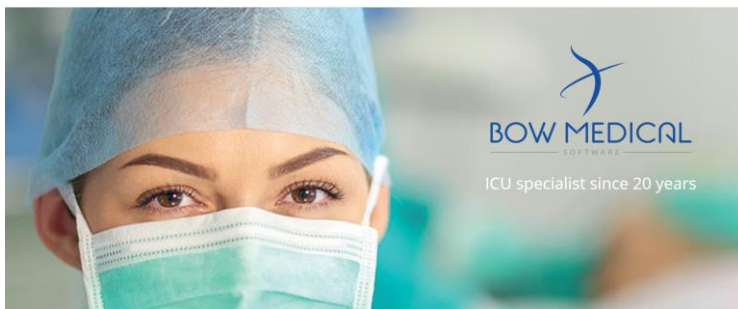




BOW MEDICAL

— EDITEUR DE LOGICIELS —

**Offre produits
Michel Le Lan**



ABOUT BOW MEDICAL

Created in September 1999, Bow Medical has become a major player in the medical anesthesia field through the Diane software suite deployed within 2700 operating room in France.

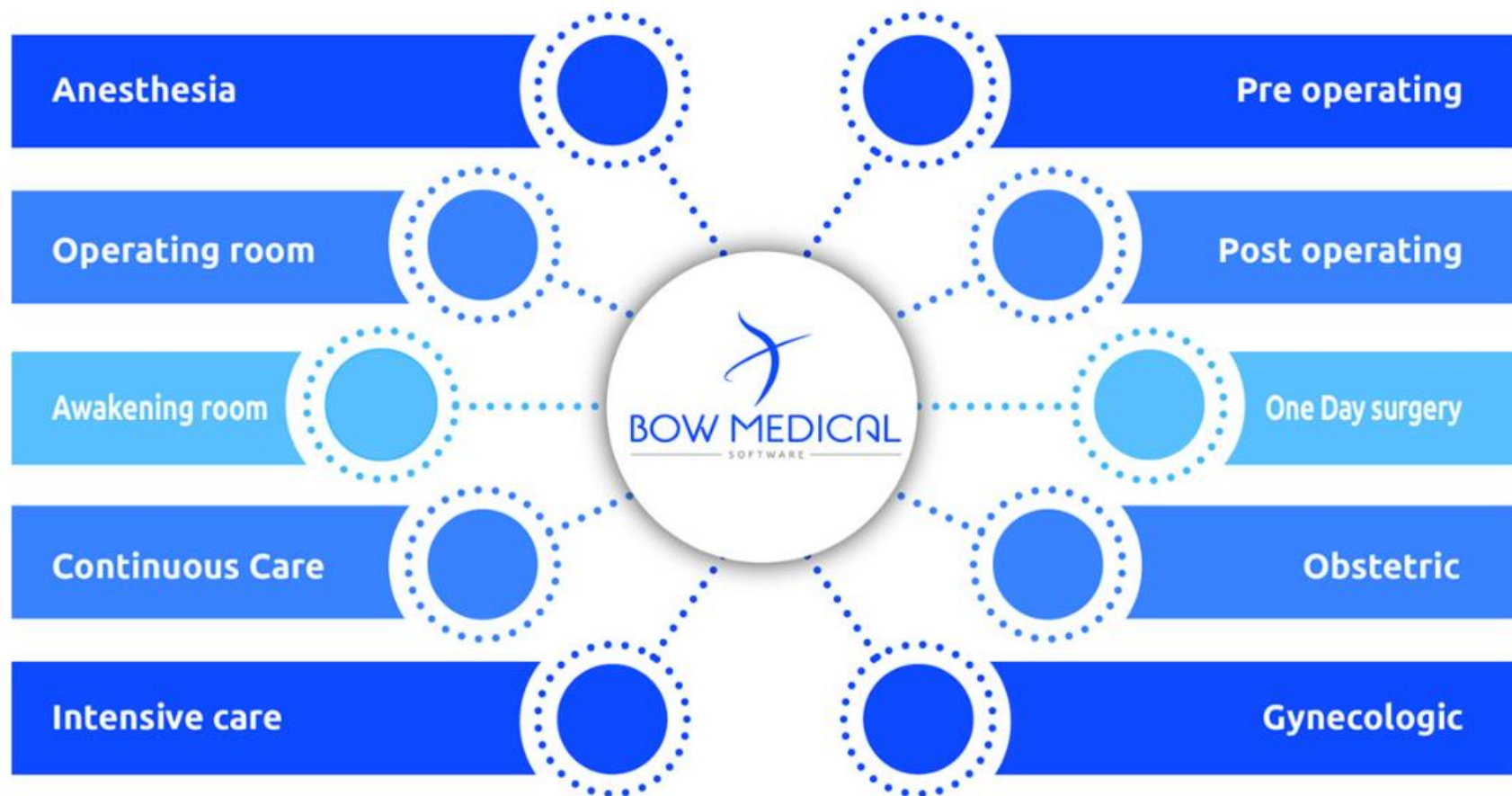
Bow Medical has then continued its development through the intensive care market segment.

- **French company founded in 1999.**
- **Headquarters in Amiens France.**
- **Subsidiary 6 Villa Ballu 75009 Paris.**
- **Company specialized in anesthesia, intensive care obstetric and outpatient care**

- **Headcounts 33 people:**
 - › Engineers and technicians for research and development including technical support
 - › Trainers
 - › Application engineers
 - › Growing commercial and marketing network
- **A stake in the Extens E-Health investment fund**



BOW MEDICAL OUR INDUSTRY



DIANE | ANESTHESIA
A BOW MEDICAL brand

Performs the main functions of a computerized anaesthesia sheet.

DIANE | ICU
A BOW MEDICAL brand

Data sharing by all healthcare professionals within the same department or department through a collaborative space

DIANE | OB-GYN
A BOW MEDICAL brand

Sharing data by all health professionals in maternity wards to ensure women gynecological follow-up. Pregnancies survey, childbirth, postpartum and newborn follow-up.

AMBUCARE
Une marque de BOW MEDICAL

Provides a solution to outsourcing care, therapeutic education and improved rehabilitation of patients, during acute or chronic pathologies with a constant concern for quality and safety, regardless of the duration of surveillance

DIANE

Une marque de BOW MEDICAL

Déploiement



DIANE | ANESTHESIA

A BOW MEDICAL brand

The anaesthesia software solution in France
8 000 licenses dont 17 University
hospital

DIANE | ICU

A BOW MEDICAL brand

The ICU software solution
17% market share
park installed



More than 530 beds :

1. Hôpital Privé d'Antony
2. Clinique Convert (Bourg en Bresse)
3. Hôpital Privé de Marne Chantereine (Brou sur Chantereine)
4. CH Chambéry – Métropole Savoie
5. Hôpital Privé Parly II (Le Chesnay)
6. Hôpital Marie Lannelongue (Le Plessis Robinson)
7. Hôpital Privé Le Bois (Lille)
8. Hôpital Privé Clairval (Marseille)
9. Institut Jacques Cartier (Massy)
10. CH Montélimar
11. Clinique du Millénaire (Montpellier)
12. Fondation Adolphe de Rothschild (Paris)
13. Clinique Geoffroy St Hilaire (Paris)
14. CTB - AHP St Louis (Paris)
15. CHP Claude Galien (Quincy-sous-Senart)
16. CHU Reims
17. Clinique de l'Union (Toulouse)
18. Hôpital Privé de l'Ouest Parisien (Trappes)
19. Clinique Vert Galant (Tremblay en F.)

Intensive care Adult, neurological and large burnt critical care,
Pediatric and neonatal Intensive care, critical care

Our partners



It is an international leader in medical and safety technology.



Maincare is a leading software digital and medical solutions editor for the healthcare world.



MOEBIUS is a software that masters the course of care. It proposes to increase the added value of your pre-anaesthesia consultation to homogenize, secure and improve the patient care.



Anamnèse helps healthcare professionals to invent the patient-practitioner relationship by involving the patient. Our artificial intelligence structure is interviewing patients in their natural languages, as a medical assistant would do.



Designed by a community of neonatologists for health professionals and supported by the B-PEN research project of the University Hospital of Reunion with the support of the European Union and the Reunion region.



Manage with efficiency
your intensive care unit.

- **Allows patient follow-up in critical care services**
- **Brings all relevant information to the healthcare team**
- **Includes advanced tools for intensive care.**

Statistical analysis of activity,
infections, mortality...

Ergonomic computerized sheet for a
clear and complete view of the
patient data

Quick access to all areas of the
service

A structured and shared patient
recording file with all teams

Ease of use and efficiency in
intensive care service

An ergonomic and secure medication
order module with protocols and
safeguards

















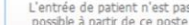












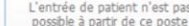

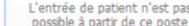
Access to the patient recording file by
contextual call

A secure Data traceability with
automatic reporting

Biology and media devices
automatic integration o

CCAM and CIM10 quotation acts



Présents		Rapports / Impressions	
Lit 1	ANGELIN Francis (M) - 55 ans J 157 Détrese respiratoire aigüe hypoxémique	  BMR Streptococcus pneumoniae (pneum...	     
Lit 2	Aucun dossier		 
Lit 3	MULARD David (M) - 58 ans J 157 ACR récupéré	  	   
Lit 3	Lit Vide		 
Lit 4	POULIQUEN GEORGES (M) - 85 ans J 694 Connexion au DiaServeur impossible : affichage restreint	 	   
Lit 5	TRAPAND COLETTE (F) - 77 ans J 692 Connexion au DiaServeur impossible : affichage restreint	 	   
Lit 6	Lit Vide		 
Réanimation	Lit Vide		 

Synthetic vision of the service:

Bed Number visibility

Patients (Name/first name)

Root Causes of hospitalization

Infections BMR

Duration in days in hospital stay

Alerts

Important elements

- ✓ Securing the medication order
- ✓ Collecting biological collection automatically
- ✓ Billing automation(CCAM, CIM 10)
- ✓ Improved information sharing
- ✓ Standardized documentation

Improve the patient monitoring efficiency.

All laboratory results are integrated automatically in DIANE ICU.

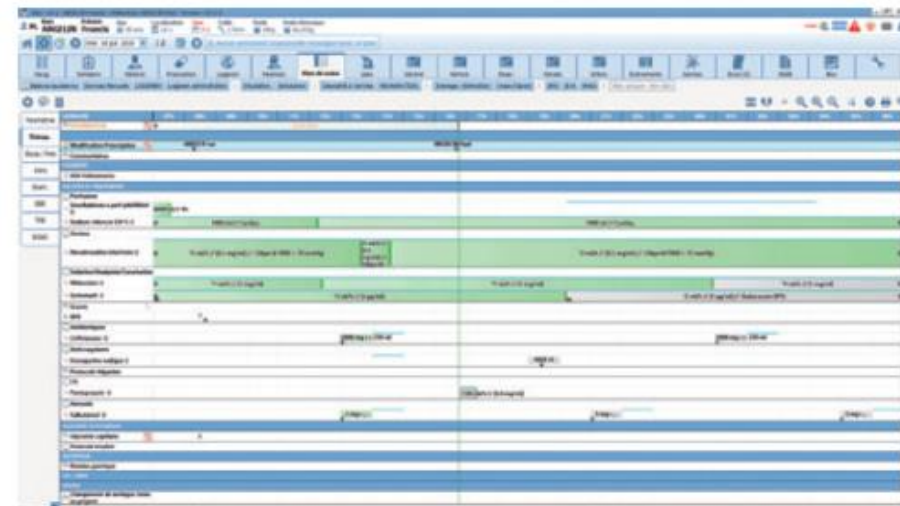
The overall results can be displayed graphically with curves and time scale modulation. Within the same sheet, the caregiver will analyze the data from different sources (laboratory, medical devices, drugs) to evaluate the overall patient health conditions.



A customizable care plan.

Each specialty ward can model its workspace according to their specific needs allowing a quick start with the system.

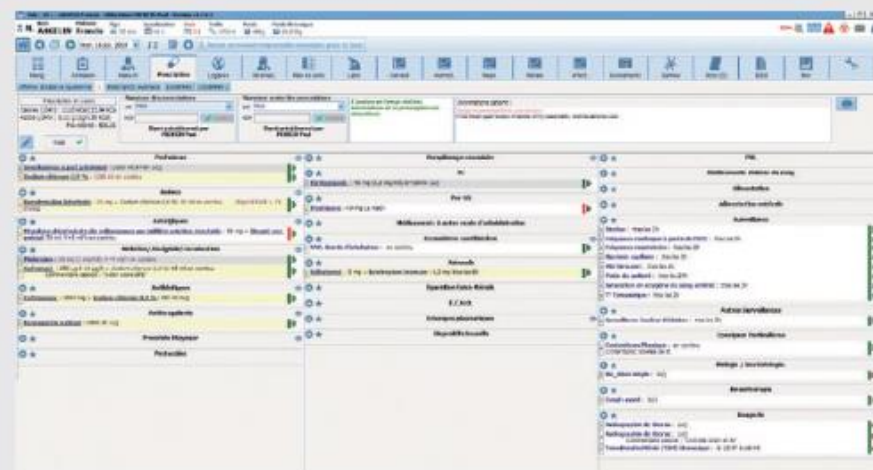
To further secure the care plan, especially when the actual occurrence requires to be modified, a dedicated rule's engine allows the caregiver to document caregiver. This documentation reflects the reality and offers reliable medical track record.



Outil de prescriptions.

DIANE RÉA apporte un moteur de prescription ergonomique, adapté aux besoins de rapidité et d'adaptation en continu, inhérent à une prise en charge en réanimation.

Basée sur les protocoles du service, la prescription informatisée permet ainsi la réduction des risques (surdosages, contre-indication, interactions médicamenteuses, erreur de lecture...). Par ailleurs, l'affichage sur une seule et même zone offre une vision globale du patient et une prise en charge rapide par le médecin.





STABILITY :More than 510 beds already equipped in intensive care



FLEXIBILITY :Pilot the Pilot critical care process.



ERGONOMICS :Designed to replace 80% of data entry with only one simple process.



RULES' ENGINE

Architecture around a protocols' library and a rules' engine.



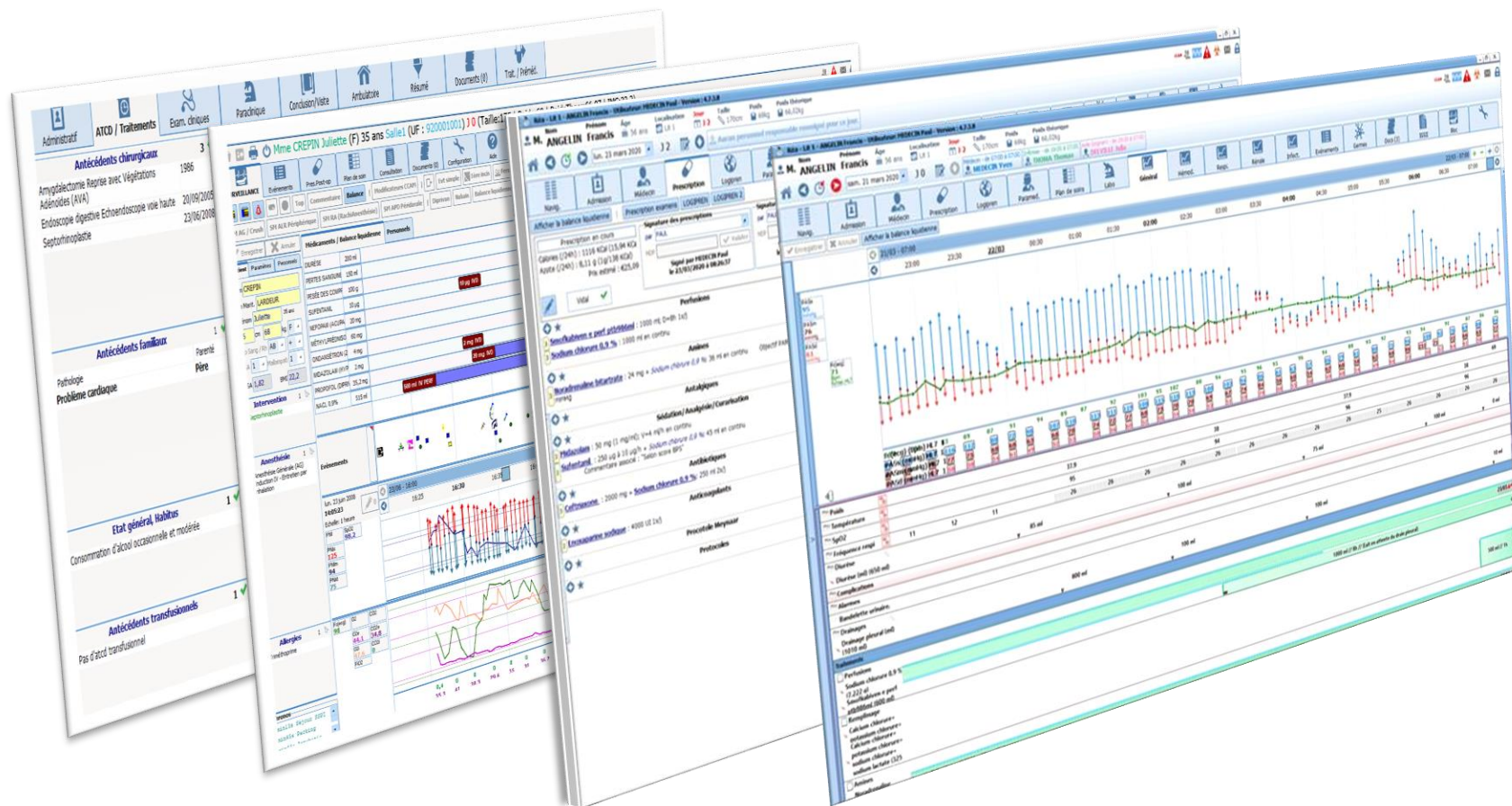
INTEROPERABLE

Connected to more than 410 medical devices.



MEDICAL DEVICE CE CERTIFIED

DIANE ICU prescription engine is certified as medical device, manufacturer in the sense of the Directive 93/42/EEC.



Consultation

Operating theatre

Anaesthesia

Recovery room

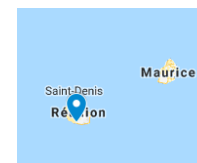
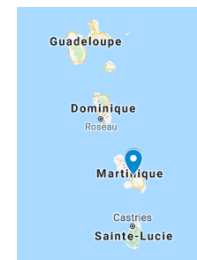
Intensive care

Une base de données et des interfaces communes



50 Public Hospitals
10 Cancer Centre
135 Private hospitals including:

- 75 Ramsay GDS - Capiro,
- Almayiva,
- Clinifutur,
- Domus Cliniques,
- Elsan
- OC Santé,
- PBNA,
- Saint Gatien
- Santé Cité
- Védici
- Vivalto



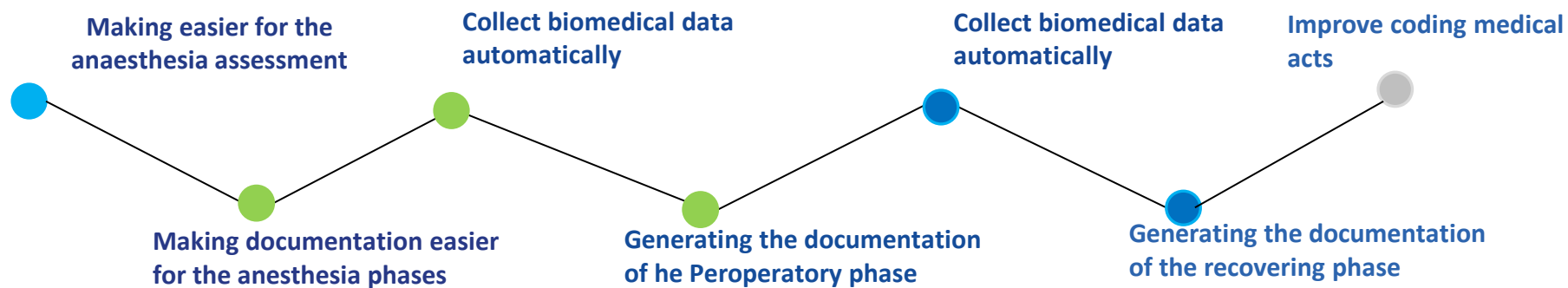
3



The solution

for facing the challenges
of anesthesia.

- Monitor patient information status in real time.
- Reflect the accuracy of the patient care
- Generate quickly the documentation in order to ensure the continuity of the patient care



Operative

Per Operative

Post operative

Billing

- ✓ Patient overview
- ✓ Ergonomic data entry
- ✓ Automatic quotation
- ✓ Quick access to all patient information
- ✓ Exporting patient data history and treatment
- ✓ Generating report

Consultation Pré anesthésique Utilisateur connecté : MEDECIN Paul - CREPIN LARDEUR Juliette (né(e) le 18/09/1972)

Patient

Sélection du patient

Nom de naissance: CREPIN
Nom usuel: LARDEUR
Sexe: ☐ M ☒ F
Prénom: Juliette

Intervention(s)

Date	Age	Taille	Poids	Intervention
23/09/2019	47 ans	175 cm	56 Kg	Dilatation coronarienne avec pose...
23/06/2008	35 ans	175 cm	68 Kg	Septorhinoplastie
20/09/2005	33 ans	175 cm	65 Kg	Endoscopie digestive Echoendosc...

Champs à saisir

Enregistrer Annuler Imprimer Options Reprise

Généralités

Taille 175 Poids 56 SC 1,64 IMC 18,29 Poids idéal 66,07

Appareil cardio-respiratoire

FC 92 PA systo 144 PA diasto 63 Dyspnée 1

Abord veineux / Varices 1

CAPITAL VEINEUX CORRECT : Pas de difficultés de perfusion à priori

Examens cardio-respiratoires 1

Souffle systolique au foyer aortique Bilan non fait

Examens généraux ✓

Exam. cliniques

Intubation

Mallampati 1 normal

Ouverture de la bouche 3 Doigts

Distance ThyroMentonnière > 65 mm

Mobilité cervicale Diminuée

Profil du patient Normal

Score 6

Accès aux voies aériennes 2

Intubation OroTrachéale (IOT) avec sonde préformée

DIFFICULTES PREVISIBLES A L'INTUBATION +++

Prothèses - Piercing - Piloité 1

Piercing de Nanne droite à laisser en chambre

Examens spécifiques et Scores

Abord Rachis

Abord veineux

Anesthésie Ambulatoire

Asthme détails

Autres ALR

ESB

MCJ

Voie périphérique ☒ VP sans problème ☐ VP difficile ☐ VP très difficile

Atcd Chmio

Atcd courage axillaire ☐ D ☐ G

Enfant

Voie centrale ☐ VC jugulaire ☐ VC fémorale ☐ VC sous-clavière ☐ Chambre implantable

Commentaires

Schéma dentaire

Incisive centrale Incisive latérale Canine

Première prémolaire Deuxième prémolaire Première molaire Deuxième molaire Dent de sagesse

Haut Bas Droite Gauche

Légende

Bridge Pivots/prothèse/implant Mobile Cassée Manquante Autre

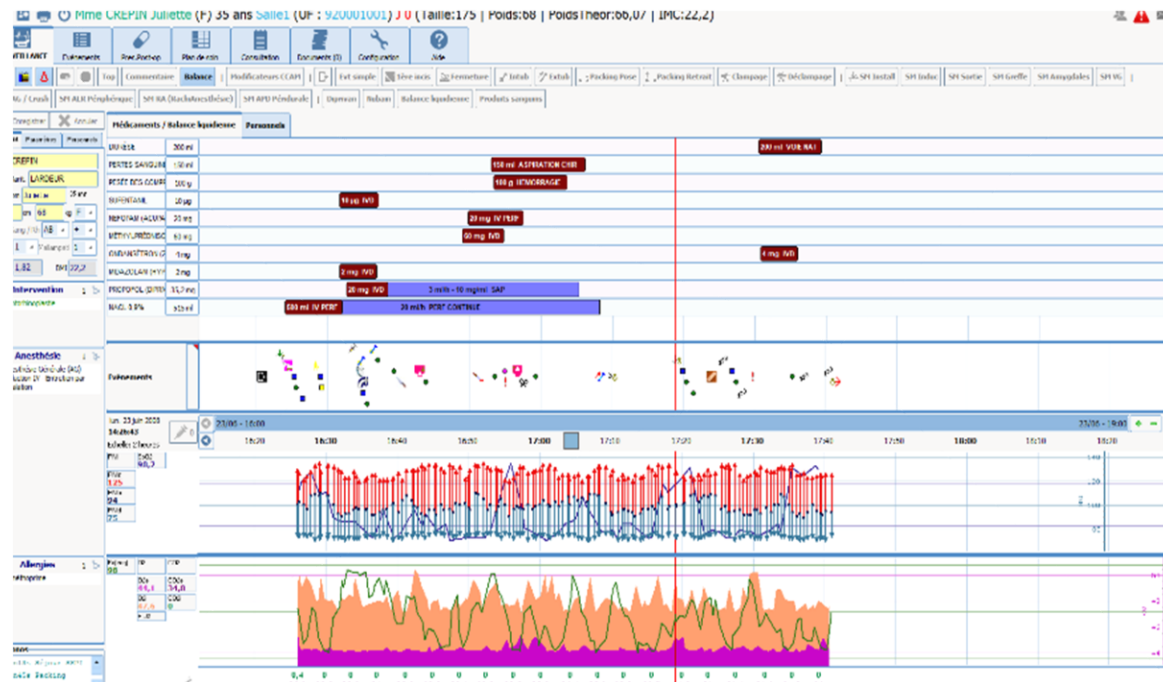
Saisi à 20h35 Par MEDECIN Paul

CORMACK LEE FAGERSTRÖM WILSON Prédiction VAM

CORMACK

Classification de Cormack et Lehane

Aucun enregistrement



- ✓ Ergonomic view screen
- ✓
- ✓ Synthetic view
- ✓
- ✓ Automatic data collection
- ✓
- ✓ Continuity of the anaesthesia assessment file between the operating theatre and the recovery room
- ✓

DIANE (RACHIANESTHESIE)

<input checked="" type="checkbox"/> Installation	Position Assise	Unique	<input type="text" value="14:36:57"/>	Heure actuelle	
<input checked="" type="checkbox"/> Anesthésie LocoRégionale (R)	RachiAnesthésie (RA)	Unique	<input type="text" value="14:37:57"/>	Heure actuelle	
<input checked="" type="checkbox"/> Aiguille RachiAnesthésie (R)	Whitacre 25G 090mm (+intro)	Unique	<input type="text" value="14:37:57"/>	Heure actuelle	
<input checked="" type="checkbox"/> Niveau de ponction	Ponction rachi L4-L5	Unique	<input type="text" value="14:38:57"/>	Heure actuelle	
<input checked="" type="checkbox"/> Nombre de ponction cutané	1 ponction cutanée	Unique	<input type="text" value="14:38:57"/>	Heure actuelle	
<input checked="" type="checkbox"/> Réalisation de la ponction	Ponction facile	Unique	<input type="text" value="14:38:57"/>	Heure actuelle	
<input checked="" type="checkbox"/> ANESTH LOCAUX	Bupivacaine (Marcaïne)	Voie intrarachidienne - 8 r	Unique	<input type="text" value="14:39:57"/>	Heure actuelle
<input checked="" type="checkbox"/> ANALGESIQUES	Sufentanil	Voie intrarachidienne - 2,1	Unique	<input type="text" value="14:39:57"/>	Heure actuelle
<input checked="" type="checkbox"/> ANTALGIQUES	Chlorhydrate de morphine (Morphin)	Voie intrarachidienne - 10	Unique	<input type="text" value="14:39:57"/>	Heure actuelle
<input checked="" type="checkbox"/> CARDIO-VASC	Clonidine (Catapressan)	Voie intrarachidienne - 25	Unique	<input type="text" value="14:40:57"/>	Heure actuelle
<input checked="" type="checkbox"/> Position	Position Décubitus dorsal	Unique	<input type="text" value="14:41:57"/>	Heure actuelle	
<input checked="" type="checkbox"/> Niveau sensitif	Niveau sensitif T10	Unique	<input type="text" value="14:44:57"/>	Heure actuelle	
<input checked="" type="checkbox"/> Bloc moteur	Bloc chirurgical	Unique	<input type="text" value="14:44:57"/>	Heure actuelle	

☒ OK
 ☒ OK et poursuivre avec...

☐ Conserver cette saisie multiple
 14:37:04
 14:36:57 Touche Ctrl : décale l'horaire de l'item choisi et les suivants.

✓ Quick entry via Diane protocols

✓

✓ Rating of modifying acts

✓

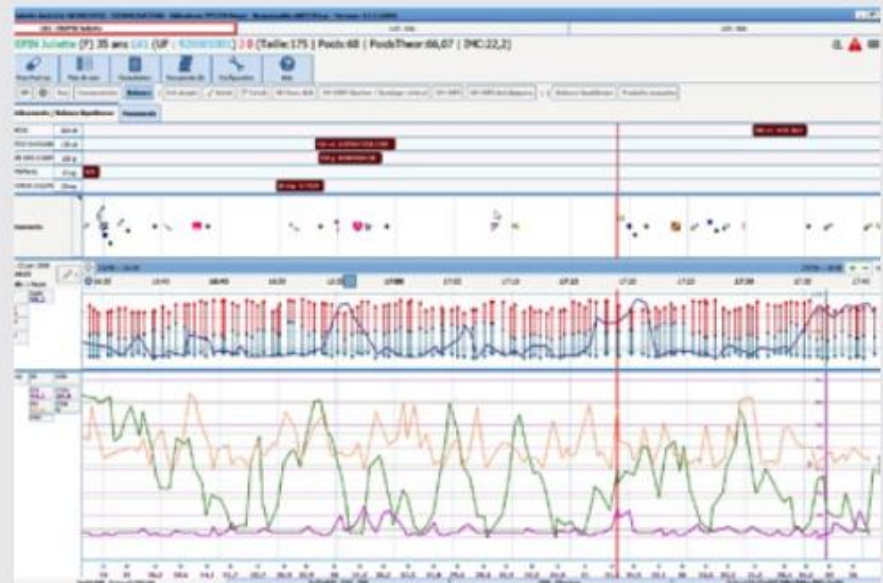
✓ Compliance with IPAQSS (certification)

✓

Intuitive user interface.

We implemented a unique interface to ease the usage of the software by caregivers along the different phases of the patient journey.

Vacancies or occupied beds are displayed graphically and navigation from one bed to another is simple. These features are improving the overall management of the recovery room.



Simplify administrative tasks.

DIANE ANESTHESIA integrates tools facilitating the patient medical record and the patient Media care.

With a print engine, a quick entry module, or preconfigured favorites tools, DIANE ANESTHESIA ensures easy documentation during the different phases of the medical record, from the first appointment to the exit of the patient.

The print engine automates and accelerates the reports.

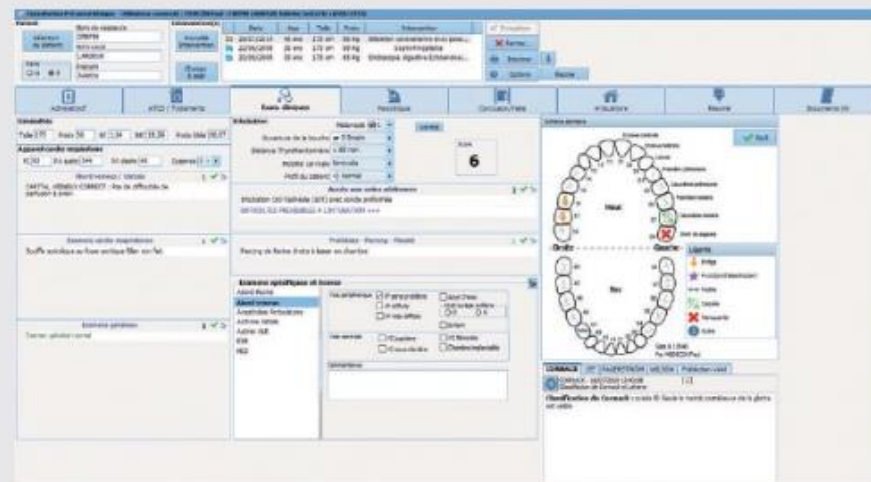
The screenshot displays the DIANE ANESTHESIA software interface, which is designed for managing patient medical records and anesthesia procedures. The interface is organized into several sections:

- Top Bar:** Contains navigation tabs such as "Anesthésie", "Médecine", "Dossier", "Prescription", "Suivi", "Rapport", "Paramètres", and "Aide".
- Left Panel:** A sidebar with icons for "Anesthésie", "Médecine", "Dossier", "Prescription", "Suivi", "Rapport", "Paramètres", and "Aide".
- Main Content Area:**
 - Anesthésie / Anesthésie Supplémentaire:** A section for recording anesthesia details, including patient information, anesthesia type, and duration.
 - Anesthésie / Anesthésie Supplémentaire:** A section for recording anesthesia details, including patient information, anesthesia type, and duration.
 - Anesthésie / Anesthésie Supplémentaire:** A section for recording anesthesia details, including patient information, anesthesia type, and duration.
 - Anesthésie / Anesthésie Supplémentaire:** A section for recording anesthesia details, including patient information, anesthesia type, and duration.
- Bottom Panel:** A section for recording anesthesia details, including patient information, anesthesia type, and duration.

Improve patient care during the perioperative phase.

DIANE ANESTHESIA interfaces to more than 70 different software vendors, including other modules from Bow Medical.

As soon as the anesthesia assessment ends, it is possible to start the patient follow-up process by a simple contextual call from our "AMBUCARE" tracking solution. During all the patient survey period, the data are exchanged daily between the hospital and the patient. AMBUCARE collects all information such as (appointment, prescriptions, reports, care plan).





STABILITY: Deployed in more than 2700 operating rooms.



FLEXIBILITY

Setting up user interface according caregivers' habits



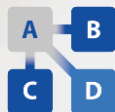
ERGONOMICS

Designed to optimize 80% of seizures in one operation.



ENGINE RULES

Architecture around a complete rules and protocols library



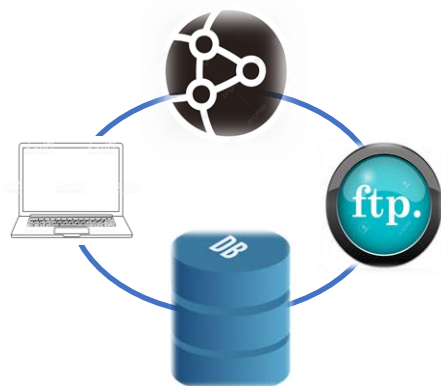
Interopérable: collecte des données de plus de 410 dispositifs médicaux



MEDICAL DEVICE CERTIFICATION CE

DIANE ANESTHESIA

prescription engine is certified as medical device, manufactured in the sense of the Directive 93/42/EEC



Patient records and setting data are loaded locally

High execution speed (No server request access)

Continuity of operations (in case of lost connection with the server)

Quick installation on servers and customer work station

Compatible database: Oracle / MySQL / MsSQL

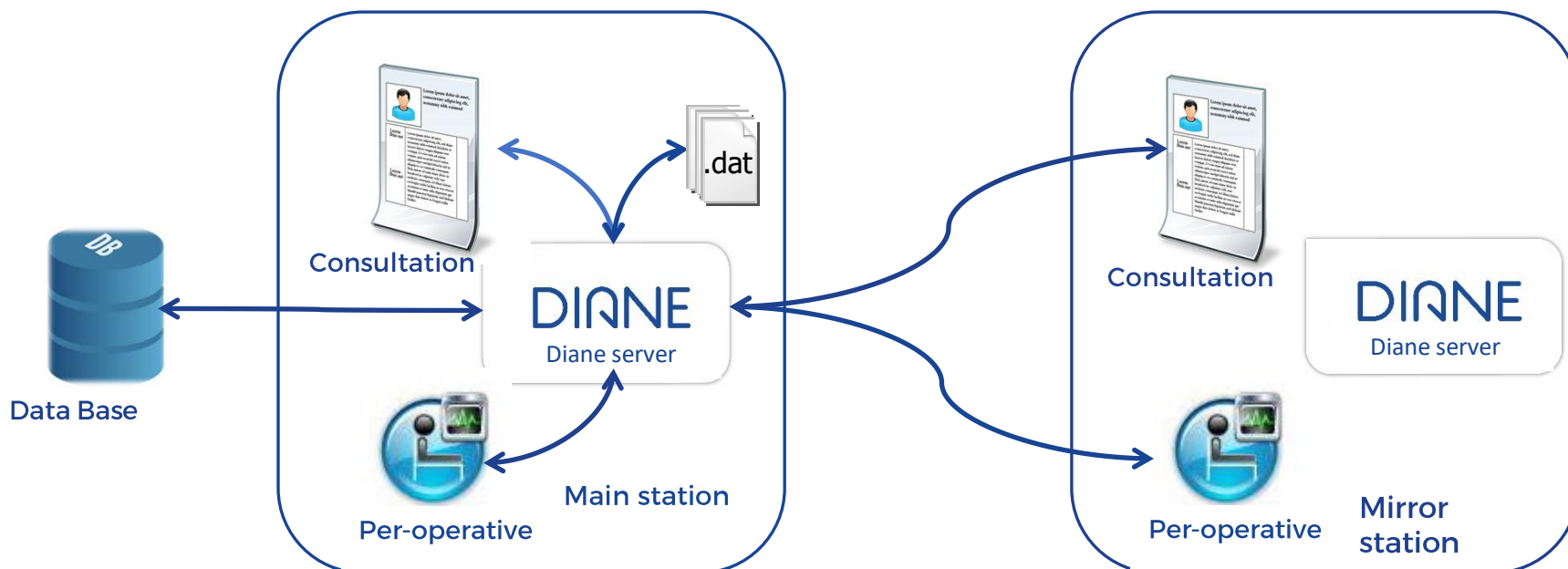
Automatic update managed by customer work station

Mirror stations for:

Access to all reading/writing patient recording file of the service

From two different locations

- In real time
- Via a portal and or via a patients present list





Mirror Stations :

Mobiles

full list of patients present

Reading/writing access to all patients recording file simultaneously

allows access to all the files of all units from the portal

Operating theatre

Recovery room

ICU

Intensive care

Main station

1 PCs that can handle b
1 up to 8 beds

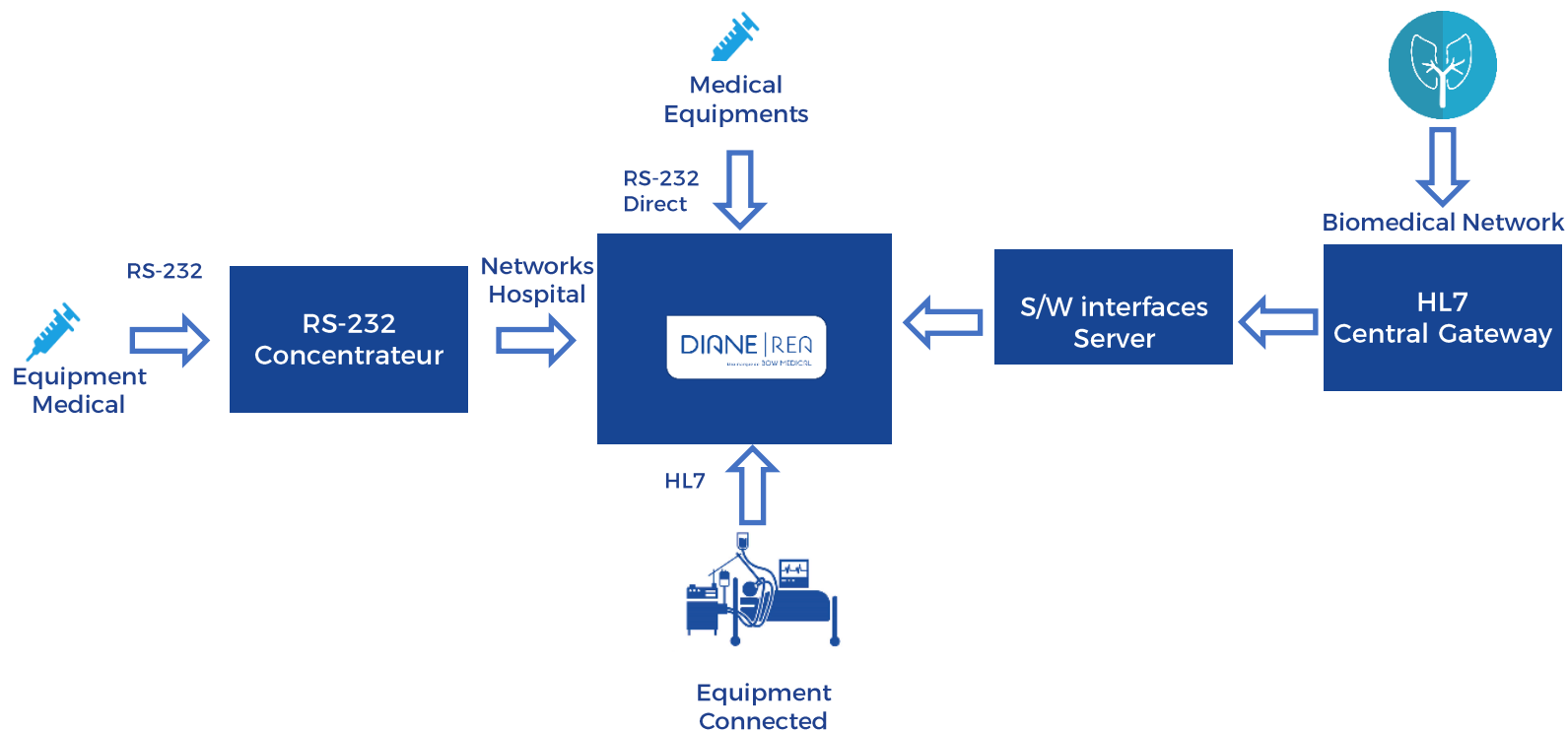
Regrouping all the
connection
medical devices

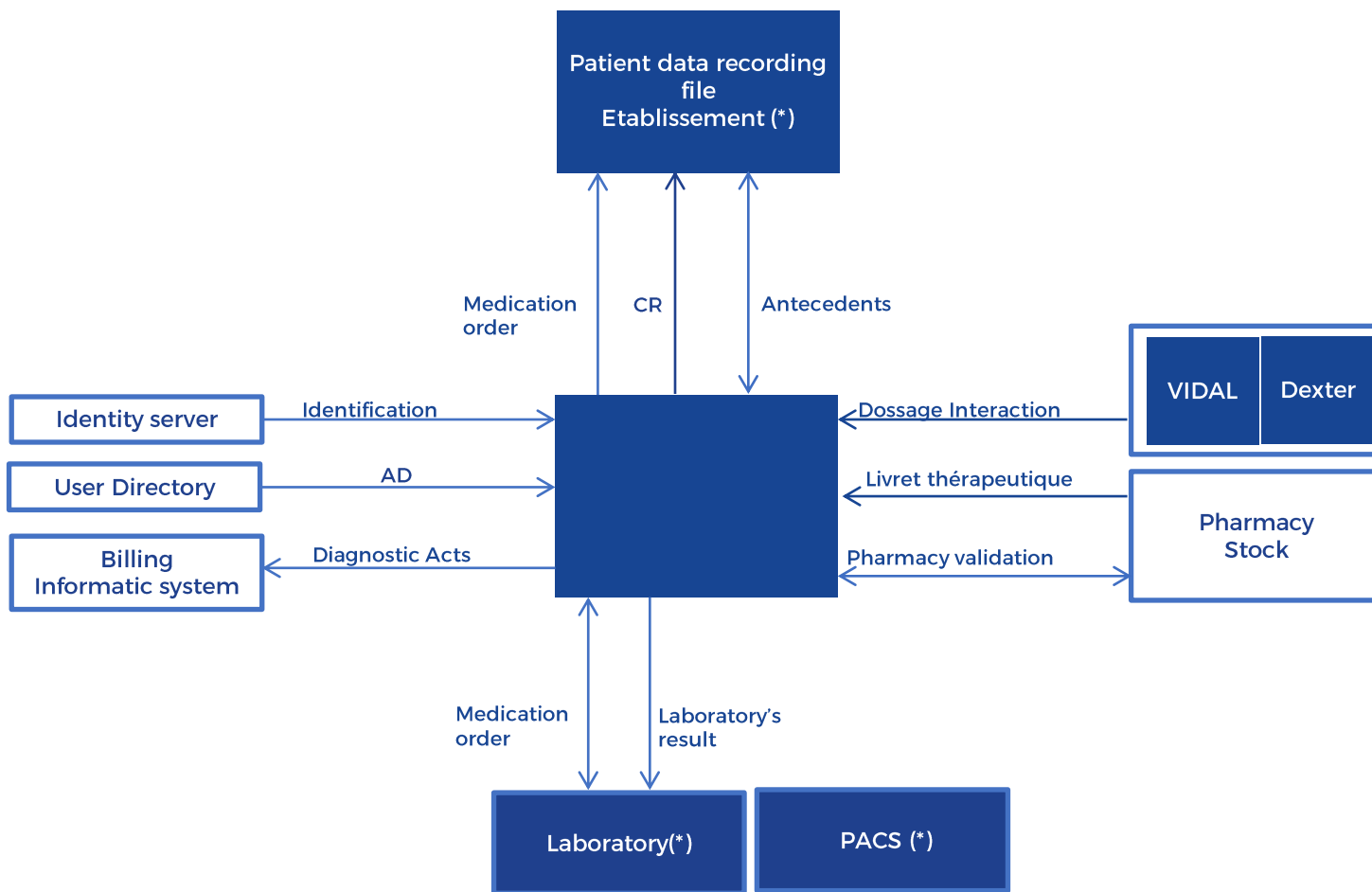


Device connection (410 drivers)

Multiple connection link:

Via RS-232 serial cable
Via RS-concentrator
Via HL7 direct
Via S/W interfaces server





Features	Communications Standard
Identity/ Stay	HL7, IHE PAM, HPRIM, XML, Web service, Proprietary Flat Files
Export reviews and documents	•Word, Pdf, SXW files, with header in HPRIM or HL7 •
Export CCAM, CIM 10	HPRIM-XML, HL7, HPRIM
Operating theatre management	Shared internal base, HL7
Laboratories	HPRIM, Contextual Call Button
Medication Orders	Contextual button, PN13 or codification

Appendix: Computer Interfaces

Connection type	Benefits	Risks
RS-232	Out of network, cheap, easy	Wires, spaghetti syndrome, length, specific.
RS-232 via serial port server	scalable, no need to be next to the device	Expensive, installation and configuration, no network - no data
Ethernet via gateway	Economic if homogeneous, compatible Citrix/TSE.	Uneasy to change, gateway cost. no network - no data,
Ethernet (direct connection)	Cheap, easy to set, independent of network.	Second board, adapted device (rare).

Annexe: Device connection (410 drivers)