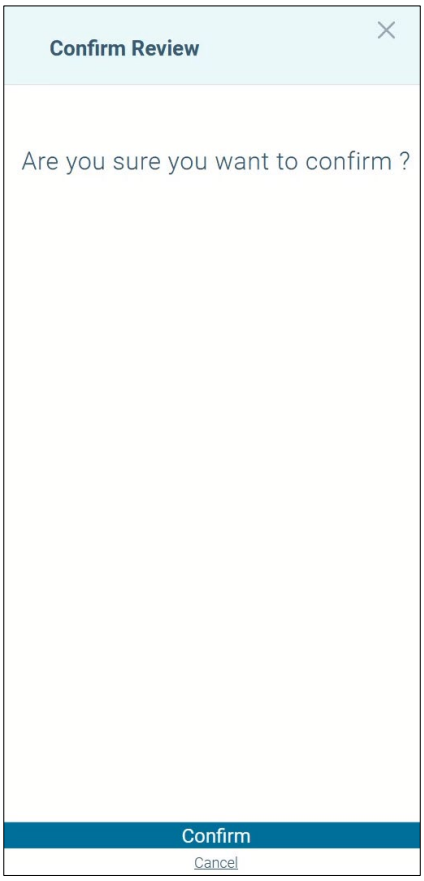


Figure 70: Confirm Review Dialog Box

3. Click Confirm.
4. To edit the conclusions, click the icon.

   During editing, the record status is **In Review**.
5. To save the changes, click Save.

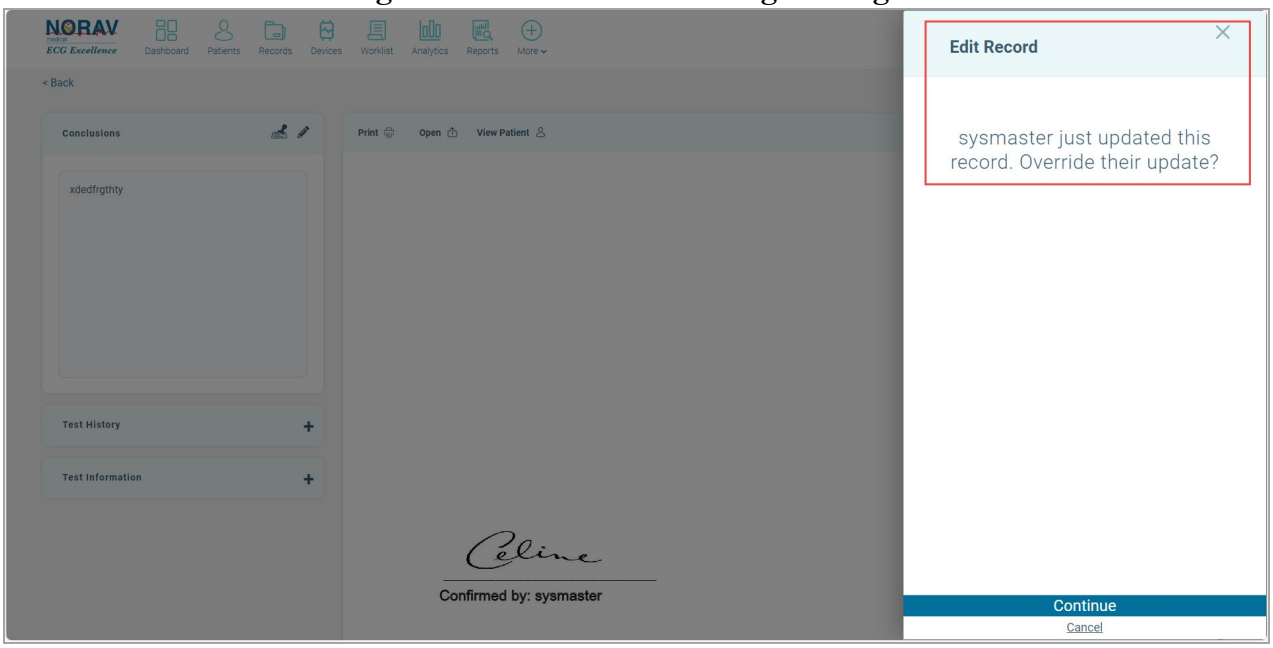
   The record status is changed to **Reviewed**.

   As a result, for every change made, the system automatically generates a new version of the report with the latest conclusions added.

Note	The message The report is updating! This may take a while... is displayed at the top of the screen, indicating the new report is displayed after a few seconds.

Note	In the **Record** screen, if a user attempts to edit or confirm **a new record**, the system will check if another user has already made updates (e.g., changed the status to **In Review**, **Reviewed**, or **Confirmed**) while the current user is working on it. If so, the following warning prompt will appear (see below). Additionally, this warning will be displayed if there are no conflicting sessions, but the record has been previously confirmed by a specialist with the appropriate permissions. This ensures users are aware that the test has already been finalized and confirmed.

Figure 71: Edit Record Warning Message



Reviewing Adding and Confirming STRESS Test Conclusion

1. From the **Records Screen**, select a STRESS test.
2. Click the icon or hover over the ⋮ and click View.

   The **Stress Record Screen** is displayed (see Figure 72).

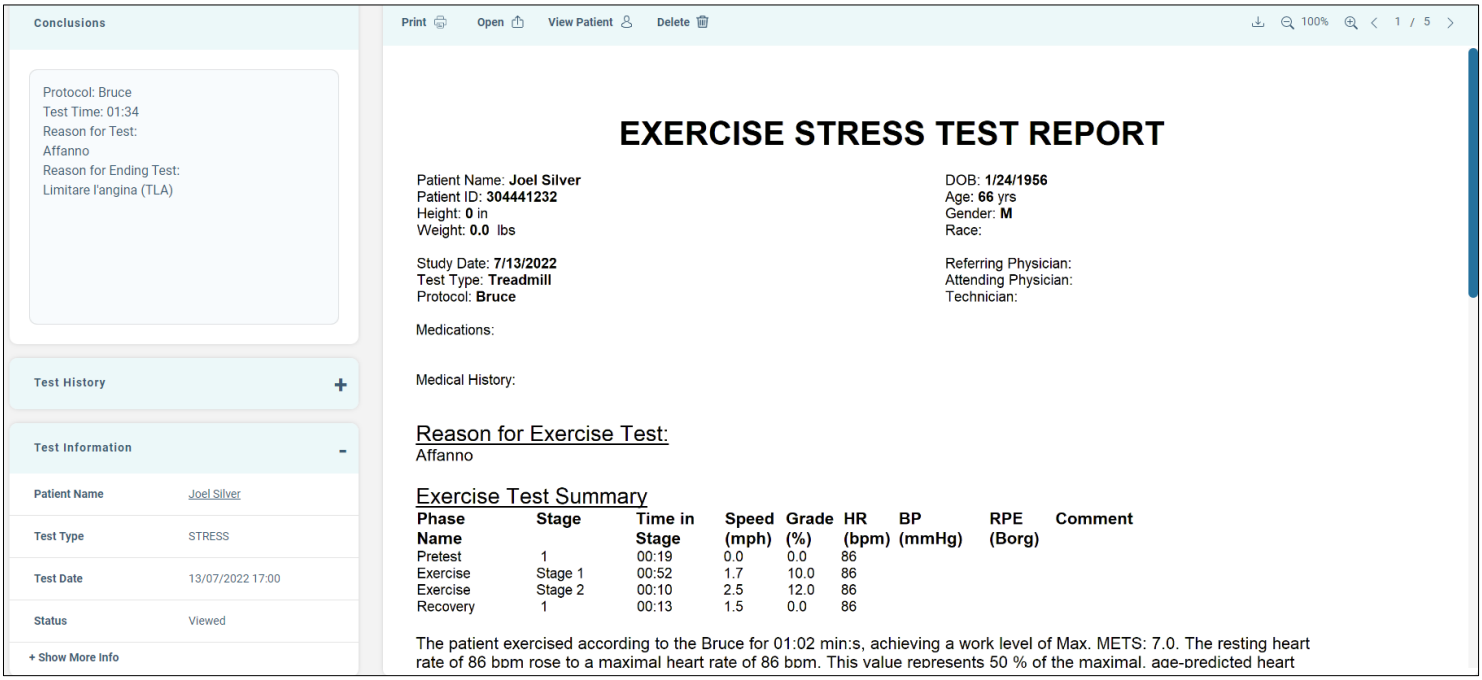


Figure 72: Stress Record Screen

The **Stress Record Screen** includes two parts:

- ◊ The PDF Report Section on the right displays the actual test results.
- ◊ The Patient and Test Information Section on the left allows finding relevant information.

3. To open the **Test History** and/or the **Test Information** section, click +.
4. To open the Stress app., click the Open icon.

The **Stress ECG App** is opened (see Figure 73).

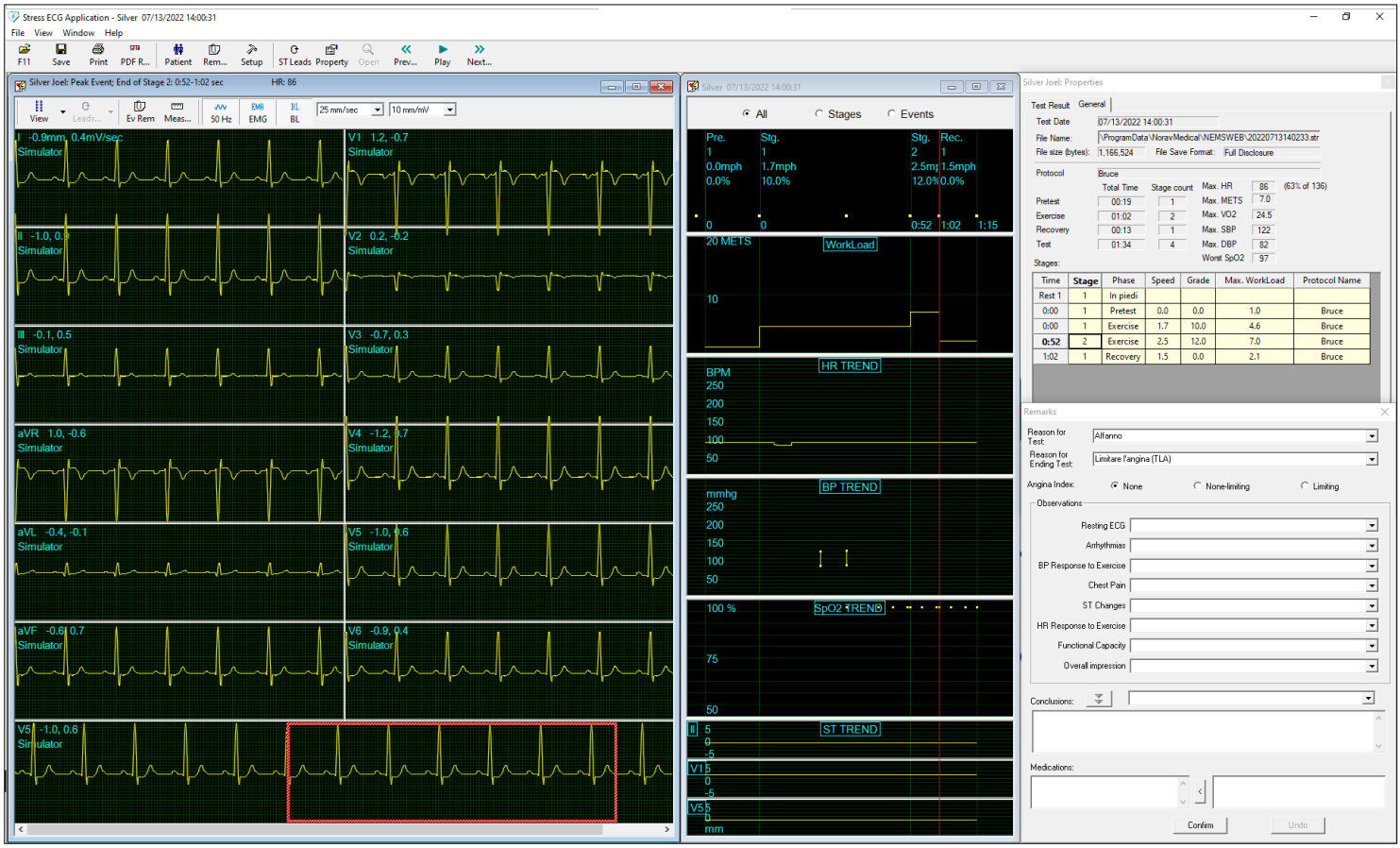


Figure 73: Stress App Screen

5. In the **Remarks** dialog box, fill data or select data from the drop-down lists, and fill the **Conclusion** field.
6. Click **Confirm** and then close the Stress app.

   You are redirected to the NEMS-Web previous screen (see Figure 72).

   Generating the updated report may take a few minutes, after which you can view the report.

Reviewing a New HOLTER Test

1. After downloading the test, open the **Records Screen**.
2. Select the test, click  or hover over the  and then click  .

   The Holter NH-301 app is opened, displaying the **Patient Information** (see Figure 74)

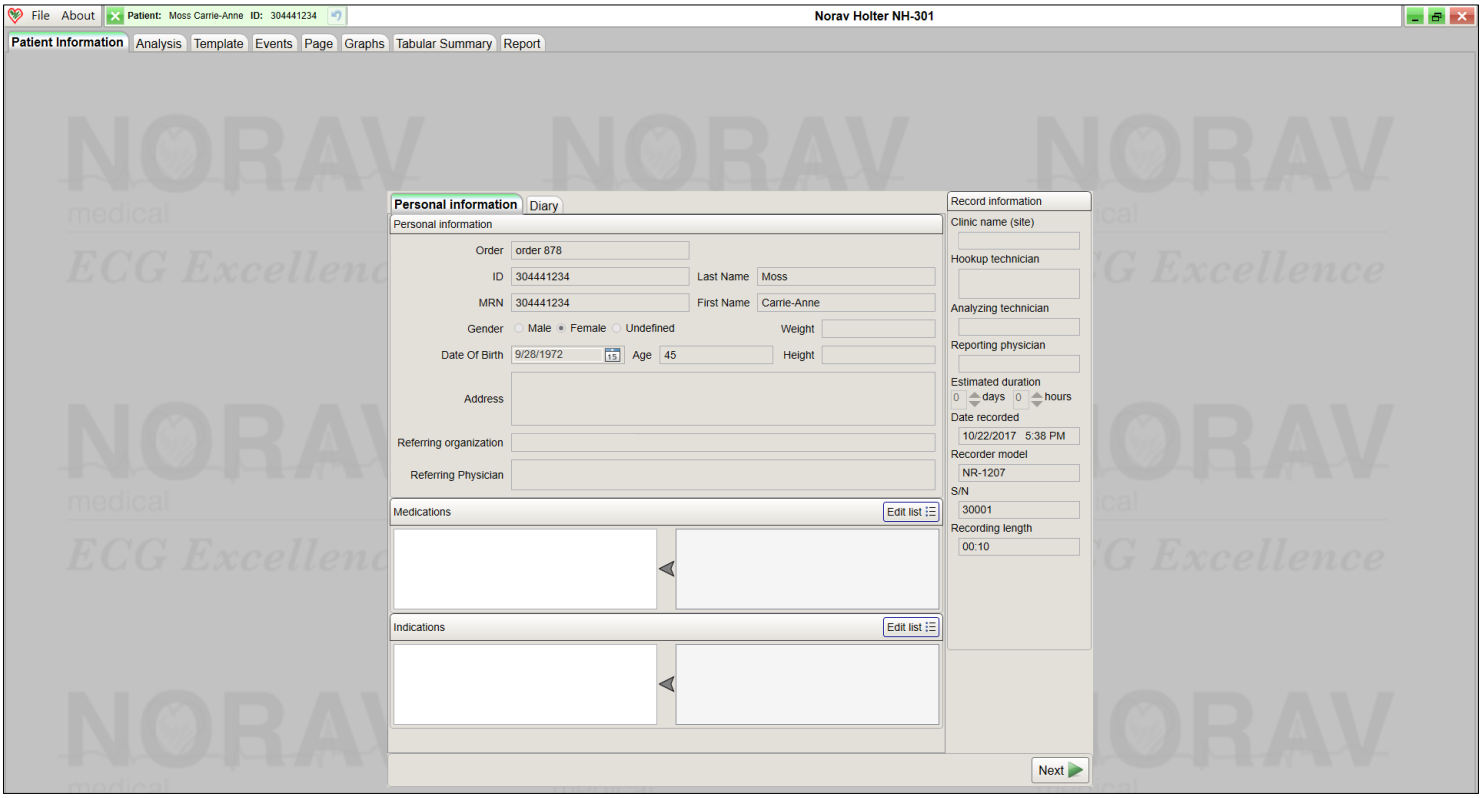


Figure 74: Patient Information Screen

3. Click the  button.

The **Analysis Screen** is displayed (see Figure 75).

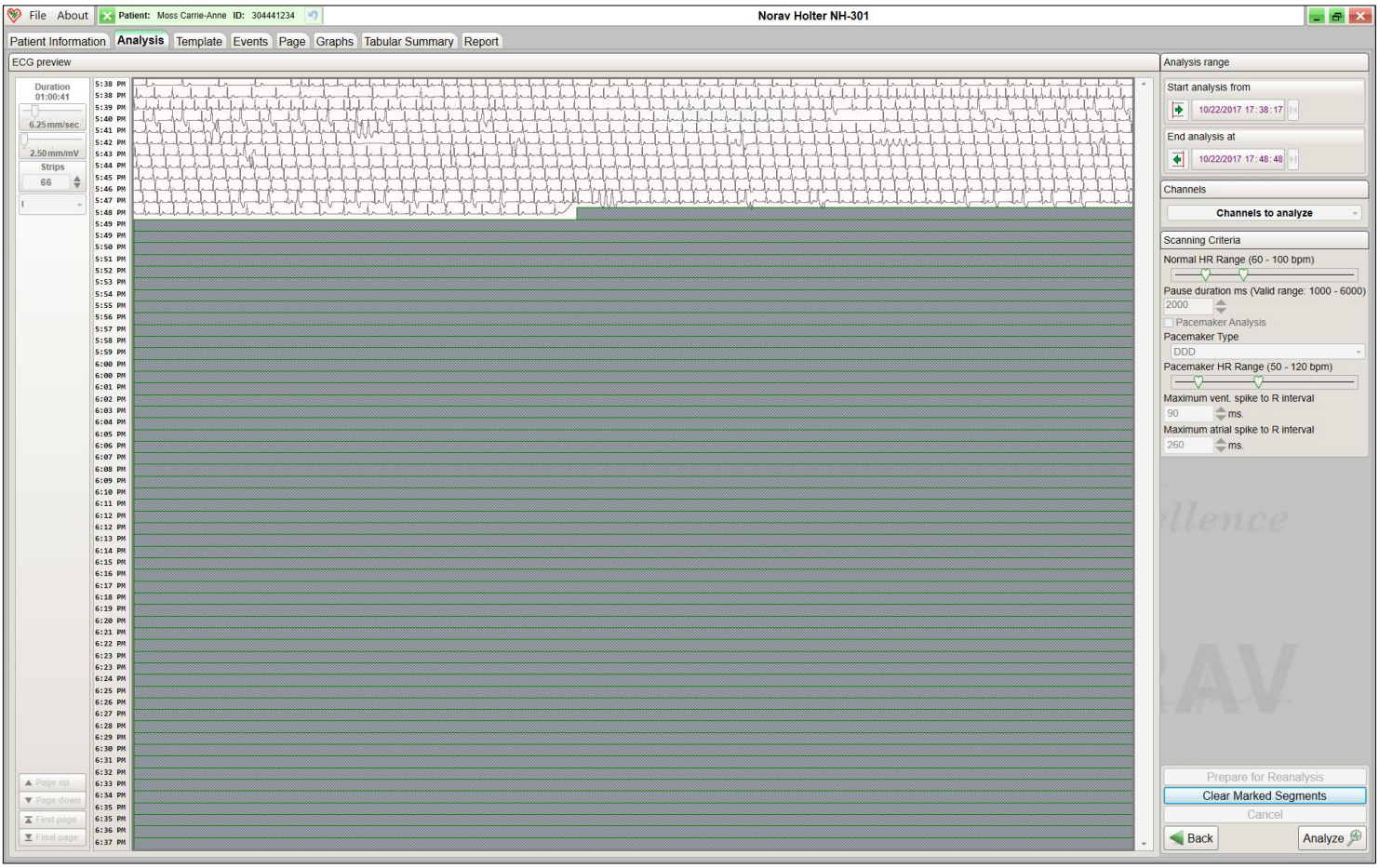


Figure 75: Analysis Screen

4. Analyze the test (see the NH-301 Instructions for Use).
5. Click the Report tab.

The **Report Screen** is displayed (see Figure 76).

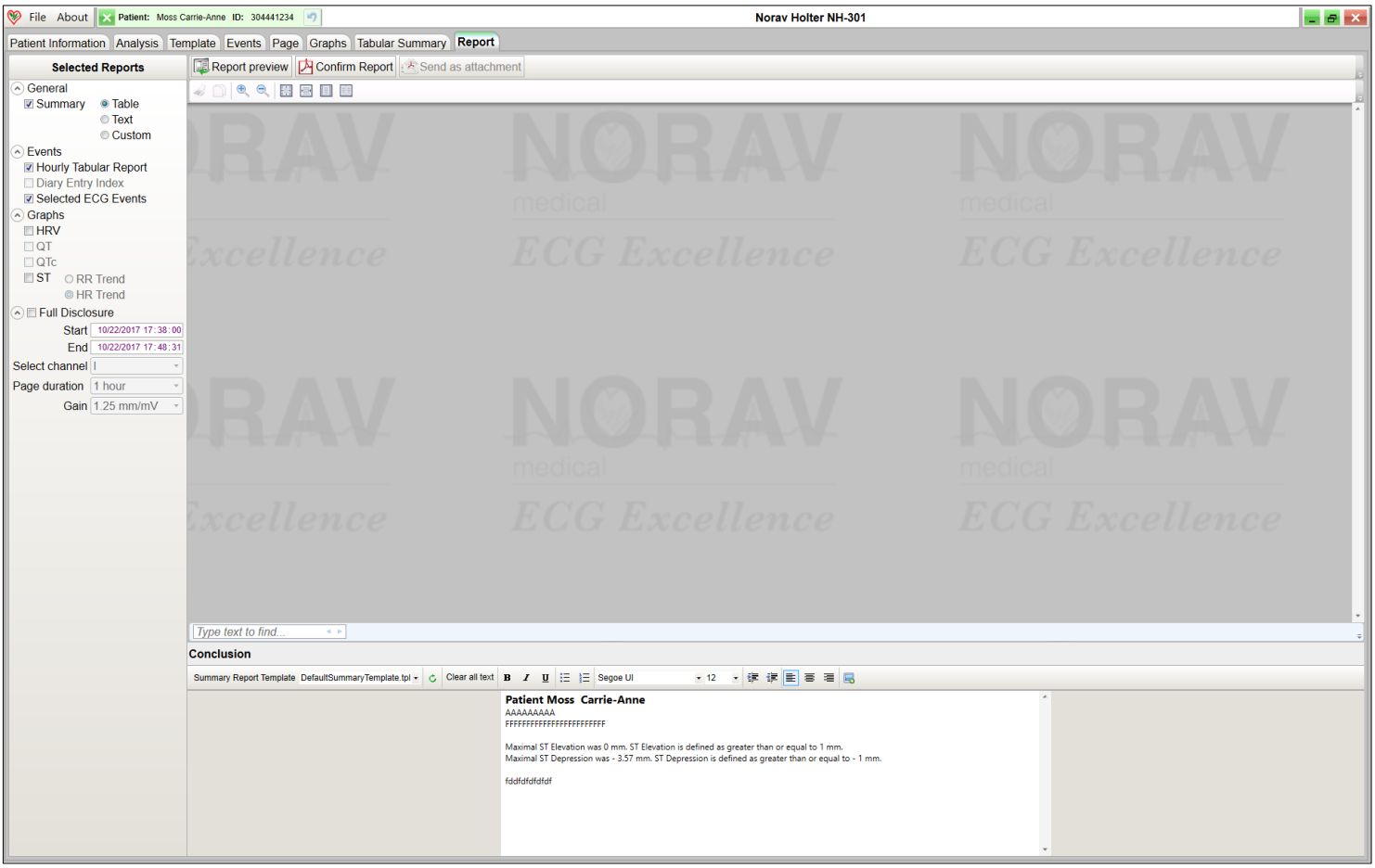


Figure 76: Report Screen

6. In the **Conclusion Section** at the bottom center of the screen, edit the conclusion.
7. Click the Report preview button at the top of the screen.

The revised report preview screen is displayed with the new conclusion (see Figure 77).

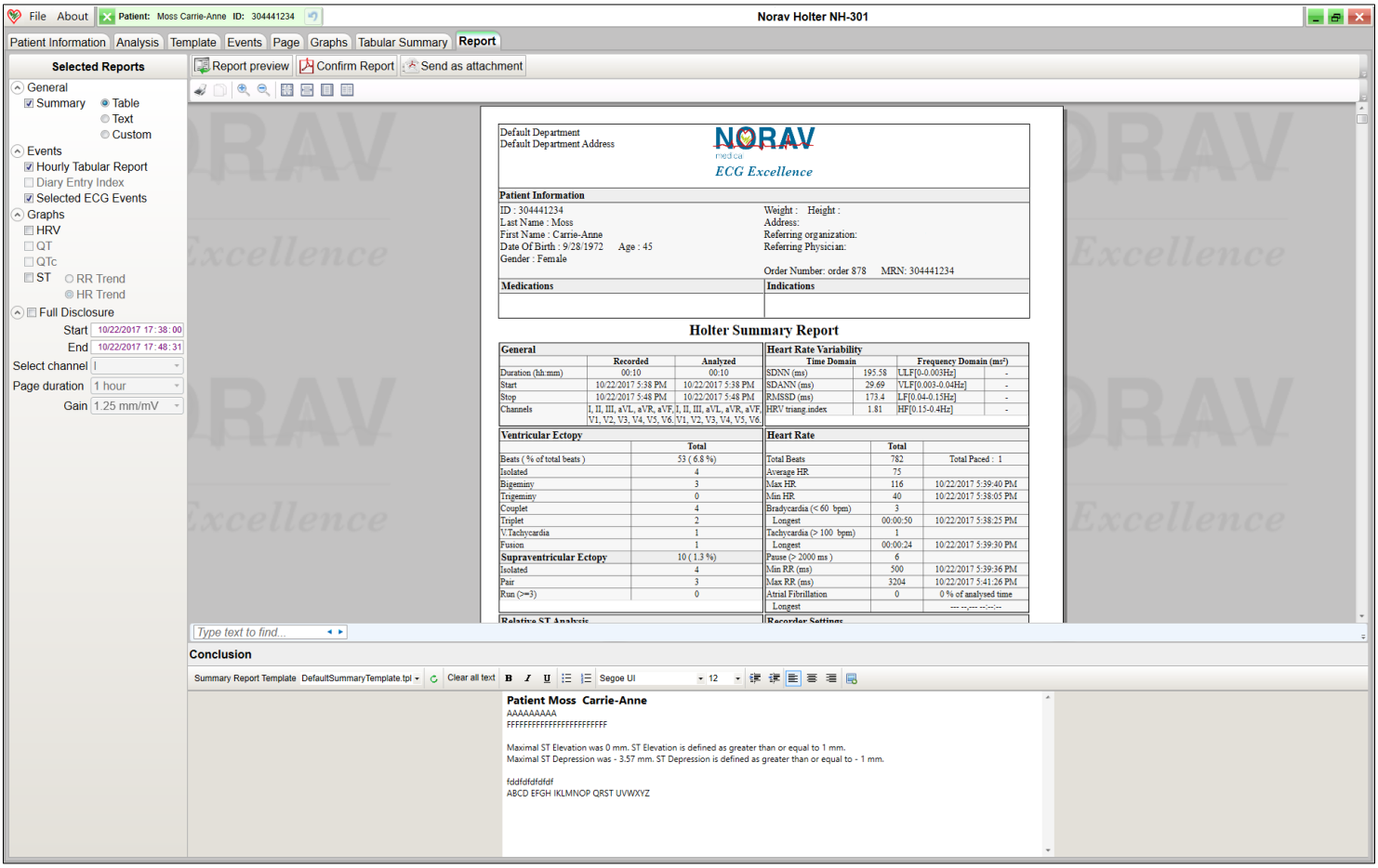


Figure 77: Revised Report Preview Screen

The Revised Report Preview Screen includes two parts:

- ◊ The PDF Report Section in the middle displays the actual test results.
- ◊ The Conclusion Section at the bottom center displays the conclusion.

8. To confirm the revised report, click the Confirm Report button.
   The report is generated.
9. Close the Holter NH-301 app.
   You are redirected to the **Records Screen** (see Figure 10).
   Generating the updated report may take a few minutes, after which you can view the report.

Editing HOLTER Test Conclusion

Editing HOLTER Test Conclusion via NH-301 Application

1. To open a **HOLTER Record Screen**, click  or hover over the ⋮ and then click Review (see Figure 78).

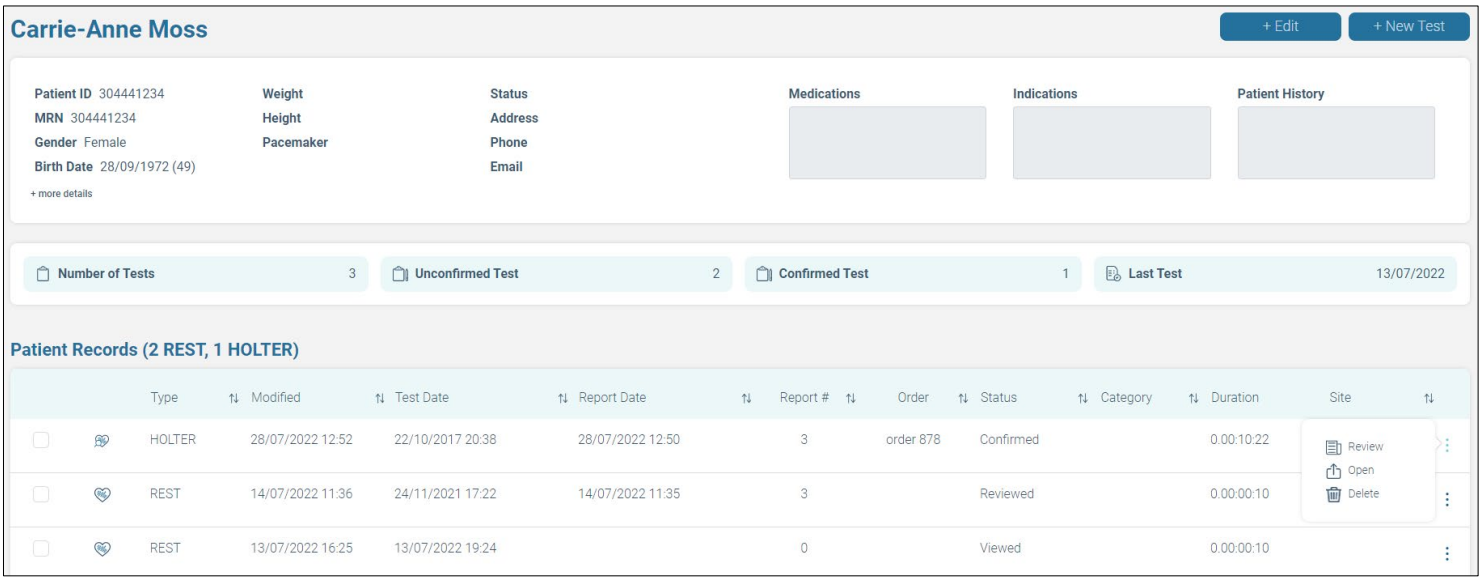


Figure 78: Patient Screen

The **Holter Record Screen** is displayed (see Figure 79).

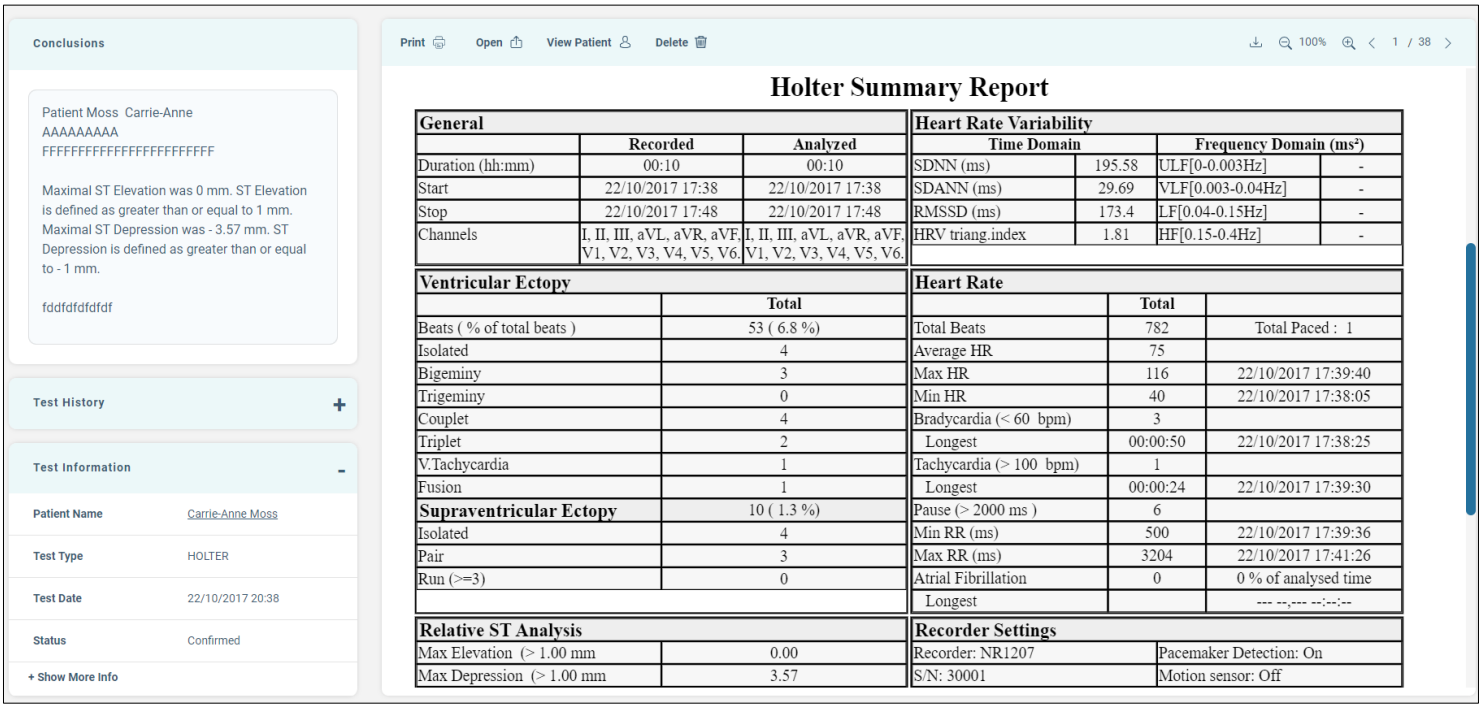


Figure 79: Holter Record Screen

The **Holter Record Screen** includes two parts:

- ◊ The PDF Report Section on the right displays the actual test results.
- ◊ The Patient and Test Information Section on the left allows finding relevant information.

2. To open the **Test History** and/or the **Test Information** section, click ➕.
3. Click the Open icon (see Figure 78).

The Holter NH-301 app is opened, displaying the **Patient's Personal Information** (see Figure 80).

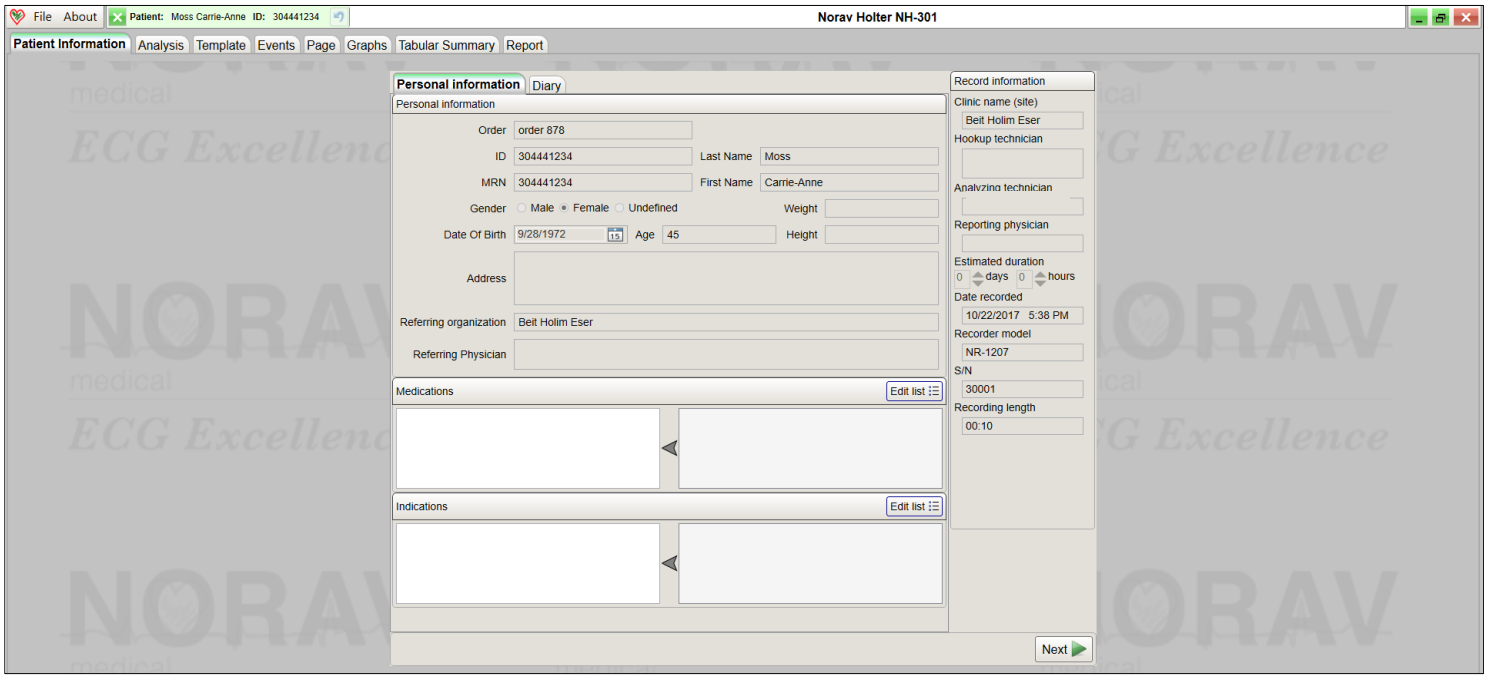


Figure 80: Patient's Personal Information

4. Click the Next tab.

The **Holter Analysis Screen** is displayed (see Figure 81).

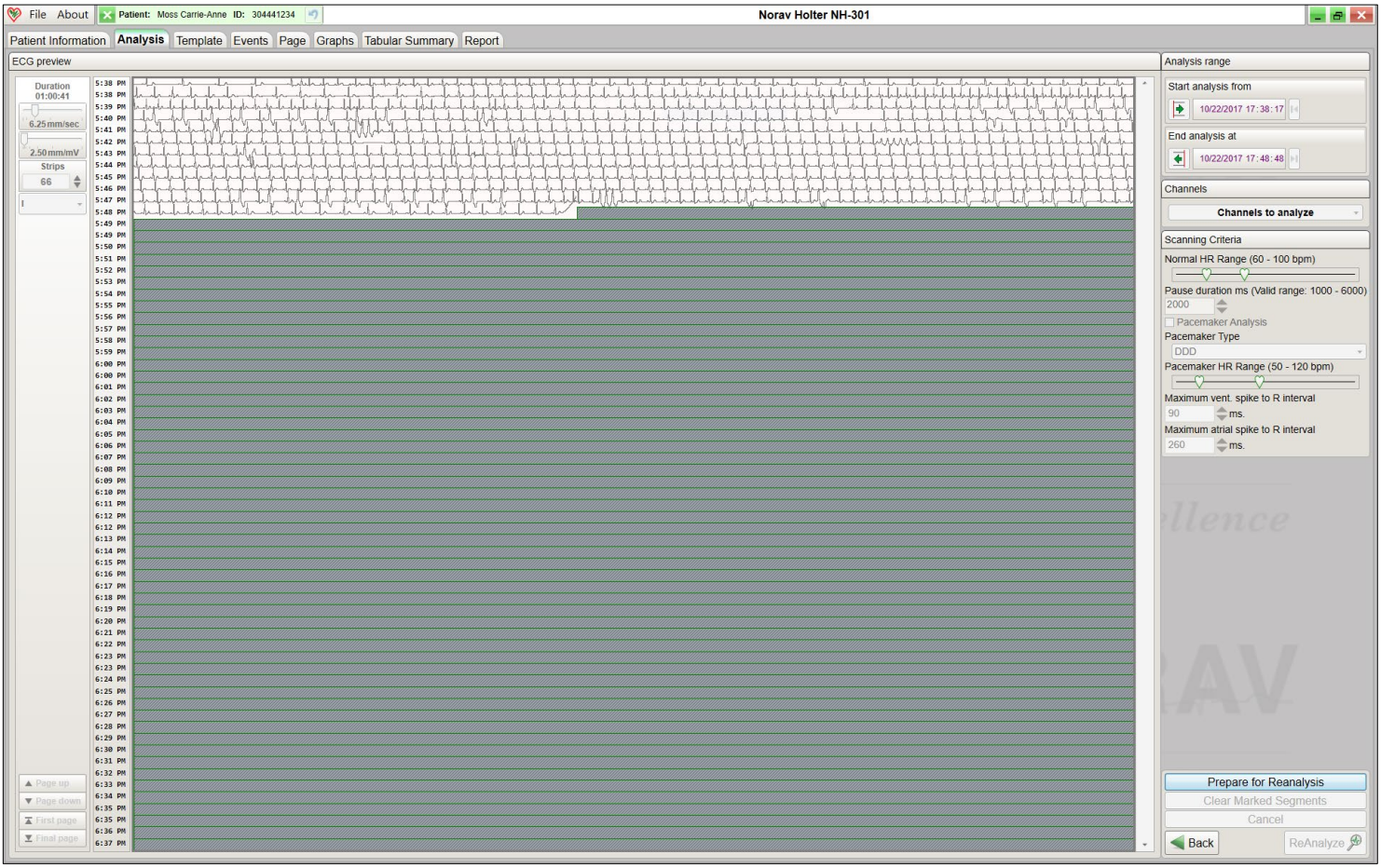


Figure 81: Holter Analysis Screen

5. Click the Report tab.

The **Holter Report Screen** is displayed (see Figure 82).

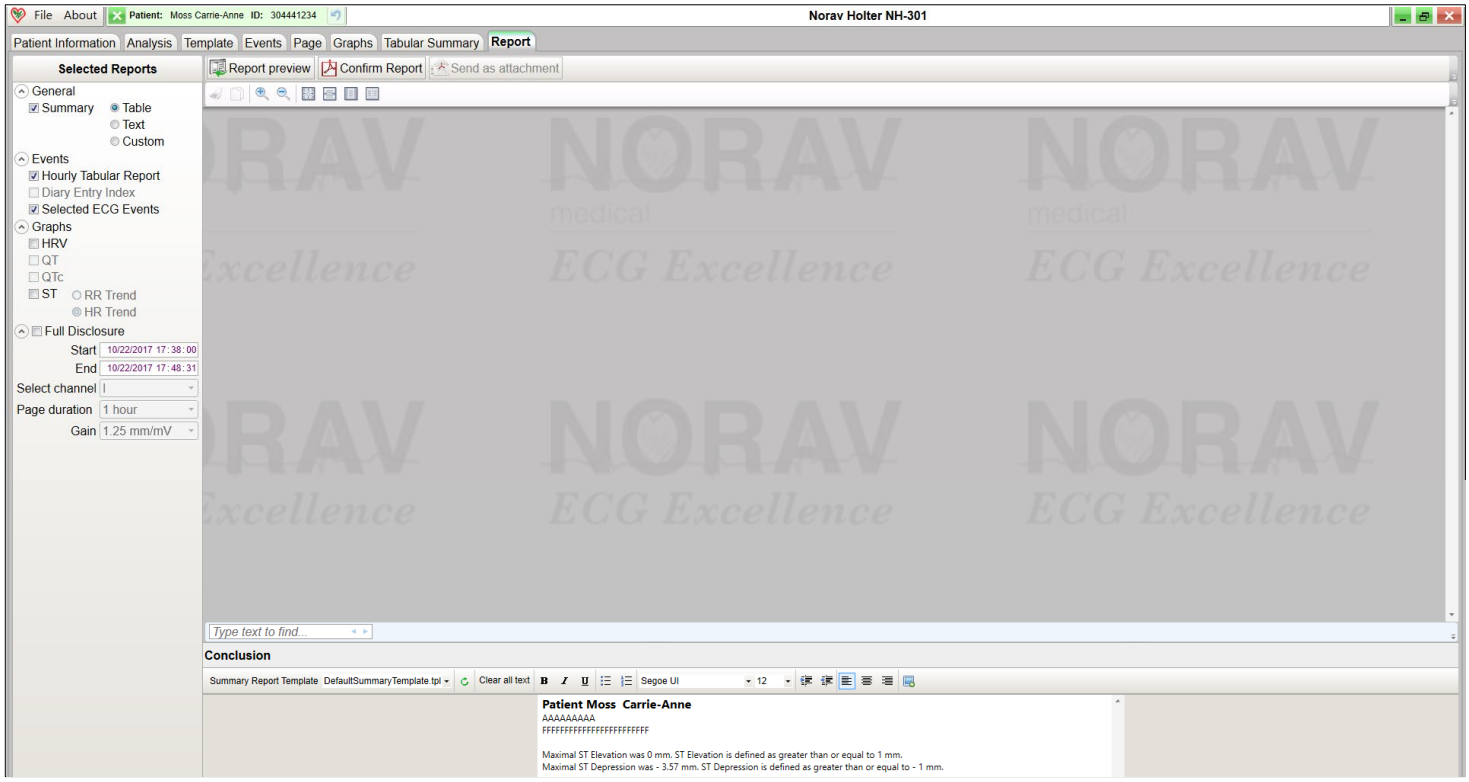


Figure 82: Holter Report Screen

6. In the **Conclusion Section** at the bottom center of the screen, edit the conclusion.
7. Click the Report preview button at the top of the screen.

   The Holter NH-301 app displays the revised Holter report preview (see Figure 83).

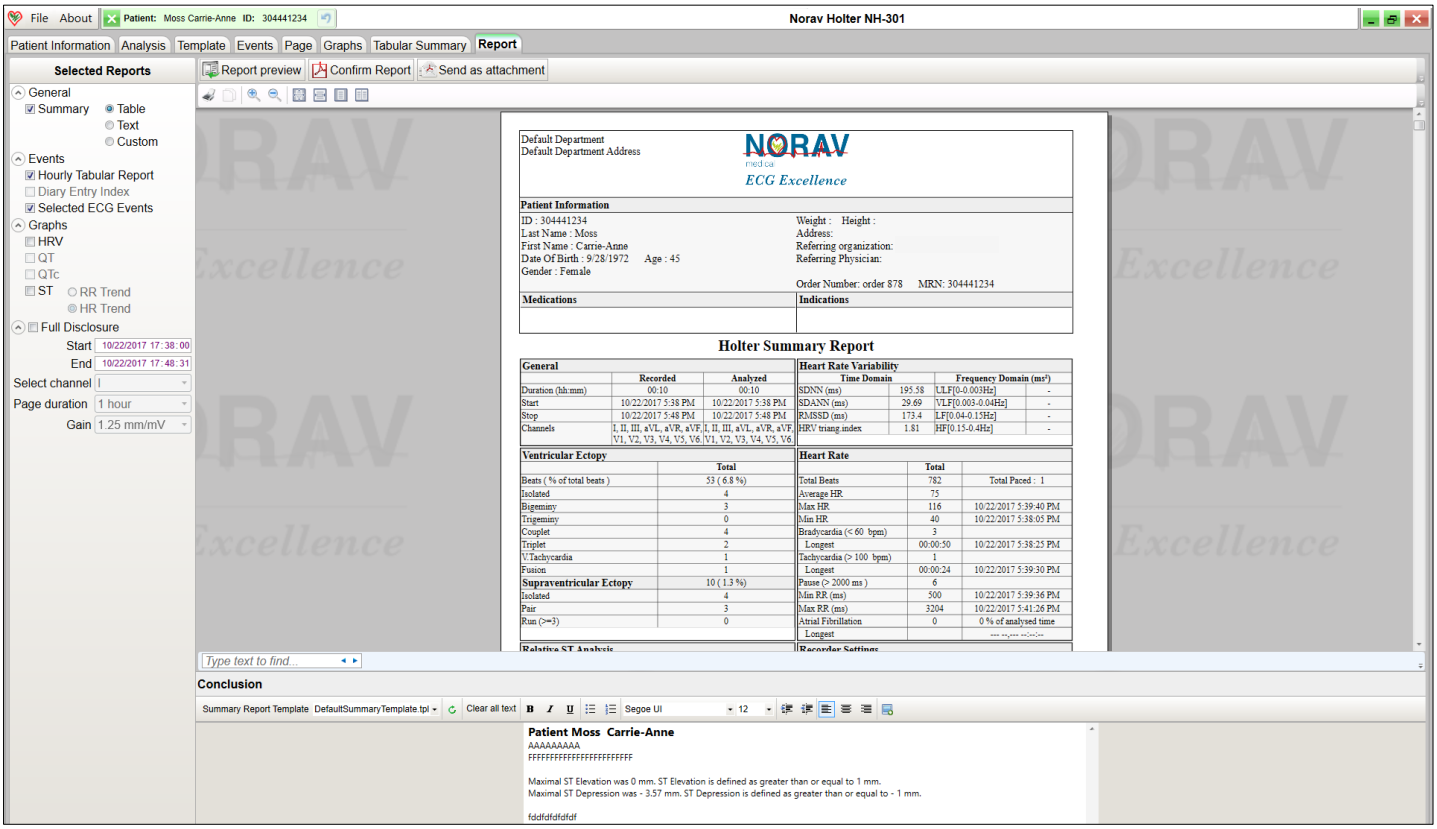


Figure 83: Revised Holter Report Preview Screen

8. To confirm the revised report, click the Confirm Report button.
   A new report is generated.
9. Close the Holter NH-301 app.
   You are redirected to the **Records Screen** (see Figure 10).
   Generating the updated report may take a few minutes, after which you can view the report.
10. To open the PDF report from the **Confirmed Reports Section** on the **Dashboard Screen**, click the View Report button.
    The **Holter PDF Report** is displayed (see Figure 84).

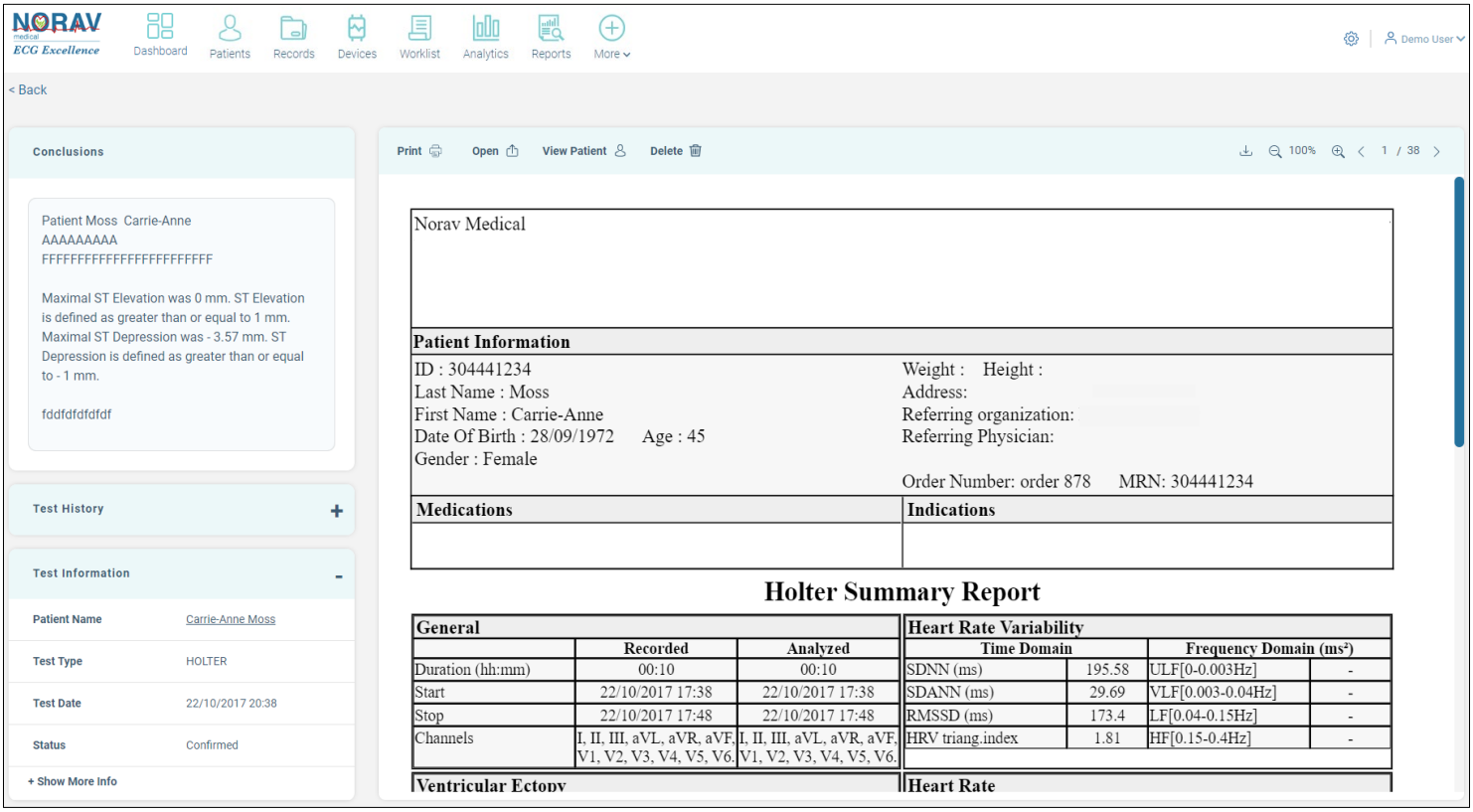
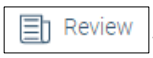


Figure 84: Holter PDF Report

Editing HOLTER Test Conclusion within NEMS-Web

1. To open a **HOLTER Record Screen**, click  or hover over the  and then click  . The **Holter Record Screen** is displayed (see Figure 79).

   The **Holter Record Screen** includes two parts:
   - ◊ **PDF Report Section:** Located on the right, it displays the actual test results.
   - ◊ **Patient and Test Information Section:** Located on the left, it provides relevant information.

2. To edit the test conclusion, click the **Review** icon in the upper-right corner of the **Conclusions** text field to unlock the text field for editing (see Figure 85). **Note:** You need review permissions in NEMS-Web, and Holter/ABPM review editing must be **enabled in General Settings** to edit the conclusion.

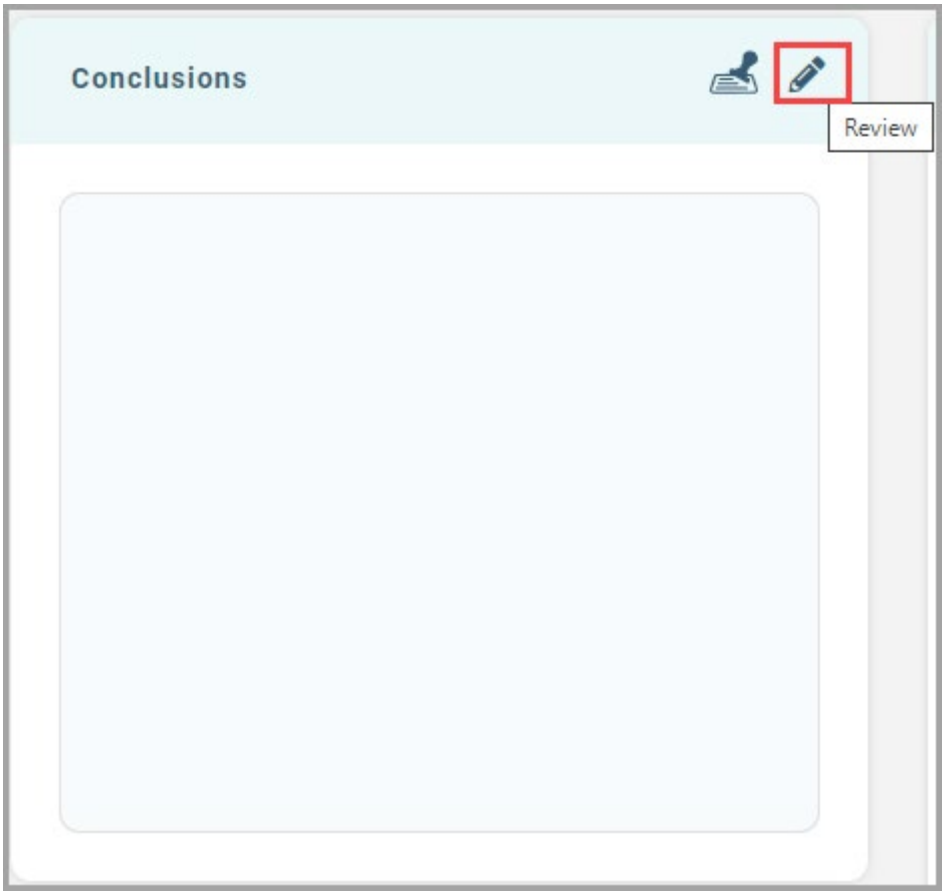


Figure 85: Holter Conclusions Review

3. Enter the desired text into the **Conclusions** text field.
4. Click **Save** in the bottom-right corner of the **Conclusions** text field. A new page with the conclusion text and patient data will be displayed as the first page of the updated report. This additional page is added before the report pages only during conclusion editing within the NEMS-Web system.

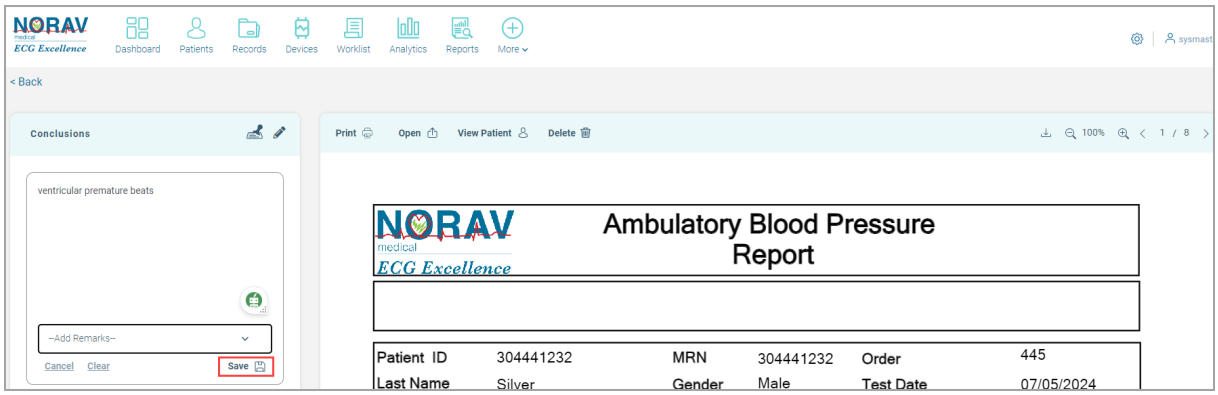


Figure 86: Saving Conclusion

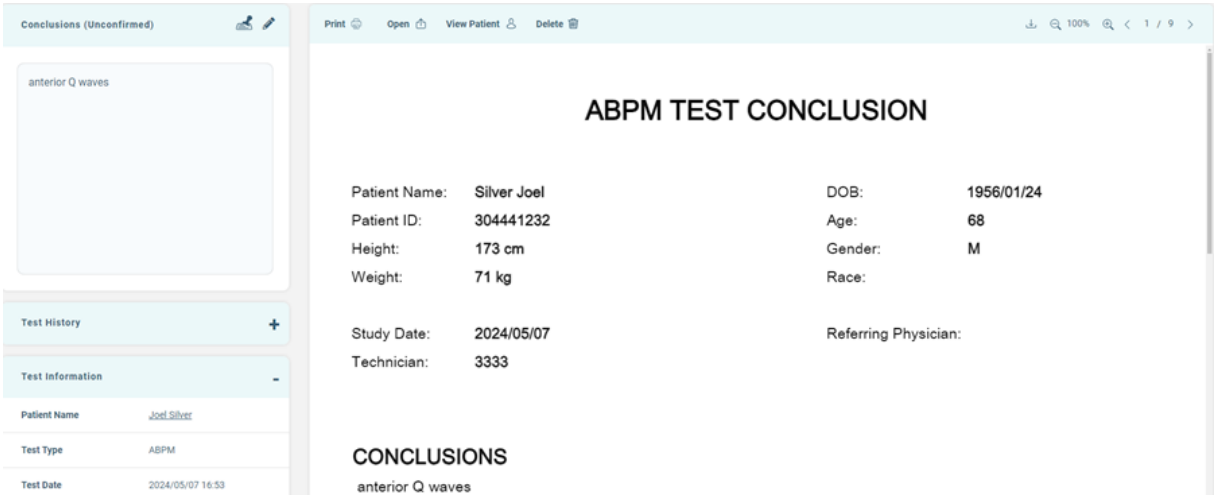


Figure 87: Updated Report Page

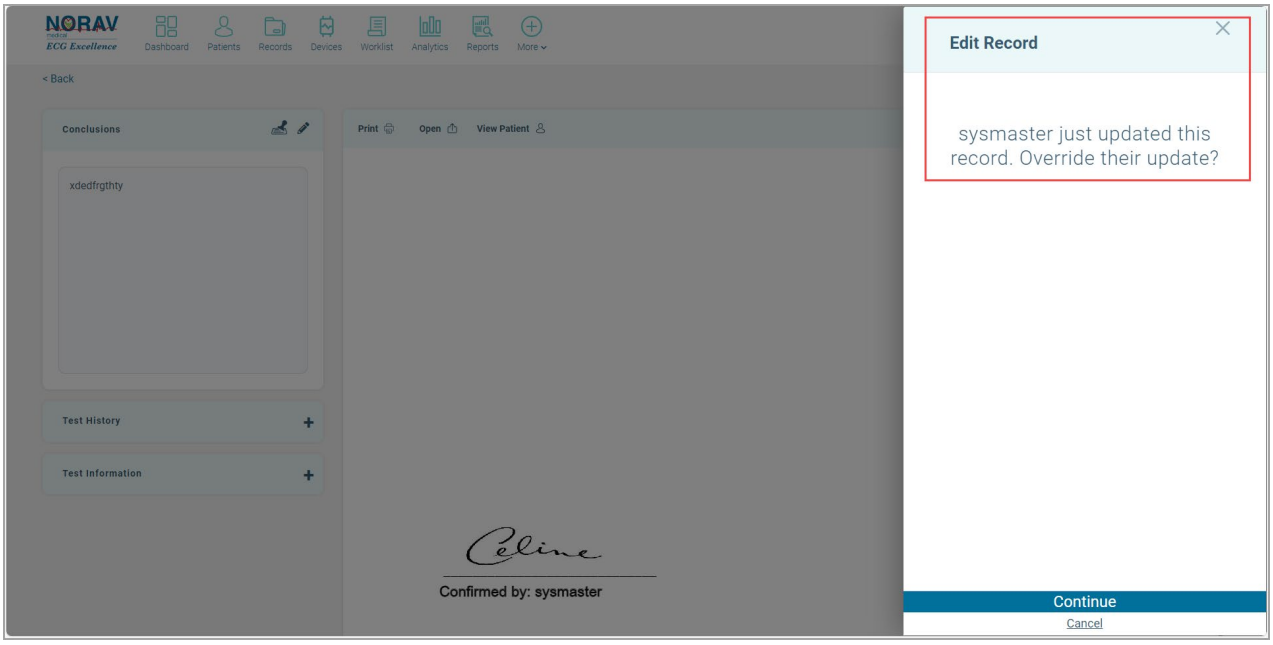


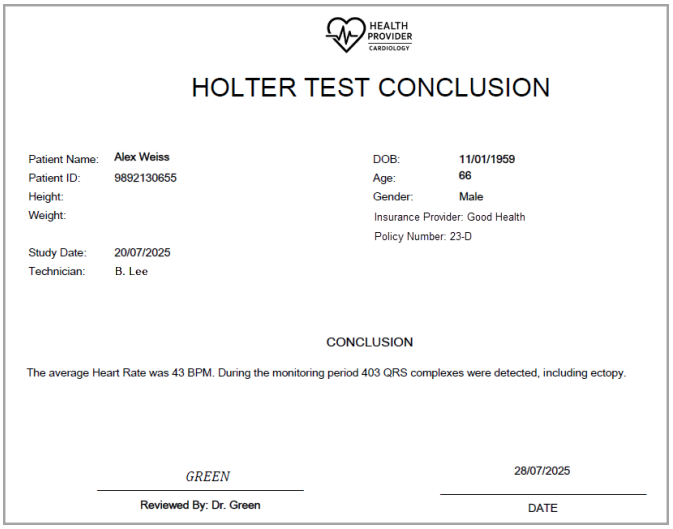
Figure 88: Edit Record Warning Message

 **Note**	In the **Record** screen, if a user attempts to edit or confirm **a new record**, the system will check if another user has already made updates (e.g., changed the status to **In Review**, **Reviewed**, or **Confirmed**) while the current user is working on it. If so, the following warning prompt will appear (see below). Additionally, this warning will be displayed if there are no conflicting sessions, but the record has been previously confirmed by a specialist with the appropriate permissions. This ensures users are aware that the test has already been finalized and confirmed.

Custom Summary Page Templates

This feature allows healthcare organizations to request a custom summary page template for **ABPM and Holter reports** in NEMS-Web. The template, provided by Norav Medical, can include your company logo, contact information, and additional patient information fields (such as extended demographic or clinical data).

Once configured, the custom summary page is automatically applied as the first page of each ABPM or Holter report whenever a physician **reviews or confirms the report in NEMS-Web**, ensuring consistent branding and standardized information.



HEALTH PROVIDER CARDIOLOGY

HOLTER TEST CONCLUSION

Patient Name:	Alex Weiss	DOB:	11/01/1959
Patient ID:	9892130655	Age:	66
Height:		Gender:	Male
Weight:		Insurance Provider:	Good Health
		Policy Number:	23-D
Study Date:	20/07/2025		
Technician:	B. Lee		

CONCLUSION

The average Heart Rate was 43 BPM. During the monitoring period 403 QRS complexes were detected, including ectopy.

GREEN
Reviewed By: Dr. Green

28/07/2025
DATE

Figure 89: Example of a custom summary page template

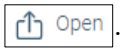
Requesting a Template

To enable this feature, contact Norav Medical and provide your logo, contact details, and any additional patient information fields you want included. Norav Medical will configure and deliver the template for seamless integration with your NEMS-Web installation.

Note	The summary page template can only be created and updated by Norav Medical.

Note	It is available **exclusively for ABPM and Holter reports** and cannot be applied to REST or STRESS reports.

Reviewing a New ABPM Test

1. After downloading the test, open the **Records Screen**.
2. Select the test, click  or hover over the  and then click  .
   NEMS-A is opened, displaying the **Patient and Record Information Screen** (see Figure 90).

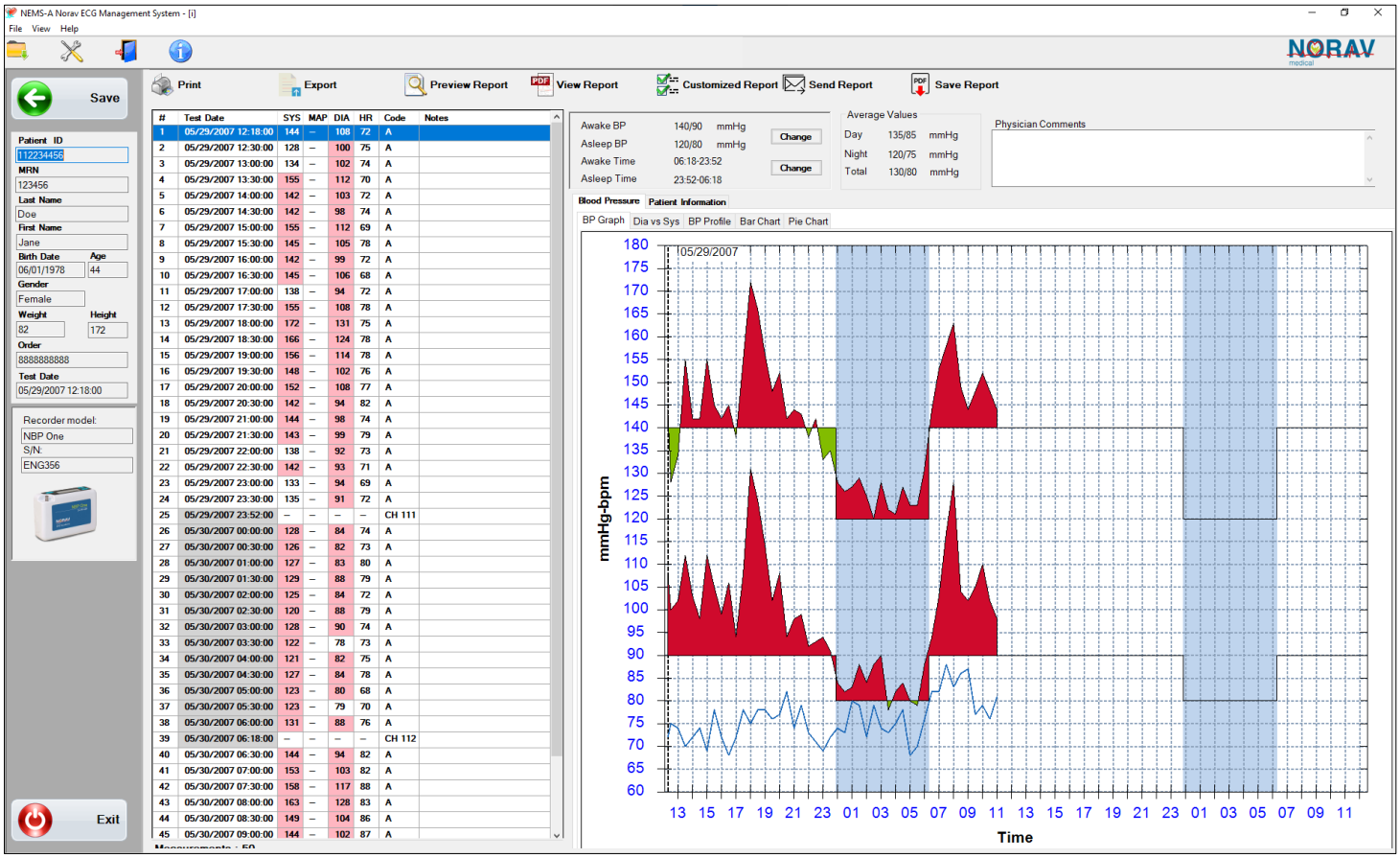


Figure 90: Patient and Record Information Screen

3. In the **Physician Comments** field at the top right of the screen, add comments.
4. Click  , select the items to be included in the report, and then click 
   (see Figure 91).

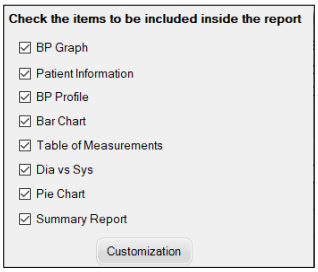
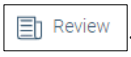


Figure 91: Customization Window

5. To view the PDF report preview, click  .
6. Click  .
   A prompting confirmation dialog box is displayed.
7. Click **OK**.
   You are redirected to NEMS-Web.
   Generating the new report may take a few minutes, after which you can view the report.
   The record status is changed to **Confirmed**.

Editing ABPM Test Conclusion

1. To open the **ABPM Record Screen**, click  or hover over the  and then click  .
   NEMS-A is opened displaying the **ABPM Review Screen** (see Figure 92).

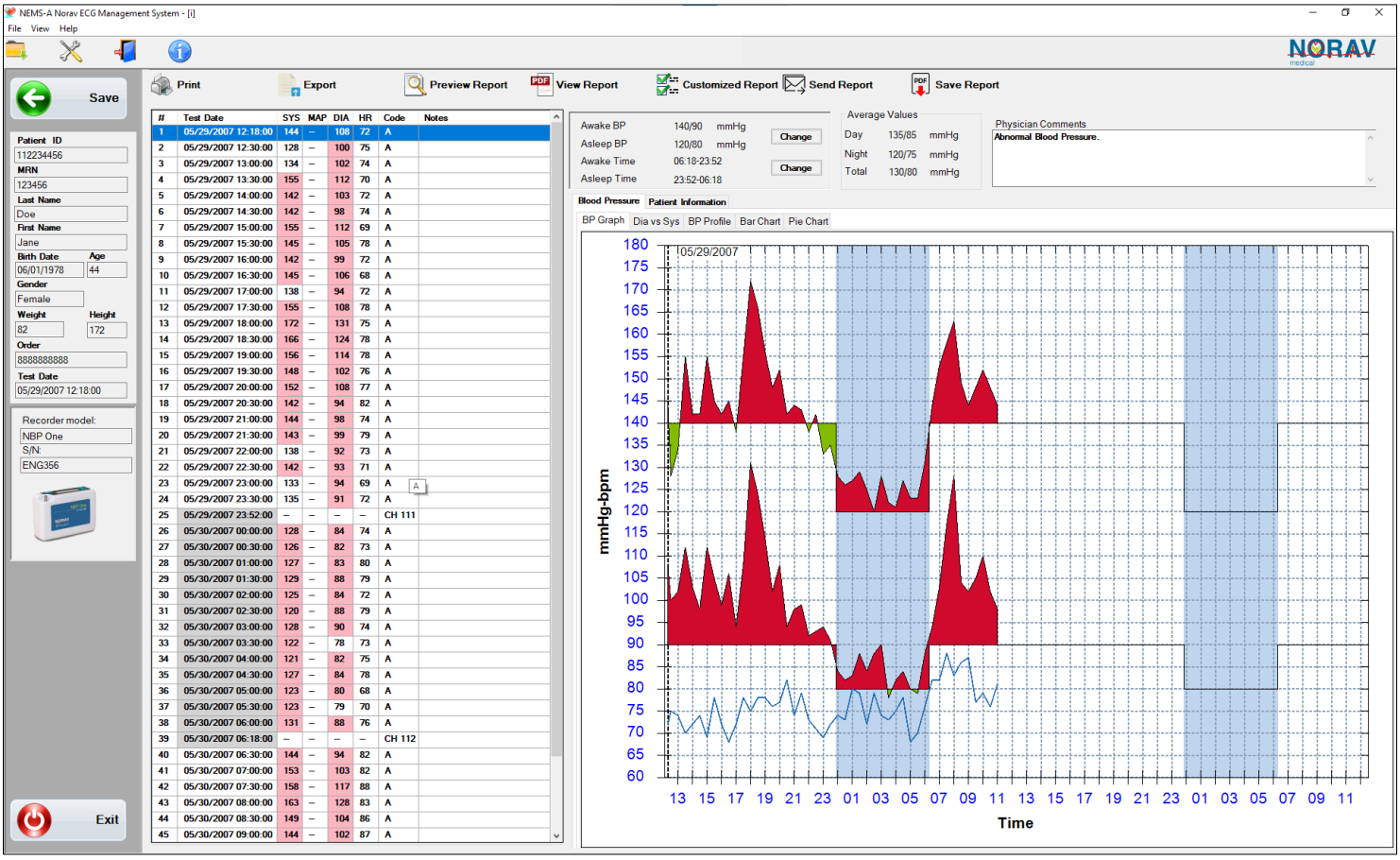


Figure 92: ABPM Review Screen

2. In the **Physician Comments** field at the top right of the screen, edit the comments.
3. Click  .
   You are redirected to NEMS-Web.
   Generating the new report may take a few minutes, after which you can view the report.

Editing ABPM Test Conclusion within NEMS-Web

1. To open an **ABPM Record Screen**, click  or hover over the  and then click  . The **ABPM Record Screen** is displayed.

2. To edit the test conclusion, click the **Review** icon in the upper-right corner of the **Conclusions** text field to unlock the text field for editing. **Note:** You need review permissions in NEMS-Web, and Holter/ABPM review editing must be **enabled in General Settings** to edit the conclusion.

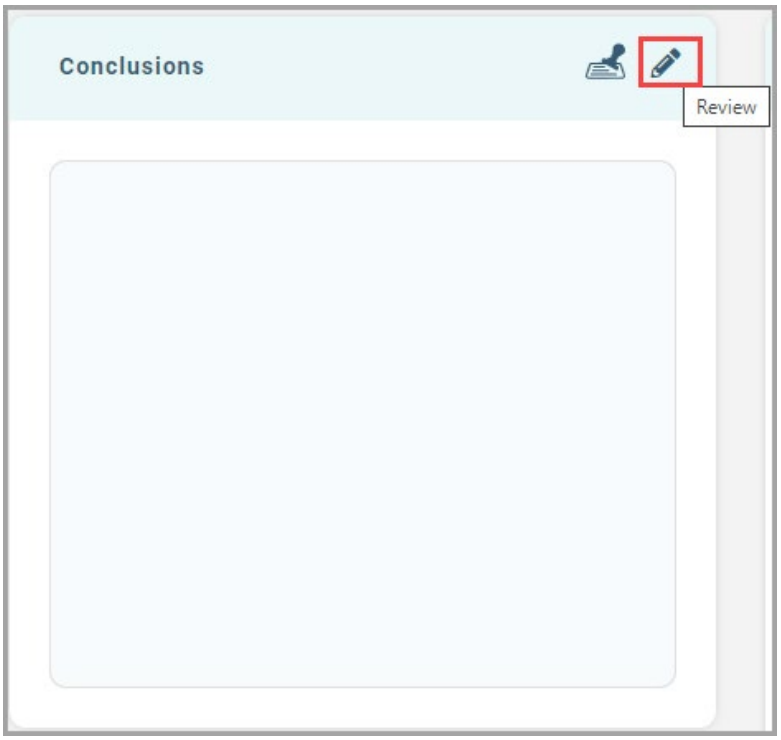


Figure 93: ABPM Conclusions Review

3. Enter the desired text into the **Conclusions** text field.
4. Click **Save** in the bottom-right corner of the **Conclusions** text field. A new page with the conclusion text and patient data will be displayed as the first page of the updated report. This additional page is added before the report pages only during conclusion editing within the NEMS-Web system.

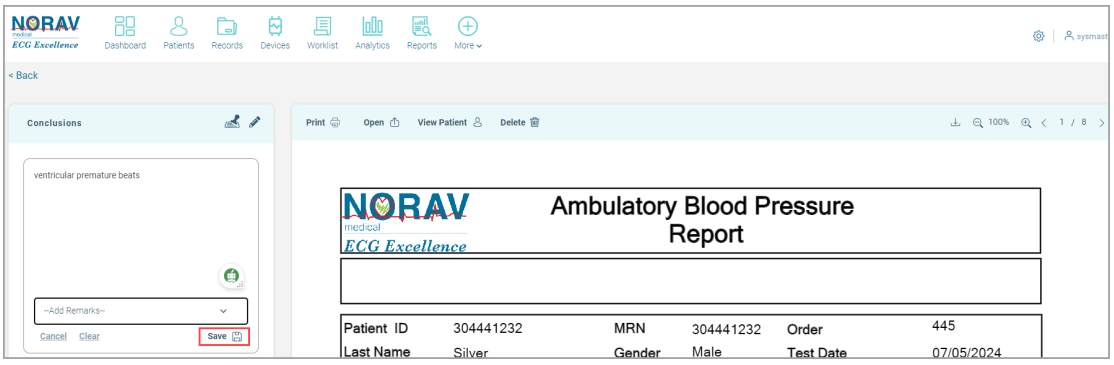


Figure 94: Saving Conclusion

Note	In the **Record** screen, if a user attempts to edit or confirm **a new record**, the system will check if another user has already made updates (e.g., changed the status to **In Review**, **Reviewed**, or **Confirmed**) while the current user is working on it. If so, the following warning prompt will appear (see below). Additionally, this warning will be displayed if there are no conflicting sessions, but the record has been previously confirmed by a specialist with the appropriate permissions. This ensures users are aware that the test has already been finalized and confirmed.

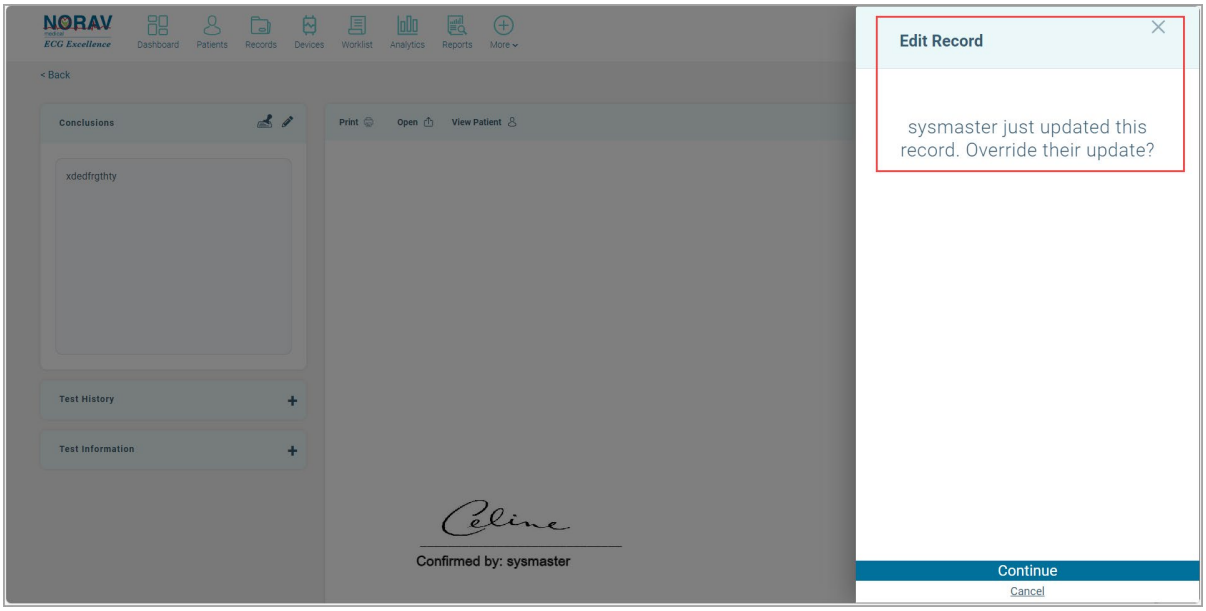


Figure 95: Edit Record Warning Message

Custom Summary Page Templates

This feature allows healthcare organizations to request a custom summary page template for **ABPM and Holter reports** in NEMS-Web. The template, provided by Norav Medical, can include your company logo, contact information, and additional patient information fields (such as extended demographic or clinical data).

Once configured, the custom summary page is automatically applied as the first page of each ABPM or Holter report whenever a physician **reviews or confirms the report in NEMS-Web**, ensuring consistent branding and standardized information.

Requesting a Template

To enable this feature, contact Norav Medical and provide your logo, contact details, and any additional patient information fields you want included. Norav Medical will configure and deliver the template for seamless integration with your NEMS-Web installation.

 **Note**	The summary page template can only be created and updated by Norav Medical.

 **Note**	It is available **exclusively for ABPM and Holter reports** and cannot be applied to REST or STRESS reports.

Comparing REST Tests by Physician

1. Select a specific patient.
2. Open the **Patient Screen** and look at the **Patient Records** section.
3. Select the ☑ of two or more REST tests for comparison.
4. Click Compare Selected.

   The Rest application is opened displaying the comparison between the selected tests (see Figure 96).

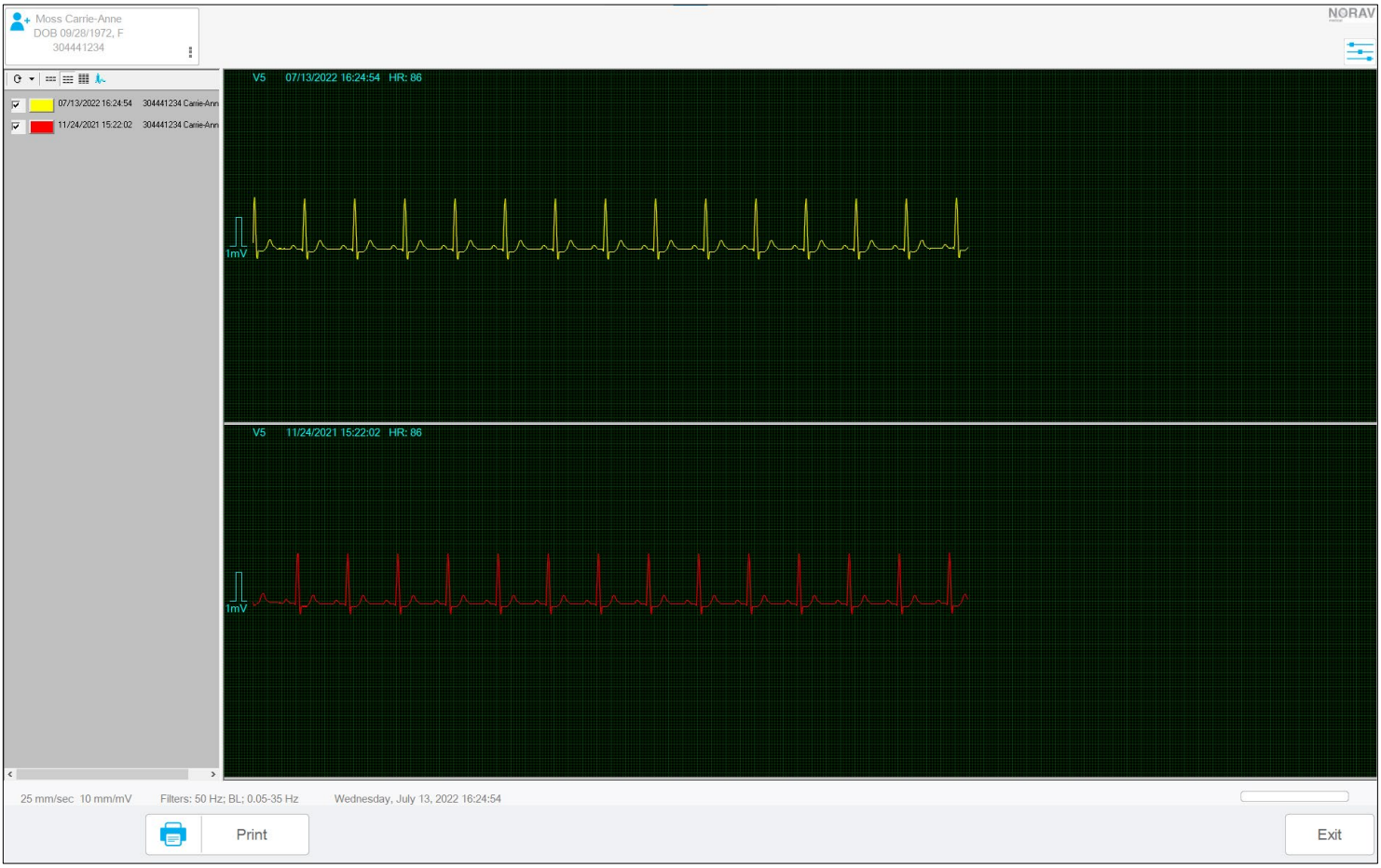


Figure 96: Rest Application in Compare Mode

5. To print the comparison, click the Print button at the bottom left of the screen.
6. To return, click the Exit button at the bottom right of the screen.

Administration Management

To perform any administration-related action, make sure you have the appropriate permissions. This section describes the following Administration Management actions.

General Settings

General Settings allow the selection of interface language and date formatting, the establishment of user redirection rules after record confirmation, and patient information display options, as well as the choice between standard and two-factor authentication methods.

To access General Settings:

1. On the **Menu Bar**, click the **More** drop-down list, then select **General Settings**.
2. The **General Settings** dialog box is displayed.

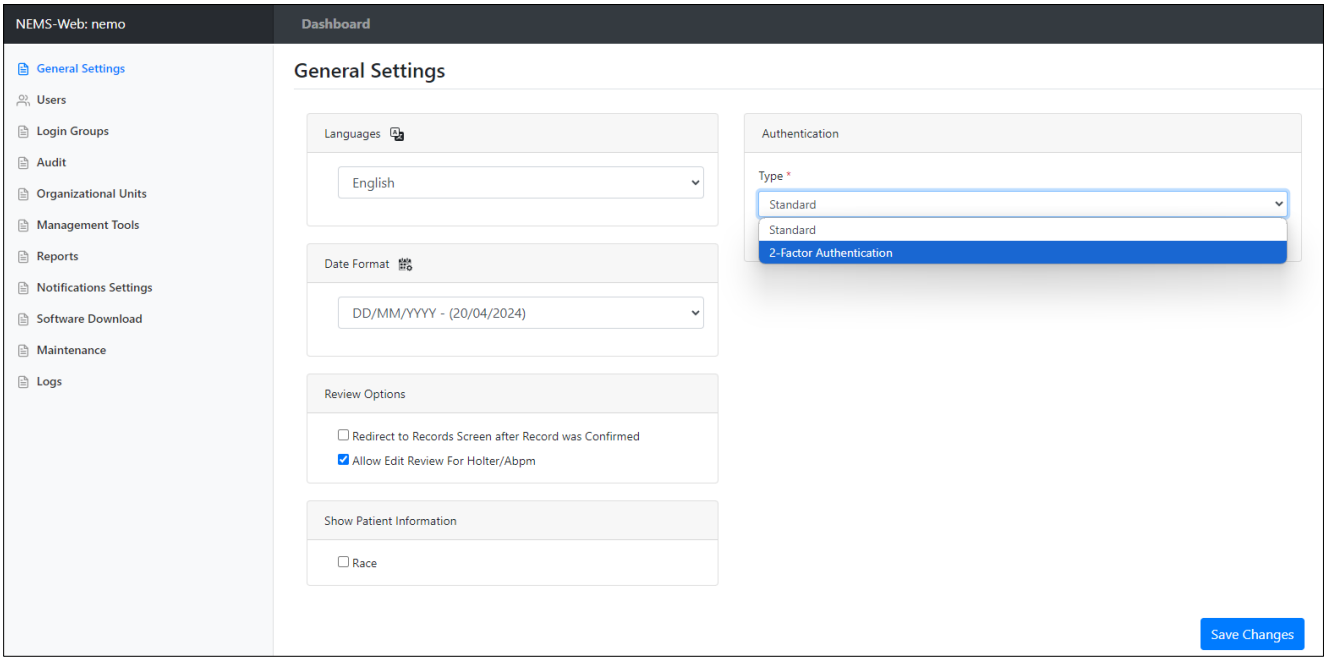


Figure 97: General Settings Dialog Box

In the **Language** drop-down list:

- Select the interface language from the drop-down list and click **Save Changes**.

In the **Date Format** drop-down list:

- Select the date format for use across NEMS-Web from the available options in the drop-down list and click **Save Changes**.

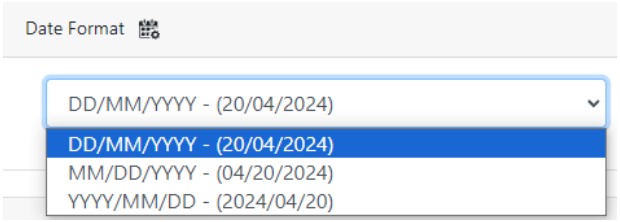


Figure 98: Date Format Drop-down

Under **Review Options**, configure the following settings:

- Check the **Redirect to Records Screen after Record was Confirmed** checkbox in this section to enable redirection to the **Records Screen** after confirming a record and click **Save Changes**. If unchecked, redirection will be OFF.

- Check the **Allow Edit Review for Holter/ABPM** checkbox to enable editing of Holter and ABPM reports directly in NEMS-Web after they are confirmed. Click **Save Changes** to apply. If unchecked, users will not be able to edit confirmed Holter and ABPM reports within NEMS-Web.

Under the **Show Patient Information** set the patient information display rules:

- Check the checkbox in this section to enable the display of the patient's race in patient details and click **Save Changes**. If unchecked, the patient's race will not be displayed.

Under the **Authentication**, choose the authentication type to log in into the NEMS-Web:

- **Standard:** Uses login and password only. This authentication method does not require any additional setup.

- **2-Factor Authentication**: In the Carrier drop-down list select:

    - Email – choose this option to set up and receive one-time passwords (OTP) via email.

    - SMS – choose this option to set up and receive one-time passwords (OTP) via SMS.

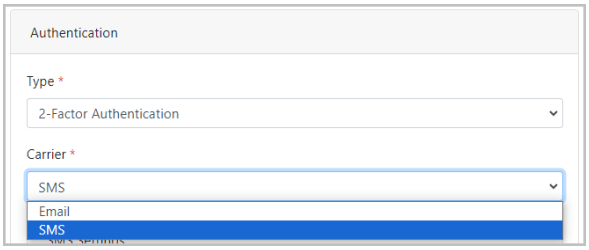


Figure 99: Carrier Options Drop-down

To set up two-factor authentication (2FA) using email:

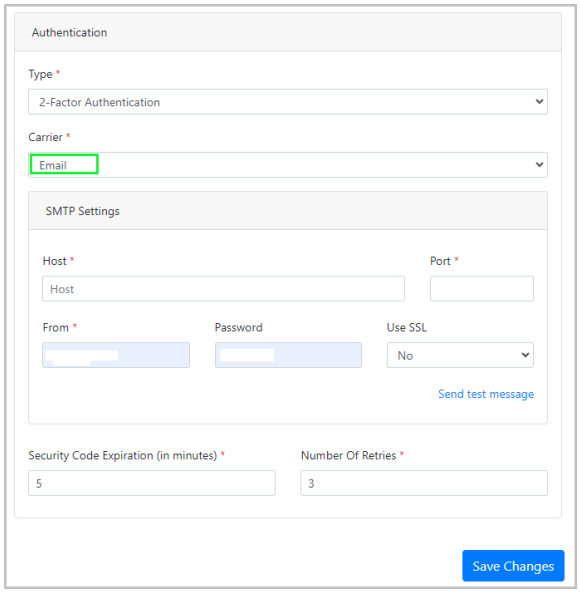


Figure 100: 2FA via Email

1. In the **Authentication** section, select **2-Factor Authentication** from the **Type** drop-down list.
2. Select **Email** from the **Carrier** drop-down list.
3. Fill in the **SMTP Settings**: Note that the **Host**, **Port**, and **From** fields are mandatory (refer to the table below for the detailed description of the fields). You can send a test email after filling in the credentials to verify if this authentication method has been correctly set up.
4. Under **Security Code Expiration (in minutes)**: Set how long a verification code sent to your email remains valid. This is a mandatory field.
5. Under **Number Of Retries**: Set how many times a user can attempt to enter a verification code before being locked out. This is a mandatory field.
6. Click **Save Changes**.

Table 3: 2FA – Email SMTP Settings

Option	Description
Host	Name or address of the email server used for 2FA.
Port	The port for sending OTP emails.
From	Specifies the sender credentials that will be used to send verification emails.
Password	The password for your email account used for SMTP server authentication.
Use SSL drop-down	Determines whether to use SSL encryption for email server communication. Select **Yes** for SSL, **No** if not. It's highly recommended to enable SSL for enhanced security.

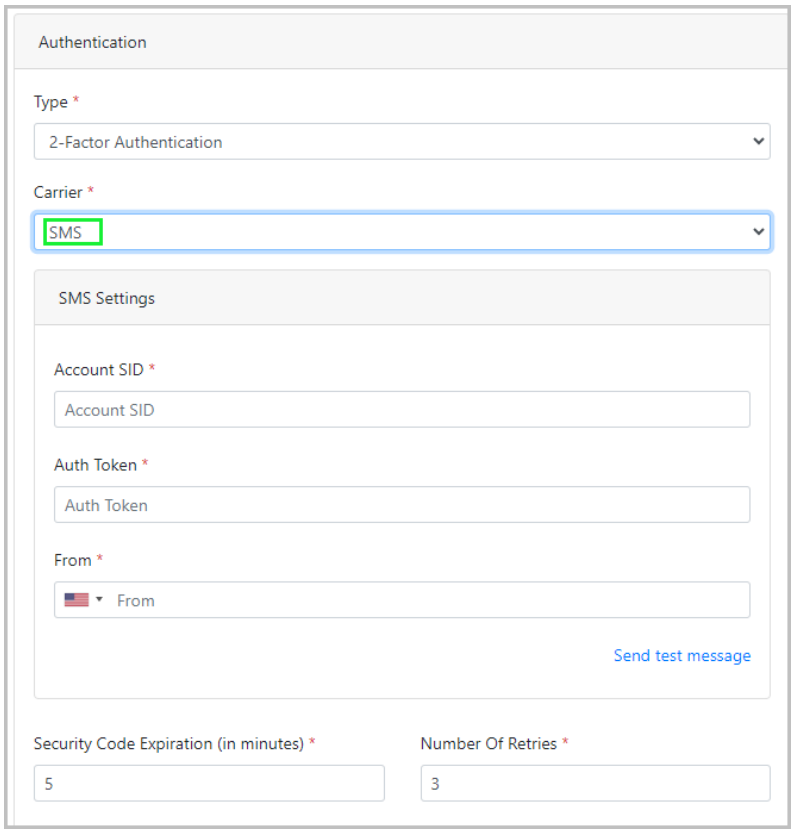


Figure 101: 2FA via SMS

To set up two-factor authentication (2FA) using SMS:

1. In the **Authentication** section, select **2-Factor Authentication** from the **Type** drop-down menu.
2. Select **SMS** from the **Carrier** drop-down menu.
3. Fill in the **SMS Settings**: Note that the **Account SID, Auth Token**, and **From** fields are mandatory. Refer to the table below for detailed descriptions of these fields. You can send a test SMS after entering the credentials to verify the setup.
4. Under **Security Code Expiration (in minutes)**: Set the validity duration for a verification code sent via SMS. This is a mandatory field.

5. Under **Number Of Retries**: Specify the maximum number of attempts a user can make to enter a verification code before lockout. This is a mandatory field.
6. Click **Save Changes**.

Table 4: 2FA – SMS Settings

Option	Description
Account SID	Account SID (Security Identifier) is a unique identifier assigned to an account, typically used with an Auth Token to send 2FA codes via API requests. Obtain it from your service provider's dashboard.
Auth Token	The Auth Token is a secret key used alongside the Account SID for authenticating API requests. It verifies that requests to send 2FA codes are authorized. Obtain it from your service provider's dashboard.
From	Specifies the sender's mobile number for sending verification SMS.

Changing Password from the Dashboard Screen

A new user must change the initial temporary password provided by the administrator (see Section Resetting User Password on page 104).

An existing user can change the password for personal reasons.

1. Click the  icon at the top right of the **Dashboard Screen** (see Figure 102).

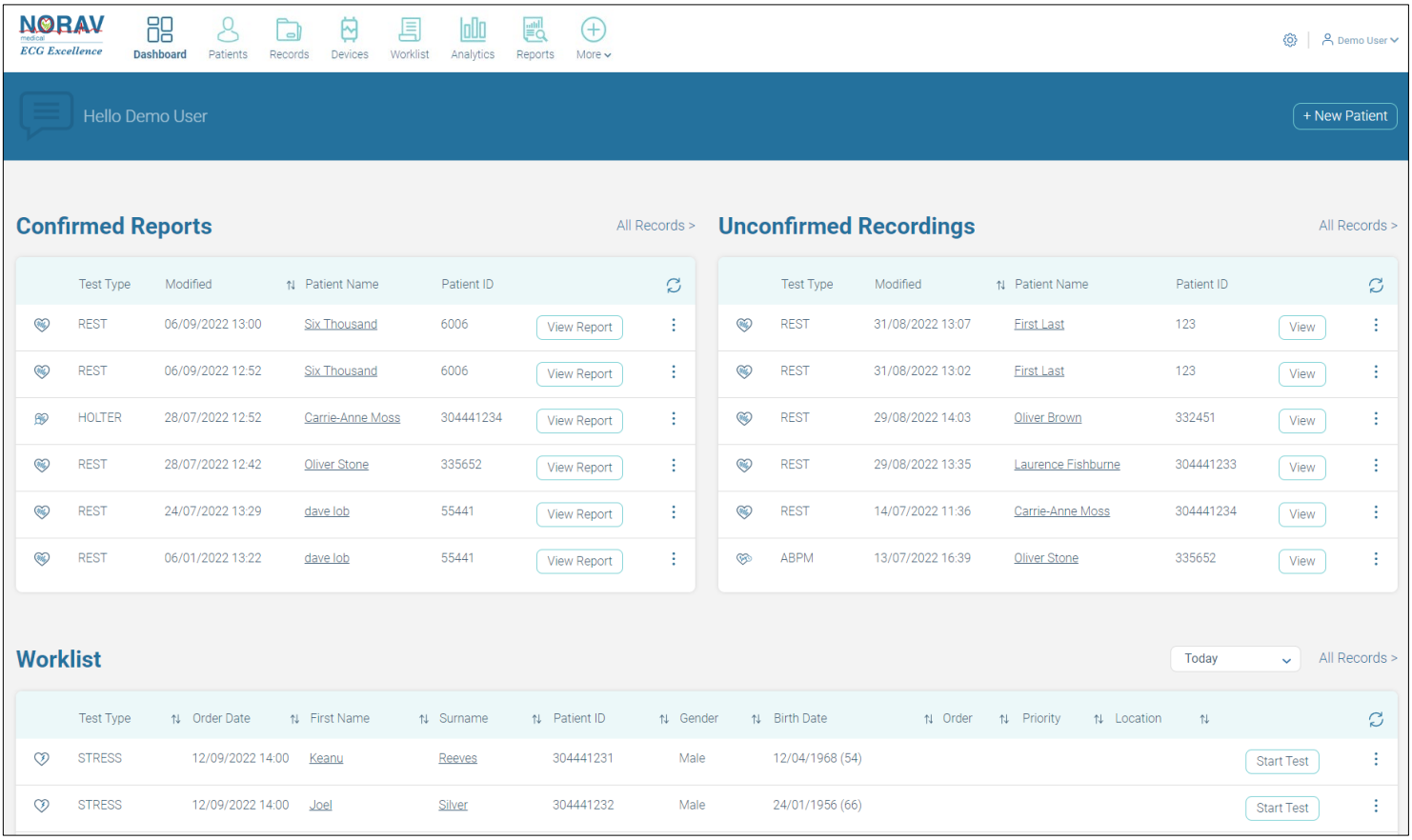


Figure 102: Dashboard Screen

The **Personal Settings Dialog Box**, which is used for changing password, is displayed (see Figure 103).

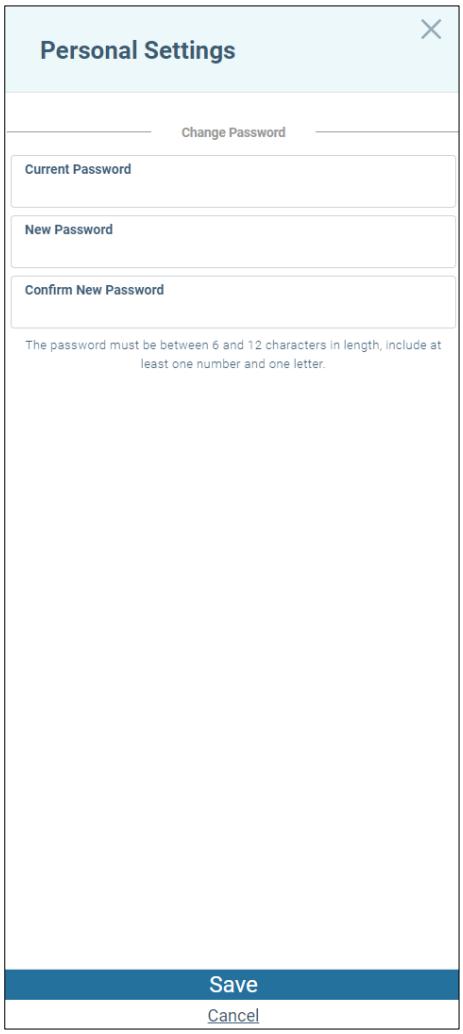


Figure 103: Personal Settings Dialog Box

2. Type the current password in the Current Password field.
3. Type the new password in the New Password field.
4. Retype the new password in the Confirm New Password field.
5. Click the Save button.

Note

Only strong passwords are accepted. Use 12 or more characters, or exactly 12 if required, including one uppercase letter (A–Z), one number (0–9), and one special character (!@#$%).

Users

The **Users Screen** allows adding users, editing users, resetting passwords, and deleting a user's account.

Adding New Users

1. On the **Menu Bar**, click the 

drop-down list, and then click Users.

   The **Users Screen** is displayed (see below).

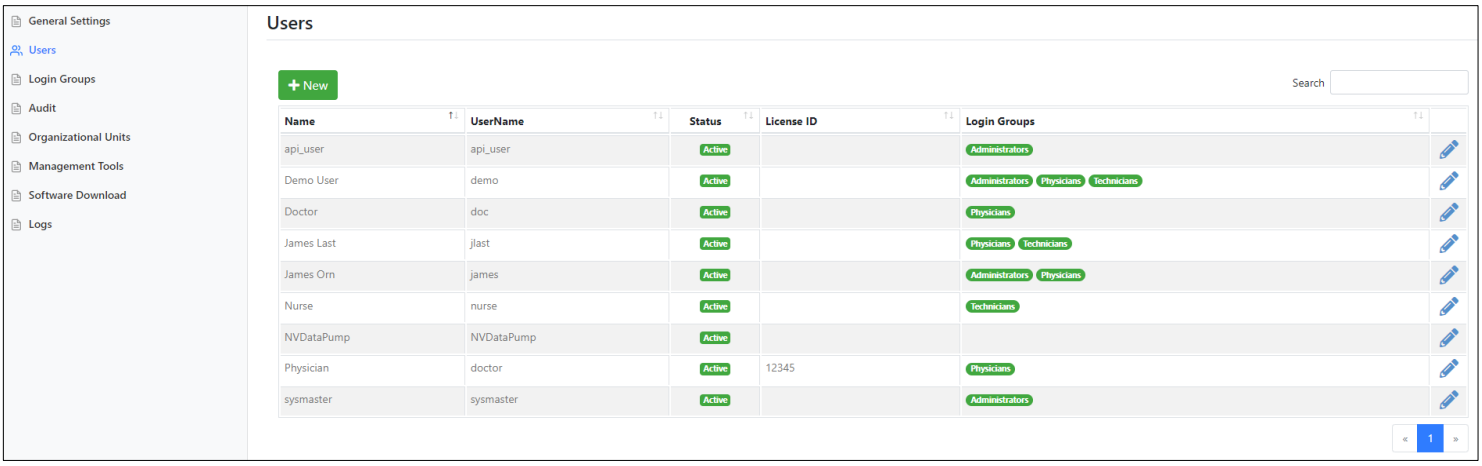


Figure 104: Users Screen

This Screen is used for adding new user(s), displaying users, user's status, login group(s) to which each user is assigned, and  used for editing each user (see Figure 108).

Users Screen Table Columns:

- The **Name** column displays the name of the user.
- The **Username** column displays the assigned username.
- The **Status** column displays the login group status.
- The **License ID** column displays the license ID number.
- The **Login Groups** column displays the login group(s) to which the user is assigned.

2. To add a new user, click the + New button at the top left corner.

The **New User Dialog Box** is displayed (see Figure 105).

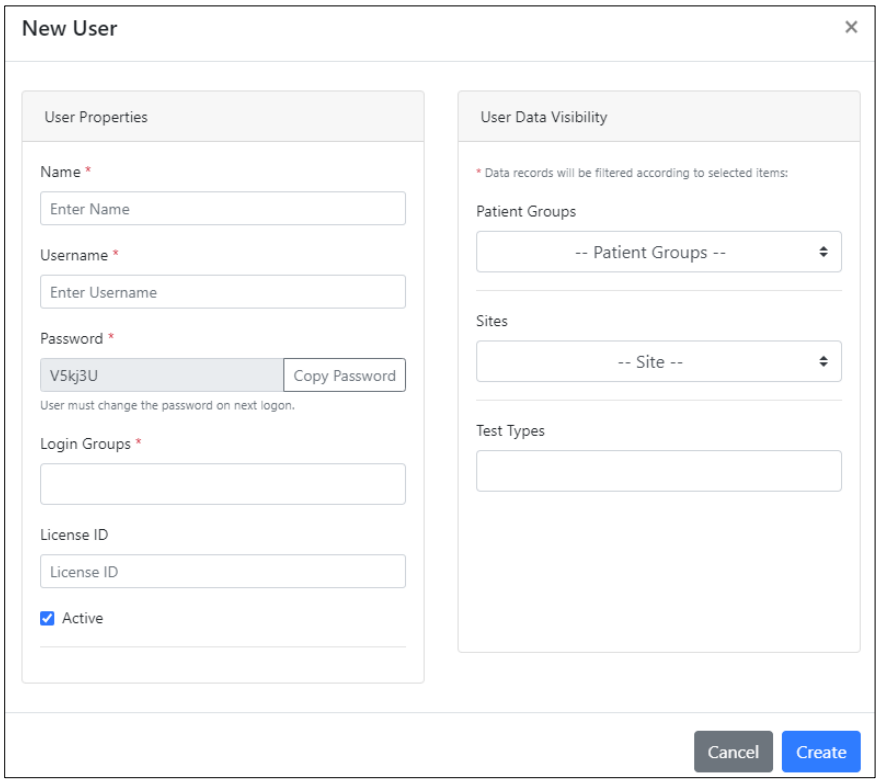


Figure 105: New User Dialog Box

This dialog box is divided to two panes:

- The left pane includes **User Properties**
- The right pane includes **User Data Visibility**

3. Fill all the mandatory fields marked *. Otherwise, you cannot proceed.

   While adding a user, the system generates an initial temporary password that must be provided to the new user, and then the user changes the password upon first login.

4. To select the **Login Groups** for this specific user, click inside the Login Groups * field, and then click the relevant **Login Groups** (see Figure 106).

   Each user must be assigned to one or more Login Groups.

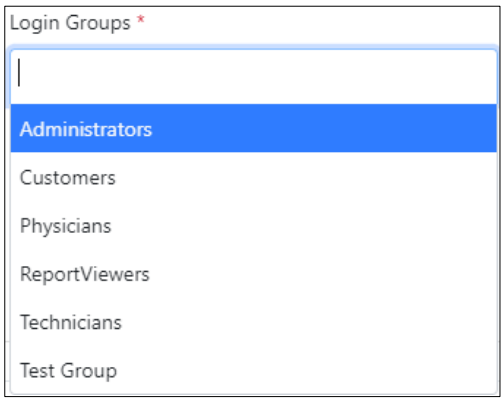


Figure 106: Login Groups Screen

5. After entering the information, click the Create button at the bottom of the **New User Dialog Box** (see Figure 105).

   After the user is created, you are redirected to the **Users Screen**.

Resetting User Password

6. To edit the relevant user, click the  icon on the **Users Screen** (see Figure 107).

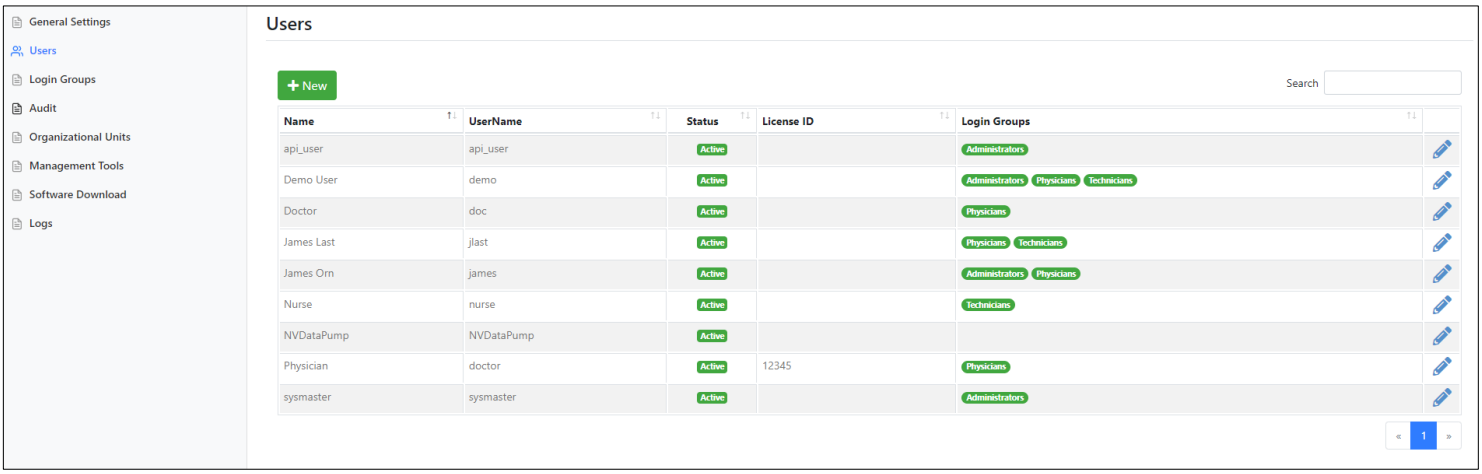


Figure 107: Users Screen

The **Edit User Dialog Box** is displayed (see Figure 108).

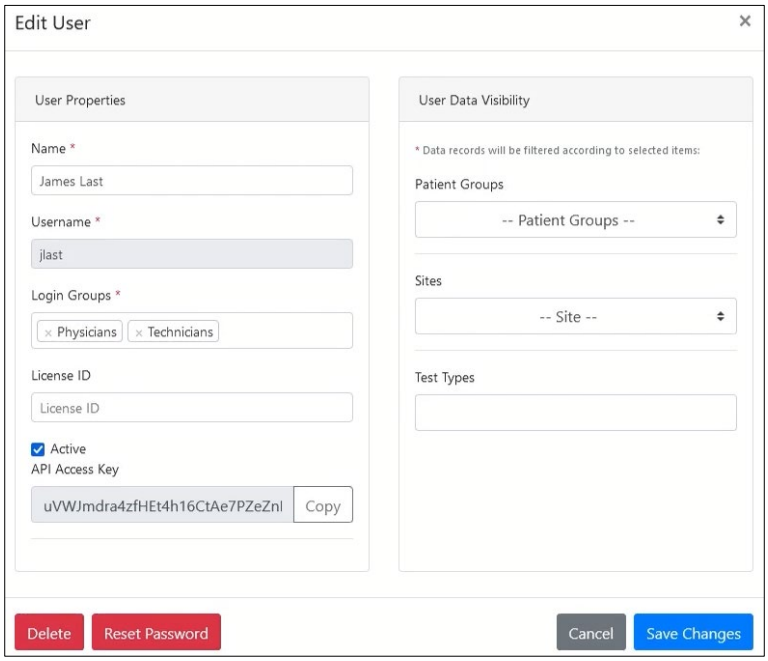


Figure 108: Edit User Dialog Box

7. To reset the password, click the Reset Password button at the bottom of the dialog box. The **Password Reset Dialog Box** is displayed with a temporary password (see Figure 109).

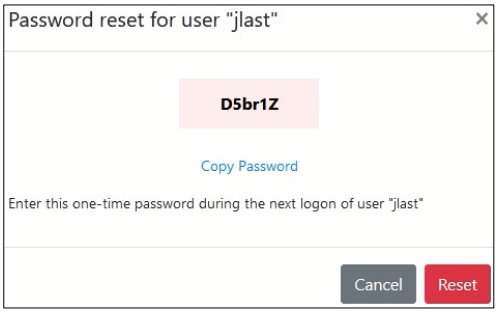


Figure 109: Password Reset Dialog Box

8. Copy the temporary password and provide it to the user for reset login.

Adding User Signature

User Signatures can be used in NEMS-Web for **Confirm Report** actions, but report confirmation can be performed with or without a user signature.

To add a user signature:

1. On the **Menu Bar**, click the **More** drop-down list, then select **Users**.
2. The **Users Screen** is displayed.

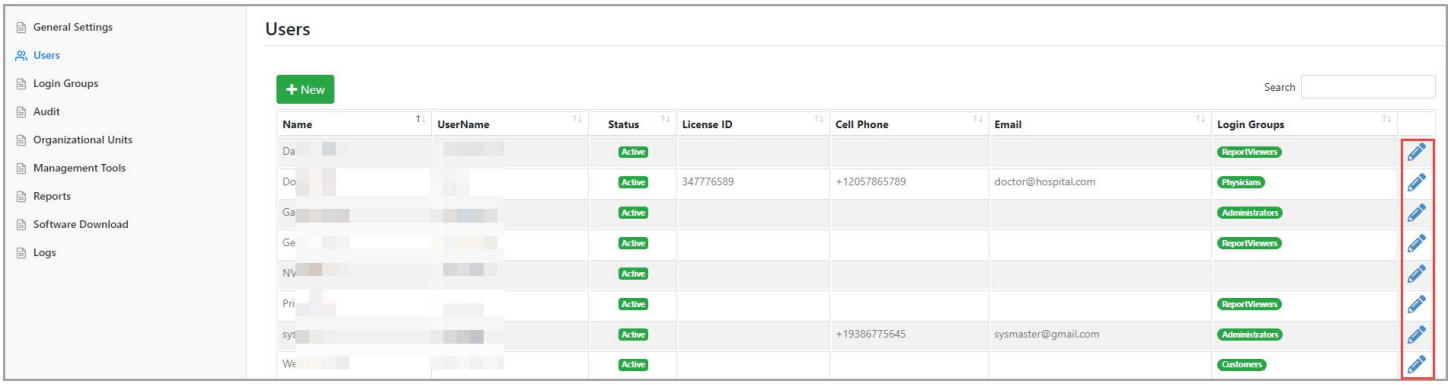


Figure 110: Users Screen

3. To add a signature, click the **Edit** icon associated with the relevant user.
4. The **Edit User** dialog box is displayed.

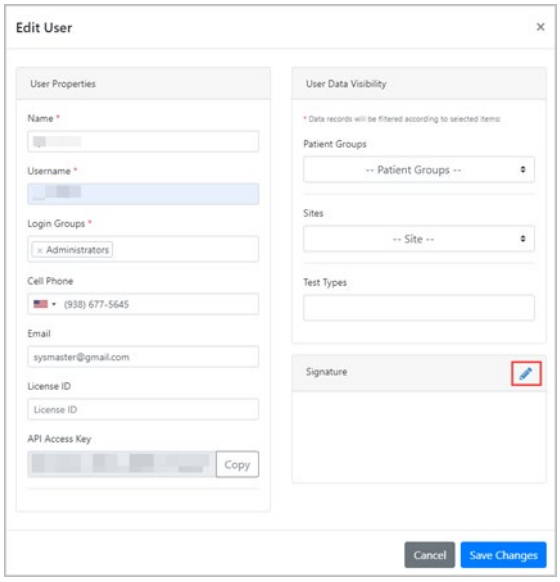


Figure 111: Edit User Dialog Box

5. Click the **Edit** icon in the **Signature** field to access the signature adding options.
6. Select one of the available options, **Upload Signature** (selected by default) or **Create Signature**, to proceed:

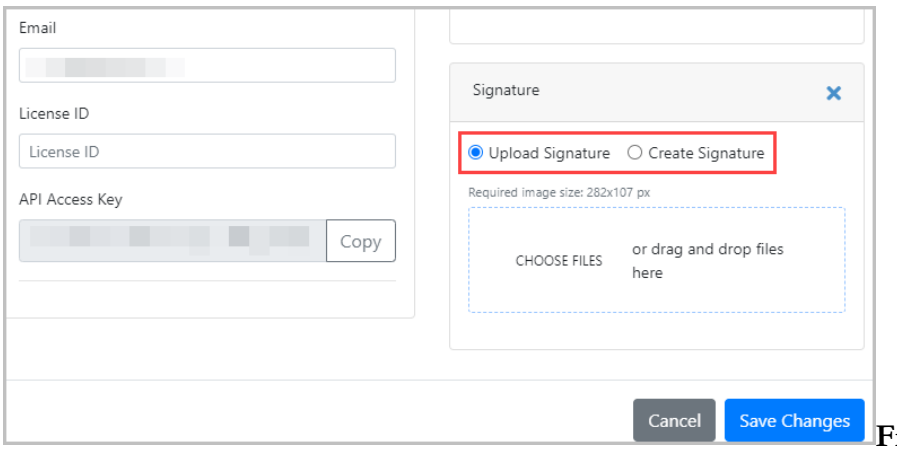


Figure 112: Upload or Create Signature

a. **Upload Signature** Allows you to upload a premade signature (in JPG, JPEG, PNG, GIF, BMP, or WEBP format). To upload a premade signature:

1. Drag and drop your premade signature image from a folder on your PC into the designated **drop zone** in the dialog box, which reads "**CHOOSE FILES or drag and drop files here**".

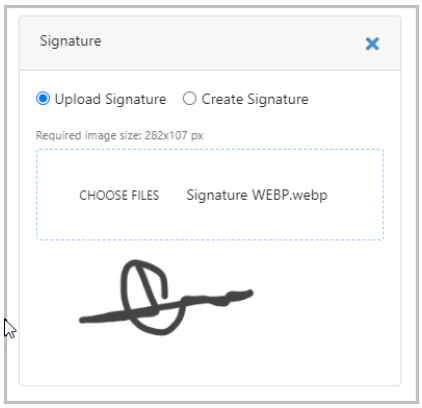


Figure 113: Drag-and-Drop

2. Click **CHOOSE FILES** within the **drop zone** to open the File Explorer window. Navigate to the folder containing your premade signature file, select it, and click **Open** in the bottom-right corner of the File Explorer.

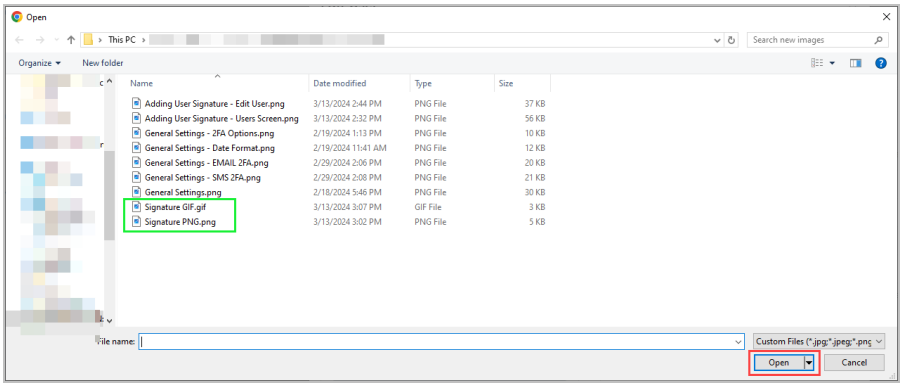


Figure 114: Upload Signature

3. If successful, the signature will be displayed right below the drop zone. If the signature does not appear, check the file's format and parameters according to on-screen instructions.

b. **Create Signature:** Allows you to draw a signature on the spot using your PC mouse. To create a signature:

1. Move the cursor to the position within the signature field area labeled **Sign Below**. The cursor will change its shape from the standard "arrow" to a "crosshair".

Figure 115: Create Signature

2. Click and hold the left mouse button to draw a signature. Move your mouse slowly, strictly within the signature field, to replicate your hand-drawn signature.

3. If you don't like the result, click the **Clear** button right below the signature field to remove the signature sample and start anew.

7. To save your signature, click **Save Changes** in the bottom-right corner of the **Edit User** dialog box.

Figure 116: Save Changes

Login Groups

Each user must be assigned to one or more Login Groups.

For each Login Group, you can control each permission action that you can add or remove as needed.

The following login groups are assigned default permissions.

- **Administrators** – Responsible for all management activities, thus have all permissions excluding review, compare, and confirm records.
- **Customers** – Permitted to view confirmed reports, patients, unconfirmed recordings, worklist, download devices, scan recorders, create a patient, open existing test, search patients, record, search a record, change own password, and search a worklist.
- **Physicians** – Permitted to view and edit confirmed reports, patients, unconfirmed recordings, worklist, download devices, scan recorders, create a patient, open existing test, start new test, search patients, compare, confirm, and review a record, search records, change own password, search a worklist, and start a new test.
- **Report Viewers** – Permitted to view confirmed reports, visitors, persons outside the organization, QA persons, patients, unconfirmed recordings, worklist, view patient, search patients, record, search a record.
- **Technicians** – Permitted to view confirmed reports, patients, unconfirmed recordings, worklist, download devices, scan recorders, create a patient, open existing test, start new test, search patients, compare, confirm, and review a record, search records, change own password, search a worklist, and start a new test.

1. On the **Menu Bar**, click the 

drop-down list, and then click 

.

   The **Login Groups Screen** is displayed (see Figure 117).

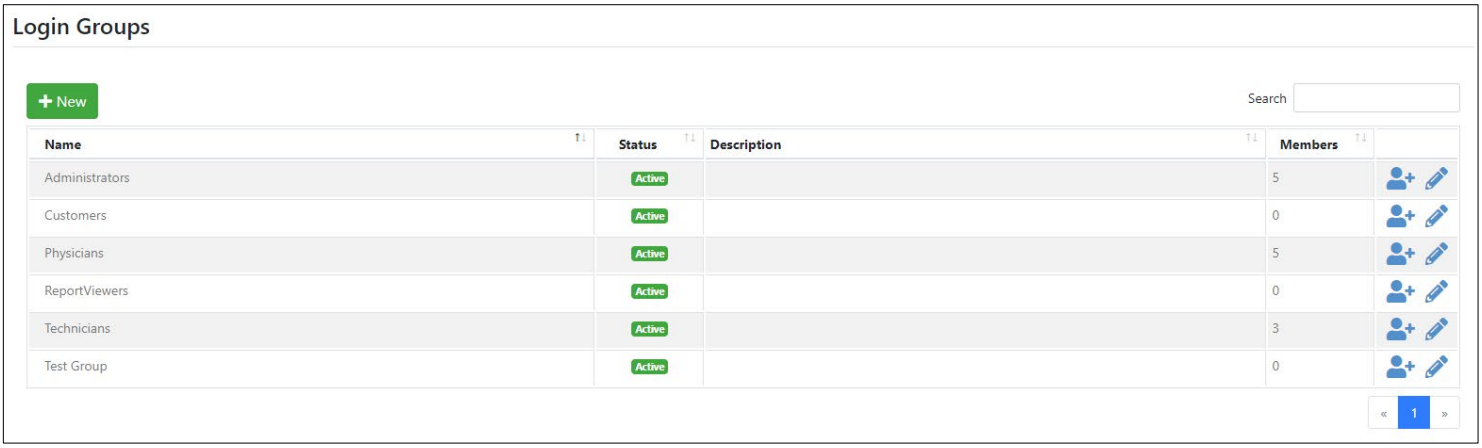


Figure 117: Login Group Screen

Login Group Screen Table Columns:

- ◊ The **Name** column displays the login group name.
- ◊ The **Status** column displays the login group status.
- ◊ The **Description** column displays the login group description.
- ◊ The **Members** column displays the number of members in login group.

2. To view which users are assigned to each login group, click the  icon.

The **Login Group Members Dialog Box** is displayed (see Figure 118).

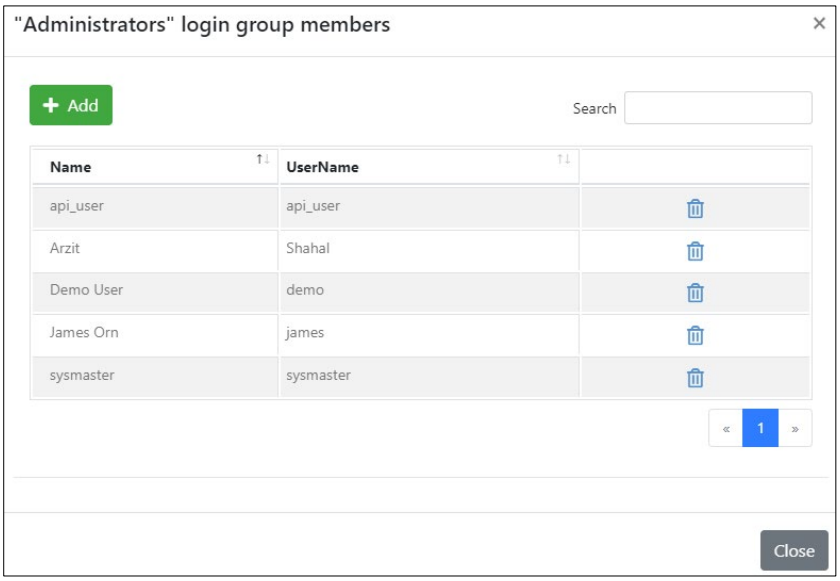


Figure 118: Login Group Members Dialog Box

Login Group Members Dialog Box Table Columns:

- ◊ The **Name** column displays the name of the user.
- ◊ The **Username** column displays the assigned username.
- ◊ The 🗑 column displays the option to delete user.
- ◊ The **Search Field** column displays the username for search.

3. To add users manually to this login group, click **+ Add**.

   The **Add Members to Login Group Dialog Box** is displayed (see Figure 119).

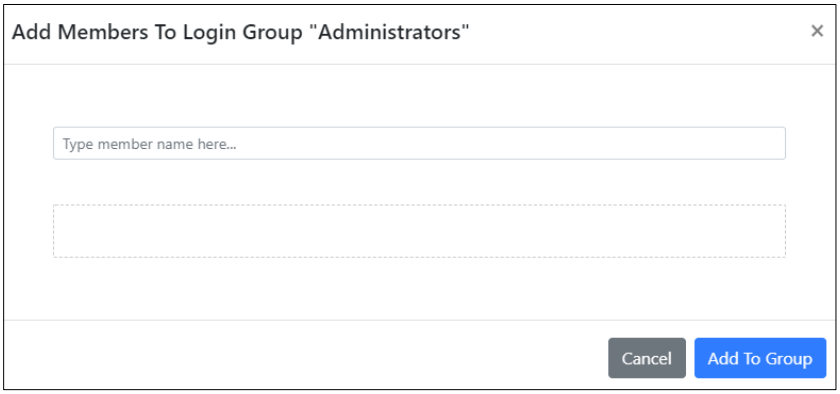


Figure 119: Add Members to Login Group Dialog Box

4. Type the existing username and click the **Add To Group** button.
5. To delete users from this group, click the 🗑 icon.
6. To create a new login group, click the **+ New** button.

The **"New" Login Group Dialog Box** is displayed (see Figure 120).

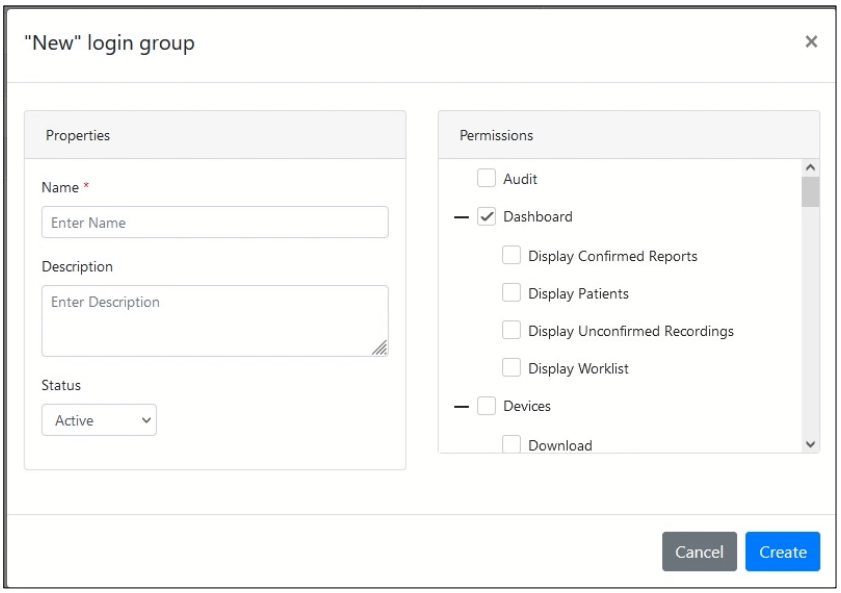


Figure 120: "New" Login Group Dialog Box

This dialog box is divided to two panes:

◊ The left pane contains **Group Properties**

◊ The right pane contains **Group Permissions**

7. Type the group **Name** in the Name * field.
8. To set **Permissions**, select the required ☑.
9. After setting all required permissions, click Create.

Audit

Audit logs and trails are a key requirement for GDPR and HIPAA compliance.

Privacy and data protection are becoming ever more important concepts, especially for digital health companies. GDPR and HIPAA both impose strict penalties for noncompliance. Data breaches become big news and can trigger widespread negative publicity.

This screen allows monitoring the activity of all users in the system.

The screen displays system events, like login attempts, data movements, files re-import, reports generation, and username per event.

Use the **Audit Screen** to validate security, and to perform incident investigations.

On the **Menu Bar**, click the 

drop-down list, and then click 

.

The **Audit Screen** is displayed (see Figure 121).

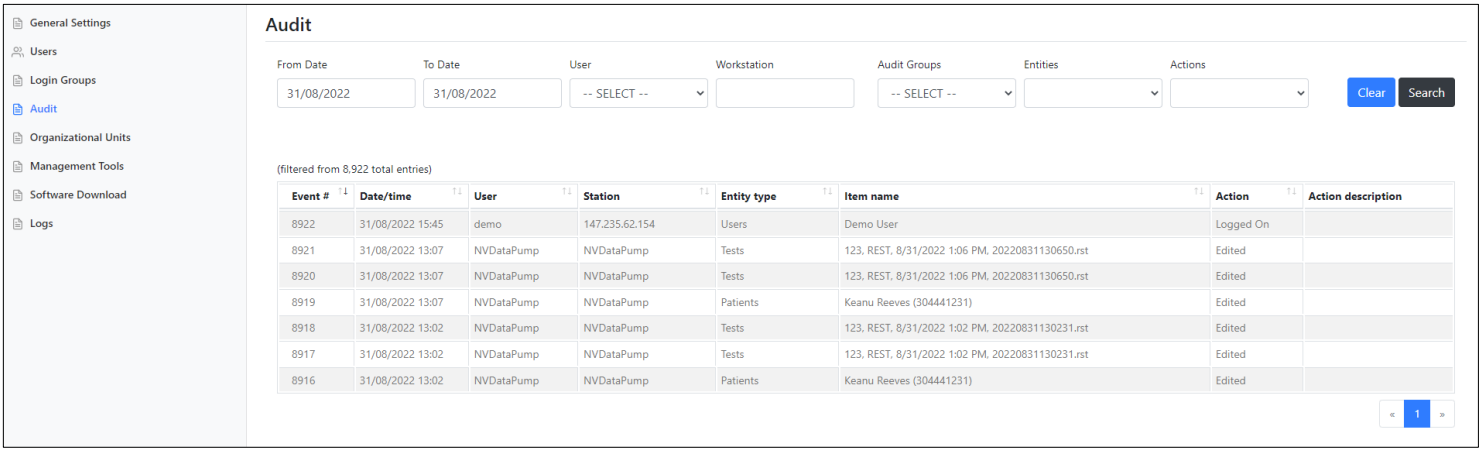


Figure 121: Audit Screen

Audit Screen Table Columns:

- The **Event #** column displays the serial number of the event.
- The **Date/Time** column displays the date and time of the event.
- The **User** column displays the username.
- The **Station** column displays the IP/name of the PC workstation.
- The **Entity Type** column displays the login group.
- The **Item Name** column displays the name of the user.
- The **Action** column displays the user status in NEMS-Web at the time of event.
- The **Action Description** column displays the description of the user status at the time of event.

The search engine at the top allows filtering audits according to search criteria.

The user can search for audit by:

- Date Range (From Date – To Date)
- Selecting User
- Selecting Audit Groups

Organizational Units

To manage information and categorize data in a close manner, each organization can determine a default definition to suit the organization's specific needs.

New sites, test types, patient groups, medications, indications, and many other characterizations can be added.

1. On the **Menu Bar**, click the More drop-down list, and then click Organizational Units.

   The **Organizational Units Screen** is displayed (see Figure 122).

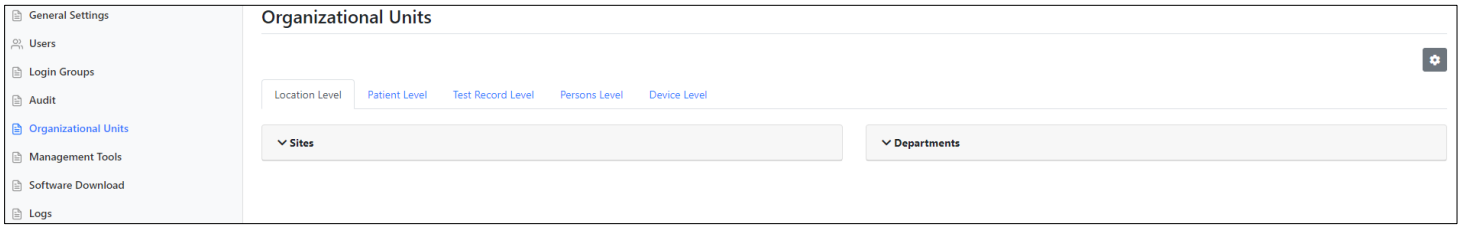


Figure 122: Organizational Units Screen

   The default parameters are characterized by the following five levels.

2. To add new characterization and default parameters, click the + New button in each section.

- **Location Level** – you can define **Sites** and **Departments** (see Figure 123).
  Based on customer preferences, the site can be the physical location in which the test is performed. Department can indicate the specific branch on the site where the test is performed.

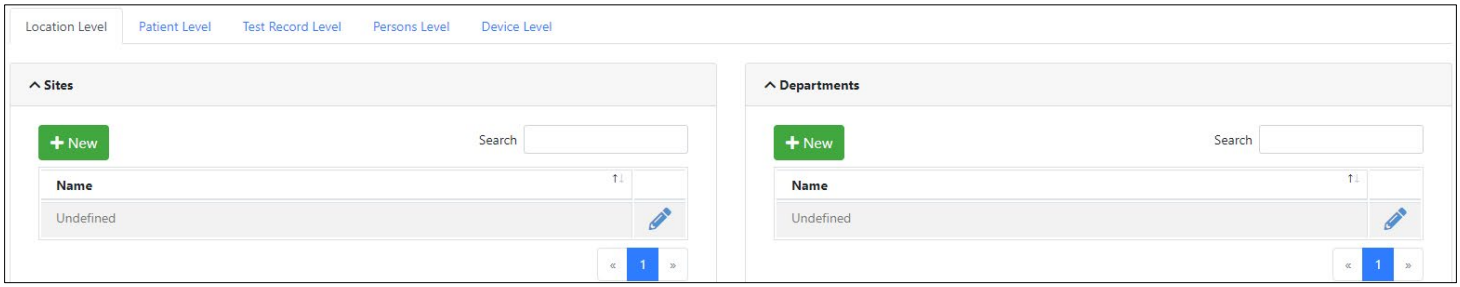


Figure 123: Location Level Screen

- Patient **Level** – you can group patients according to **Patient Statuses**, **Patient Groups**, **Medications**, and **Indications** (see Figure 124).

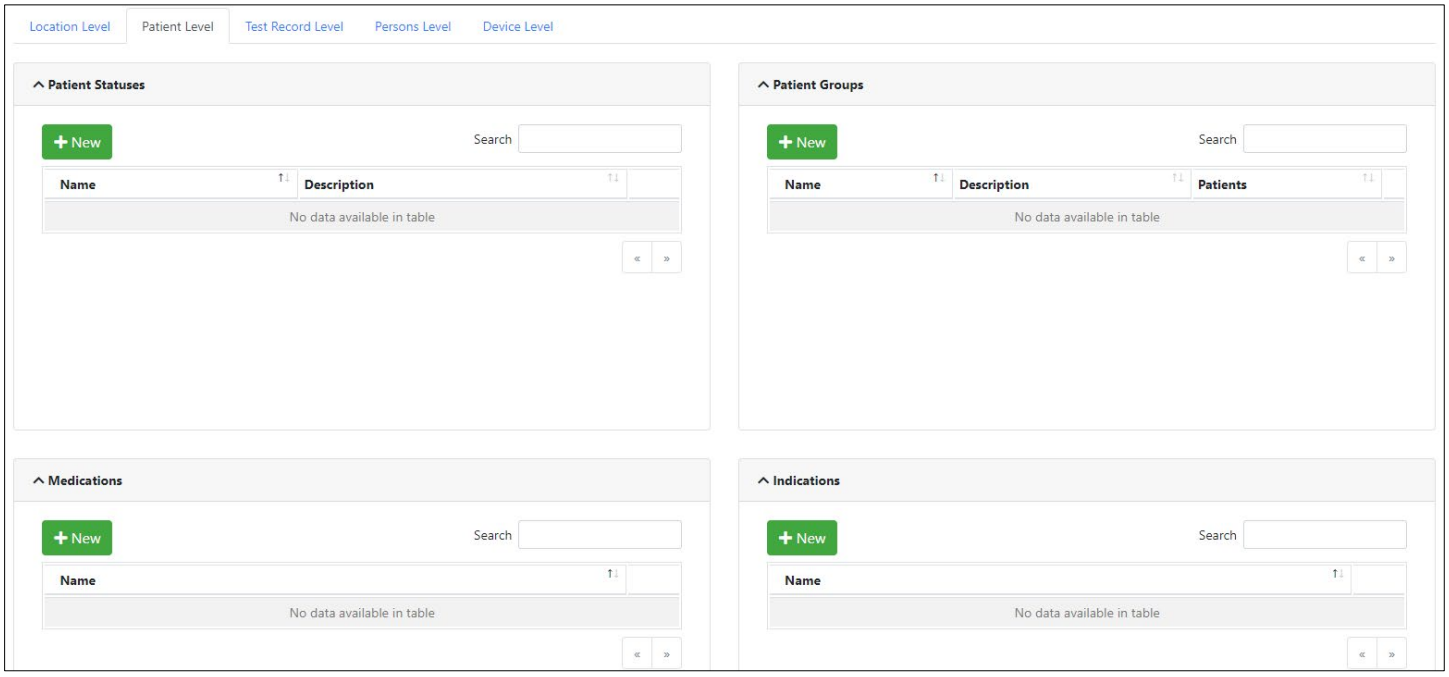


Figure 124: Patient Level Screen

◊ **Patient Statuses** – allows creating statuses in the system and associate patients to them or sort patients according to organization requirements (for example Married, Bachelor, Divorced, HIV carrier, Diabetes, and Smoker statuses).

◊ **Patient Groups** – allows associating patients to groups and then sorting accordingly according to organization preferences (for example ethnic groups).

◊ **Medications** – which medications the patient takes. Here you can create a predefined list of the medications taken by the specific patient.

◊ **Indications** – a predefined list of diagnoses like Heart Diseases, Heart Rhythm Disorders, etc., from which you can select.

3. To define more entities in **Location Level** or **Patient Level** settings, click the  icon at the top right of the **Organizational Units** screen (see Figure 122).

- Test **Record Level** – you can define specific parameters as defaults for ABPM tests, like Maximal and Minimal blood pressure limits. You can also expand the drop-down list of **Review Summary Remarks** as well as adding or editing **Test Types** (see Figure 125).

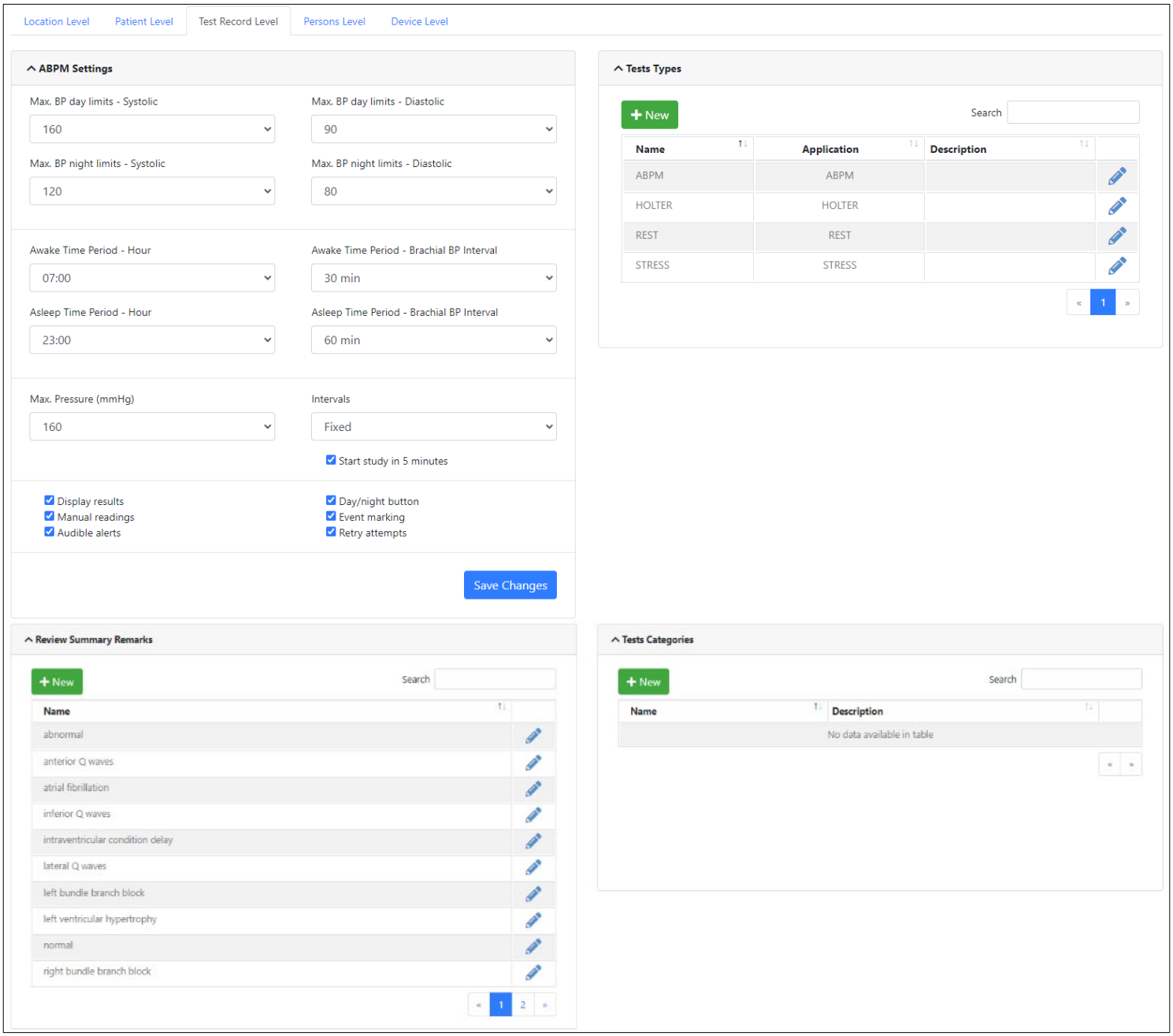


Figure 125: Test Record Level Screen

Here you have test definitions. When performing new test, the test definitions are the following:

◊ **ABPM Settings** – Default definitions that can be predefined. Each ABPM test is performed with these definitions, which the technician can change during the test.

◊ **Test Types** – You can create various test types according to your organization's requirements. Different test types can be created for the same application. A Test Type is an alias that the organization can use to define multiple test types within the same app. For example, a STRESS test may vary between an ordinary person and a professional athlete.
For ABPM and Holter tests, you can also set the default (predefined) device model to be automatically selected for the particular Test Type. Available device options include: For ABPM tests - None, NBP One, NBP-24 NG; for Holter tests - None, NR, NR Patch (NR-314-P).

- ◊ **Review Summary Remarks** – After performing tests, the physician must review summary remarks. The **Name** column includes a list of prewritten remarks to which the organization can add more prewritten remarks that are displayed here.
- ◊ **Test Category** – Groups of tests (for example, routine annual medical examination, urgent diagnosis, etc.

- **Persons Level** – You can determine specific predefined list of Technicians/Physicians who can be related to specific tests (see Figure 126).

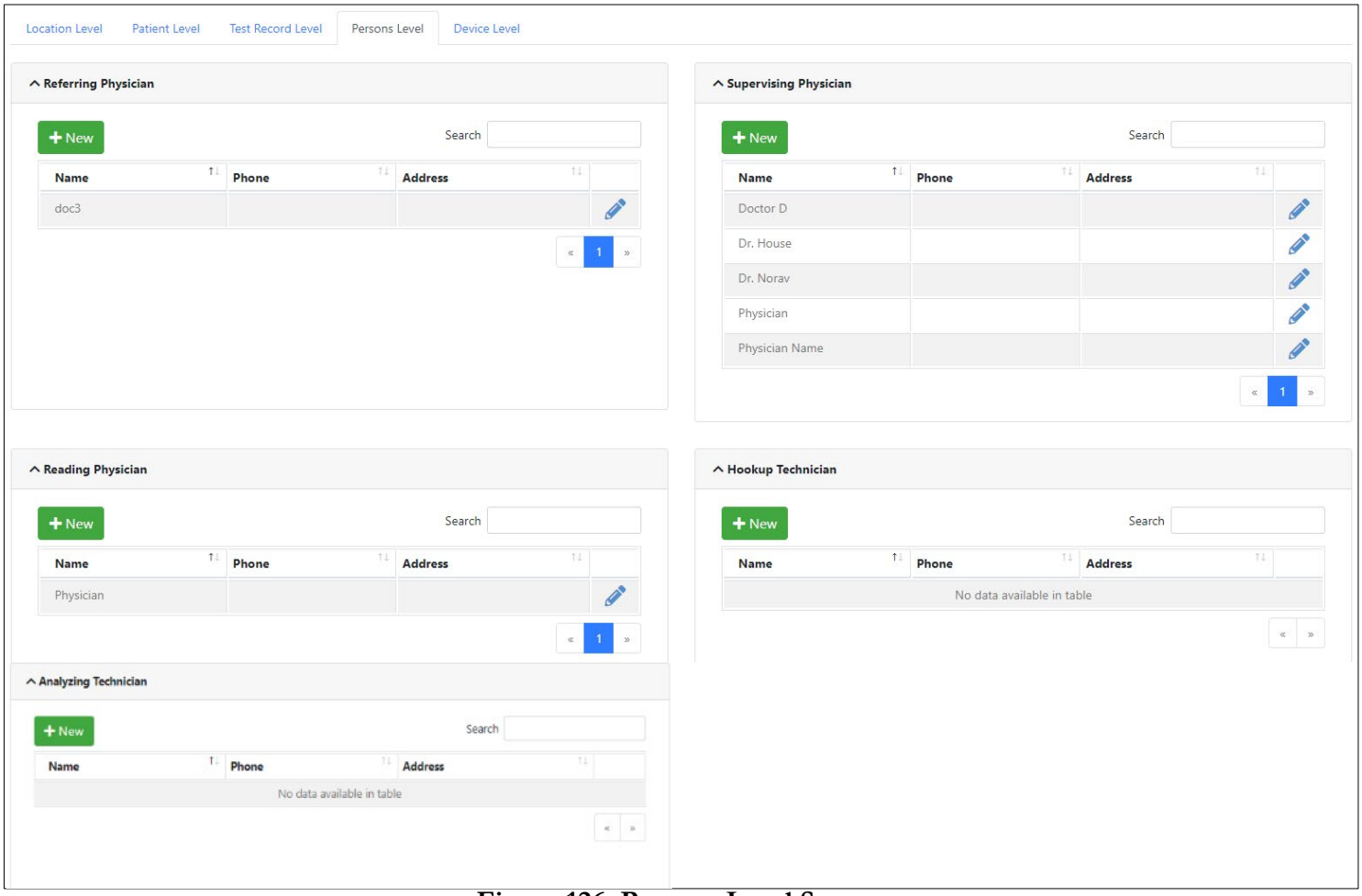


Figure 126: Persons Level Screen

- ◊ **Referring Physician** – List of physicians referring the patient(s) for tests. These physicians do not necessarily use NEMS-Web and write conclusions, but physicians outside the system.
- ◊ **Supervising Physician** – Physician who follows the process or the analyzing technician.
- ◊ **Reading Physician** – Physician who reads the conclusions.
- ◊ **Hookup Technician** – Technician who hooks up the electrodes to the patient and is responsible for proper testing.
- ◊ **Analyzing Technician** – Technician who analyses tests (Hookup technician and Analyzing technician can be the same person).

- **Device Level** – You can add default settings (see Figure 127).

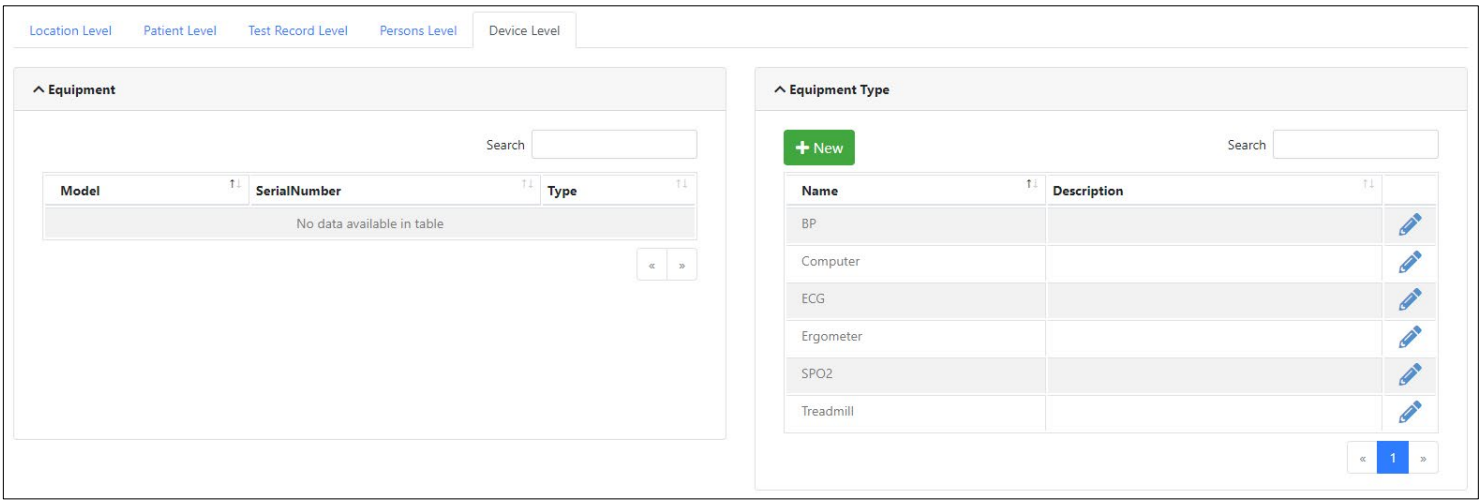


Figure 127: Device Level Screen

This process occurs in the background, allowing to know which equipment is used by the organization as follows:

◊ **Equipment** – Equipment types are predefined. The details of equipment used are displayed here and taken from **Equipment Type**.

◊ **Equipment Type** – List of equipment types.

Fields Settings

Use **Fields Settings** to configure mandatory fields and data input restrictions for patient and record information entered into NEMS-Web. This feature ensures that all critical data is consistently captured according to your organizational workflows and compliance requirements.

To access Fields Settings:

1. Click the **More** drop-down list on the **Menu Bar** to expand the list.
2. Click **Fields Settings**. The **Fields Settings** screen is displayed.

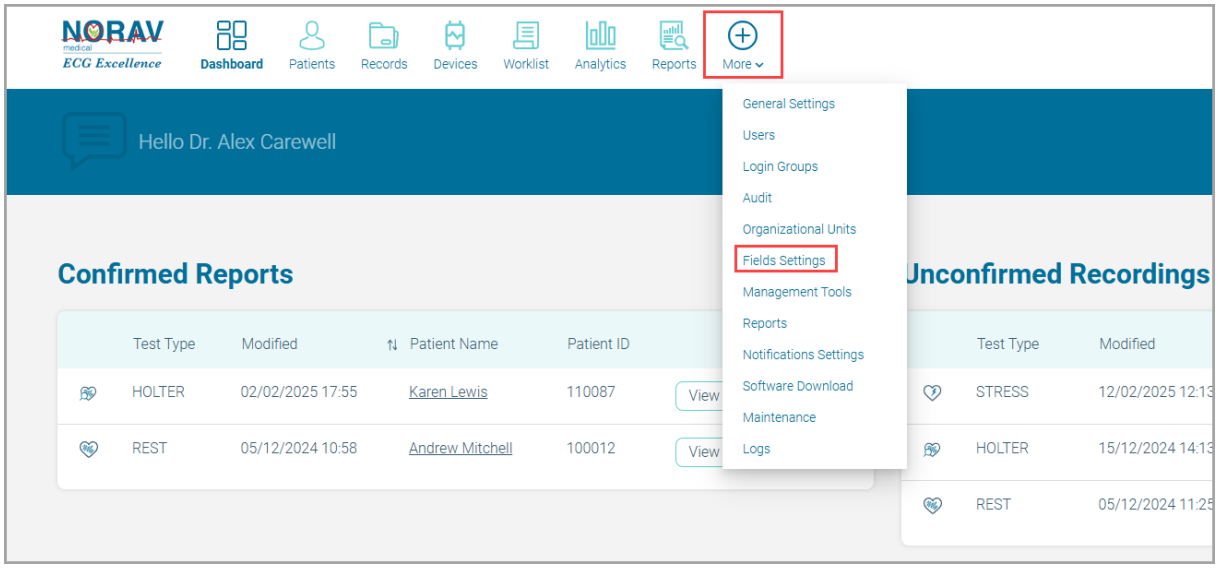


Figure 128: Fields Settings Screen

To configure the requested Patient Fields:

1. Locate patient-related information fields.
2. Select the **Mandatory** checkbox next to required fields (e.g., MRN, Weight, Email) to enforce these fields completion. Personal ID, First Name, Last Name fields are checked by default and can't be unchecked.
3. Under **Input Range**, define allowed data input types for specific fields:
    - **All**: Allows both letters and digits.
    - **(0-9)**: Restricts input to digits only.
    - **(a-zA-Z)**: Restricts input to letters only.
4. After completing your selections, click **Save Changes** to apply the changes.

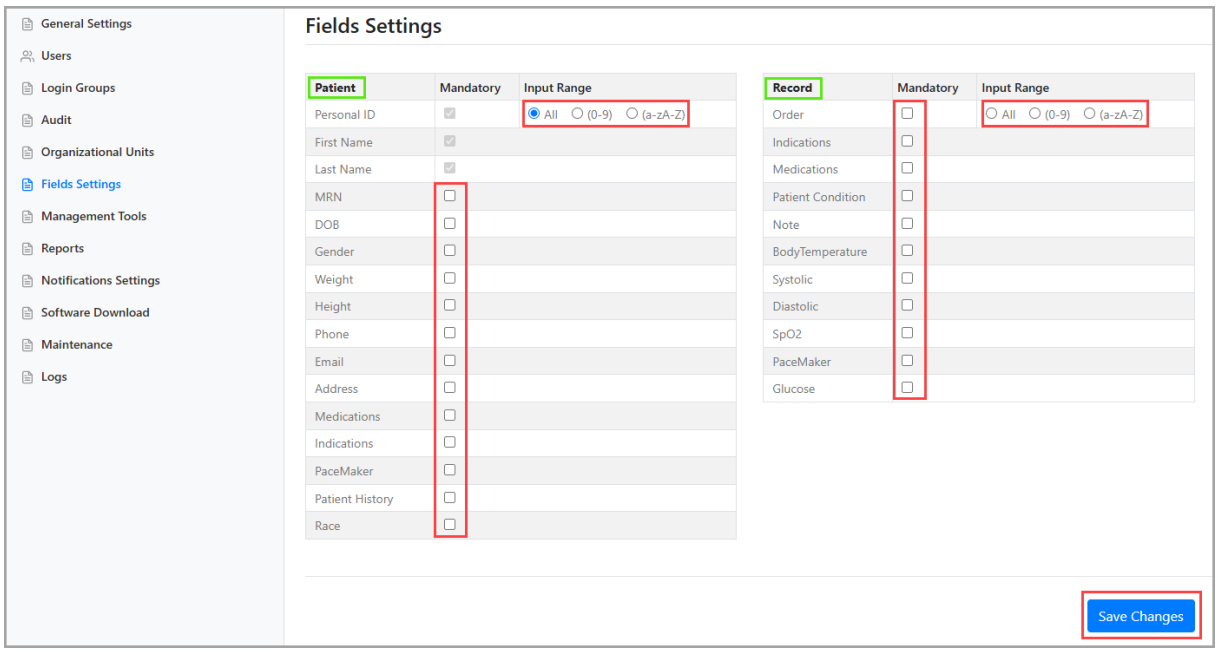


Figure 129: Setting Mandatory Fields and Input Range

To configure the requested Record Fields:

1. Locate record-related information fields.
2. Select the **Mandatory** checkbox next to required fields (e.g., Order, Patient Condition, SpO2) to enforce these fields completion.
3. Under **Input Range**, define allowed data input types for specific fields:
    - **All**: Allows letters and digits.
    - **(0-9)**: Restricts input to digits only.
    - **(a-zA-Z)**: Restricts input to letters only.
4. After completing your selections, click **Save Changes** to apply the changes.

Management Tools

This feature can also be useful in case of an incorrect assignment of a test to a patient.

On the **Menu Bar**, click the 

drop-down list, and then click 

.

The **Management Tools Screen** is displayed (see Figure 130).

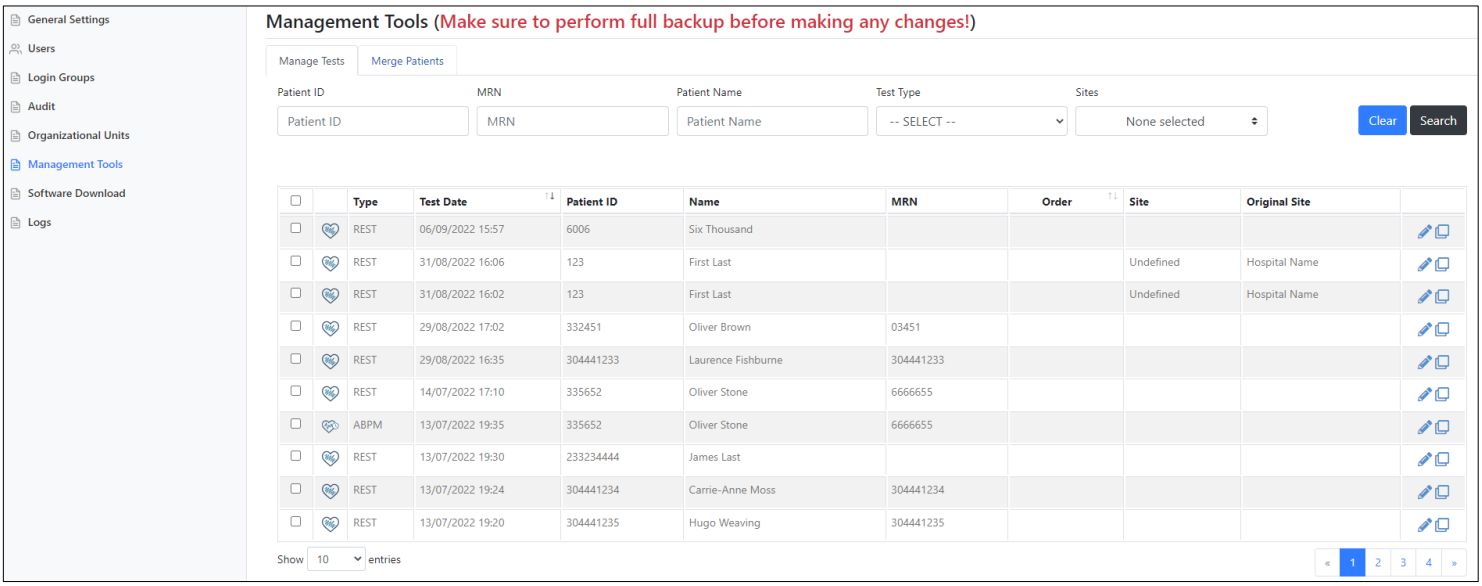


Figure 130: Management Tools Screen

- The 

tab allows editing test properties and reassigning tests.
- The 

tab allows merging duplicate patient records into a single patient record.

Manage Tests

1. To update a single record, click  at the right of the required record (see Figure 131).

   Or

   To update multiple records, select the  at the left of each record to be updated and then click  (see Figure 131).

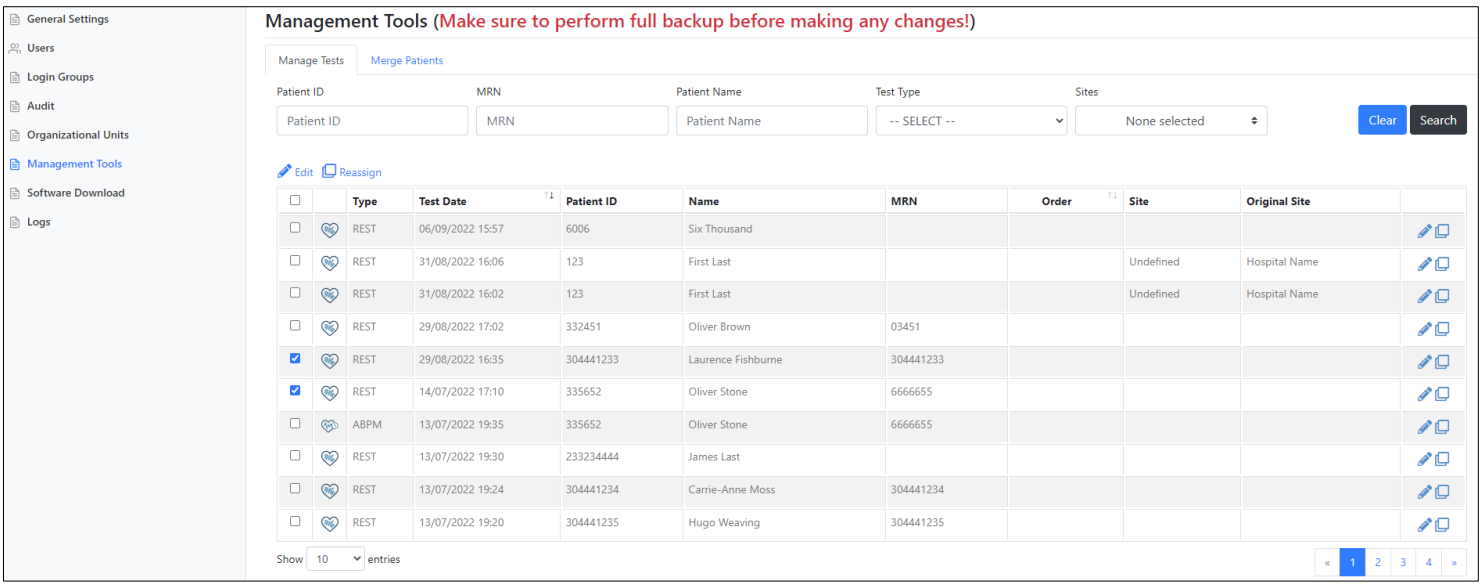


Figure 131: Updating Record(s)

The **Edit Test/s Dialog Box** is displayed (see Figure 132).

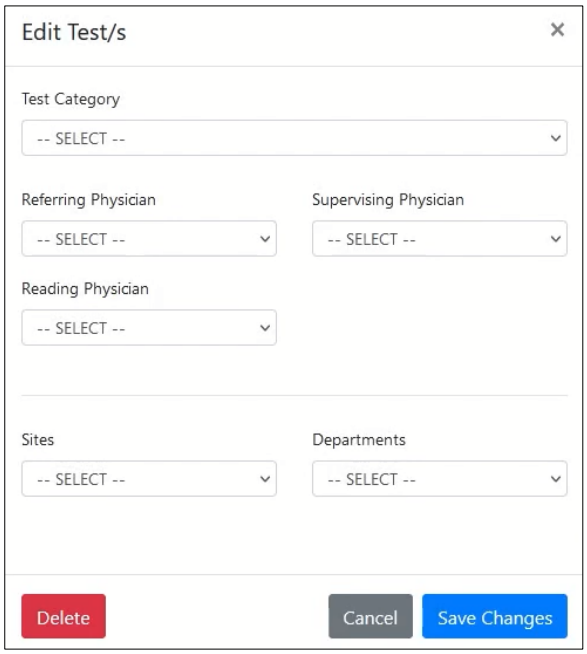


Figure 132: Edit Test/s Dialog Box

2. Edit test properties like **Test Category**, **Referring Physician**, **Supervising Physician**, **Reading Physician**, and set default parameters that appear on the test report output, like **Site** and **Department**.
3. To save changes, click the Save Changes button or click Delete to delete the saved records.
4. To reassign the test record, click  (see Figure 131).

   The **Reassign Dialog Box** is displayed (see Figure 133).

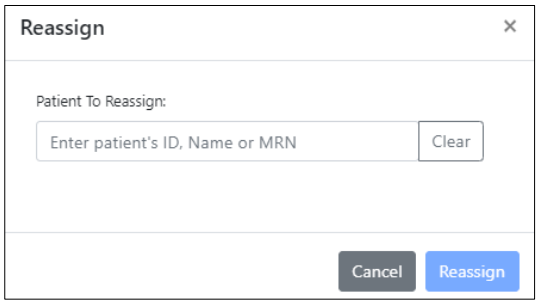


Figure 133: Reassign Dialog Box

5. Type the **patient's ID**, **Name**, or **MRN**.
   The relevant patient is displayed.
6. Click the Reassign button (see Figure 133).

Merge Patients

You can merge two patients into one patient in case a patient has been recorded in the system, and the next time, has been recorded with incorrect data.

1. To merge patients, click the Merge Patients tab (see Figure 134).

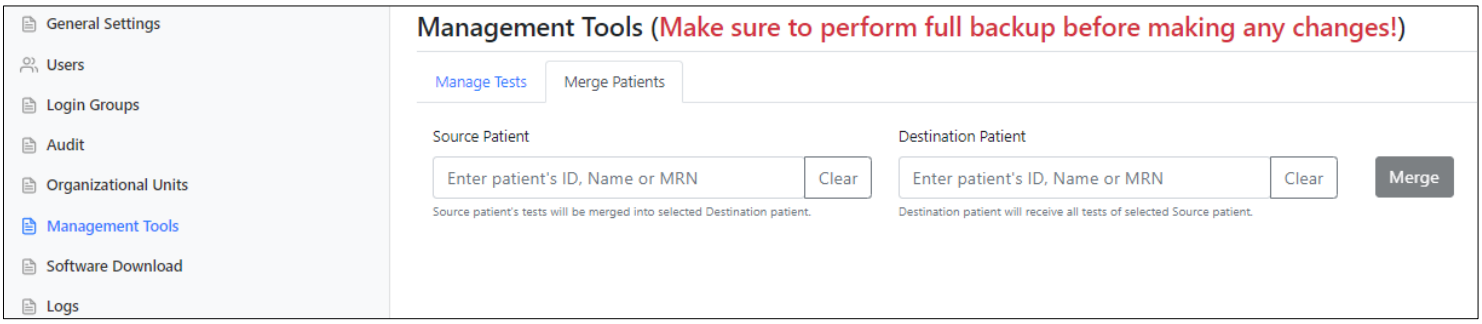


Figure 134: Merge Patients Screen

2. In the **Source Patient** field, select the patient whose tests are to be merged with the selected destination patient's tests (see Figure 135).

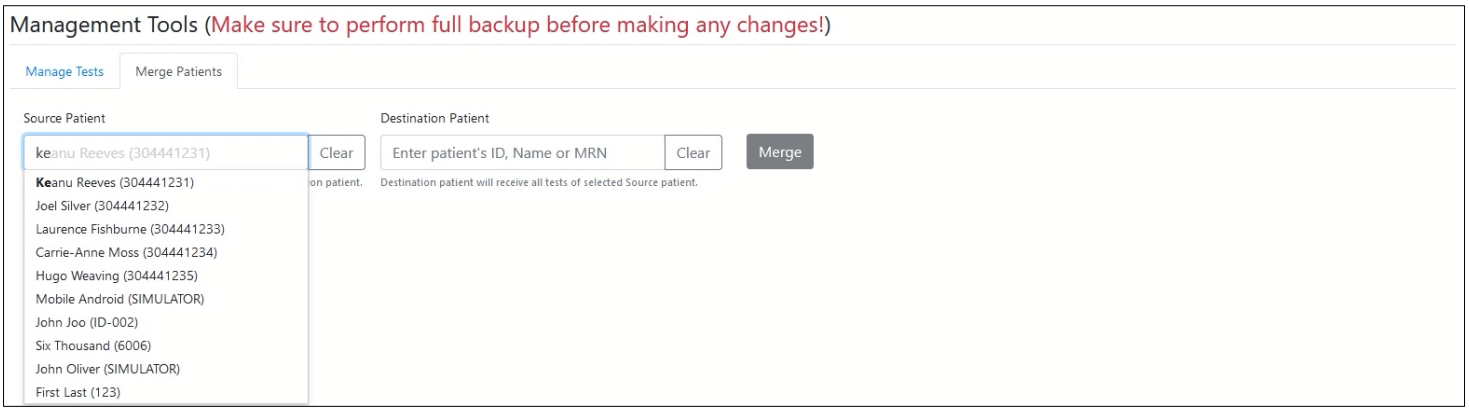


Figure 135: Source Patient Selection

3. In the **Destination Patient** field, select the patient who receives all tests from the selected source patient (see Figure 136).

Figure 136: Destination Patient Selection

4. Click the Merge button.
   The **Confirm Merge Dialog Box** is displayed (see Figure 137).

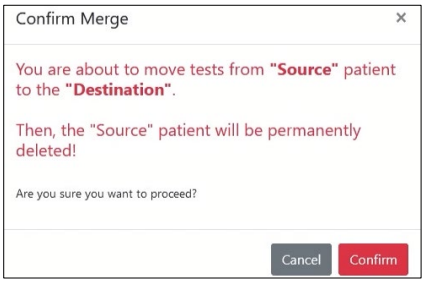


Figure 137: Confirm Merge Dialog Box

5. To approve merging, click the Confirm button.

Reports

This advanced feature enables users to create new report templates or modify existing ones. Reports can be customized by adjusting various parameters, such as text strings, graph visualizations, report layout, current date and time, and test details (e.g., Test Date, Type, Name, Gender, ID, and Signed By), as shown in the **Confirmed Records For Month** report image.

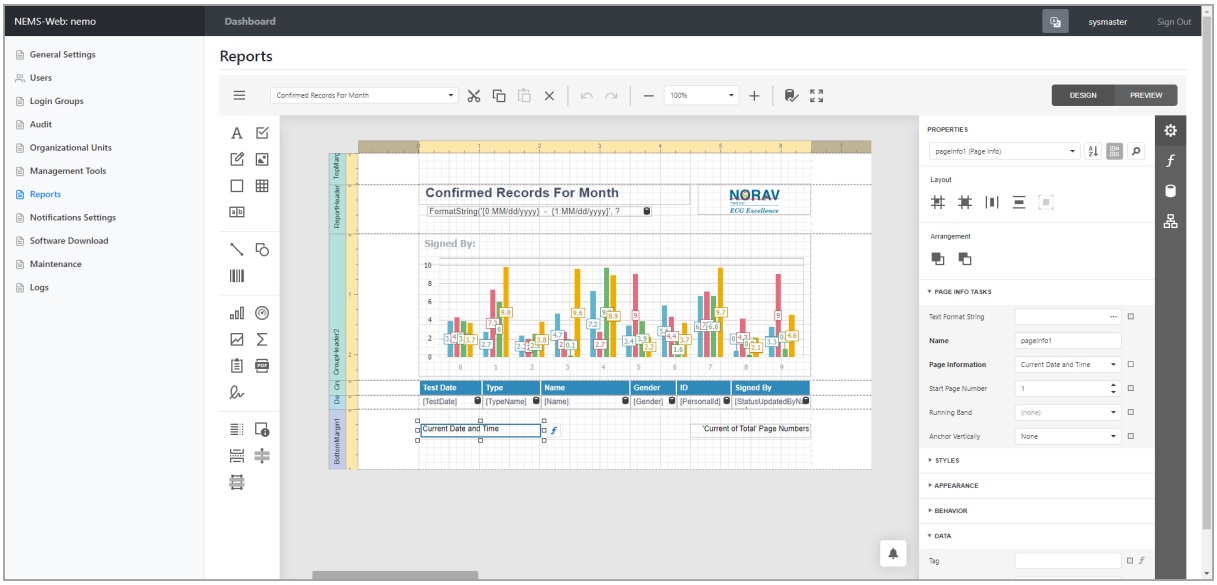


Figure 138: Reports Settings

To customize the report template, use the available tools in the interface, including design and preview options, premade report elements, layout arrangements, and report logic. Tooltips provide guidance on individual settings and parameters for ease of use.

For more detailed adjustments, use the **Properties Panel** on the right side of the screen, where you can configure a range of parameters to refine report elements.

Notifications Settings

This feature is designed to notify relevant NEMS-Web users about events related to patient tests (e.g., pending reviews, record review completion) and administrative notifications (e.g., blocked users, server storage space warnings). It ensures timely follow-up and care coordination by sending notifications through various channels, including in-system alerts, email, and SMS.

Administrator permissions are required to adjust these settings.

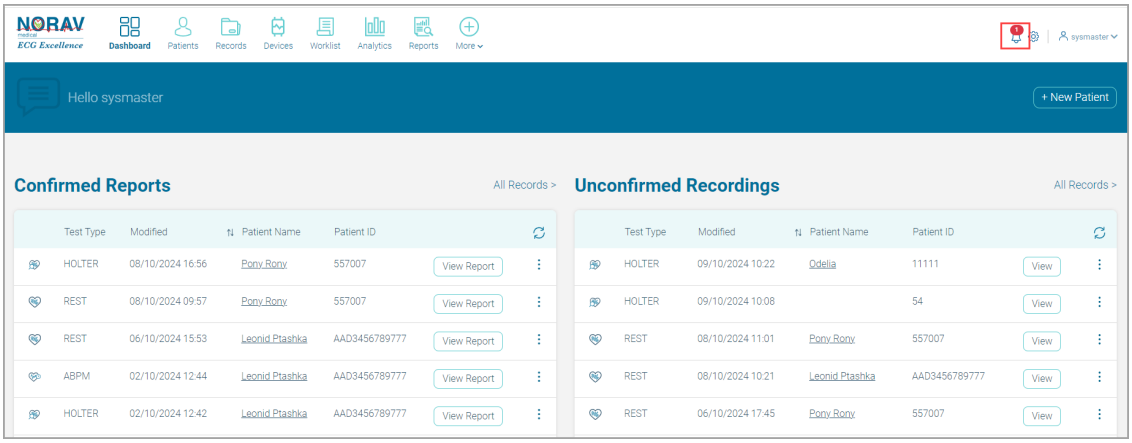


Figure 139: Notification Bell Icon

To access **Notifications Settings**:

1. Log into NEMS-Web as an administrator.
2. On the **Menu Bar**, click the **More** drop-down list.
3. Click **Notifications Settings**.
4. The **Notifications Settings** dialog box is displayed.

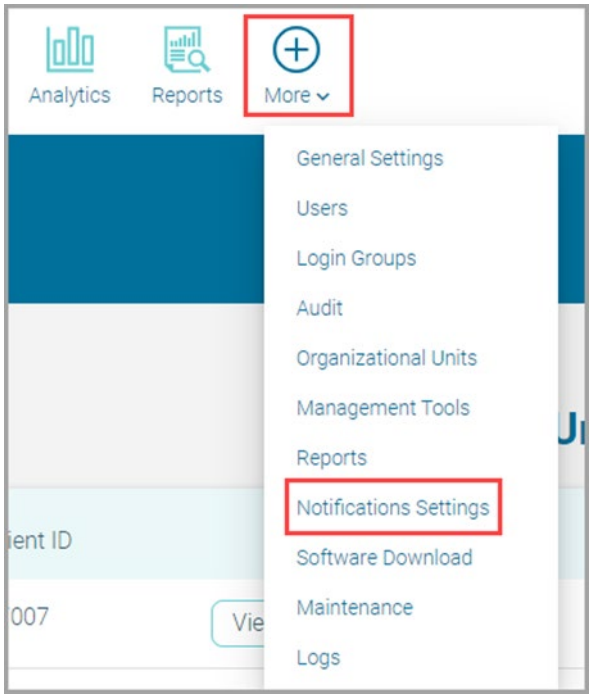


Figure 140: Navigating to Notification Settings

The **Notifications Settings** screen contains four key tabs:

1. **Users Groups**

2. **Carriers**
3. **Messages**
4. **Templates**

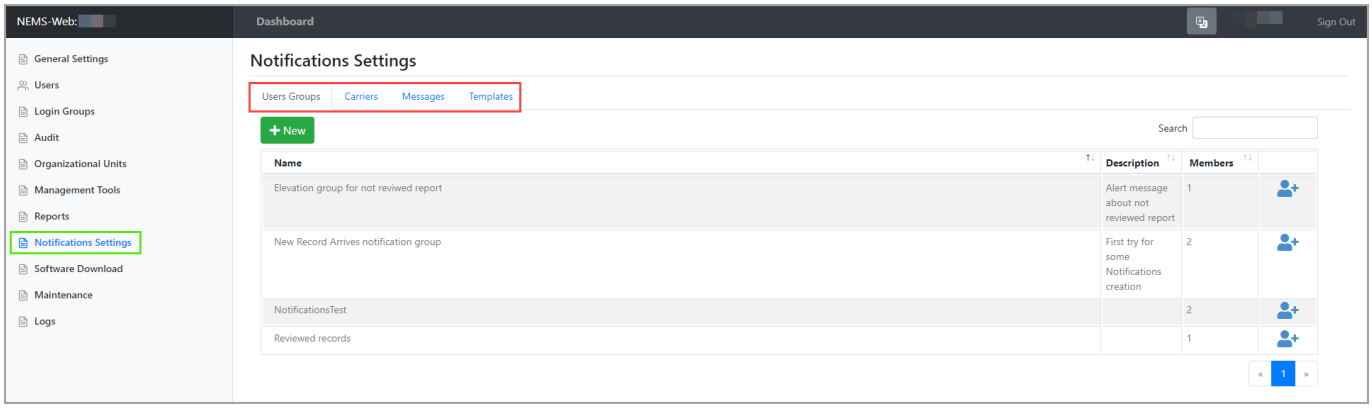


Figure 141: Notification Settings Tabs

The notification setup procedure follows a straightforward process:

1. **Users Groups tab:** Create a user group containing all the target users who should receive this notification.
2. **Carriers tab:** Define and configure the delivery carrier (email or SMS). If no carrier is defined, the notification will only appear on the website.
3. **Messages tab:** Set the trigger for the notification and compose the message content using text and predefined trigger fields (placeholders).
4. **Templates tab:** Create a notification template by defining the message, carrier, target user group, and additional parameters for this notification.

Managing User Groups

To ensure notifications reach users, you first need to create user groups:

1. Click the **Users Groups** tab.

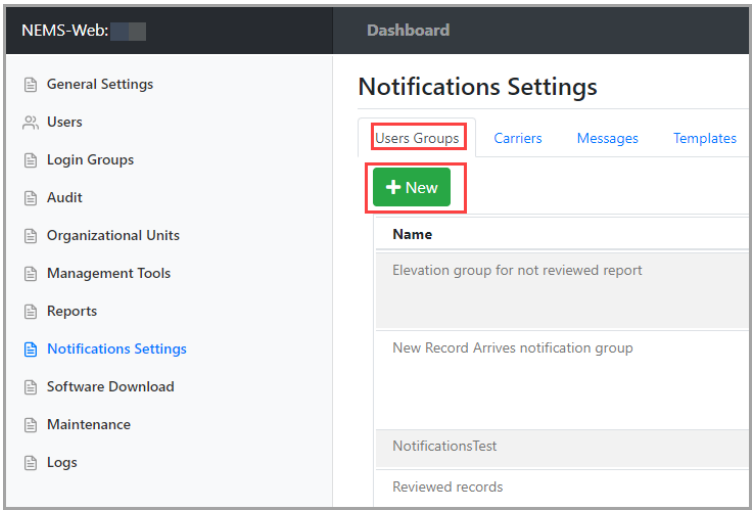


Figure 142: Creating User Groups

2. Click **+ New** to create a new notification group.

3. Assign a **Name** (mandatory field) and a **Description** to the group.

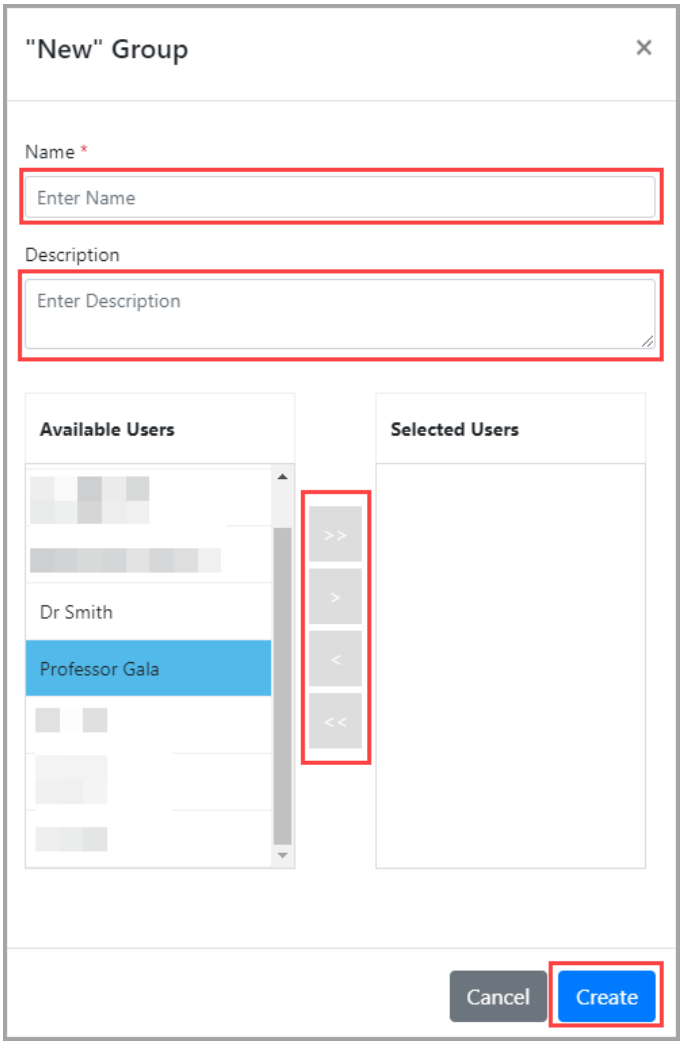


Figure 143: Enter Group Details

4. Add members from the **Available Users** list to the **Selected Users** list:
   - To move all users from **Available Users** to **Selected Users**, click the **>>** button.
   - To move individual users, double-click their name in the **Available Users** list, or select a user and click the **>** button.
   - **(Optional)** To remove users from **Selected Users**, double-click their name or use the **<** and **<<** buttons.
5. Click **Create** to finalize the group with the selected users.

Once the group is created, you need to set up the delivery carrier, compose the message, and then create a notification template by assigning the group. This ensures that different groups receive specific types of alerts.

To modify a user group:

1. Click the **Members** icon (highlighted as a person symbol with a plus sign) to open the modification dialog box.

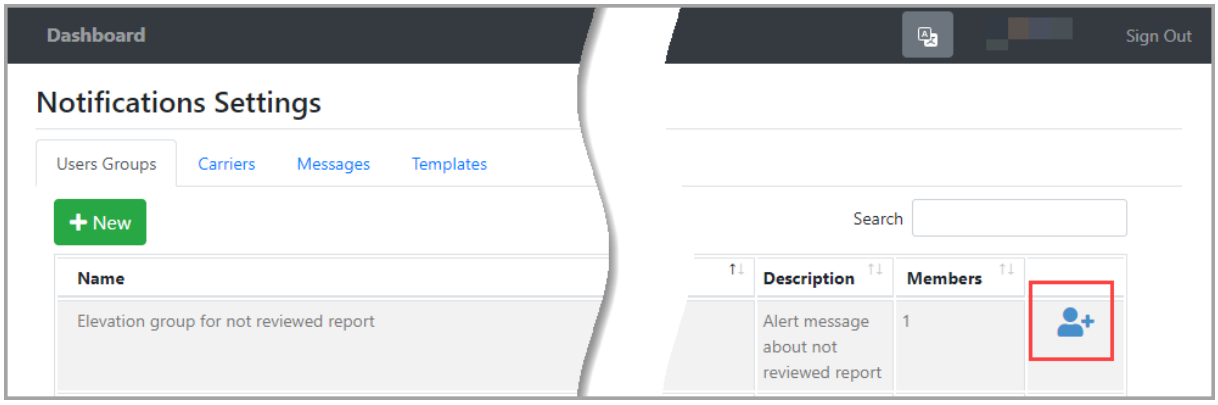


Figure 144: Edit Group Details

2. Update the group information, if needed:
   - **Name**: Click the **Name** text field and enter a new name for the group.
   - **Description**: Click the **Description** text field and enter a new description.
3. Add or remove users, if needed:
   - **To add users**:
     - From the **Available Users** list, select the users you want to add.
     - Click the **>** button to move selected users to the **Selected Users** list.
     - To add all users, click the **>>** button.
   - **To remove users**:
     - From the **Selected Users** list, select the users you want to remove.
     - Click the **<** button to move them back to **Available Users**.
     - To remove all users, click the **<<** button.
4. Click **Save Changes** to apply the modifications.

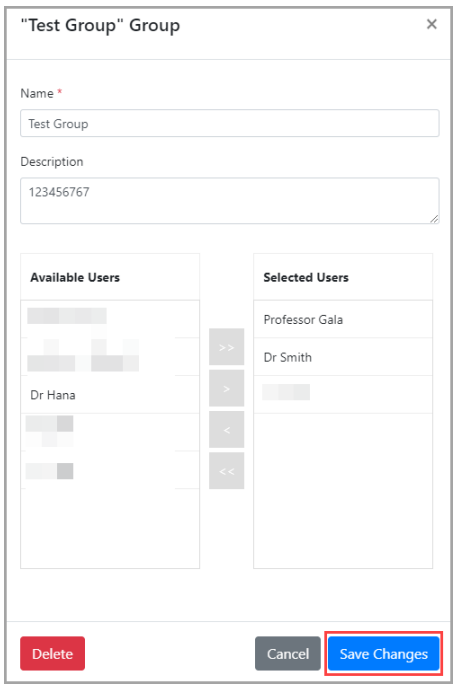


Figure 145: Save Changes

5. **(Optional)** To delete the group, click the **Delete** button. A warning prompt will appear, asking for confirmation to proceed with the deletion. You will be required to enter the administrator password to complete the operation. Click **Proceed** to finalize the deletion or **Cancel** to abort. Note that this action is permanent.

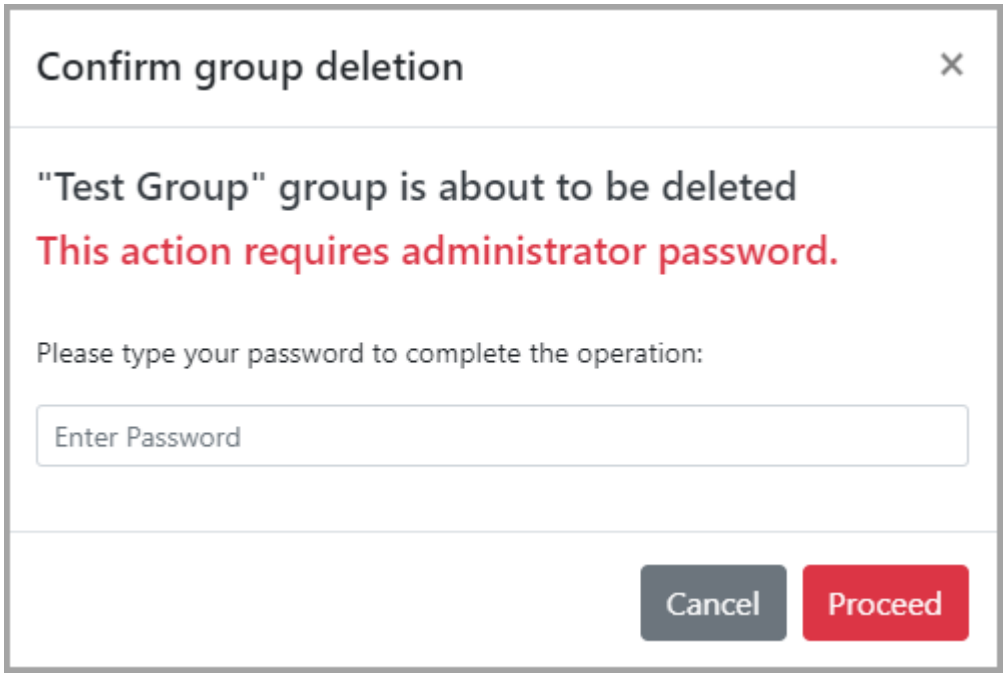


Figure 146: Confirm Group Deletion

Note

A warning prompt will appear for all deletion attempts. If the group is assigned to a template, it cannot be deleted, even if you proceed with the prompt.

Managing Notification Carriers

Carriers define how notifications will be delivered (e.g., Email or SMS).

To initiate the setup of a new notification carrier:

1. Click the **Carriers** tab.

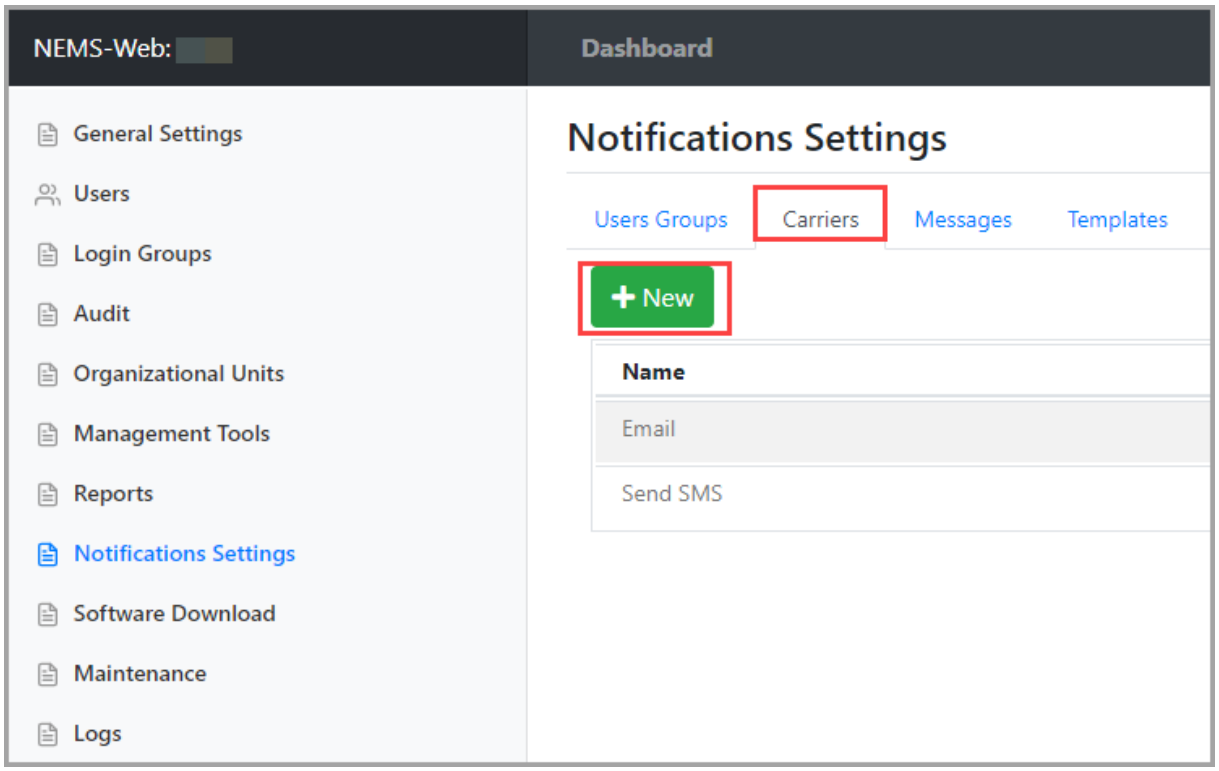


Figure 147: Creating Carrier

2. Click **+ New** to create a new carrier.
3. Follow the instructions in the **General Settings** section for **setting up Email and SMS carriers**, since the procedure follows the same steps as those used for setting up two-factor authentication.

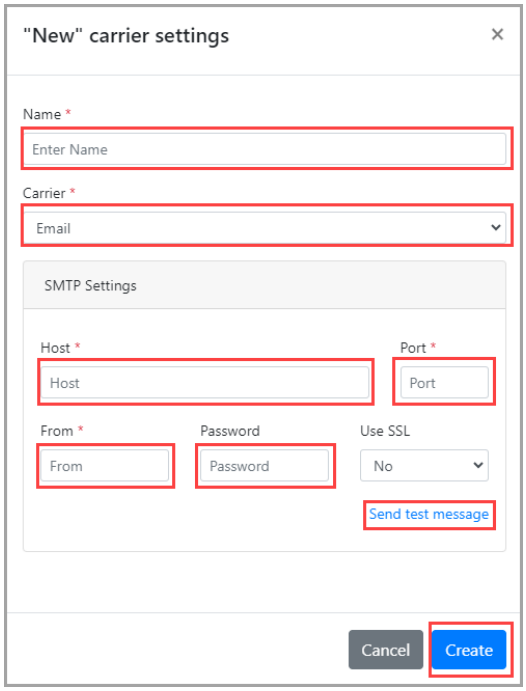


Figure 148: Creating Carrier

Once the carrier is set up, send a test message to verify the configuration by clicking **Send test message**.

To modify an existing notification carrier:

1. Locate the carrier you want to modify and click the **Edit** icon (highlighted as a pencil symbol) to open the modification dialog box.

Figure 149: Edit Carrier Details

2. Update the carrier information, if needed:
    - **Name**: Click the **Name** text field and enter a new name for the carrier.
    - **Carrier Type**: Choose **Email** or **SMS** from the **Carrier** drop-down menu.
        - **For Email**:
            - **Host**: Update the SMTP host address if necessary.
            - **Port**: Update the SMTP port number.
            - **From**: Update the sender email address.
            - **Password**: Update the SMTP password.
            - **Use SSL**: Update whether SSL is used by selecting **Yes** or **No**.
        - **For SMS**:
            - **Account SID**: Update the account SID for the SMS service.
            - **Auth Token**: Update the authentication token.
            - **From**: Update the sender's phone number.

3. Click **Send test message** to verify the updated configuration after making modifications. It is recommended to test the carrier configuration.

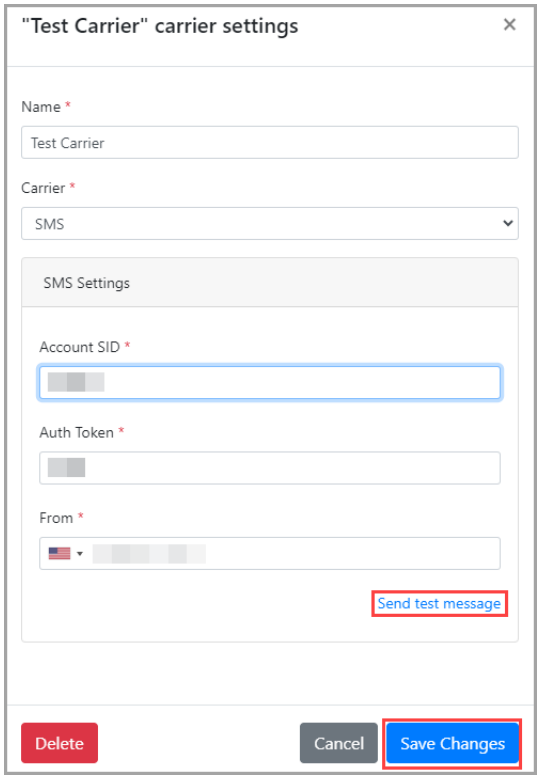


Figure 150: Save Changes

4. Click **Save Changes** to apply the modifications. To discard the changes, click **Cancel**.
5. **(Optional)** To delete the carrier, click the **Delete** button. A warning prompt will appear, asking for confirmation to proceed with the deletion. You will be required to enter the administrator password to complete the operation. Click **Proceed** to finalize the deletion or **Cancel** to abort. Note that this action is permanent.

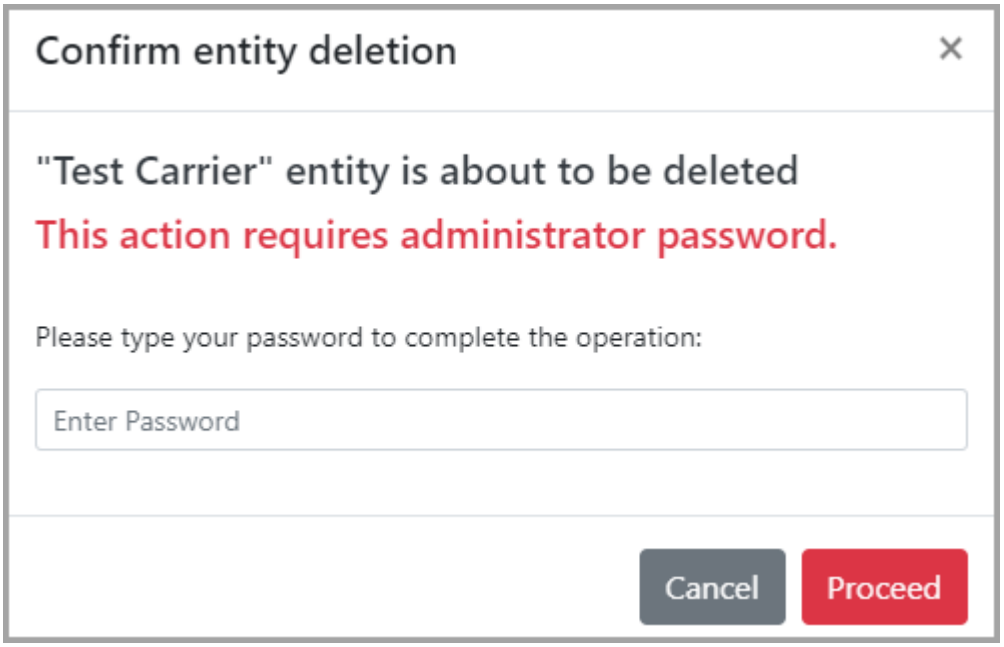


Figure 151: Confirm Entity Deletion

Note

A warning prompt will appear for all deletion attempts. If the carrier is assigned to a template, it cannot be deleted, even if you proceed with the prompt.

Managing Notification Messages

To create notification messages that will be delivered to users, follow these steps:

1. Click the **Messages** tab to view and manage existing message templates.

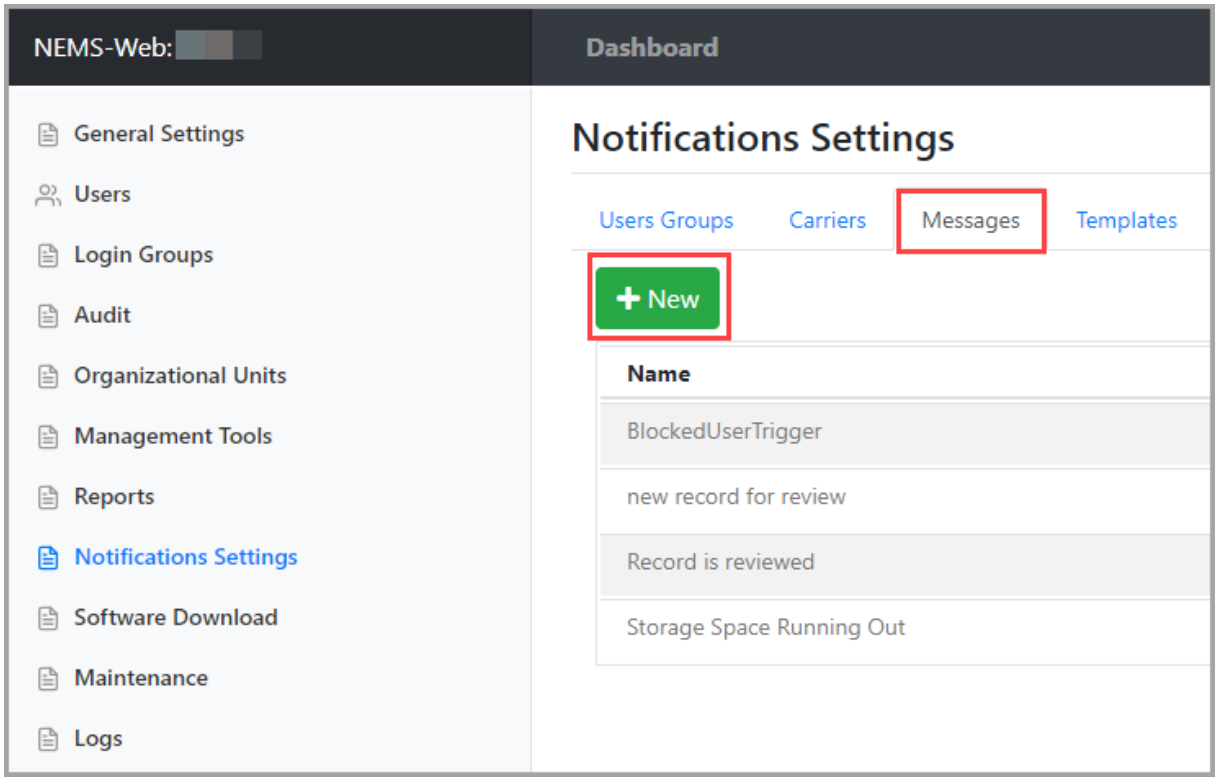


Figure 152: Creating Message

2. **Create a New Message Template:**
    1. Click the **+ New** button to create a new message template.
    2. **Name**: Enter a name for the new message (mandatory field).
    3. **Triggers**: Select a trigger for the notification from the **Triggers** drop-down list. Available triggers define the condition that will activate this notification.

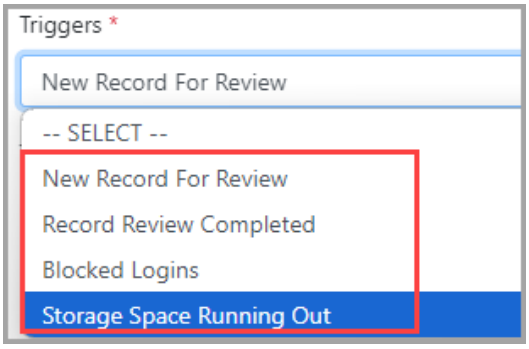


Figure 153: Select Trigger

4. **Trigger Fields**: Use **Trigger Fields** to personalize messages by inserting placeholders based on relevant data points, such as LastName, FirstName, or TestDate. Click on any available trigger fields to insert them directly into the **Message Template** text box, ensuring that your message contains relevant dynamic data. Note that different triggers offer different trigger fields or no trigger fields at all (e.g., the **Storage Space Running Out** trigger).

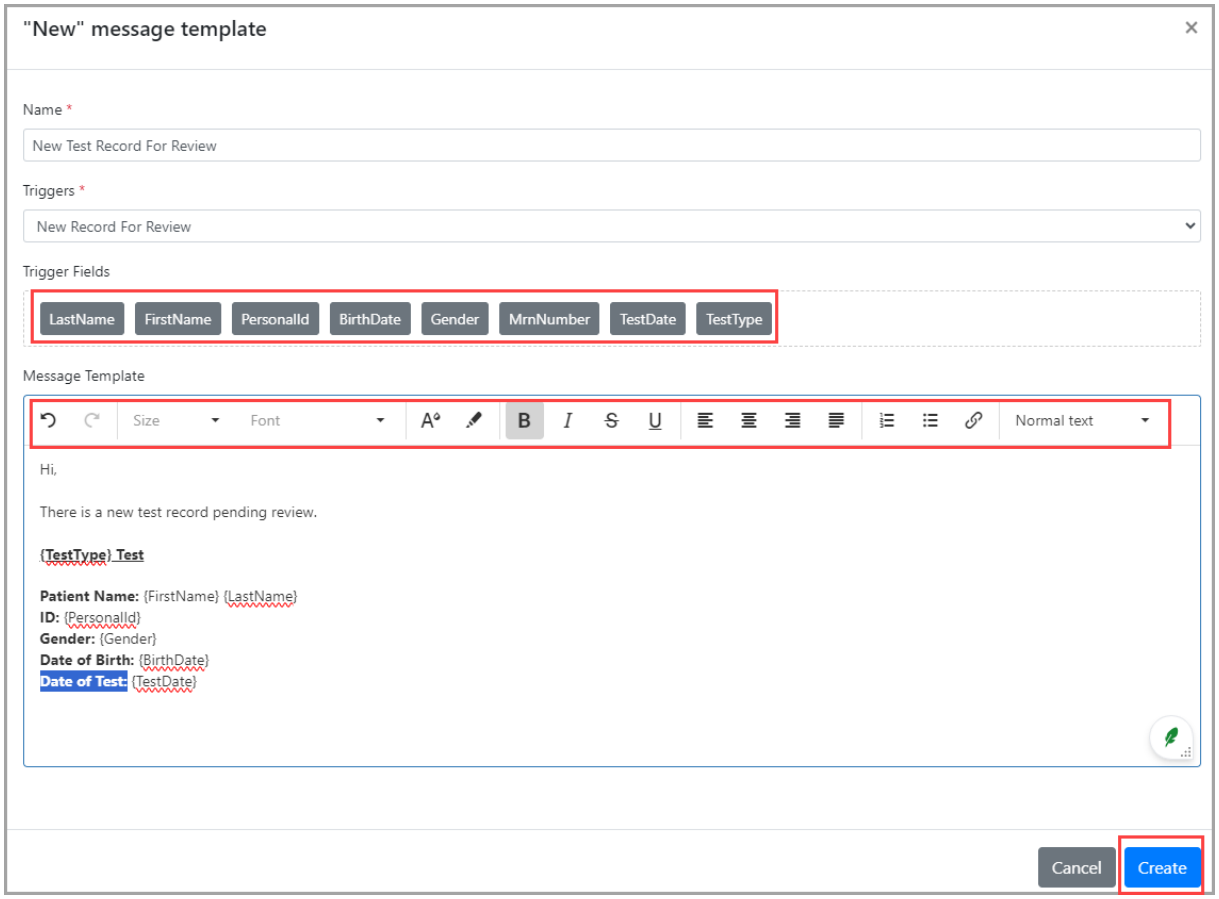


Figure 154: Use Trigger Fields

5. **Message Template**: Compose the message content in the provided text box. Use formatting tools (bold, italic, underline, etc.) as needed. Insert placeholders for personalized fields using the provided options.

3. After completing the message template, click **Create** to finalize it.

Trigger	Description
New Record For Review	There is a new test pending for review.
Record Review Completed	The record has been reviewed and confirmed by a user. The status of the record is now **Confirmed**.
Blocked Logins	A user has been blocked due to several failed login attempts.
Storage Space Running Out	The space on your server storage drive is running out.

Trigger Filed	Triggers	Description

{FirstName}	New Record For Review, Record Review Completed	Patient's First Name.
{LastName}	New Record For Review, Record Review Completed	Patient's Last Name.
{PersonalId}	New Record For Review, Record Review Completed	Patient ID stored in the system.
{Gender}	New Record For Review, Record Review Completed	Patient's Gender.
{BirthDate}	New Record For Review, Record Review Completed	Patient's Birth Date.
{MrnNumber}	New Record For Review, Record Review Completed	Medical Record Number: A unique identifier for each patient's medical record.
{TestType}	New Record For Review, Record Review Completed	Type of the test.
{TestDate}	New Record For Review, Record Review Completed	The date on which the test was performed and the record was created.
{ReviewSummary}	Record Review Completed	Summary of the test review.
{UserName}	Blocked Logins	Username of the blocked user.
{DateCreated}	Blocked Logins	Date when the user was blocked.
{Workstation}	Blocked Logins	Workstation, where the user was blocked.

To modify an existing message template:

1. Locate the message template you want to modify from the list.

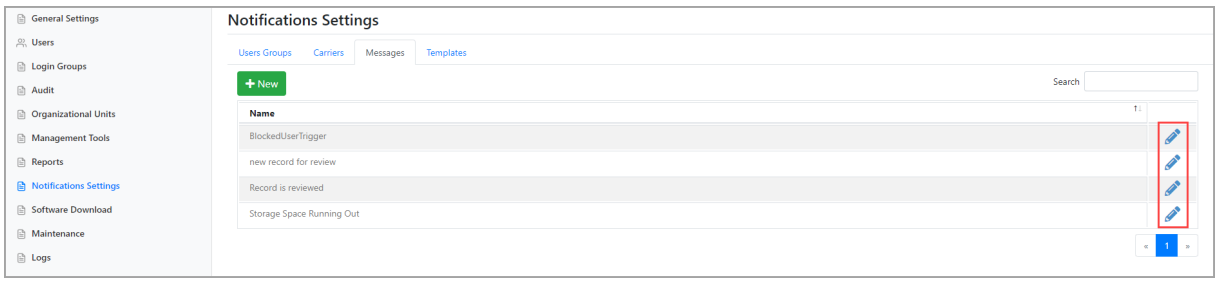


Figure 155: Edit Message

2. Click the **Edit** icon (pencil symbol) next to the message template to open the modification dialog box.
3. Update the following fields if needed:

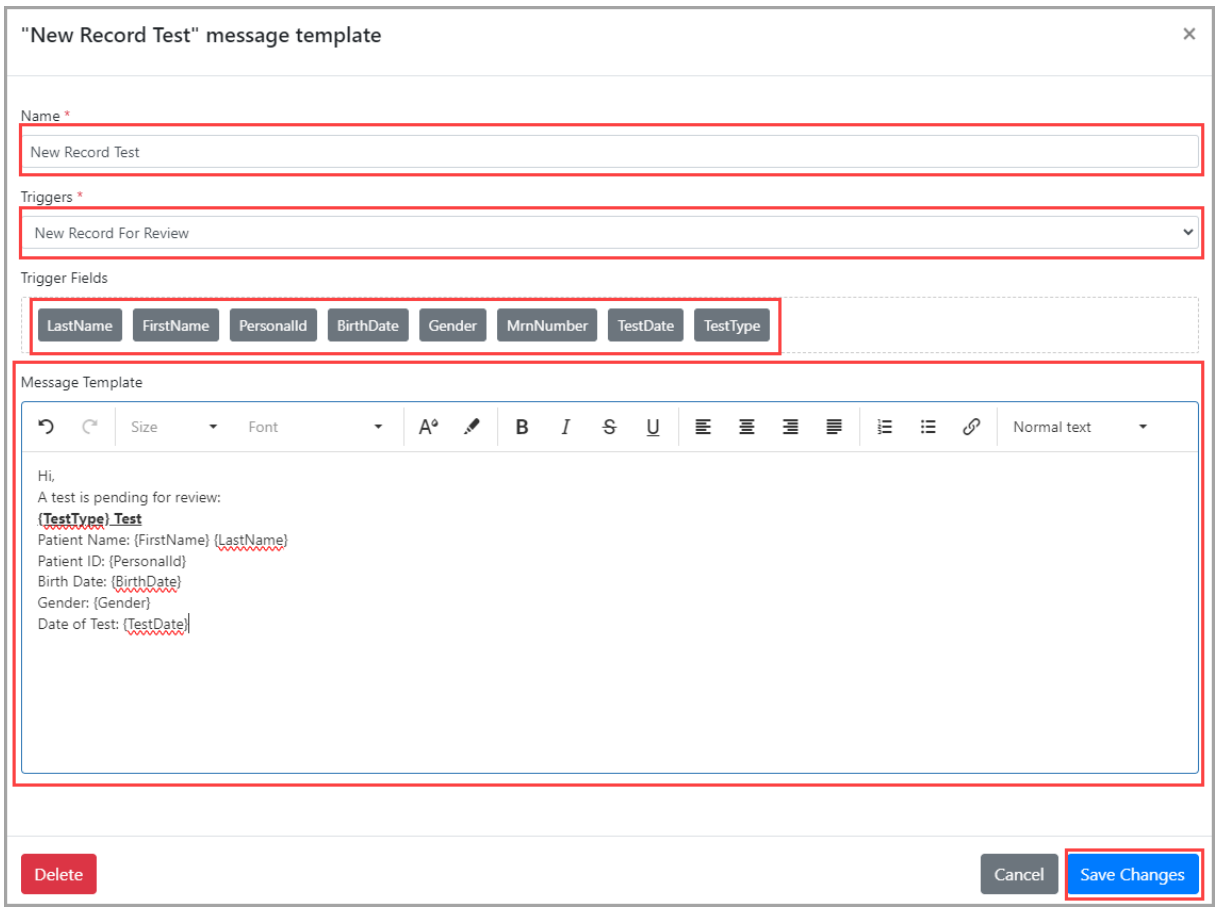


Figure 156: Edit Message

1. **Name**: Update the name of the message.
2. **Triggers**: Update the trigger for the notification.
3. **Message Template**: Update the message content using the text box, ensuring all placeholders are still relevant.

4. Click **Save Changes** to apply the modifications or click **Cancel** to discard them.
5. **(Optional)** To delete an existing message template, click the **Delete** button. A warning prompt will appear, asking for confirmation to proceed with the deletion. You will be required to enter the administrator password to complete the operation. Click **Proceed** to finalize the deletion or Cancel to abort. Note that this action is permanent.

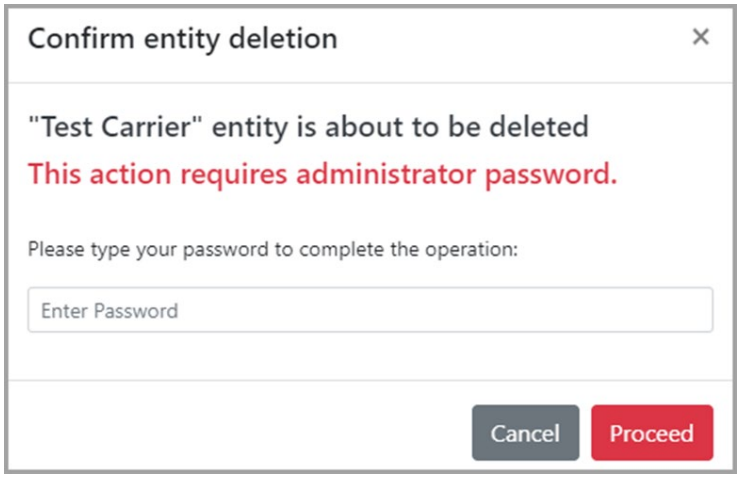


Figure 157: Confirm Entity Deletion

Note

A warning prompt will appear for all deletion attempts. If the message is assigned to a template, it cannot be deleted, even if you proceed with the prompt.

Configuring Notification Templates

Notification templates define the events (or triggers) that generate notifications and the message content sent to users.

To create notification templates:

1. Click the **Templates** tab to view and manage existing notification templates.

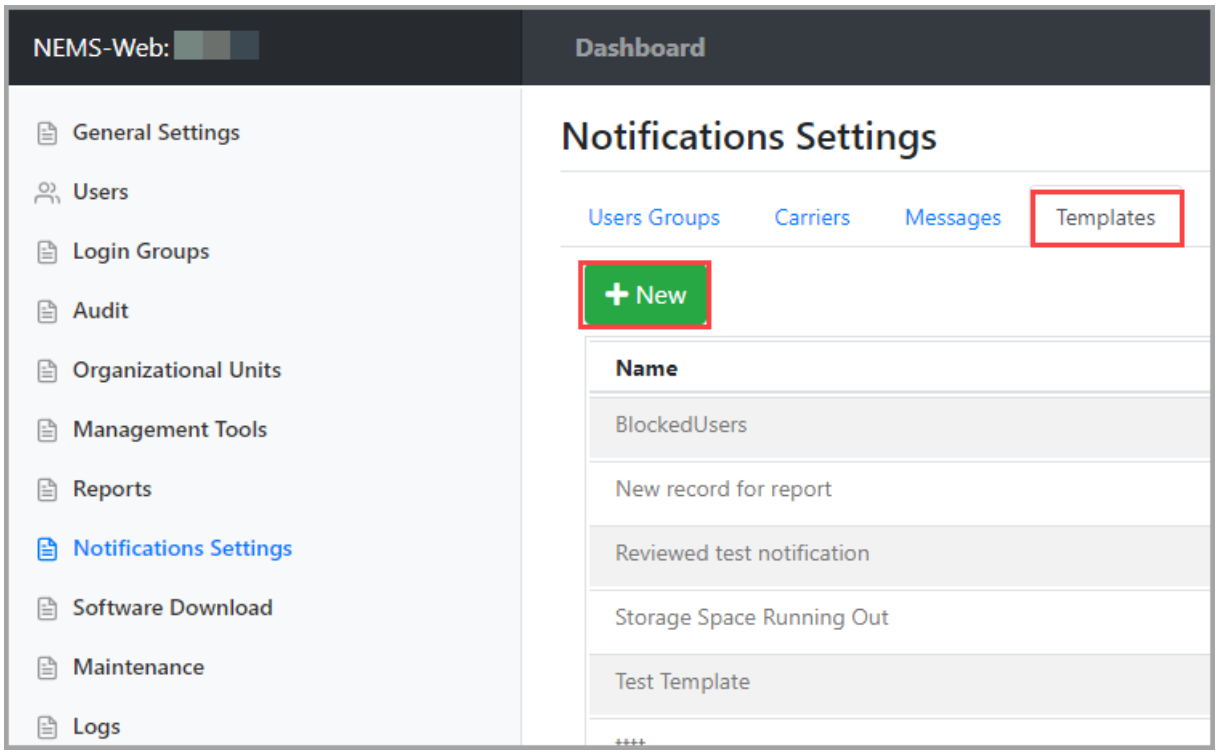


Figure 158: Create Notification Template

2. **Create a New Template:**
    1. Click the **+ New** button to create a new template.
    2. **Name**: Enter a meaningful name for the notification. For example, names like "New ECG Completed" or "Follow-up Appointment Reminder" can make it easier to recognize the template's purpose. This is a mandatory field.

3. **Description**: Enter a description that summarizes the purpose of the template.

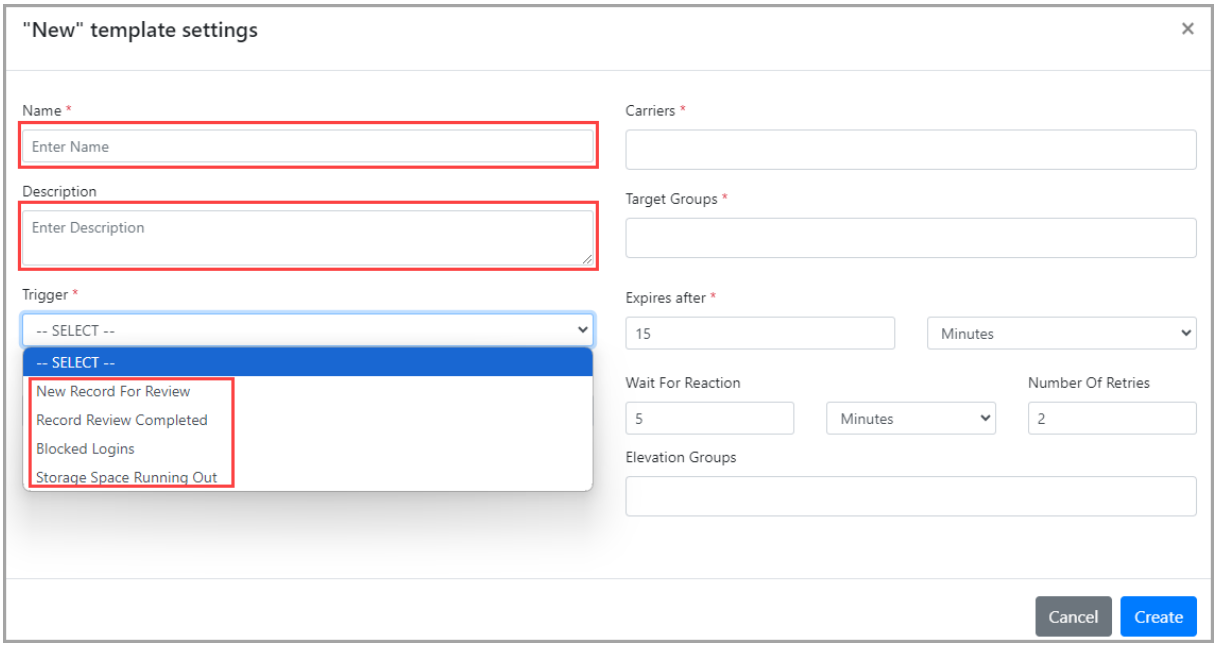


Figure 159: Assign Name, Description, and Trigger

4. **Triggers**: Click and select a trigger for the notification from the **Triggers** drop-down list. Available triggers define the condition that will activate this notification:
    - **New Record For Review:** There is a new test pending for review. For this trigger, select which **Test Types** should activate the trigger: REST, STRESS, HOLTER, ABPM.

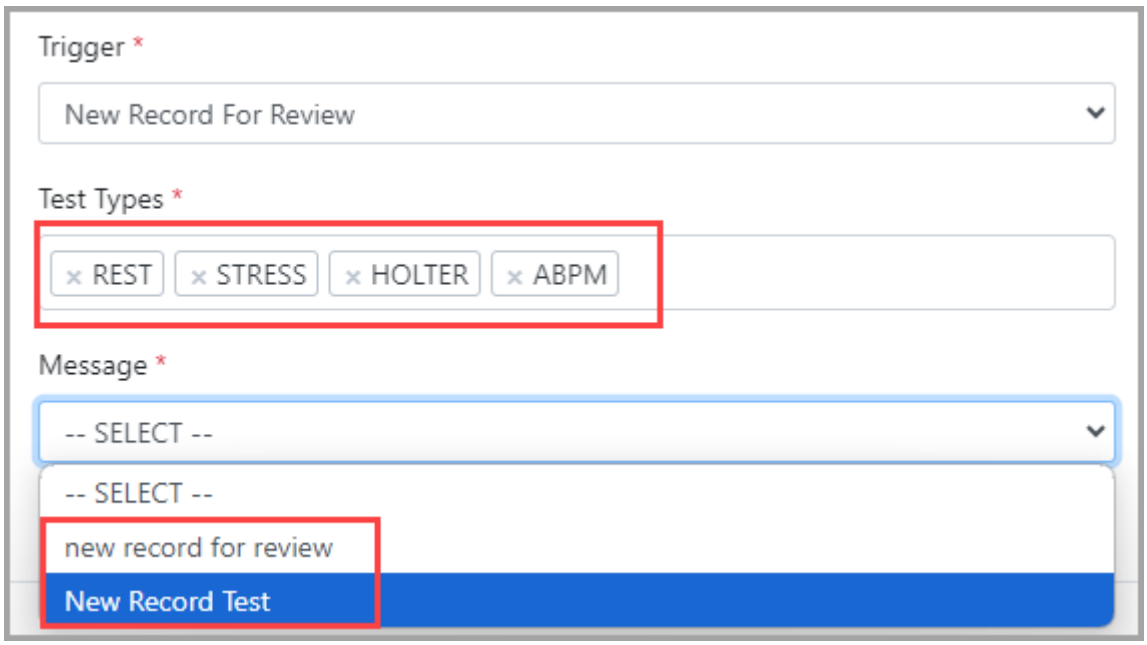


Figure 160: Assign Test Type and Message

- **Record Review Completed:** A record has been reviewed and is ready for confirmation. For this trigger, select which **Test Types** should activate the trigger: REST, STRESS, HOLTER, ABPM.
- **Blocked Logins:** Indicates that a user was blocked due to multiple failed login attempts.

- **Storage Space Running Out:** Alerts when storage space on the server drive is running low. For this trigger, select the value in GB or % of the total disk space to activate this trigger.

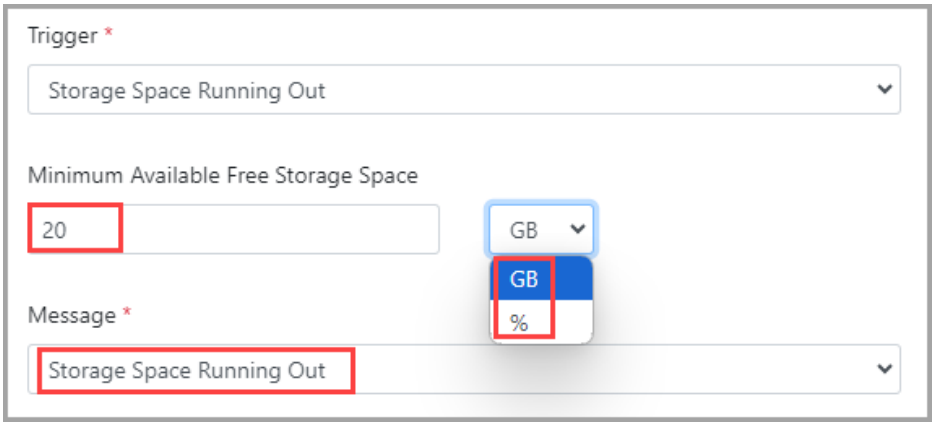


Figure 161: Assign Minimum Available Disk Space and Message

5. **Message**: Click and select the available message template that was created in the **Messages** tab. The chosen message should align with the trigger to ensure accurate content is delivered.
6. **Carriers**: Click and select methods of delivery (e.g., **Email**, **Send SMS**). Each template must be associated with at least one carrier for delivering the message.

Figure 162: Assign Carriers

7. **Target Groups**: Click and select target user groups who will receive the notification. These groups can be configured from the **User Groups** tab.

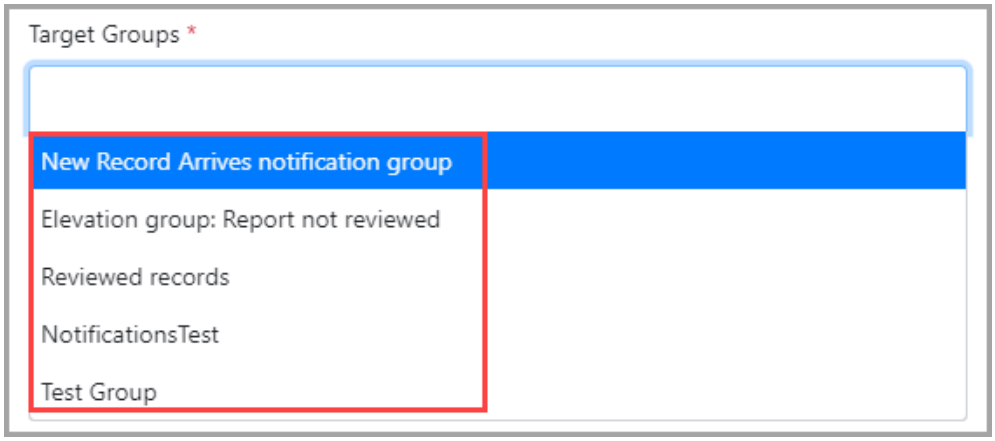


Figure 163: Assign Carriers

8. **Expires After**: Specify the expiration time for the notification (at least 1 minute). This determines how long the notification will be active in the system if no action is taken. Use the drop-down to select **Minutes**, **Hours**, or **Days**.

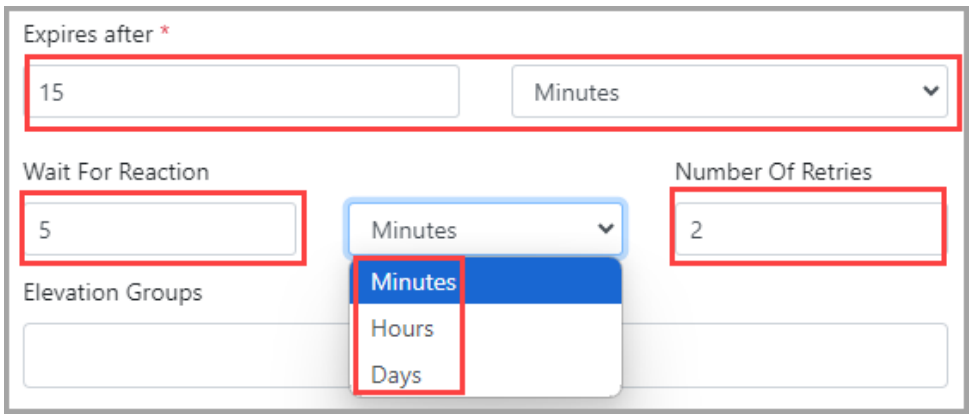


Figure 164: Assign Notification Life Cycle Parameters

9. **Wait for Reaction**: Define a waiting period before additional actions, like retries, take place. A reaction means clicking the **Close** button to dismiss a notification or clicking the link to the test, which also deletes the notification. This setting is useful for managing alerts that require user acknowledgment.
10. **Number of Retries**: Enter the number of attempts to re-send the notification if there is no response. This option ensures critical notifications are not missed.
11. **(Optional) Elevation Groups**: Click and select elevations group to manage unaddressed notifications, if available. If no action is taken within the specified time, the notification is escalated to a higher-level group (e.g., **Supervisors**).

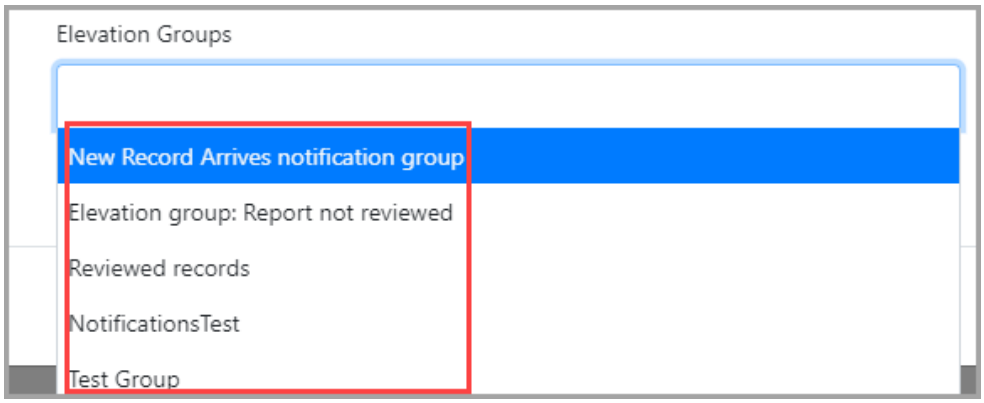


Figure 165: Assign Elevation Groups

3. After completing the message template, click **Create** to finalize it.

To modify an existing notification template:

1. Locate the template you want to modify from the list.

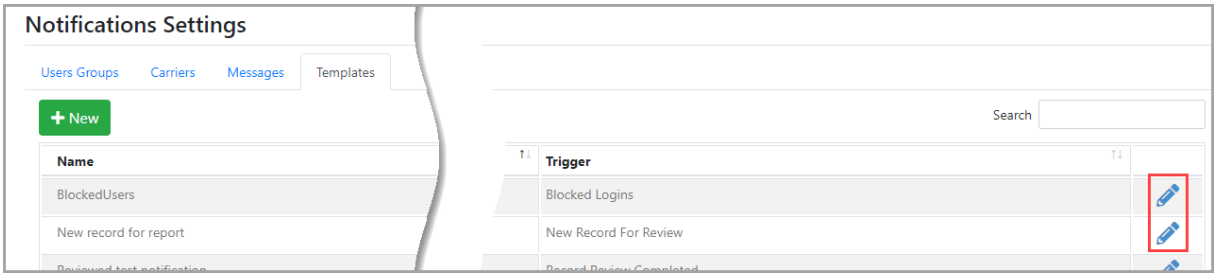


Figure 166: Edit Notification Template

2. Click the **Edit** icon (pencil symbol) to open the modification dialog box.
3. Update available fields (refer to **Step 2** of the instruction above) as needed.
4. Click **Save Changes** to apply modifications or **Cancel** to discard them.

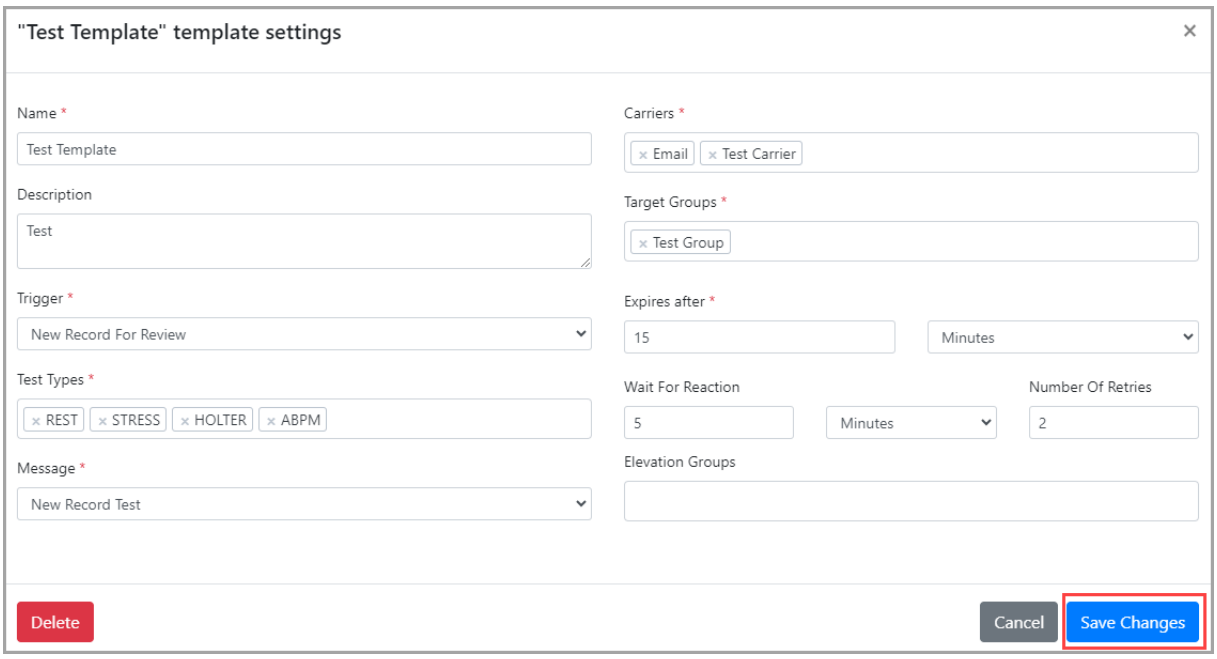


Figure 167: Save Notification Template

5. **(Optional)** To delete an existing notification template, click the **Delete** button. A warning prompt will appear, asking for confirmation to proceed with the deletion. You will be required to enter the administrator password to complete the operation. Click **Proceed** to finalize the deletion or **Cancel** to abort. Note that this action is permanent.

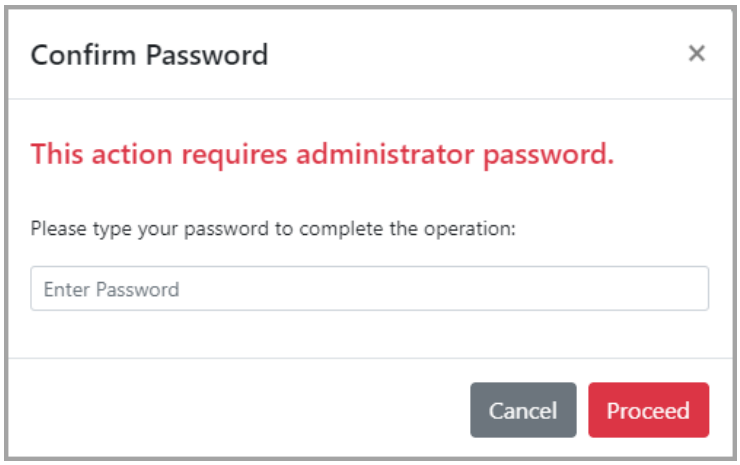


Figure 168: Confirm Template Deletion

Software Download

The **Software Download Screen** allows downloading the Norav applications locally in the Client Side, and then installing the software.

1. On the **Menu Bar**, click the 

drop-down list, and then click 

.

   The **Software Download Screen** is displayed (see Figure 169).

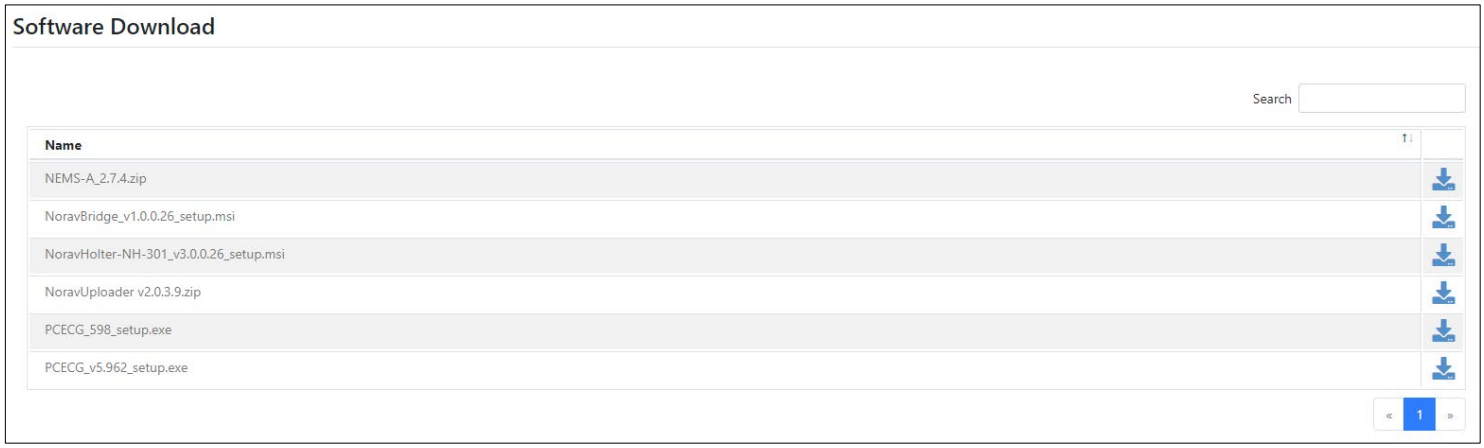


Figure 169: Software Download Screen

2. To download the required software, click the  icon on the right of the screen.
3. Install the software.

Imported Records

The **Imported Records** page enables administrators to track and manage all files imported into NEMS-Web via the NVDataPump service. Each record displays its status, allowing quick identification of successful and failed imports. This page helps administrators resolve import issues and maintain accurate records within the system.

Administrator permissions are required to view or manage this page. The permission for accessing **Imported Records** is assigned in the **Login Groups** page.

Accessing Imported Records

1. Log into NEMS-Web as an administrator.
2. On the **Menu Bar**, click the **More** drop-down list.
3. Click **Imported Records**.
4. The **Imported Records** page is displayed.

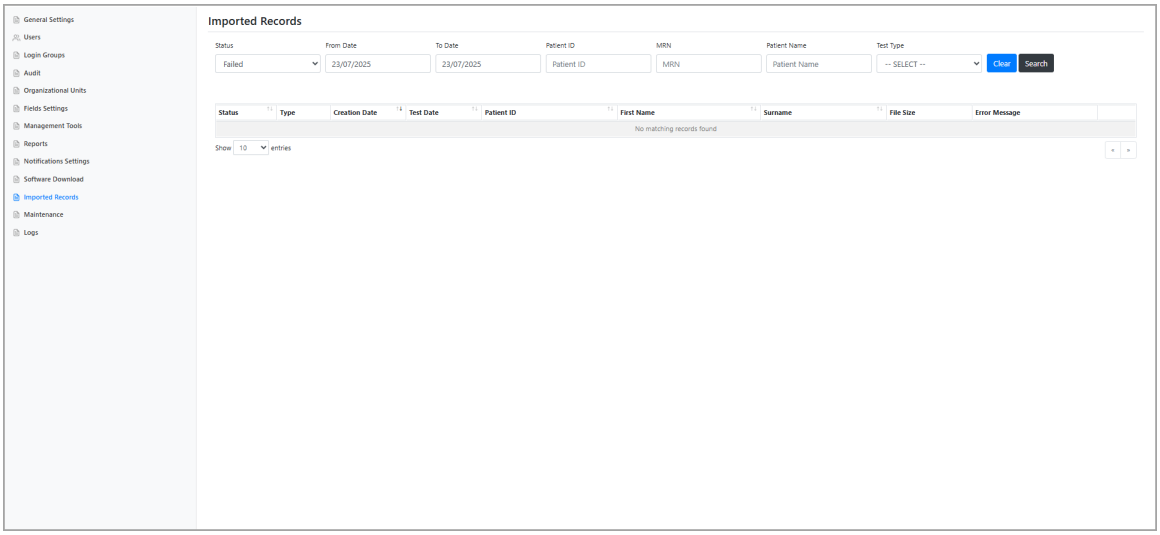


Figure 170: Accessing Imported Records Page

Using Filters on the Imported Records Page

The top section of the page contains multiple filters for locating records.
The available filters include:

1. **Status:** Select **Failed** or **Succeeded** to filter by result.

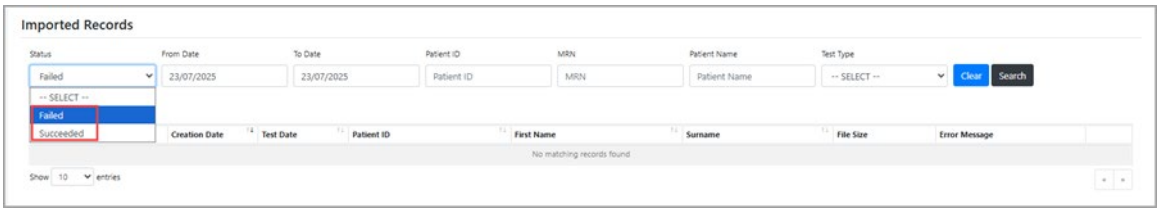


Figure 171: Accessing Imported Records Page

2. **Date Range:** Select **From Date** and **To Date** using the calendar pop-up to narrow results to a specific time frame.

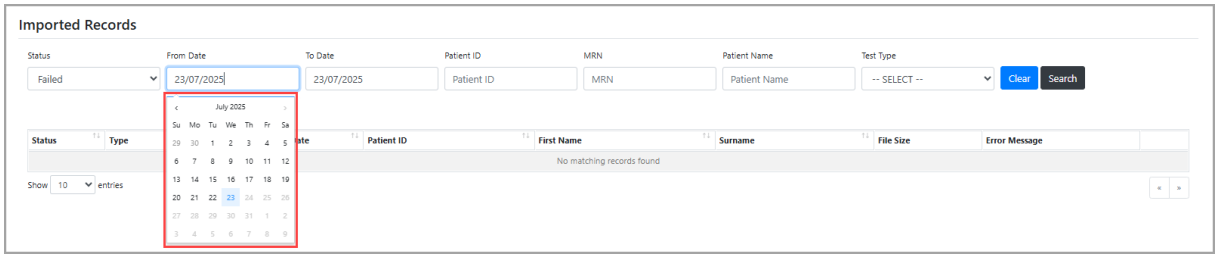


Figure 172: Selecting Date Range

3. **Patient Details:** Type in and filter by **Patient ID**, **MRN**, or **Patient Name**.

Figure 173: Filter by Patient Details

4. **Test Type:** Filter by type of test. Options include **Resting ECG**, **Exercise Stress Test**, **Holter**, **ABPM**, and **Stress**.

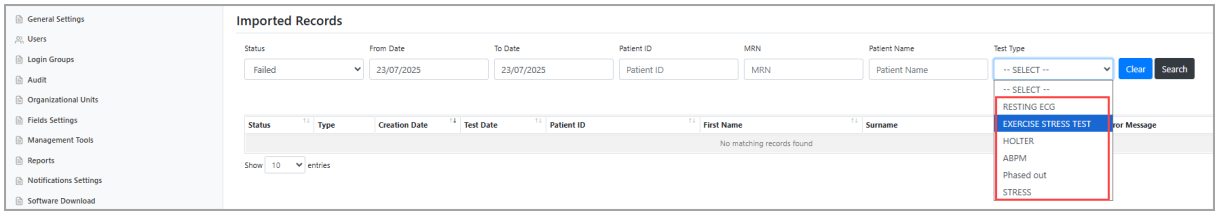


Figure 174: Select Test Type Options

5. **Entries per Page:** Select how many records to display at once (10, 25, 50, 100, 250, or 500).

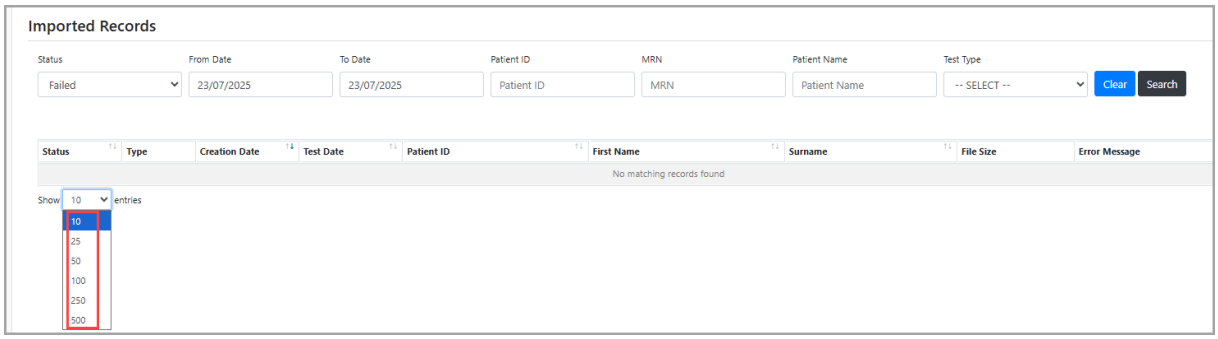


Figure 175: Select Number of Displayed Entries

After setting filters, click **Search** to display results or **Clear** to reset all filters.

Reviewing Imported Records

The results table lists each imported record with the following fields:

- **Status**: Indicates whether the import succeeded or failed.
- **Type**: Specifies the test type (e.g., Holter, Exercise Stress Test).
- **Creation Date**: Date and time when the file was created.
- **Test Date**: Date when the test was performed.
- **Patient ID, First Name, Surname**: Patient identifiers associated with the record.
- **File Size**: The size of the imported file.
- **Error Message**: For failed records, displays the error encountered (e.g., incorrect file format, missing file, invalid string data).

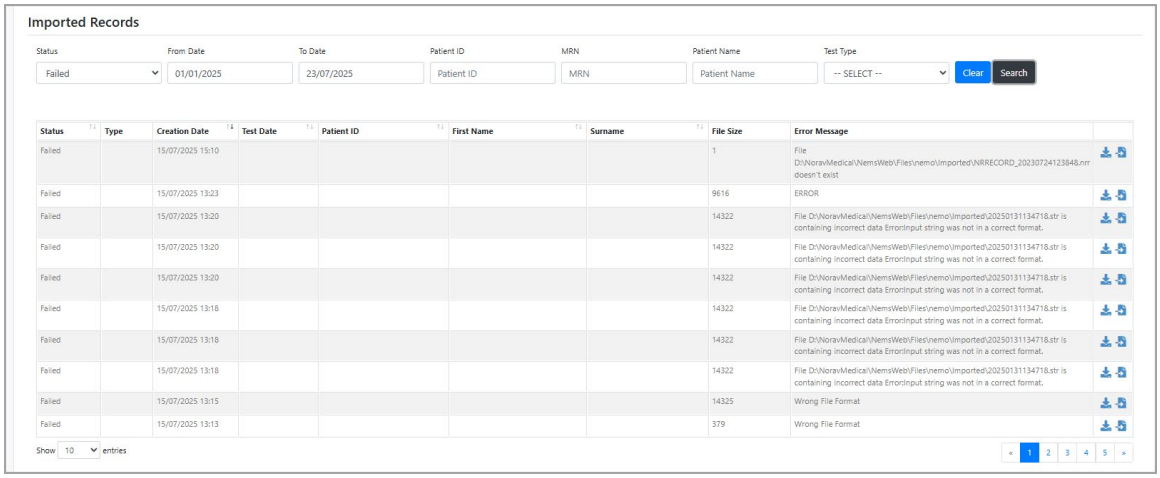


Figure 176: Example of Failed Imported Records

Regenerating Reports

If a record was successfully imported but the report has not been generated, the **Re-Generate Report** icon becomes available in the rightmost column of the **Imported Records** table.

This function allows users to attempt regenerating the report manually.

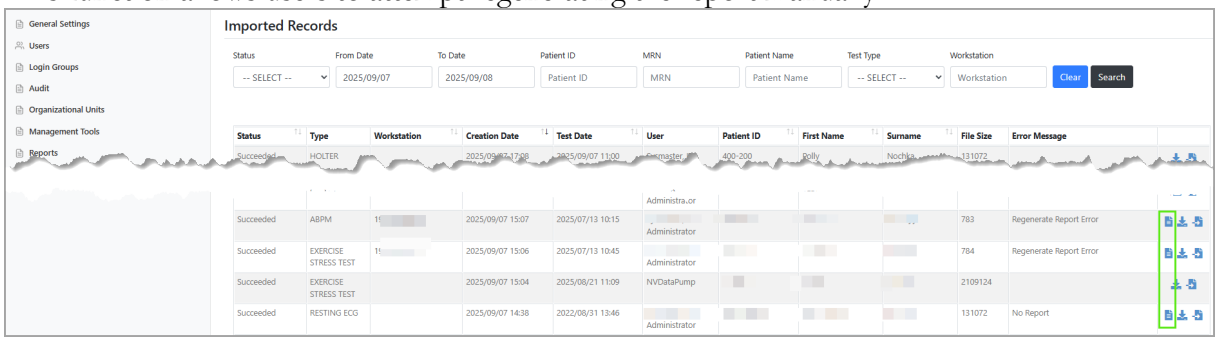


Figure 177: Re-Generate Report Icon

To regenerate the report:

1. Locate the record with a **"No Report"** or **"Regenerate Report Error"** status in the **Error Message** column.
2. Click the **Re-Generate Report** icon on the far right.
3. A confirmation prompt appears.

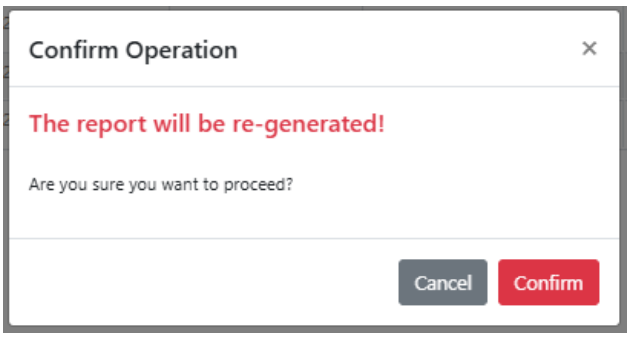


Figure 178: Re-Generate Report Confirmation Prompt

4. Click **Confirm** to proceed with report regeneration. Click **Cancel** to abort the operation.
5. If the operation is successful, a notification banner is displayed confirming the action.

All report regeneration operations are logged in the **NEMS-Web Audit** under the **Tests** group as a **Re-Generate Report** action for traceability.

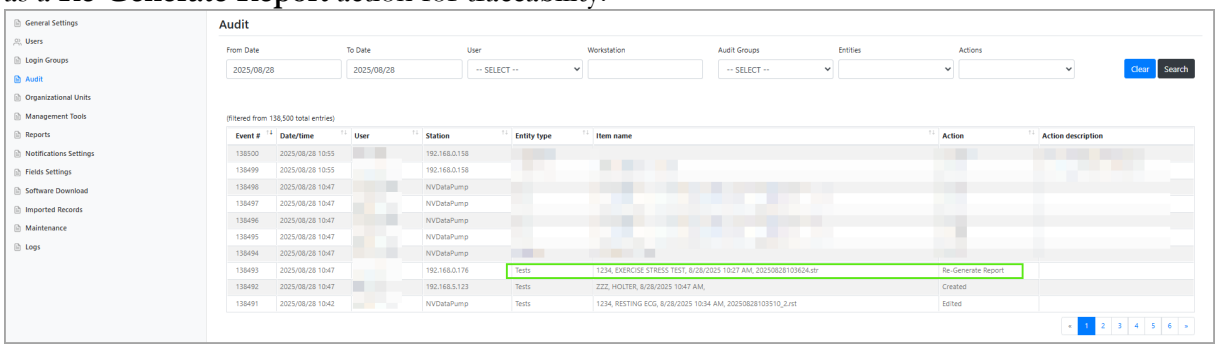


Figure 179: Audit Re-Generate Report Action Status

Downloading Imported Files

Each record includes a **Download** icon, located on the far right. Click the icon to download the file to a local workstation.

Re-Importing Failed Records

Failed records can be re-imported directly from the **Imported Records** page:

1. Click the **Re-Import** icon next to the failed record.

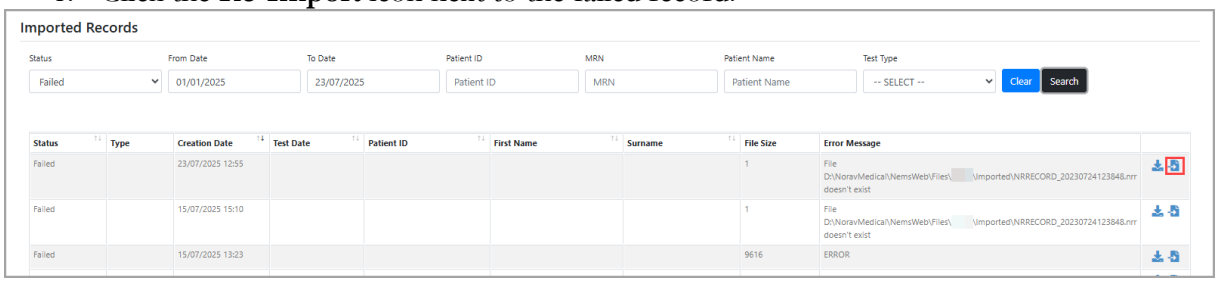


Figure 180: Click Re-Import Icon

2. A confirmation dialog appears with the warning message:
   "You are about to re-import the file! Are you sure you want to proceed?"
3. Click **Confirm** to retry the import or **Cancel** to abort

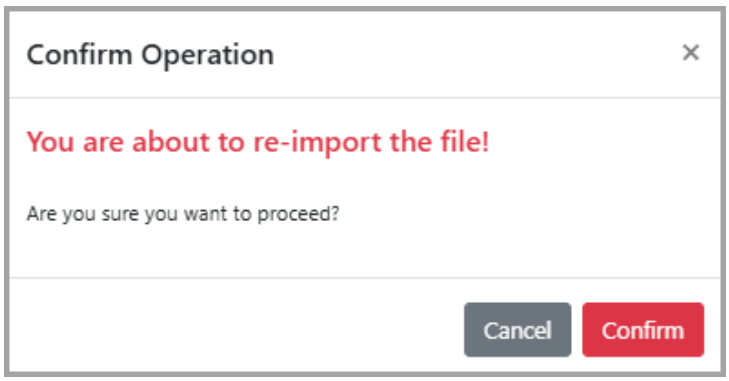


Figure 181: Re-Import Confirmation Dialog

All re-import operations are logged in the **NEMS-Web Audit** under the **Tests** group as a **Re-Imported** action for traceability.

Note

Only administrators with the appropriate permission can view or manage the Imported Records page.

Note

Re-importing is only available if the original file exists in the designated system directory.

Maintenance

The **Maintenance** feature in NEMS-Web allows administrators to manage server operations through a web interface. This feature includes tools for checking the status of services, managing database size, and clearing storage space.

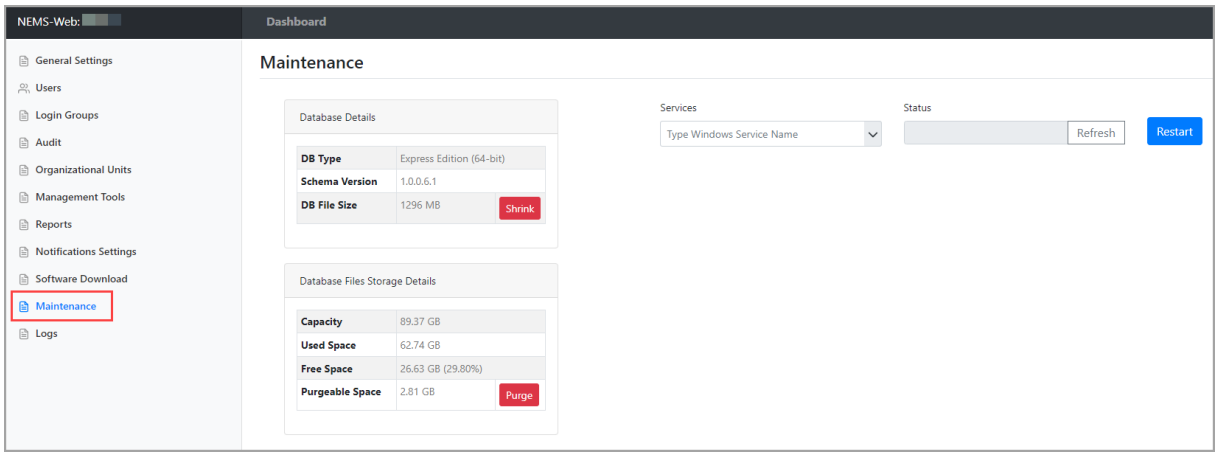


Figure 182: Maintenance Screen

Managing Norav Services

To check service status:

1. In the **Services** text field, type or select the Windows Service name you need to check from a drop-down list. Available options include:
   a. NVDataPump
   b. NVDataPumpWatchDog
   c. NEMSWEB.Notifications.Service
2. Click **Refresh** to display the current status of the selected service (e.g., Running, Stopped).

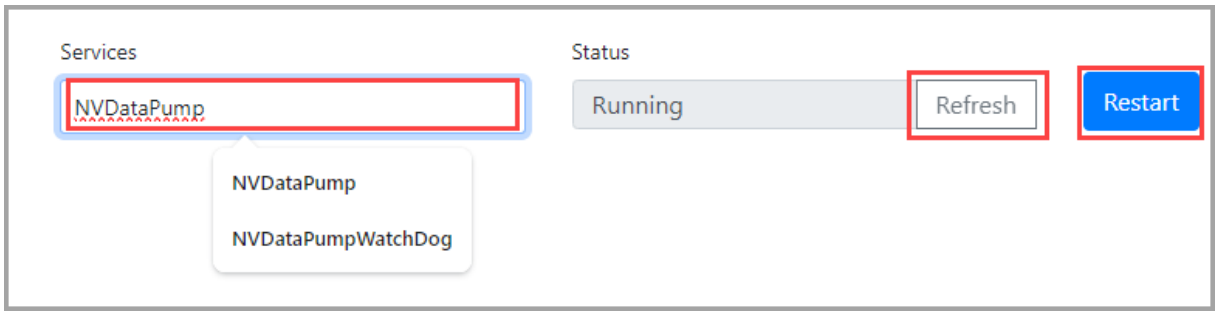


Figure 183: Maintenance Screen

To restart a service:

1. In the **Services** text field, type (or select from a drop-down list) the Windows Service name you need to restart.
2. Click the **Restart** button to restart the selected service.

Database Details

The **Database Details** section provides essential information about the database and allows you to manage its size by compressing it.

Parameter	Description
DB Type	Displays the type of database, for example, "Express Edition (64-bit)."
Schema Version	Shows the current data base schema version.
DB File Size	Displays the current size of the database in megabytes (MB).

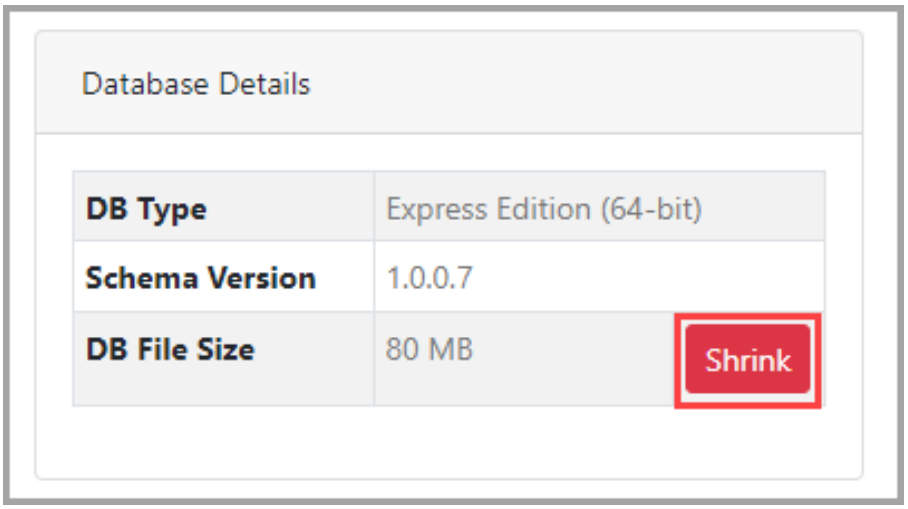


Figure 184: Database Details

To reduce (shrink) the database file:

1. Click the **Shrink** button to reduce the database file size.
2. A confirmation dialog will appear, asking for the **administrator password**. Enter the password and click **Proceed** to confirm the operation and complete the action. This operation is irreversible and requires administrator permissions.

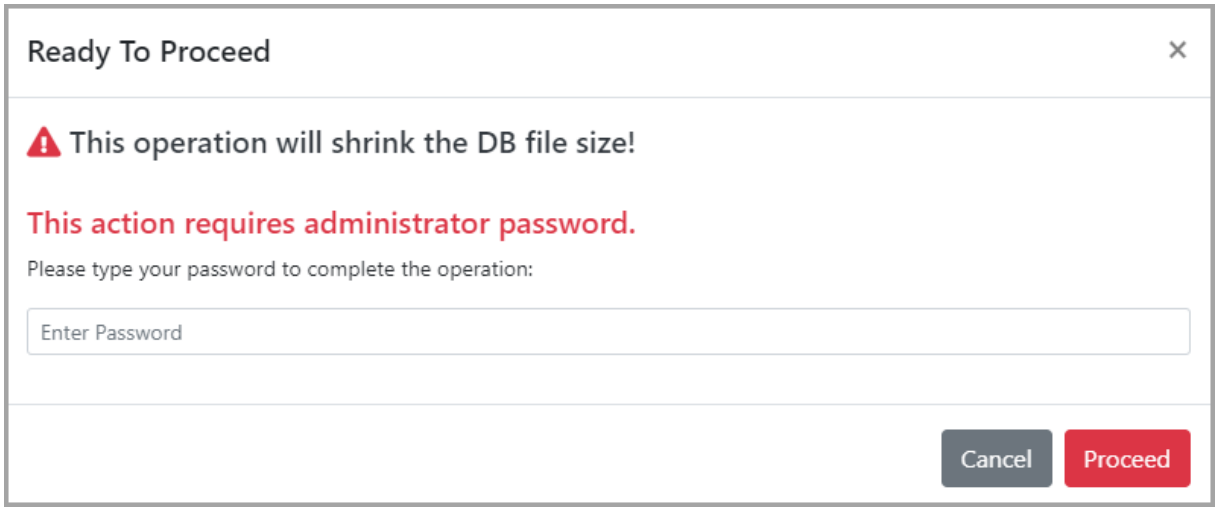


Figure 185: Proceed to Shrink Database

Database Files Storage Details

This section provides an overview of the current server storage situation, including information on capacity, used space, free space, and purgeable space.

Parameter	Description
Capacity	Total storage capacity allocated on the server drive for the database
Used Space	Storage space currently used on the server drive.
Free Space.	Remaining space on the server drive, shown in GB and percentage.
Purgeable Space	Space that can be freed on the server drive by removing temporary files.

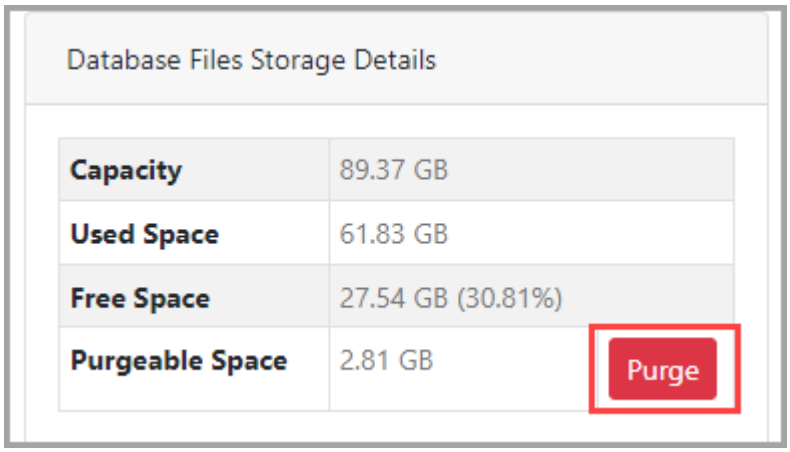


Figure 186: Database Files Storage Details

To remove (purge) temporary files:

1. Click the **Purge** button to delete temporary files.
2. A selection dialog box will appear. Choose to purge either the **UnZipped** or **Trash** folders separately by selecting the appropriate **Purge** button.

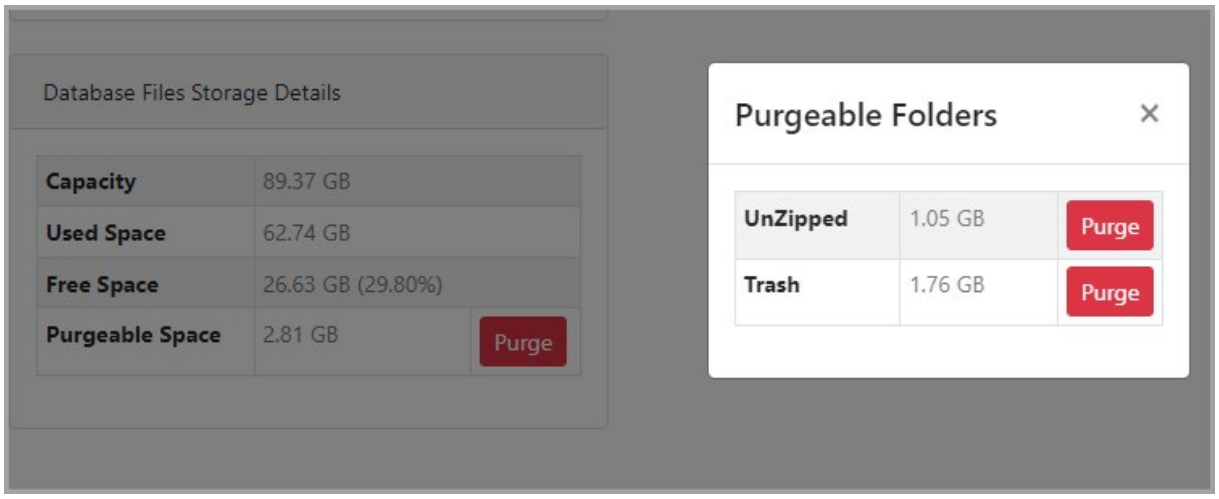


Figure 187: Select Folder

3. A confirmation dialog will appear, asking for the administrator password. Enter the password and click **Proceed** to complete the action. This operation is irreversible and requires administrator permissions.

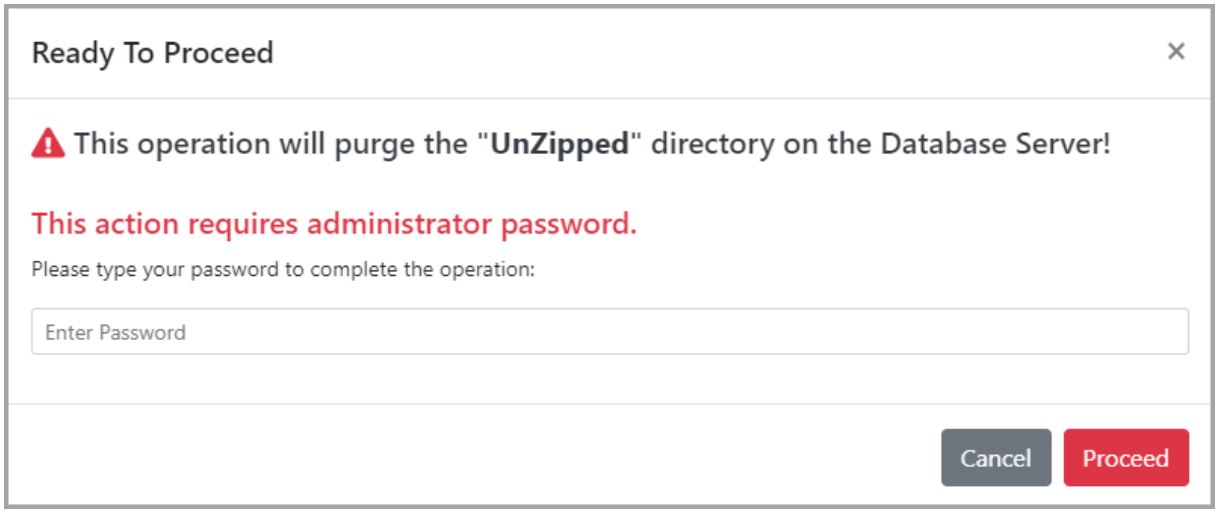


Figure 188: Proceed to Purge Folder

Logs

The **Logs Screen** allows downloading log files and sending them to support when there is a problem.

1. On the **Menu Bar**, click the 

drop-down list, and then click 

.

   The **Logs** Screen is displayed (see Figure 189).

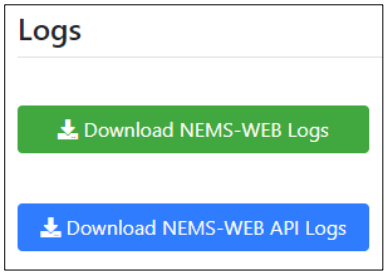
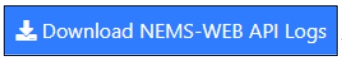


Figure 189: The Logs Screen

2. To download NEMS-Web logs, click 

.

   NEMS-Web logs describe ordinary flow, error flow, and exception flows in the system allowing the system technician to identify and solve issues.

3. To download NEMS-Web API logs, click 

.

   API is a Web app that allows receiving data such as worklist, patients, and tests from external systems and storing it in the NEMS-Web system.

   API Logs describe ordinary flow, error flow, and exception flows in the system allowing the system technician to identify and solve issues.

Working with External ECG Devices via DICOM Protocol

This section explains how to set up communication between NEMS-Web and external ECG devices using the DICOM protocol. The setup ensures seamless workflows, allowing devices to retrieve worklists, perform REST tests, and upload results to the NEMS-Web database for analysis.

Workflow Overview

1. Create a worklist in NEMS-Web.
2. Request the worklist on the ECG device by tapping the **Download** button.
3. The **Norav.Service.Dicom** service, using NEMS-Web IP settings, queries the **NEMSWEB.Web.Api** service to fetch the worklist from the NEMS-Web database.
4. **NEMSWEB.Web.Api** retrieves the worklist from NEMS-Web and transmits it to **Norav.Service.Dicom**.
5. **Norav.Service.Dicom** delivers the worklist to the ECG device.
6. Perform tests on the ECG device using the worklist.
7. Upload test results from the ECG device to the NEMS-Web **Import** folder on the NEMS-WEB server by tapping the **Upload** button.
8. **Norav.Service.Dicom** exports test files in a .zip archive to a predefined folder.
9. NEMS-Web imports test files from the **Import** folder into its database in REST ECG format.

Note

The **export settings** on the ECG device must match the **import folder settings** in NEMS-Web to ensure seamless file transfer (see examples below).

To facilitate communication between the NEMS-Web application and an external ECG device, ensure that both **Norav.Service.Dicom** and **NEMSWEB.Web.Api** are **running** with the configurations specified below.

Configuration

Prerequisites

ASP.NET Core 6.0 Runtime and **.NET 6.0.36 Desktop Runtime (x64)** must be installed on the server running **Norav.Service.Dicom**.

Setting Up the ECG Device

1. Access the **DICOM Settings** on the ECG device and configure the following:

    - **Worklist server - for retrieving worklists:**
        - Enable **DICOM Worklist** by checking the checkbox.
        - **Server IP**: XXX.XXX.X.XXX
        - **Server Port**: Use any open port or the one specified in **Norav.Service.Dicom** settings (see below).
        - **Server AE**: NORAV-AE
        - **Client AE**: NORAV-AE

- **Storage server - for file storage:**
    - Enable **DICOM Worklist** by checking the checkbox.
    - Enable **Generate Structured Report** by checking the checkbox.
    - **Server IP**: XXX.XXX.X.XXX
    - **Server Port**: Use any open port or the one specified in **Norav.Service.Dicom** settings (see below).
    - **Server AE**: NORAV-AE
    - **Client AE**: NORAV-AE
      Note: Use the same settings as the **Worklist Server** if a single server is used for both functions.

2. In the **Settings** menu set **File Format** to **DICOM (ECG Waveform)**. Other formats, including DICOM (Encapsulated PDF), are not supported.
3. In the **Settings** menu set the **TCP/IP** value to **DICOM**.
4. In the **Settings** menu set the file **Modality** to REST ECG, if applicable.

Setting Up Norav.Service.Dicom Service

1. Locate the appsettings.Development.json file.
2. Open the file in a text editor. You will see the following configuration (example):

```
{
 "DicomSettings": {
   "WorkListUpdateCron": "0 */5 * * * ?",
   "NemsUrl": "http://XXX.XXX.X.XXX/",
   "Port": XXXXX,
   "LogFolder": "C:\\Norav\\DICOM\\Logs",
   "TempFolder": "C:\\Norav\\DICOM\\Temp",
   "UploadFolder": "C:\\Norav\\DICOM\\Upload",
   "LogFileTemplate": "Dicom-{Date}.txt"
}
```

3. Configure the following settings under **"DicomSettings"** – refer to the table below:

Key	Description	Value
WorkListUpdateCron	Cron expression for scheduling worklist updates.	`"0 */5 * * * ?"` (updates every 5 minutes). Change the value under the / symbol to define update frequency.
NemsUrl	IP address of the NEMS-WEB server.	`"http://XXX.XXX.X.XXX/"`
Port	Port number for DICOM communication with the NEMS-WEB server.	`XXXXX`
LogFolder	Path for storing log files.	`"[EXTERNAL DRIVE]:\\Norav\\DICOM\\Logs"`
TempFolder	Path for intermediate file storage and processing.	`"[EXTERNAL DRIVE]:\\Norav\\DICOM\\Temp"`
UploadFolder	Path for uploading DICOM files. It should match the import folder in NEMS-WEB for seamless file transfer.	`"[EXTERNAL DRIVE]:\\ProgramData\\NoravMedical\\NEMS\\Import"`

4. Save the file after making changes.

Operating Instructions

Performing Tests with the ECG Device

1. Create or import a worklist in NEMS-Web.
2. Tap the **Download** button on the ECG device to retrieve the worklist. The device displays all scheduled tests for the day.

3. Select (tap) a patient from the worklist to proceed with the ECG test.
4. Verify electrode placement and signal quality before starting.
5. Start the test by tapping the appropriate button. The device records a 10-second REST ECG.
6. Review the preliminary results displayed on the device.
7. Tap the **Upload** button to send results to the NEMS-WEB **Import** folder on the NEMS-WEB server:

    1. **Norav.Service.Dicom** transmits the file to the predefined folder (for example, C:\\ProgramData\\NoravMedical\\NEMS\\Import).

    2. NEMS-Web imports the file from that predefined folder into its database, making it available in the **Records** tab.

Note

Ensure that all required services (**Norav.Service.Dicom** and **NEMSWEB.Web.Api**) are running.

Note

Verify server IPs, ports, and folder paths in **Norav.Service.Dicom** settings match the ECG device's configuration.

Note

Use the correct file format: **DICOM (ECG Waveform)**.

6. Troubleshooting

If you receive the **Norav Bridge** error message while working on the **Worklist Screen** or a **Patient Screen**:

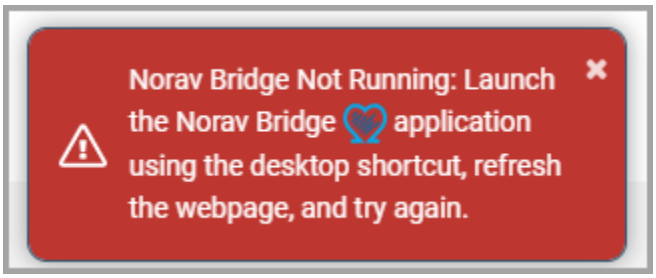


Figure 190: Norav Bridge Error Message

6. Press **F5** on the keyboard to refresh the screen and try again.
7. If this does not resolve the issue, relaunch **Norav Bridge**, or launch it if it is not currently running.
8. **(Optional)** To exit **Norav Bridge**, if it is already running:
   a. In the **Taskbar**, right-click the **Norav Bridge** icon, then click **Exit** (see Figure 191).

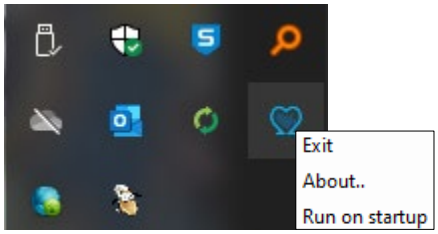


Figure 191: Norav Bridge Icon

9. To open or reopen **Norav Bridge**, click the **Norav Bridge** shortcut on the desktop.
10. Return to the **Worklist Screen** or **Patient Screen** and press **F5** again to refresh. The screen will reload, and you can continue working.

Document History

Version	Date	Updates	Changed by
1.0.0.0/1.0.0.1	22.03.2022	IFU was created	
1.0.0.2	27.04.2022	Mobile UI/UX support, PDF Viewer, Languages updates	Olga K.
1.0.0.3	15.09.2023	Support of NBP24NG recorder, "Show Device Information" option into Device screen	Yaron Z.
1.0.0.3 rev. 02	09.10.2023	Virtual License feature, Download progress bar	Yaron Z.
1.0.0.4	17.11.2023	Device-related features added, Customized Reports	Anton B.
1.0.0.4 rev. 02	14.12.2023	Report Screen, Analytics Screen updates	Anton B.
1.0.0.5	25.06.2024	2FA, Date Formats, Digital Signature, ABPM and Holter review within NEMS Web (additional page), DICOM/HL7 integration, SCP import descriptions added and updated.	Anton B.
1.0.0.7	21.10.2024	Allow Edit Review for Holter/ABPM option in General Settings; Display a warning prompt if the record is being used by others on the Records or Record Edit screen; NR-314-P Support; PC-ECG Rest and Stress test offline mode support (tests made offline are transferred to NEMS-Web when the Internet connection is up again). Notifications Settings and Maintenance sections added.	Anton B.
1.0.0.8	30.04.2025	Mandatory fields settings added; search and filtering across Doctors, Sites, etc.; Check ECG function added using Device Manager; Norav Bridge error message updated (Troubleshooting section).	Anton B.
1.0.1.0	12.10.2025	Compliance information updated; Basic UDI-Di introduced; custom summary page for ABPM and Holter reports (including logo and contact information); external devices integration section; keyboard navigation for PDF reports; password strength notes added; Imported Records section; Check ECG function updated – now available for NH-301 (prioritized) and Device Manager (secondary); Norav Uploader folder paths validation – unique paths demand.	Anton B.
1.0.1.0 rev. 02	19.01.2026	Updated Preparing a Holter Recorder section: split into separate USB and Bluetooth procedures. Address section updated (UK).	Anton B.
1.0.1.0 rev. 03	25.02.2026	Address section updated (UK-Rep), minor fixes. Role-based access note.	Anton B.