



exp^{ri}via

eCardio
Cardiology Suite

future. perfect. simple.





eCardio

Information system for Cardiology

eCardio is the Cardiology Information System developed by Exprivia in order to provide a unique platform for the entire health care facility able to meet the requirements of all outpatient and instrumental specialties through the use of cutting-edge technologies and solutions.

Innovative **eCardio** typical features of flexibility and integration with diagnostic equipment have enabled the realization of a set of specializations in Cardiology covering a wide range of biometric sources, reporting environments, documentation requirements and specialty automation.

eCardio is therefore a complete and comprehensive suite, perfectly integrated within a single application, with extremely high levels of customization potential and further specialization.

Components of eCardio suite

- **eVisit Cardio:** form for outpatient reporting and clinical documentation with modules for Echocardiography, Cardiology Visit , ECG and Holter. Structured reports such as Electrophysiology, Arrhythmology and Electrostimulation complete the application.
- **eCathLab:** form for the reporting of Hemodynamics and Interventional Angiography able to manage, in a unique environment, different specialties and diagnostic-clinical steps in charge to the various professionals belonging to the cardiology unit.

Features

- **Web architecture** characterized by high scalability and usability.
- Advanced **environment integrated with diagnostic equipment** that allows to extend the PACS system to the processing of biometric signals (such as ECG, Holter etc.), to acquire by non-DICOM diagnostics (such as endoscopes, laparoscopes, etc..), to automatically import measures calculated by the equipment.
- Set of operational tools of outpatient and specialist interest, such as the **management of materials** (e.g. catheters, endoscopic probes, stents and consumables), the **creation of dematerialized recipes**, the **request for services and consultancies**.
- Management of structured anamnesis, both general and specialized, integrated with all **eCardio** modules and **e4cure** suite.



eVisit Cardio

eVisit Cardio is one of the main components of **eCardio** suite, the Cardiology Information System developed by Exprivia in order to provide a unique platform for the entire health care facility able to meet the requirements of all outpatient, instrumental and departmental specialties through the use of cutting-edge technologies and solutions. The innovative features of flexibility and integration with diagnostic equipment of **eVisit Cardio** allowed the creation of several specialized reporting forms that meet the different needs of each specialty in Cardiology.

eVisit Cardio combines into a single reporting environment the needs of different specialties through the management of a single folder, in which the compilation of information in the various specialized fields and in various diagnostic and clinical steps (anamnesis, registration and execution of procedures, reporting) is performed by several professionals (administrative staff, nurses, sanitary technicians and doctors) which refer to the Cardiology Unit. All patient information is shared among the operators in a single computerized management tool.

eVisit Cardio takes charge of the entire workflow starting from the management of worklists coming from Booking Systems, Emergency and Order Entry to the generation and publication of the report.

eVisit Cardio allows you to produce custom reports through easily customizable print layouts and offers many additional features including:

- access to the worklist by doctor/ surgery / service;
- digital signature;
- printing the recipe;
- management of valuable materials and consumables (e.g. stents, probes, etc.);
- sterilization of endoscopic probes process management.

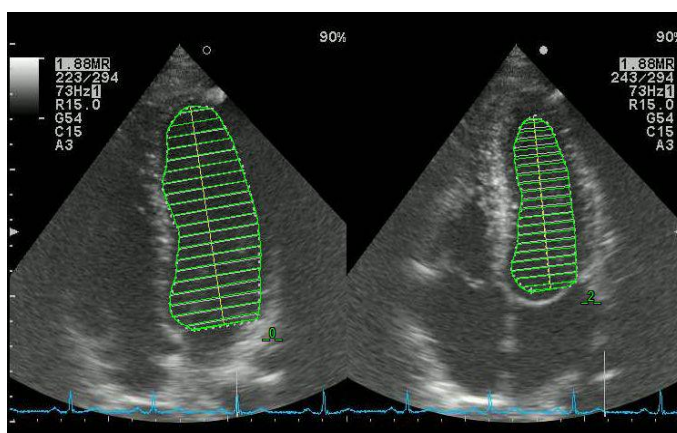
Specialized modules

eVisit Cardio has the following specific modules:

- **Cardiology Visit**;
- Reporting and clinical documentation in **Echocardiography**: Transthoracic, Transesophageal and Echo Stress;
- Specialized reporting for **ECG** and **Holter** examinations.
- Specialized reporting for outpatient **Cardiology**;
- specialized reporting in **Electrophysiology** and **Arrhythmia**.



Doppler reporting form

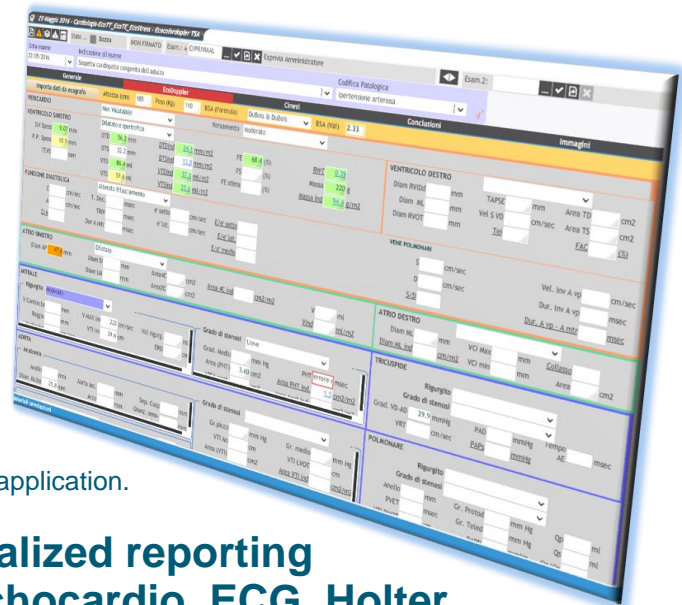


Measurement of cardiac chambers with biplane method
by MedStation CE 0476



Fast compilation reporting forms

Through integration with the diagnostics, **eVisit Cardio** allows imports directly on reporting masks the measurements made during the instrumental examination by cardiovascular ultrasound, angiography systems, ECG DICOM Structured Report format or other formats, also proprietary. **Structured reporting** allows data saving under logics that enable the automatic generation of the draft report; its content can be completed by typing it manually, with the aid of the spellchecker. The import of the previous examination, such as medical history, ensures the preparation of the report in an accurate and fast way. Structured information associated with the reports can also be used for statistical and epidemiological processing. The sending of worklists to compatible DICOM diagnostics, complete the application.

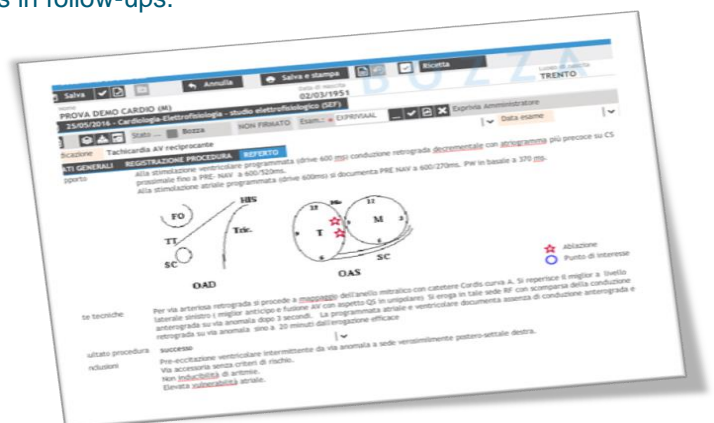


Specialized reporting for Echocardiography, ECG, Holter

- **Echocardiography:** In addition to the collection of clinical data via SR, a graphical environment with Bulleye, Longitudinal and Transversal views extends and completes the reporting views. Supported by MedStation viewer for viewing images, you can make measures importable in the report. In response to acquisition of multiple data via SR or in manual mode, the physician will choose the most satisfactory result.
- **ECG:** integrated with the viewing environment, you can view multiple paths to allow a detailed comparison. You can also apply the massive signature; the doctor reports all treatments and only later he deals with signature. Through a powerful set of presets, the structured report is generated with a simple click in more than 95% of cases.
- **Holter - Visit - Stress:** eVisit Cardio manages multiple types of stress tests, such as stress tests with various methodologies (cycle ergometer, platform and medication), as well as follow-up visits for accurate data collection for comparisons in follow-ups.

Recording procedures of Electrophysiology and Electrostimulation

The recording of the procedure allows you to trace the procedural data enabling various actors to save the events that can be recalled at any time by a doctor, for an experience of complete and accurate reporting. Traceability and materials management is an integral part of this form.





eCathLab

Reporting form for Hemodynamics and Interventional Angiography

eCathLab is the information system for the complete management of the procedures of hemodynamics and interventional angiography, that combines ease of use and speed of execution of the various procedures, automating and streamlining the work of administrative personnel and technicians, and providing clinicians with an ergonomic reporting environment perfectly integrated with PACS solution by Exprivia.

eCathLab is a software component of **eCardio** suite, developed by Exprivia for the computerization of the Cardiology and Cardiac Surgery services with the aim of providing a single platform capable of meeting the requirements of all ambulatory, instrumental and departmental specialist activities, through the use of advanced technologies and solutions.

eCathLab is perfectly integrated with the multimodal reporting workstation **MedStation** and with the other components of **e4cure** suites by Exprivia, and offers to the physician a complete reporting experience. Thanks to its ergonomics and effectiveness, **eCathLab** allows time saving for the benefit of a greater attention to the diagnostic investigation or to the interventional procedure. **eCathLab** has been designed following the guidelines of GISE so that the collected data are compatible with its dataset.

Features

eCathLab combines into a single reporting environment the needs of different specialties through the management of a single folder, in which the compilation of information in the various specialized fields and in various diagnostic and clinical steps (anamnesis, registration and execution of procedures, reporting) is performed by several professionals

(administrative staff, nurses, sanitary technicians and doctors) which refer to the cardiology unit. All patient information is shared among the operators in a single computerized management tool. The intervention phases are divided according to the normal flow of the intervention itself: pre-examination assessment, recording of the procedure and compilation of the report. Each phase is traced and is supported by structured documents, which allow the inclusion of free text notes, to provide maximum flexibility.

The screenshot displays the eCathLab software interface for a patient named "23/05/2016 - Cardio-EMO-Ref - Angiografia". The interface includes a top navigation bar with tabs for "DATI GENERALI", "REGISTRAZIONE PROCEDURA", "REFERTO", and "STEMI". Below this is a table listing various elements and their details:

Elemento	Data	Ora	Descrizione	Operatori
Operatore	30/05/2016	10:05:58	Medico 1° operatore	Evento
Operatore	30/05/2016	10:06:18	Infermiere di sala	Accesso
Operatore	30/05/2016	10:06:28	Tecnico radiologa	Procedura
Evento	30/05/2016	10:06:38	ingresso in sala	Materiale
Parametri Vitali	30/05/2016	10:07:03	FC:54 PA:120/60 SPO2:100	Lesione
Accesso	30/05/2016	10:08:10	A. femorale dx	Par. vitali
Materiale	30/05/2016	10:08:53	Introduttore radiale ENGAGE - 6 Fr x 12 cm + Kit - (STJUDE)	Complicanze
Procedura	30/05/2016	10:09:09	Angioplastica coronarica	Farmaco
Lesione	30/05/2016	10:09:44	De novo su ramo discendente posteriore della coronaria destra	Commento
Device	30/05/2016	10:08:53	Introduttore radiale ENGAGE - 6 Fr x 12 cm + Kit - (STJUDE)	

Below the table, there is a detailed view of the selected lesion: "Lesione De novo su ramo discendente posteriore della coronaria destra [DP(CDx)]". It includes fields for "Data e ora" (30/05/2016 10:09:44), "Procedura" (IVUS, FFR, OCT, PTCA), "Descrizione lesione" (Stenosi), "Descrizione procedura", "Note", and "DEVICE utilizzati" (Introduttore radiale ENGAGE - 6 Fr x 12 cm + Kit - (STJUDE)). The "DETTAGLIO LESIONE" section shows "Ramo" (vaso nativo), "Segmento" (ramo discendente posteriore della coronaria destra [DP(CDx)]), "Tipo lesione" (De novo), and "Ostiale" (no, si, Lesione biforcata).

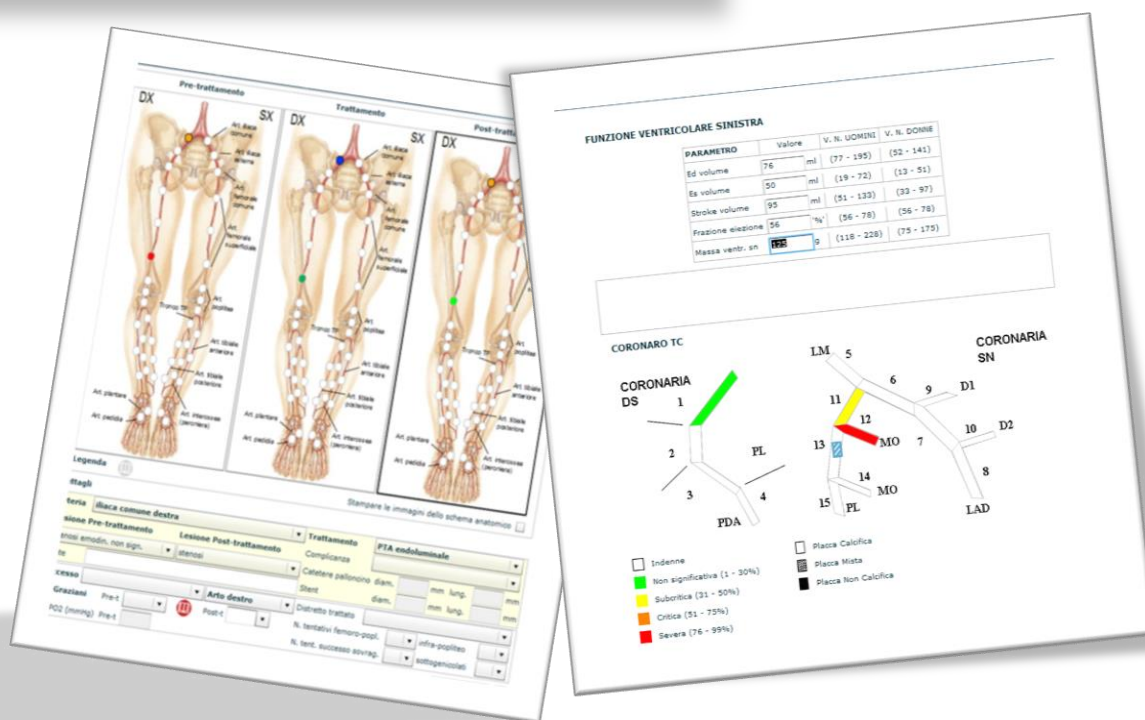


eCathLab has the following components:

- form for close medical history and pre-procedure evaluation;
- form for intervention diary;
- reporting form;
- specific module for tracking of post-procedure complications;
- form for stock management with devices traceability.

The screenshot displays the eCathLab software interface. At the top, it shows the date '23/05/2016' and the patient's name 'Cardio-EMO-Ref - Angiografia'. Below this, there are tabs for 'DATI GENERALI', 'REGISTRAZIONE PROCEDURA', 'REFERTO', and 'STEMI'. The 'REGISTRAZIONE PROCEDURA' tab is active, showing details about the procedure, including 'Studio bypass', 'Malattia', 'Descrizione', and 'AMIS: pervio e ben funzionante, non evidenza di restenosi a carico dello stent precedentemente impiantato'. The 'Coronarografia' section lists various vessels and their status, such as 'Tronco comune', 'Iva', 'Circonflessa', and 'Coronaria Dx'. The 'Esito della coronarografia' section shows 'Lesioni intermedie 50-70%'.

The flexibility of the design tools provided by Exprivia, allows to increase the specificity of models oriented to a pathological form, providing an implementation detail that follows the clinical needs with maximum adherence. Graphical support coupled with representation of intervention phases (pre-, procedure and post-) allows an accurate tracking of operations, while preserving the needs of visual and compiling immediacy.



All the functionalities in support of the service, such as CUP and document repository integration, digital signature, HL7 and DICOM integration and warehouse integration are guaranteed. Thanks to the graphic pattern, it is easier to computerize and report vascular surgery.

The products: eArchive, eLifeCare, eRis/eVisit, eViewer, eWard, MedStation are CE 0476 (93/42 / EEC) certified Medical Devices of class IIA. The complete list of certified model versions can be obtained by contacting Exprivia.