

**BOW MEDICAL** 

43, avenue d'Italie 80090 – AMIENS - FRANCE Tel. +33 (0)3 60 03 24 68 contact@bowmedical.com

# What do you need to know?

To prepare a project « DIANE » you need information about:

- Database and hosting
- Interfaces and interoperability
- Workstations to equip
  - O Pre-anesthetic consultation: method of consultation, workstations, pre-anaesthetic visit, preliminary questionnaire
    - o Anaesthesia: induction rooms, operating room, recovery
- O Intensive care: intensive care, intensive care, continuous monitoring beds
- Additional places: treatment stations, corridors, doctors' office, staff room, etc.
- Referents or Key-users
- Number of user for training purpose
- Medical devices to be connected
- Project Planning

### To go further...

#### Additional Workstations

**ASK** referents to identify additional locations or workstations for DIANE installation (in anaesthesia &/or intensive care).

Worksations	Number
# of Pre- Operative Assessment Office	To assess patients
# of Intensivist / Anesthetists offices	To work in Diane from an office
# of Anesthesiology Dpt. Secretariat	To include the patient in the expected
	patient list, to print all documents
# of Operating Rooms	with Anesthesia Vent.
# of Endoscopy Rooms	without Anesthesia Vent.
# of Induction Rooms	with Anesthesia Vent.
# of Cesarean Rooms	with Anesthesia Vent.
# of Birth Rooms	Mother and fetal monitoring

# of Spare anesthesia station and/or	
Spare Panel PCs	
	Interventional Cardiology- Vascular -
# of Interventional Rooms	Neuroradiology. Anesthesia Vent. ?
# of Recovery Beds	Monitoring – Ventilation?
# of Sub-acute Beds (1)	Monitoring
	Monitoring – ventilation? Electric
# of Critical Care Beds (1)	Syringes?
# of Intensive Care Beds (1)	Monitoring – ventilation – Electric
	Syringes -others?
Nurse central station	# of Diane working station

#### **B** Database and Hosting

**IDENTIFY** the main server used to host Diane's unique database, controlled by the IT department.

The database can be:

- Microsoft SQL Server 7.0 or higher on a Windows server.
- Oracle on a Windows or Unix server from version 8.1.7 and higher

Data hosting within the hospital, or under the responsibility of the hospital; passwords belong to the hospital.

XML data available for export if PDMS changes (if they stop using Diane). Hospital maintains its own data and database schema is available; mapping by BOW MEDICAL on request (associated costs); accessible with a FIREDAC driver, included in the DIANE server license (hospital owned). Native Oracle (SQL server) driver opensource.

#### Interfaces with the HIS

**DETERMINE** the connecting points with the HIS and the existing electronic patient record:

- -Prescription
- -LIS,
- -PACS,
- -Administrative system (storing patient name, address, patient id,
- -User database (MS Active directory or similar)...

# Interfaces	Purpose	Editor?
		Software?
		Message format?
		Way of exchange (in or out)?
Patient identity	Patient identity server, for	
(Basic Interop Package)	automatic retrieval of	
(Basic Interop Package)	patient administrative data	

	Send report or letters in	
	.doc or .pdf with index	
	information	
	Electronic Medical Record	
Reports (Basic Interop Package)	(EMR), by making available	
	Assessment reports and	
	standard letters in Word or	
	PDF format generated	
	within Diane, with	
	contextual elements	
	necessary for their indexing	
	Open the EMR at the	
	patient's page, the user	
EMR call	being already identified.	
(Basic Interop Package)		
	To read patient's	
	information stored in EMR	
	Interface with MS Active	
User Identification	Directory or Single Sign-on	
(Premium Interop Package)	or Lightweight Directory	
	Access Protocol (LDAP)	
	Open the Lab. Information	
LIS Contextual call	System (LIS) at the patient's	
(Premium Interop Package)	file, user being already	
(Premium miterop Package)		
	authenticated	
	Open the Picture Archiving	
PACS Contextual call	and Communication	
(Premium Interop Package)	System (PACS) at the	
(Premium miterop Package)	patient's file, user being	
	already authenticated	
	Link with a drug database	
	i.e. Vidal, Vademecum, BCB	
	- prescription support: Drug	
Drug Knowledge Database	monography, Drug-Drug	
(Expert Interop Package)	Interactions and	
	redundancies, Drug	
	Allergy Do not include	
	subscription to the drug	
	database itself	
	Integrate the Hospital's	
	drug list carried in	
	inventory (includes prices)	
Formulary	to prescribe only the drugs	
(Expert Interop Package)	available in the hospital.	
	No drug consumption	
	management – Not used	
	for inventory management	
	Import LIS structured data	
LIS Import	to include in Diane	
(Expert Interop Package)	patient's file (Biology,	
	Microbiology)	
	Send (one way) the drugs	
	and care prescribed into	
ICU Discharge Prescription	the Care Plan of Hospital	
(Expert Interop Package)	EMR.	
(,	This is not a prescription	
	exchange tool.	
	Complex, subject to	

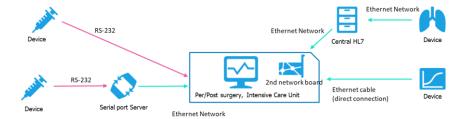
	excellent cooperation	
	between editors	
Appointments (optional))	Collect detail of the appointments list from an agenda	
Prescription integration from EMR to Diane (optional)	Collect prescription information from the EMR to be displayed in Diane. Complex, subject to excellent cooperation between editors	
Electronic Medical Record Exchange (optional)	2 ways exchange with EMR: patient history, allergies, complications exchange of XML files. subject to good cooperation between editors	
OR Tool (optional)	2-ways exchange Diane/OR planning and procedure events: integrate timeline events and reports subject to good cooperation between editors	

### Medical devices

LIST the medical devices to be connected to DIANE by installation station.

Workstation	Medical Devices	Brand	(*) Connection type
Operating Rooms	Anesthesia		
and Interventional	ventilators		
	-		
	-		
	-		
	Monitors		
	-		
	-		
	-		
	Central Stations?		
	-		
	- Connectable		
	Electric Syringes		
	Stations		
	-		
	_		
	-		
	ECLS system		
	-		
	Others:		
	-		
	Mobile devices?		

	_	
Postoperative recovery rooms	Monitors -	
	Monitoring central station	
	- Ventilators -	
Critical Care & Sub-acute care	Ventilators -	
	Monitors	
	Monitoring central station	
	Connectable Electric Syringes Stations	
	-	
Intensive Care and/or	Ventilators	
PICU	- Monitors	
and/or NICU	- Monitoring central station	
	Connectable Electric Syringes Stations	
	Pico, Pulsioflex	
	Dialysis devices	
	Cardiac output monitoring	
	Nutrition feeding pump	
Obstetrics	Ventilators	
	- Monitors	
	Monitoring central station	
	Fetal monitors	



#### \* Connection type:

- RS232
- RS232 + Serial Port Server
- Ethernet + Gateway
- Ethernet direct

### **1** Training

Who is in charge to perform the user training?	Contact details of the referents
Anesthetists and/or Intensivists and/or Obstetricians	
Resident or Medical students	
Anesthetist nurses	
Nurses	
Head nurses	
Pharmacists	
Midwives	

## **6** Project planning

**PLAN** the implementation of the project management.

What – When — By Whom	Week	Week
Set the project team		
Fine tune project content and limits		
Site Audit per specialty (Anesthesia/ ICU/ Obst.): every room, every device, connectivity, network, ergonomic		
Audit Report		
Every device to connect has been checked and connection mode is decided		
Working station ergonomic is decided (where, connected to, fixation)		
Final financial quotation		
First Key user meeting		
Order		
Workstation (panel PCs) ordering (8-10 weeks)		
Interoperability available and tested		

Server installation	
Key user training – software installation on their PC	
Software configuration check: What is missing to start?	
Software customization by key users (remote support)	
Working station installation	
Device connection working	
User trainings	
Start (asap after training)	
User support on site	
Hot-line available	
Project follow-up	
Adjustments	