



***Galician Public Health Care System  
Purchasing and Logistics Project  
GS1 standards***

***GS1 Healthcare Conference, Granada  
February 2008***



*The Galician Health Service (Sergas) has run Galicia's health system since 1991.*

2.701.042 health system users

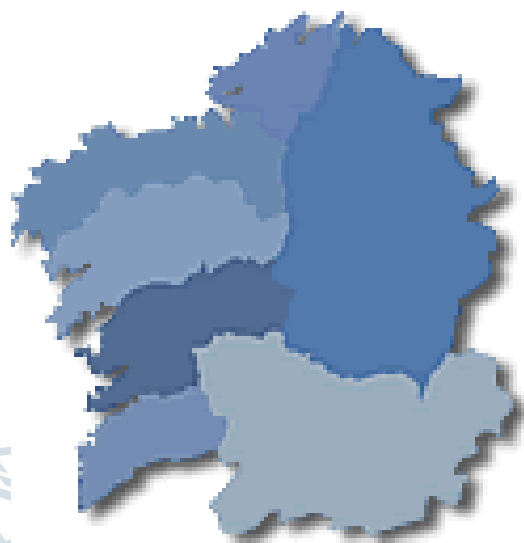
14.174.792 Family doctors' consultations

4.079.738 Specialists' consultations

1.060.166 urgencies

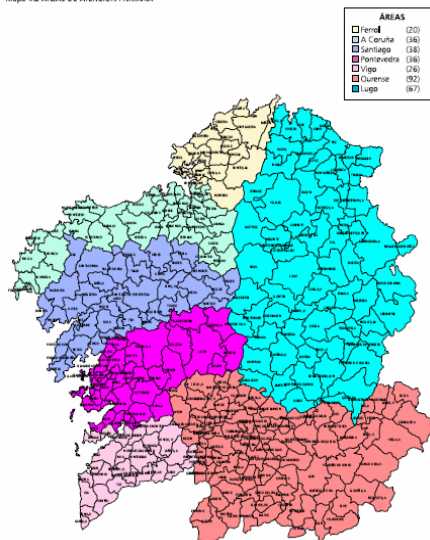
236.578 admission

164.737 surgical operation





Mapa 4.2 ÁREAS DE ATENCIÓN PRIMARIA



**Primary Care : 7 Primary Care Areas**

Organization:

6 XAP

1 Area Sanitaria

Centros:

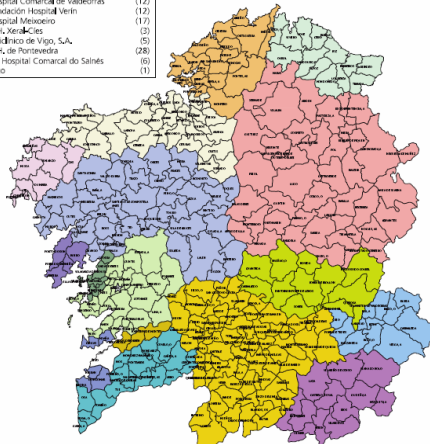
390 Primary Care Units

97 Support Units

90 Permanent Care Points(PAC)

Mapa 4.3 REFERENCIAS PARA HOSPITALIZACIÓN XERAL

ÁREAS	
C.H.U. Juan Canalejo-Martinho de Oza	(29)
C.H.U. Arquitecto Mariño Etxebarria Santos	(20)
C.H.U. Universitario de Santiago	(41)
Fundación Hospital Vixeo do Xunqueira	(4)
Fundación Hospital de Barbanza	(8)
C.H.U. Xeral-Cale	(42)
Hospital Comarcal da Costa	(14)
Hospital Comarcal de Monforte	(11)
C.H.U. de Ourense	(88)
Hospital Comarcal de Valdeorras	(12)
Fundación Hospital Verín	(12)
Hospital Mesetas	(17)
C.H.U. Xeral-Ces	(2)
Policlínico de Vigo, S.A.	(5)
C.H.U. de Nareda	(28)
F.F. Hospital Comarcal do Salnés	(6)
Vigo	(1)



**Specialized Care : 15 areas of reference to hospitalization.**

Organization :

9 Gerencias de hospitales

1 Área Sanitaria

4 Fundaciones Públicas Sanitarias

Centres (32 hospitals altogether) :

7 Complex Hospitals

3 regional hospitals

4 Hospital Foundation.

**Public Health Services**

**Administrative Services**

**Non hospital public foundations (CTG, FPUSG061, INGO, FEGAS, MEDTEC, FPMGenómica)**



**34 Centers of management with capacity of contracting, purchase, provisioning ...**



**... their mission: to provide to the professionals of health system of the necessary material resources to carry out the welfare activity**

**Δ prov | so 9 mil**

*Coordinated by means of projects of corporate area*



**CHU Santiago**

- *Model of Integrated purchase (IntegraCom).*
- *Processes of quality certifications (Aproviso 9mil) : ISO 9001:2000*
- *Common catalogue of products.*
- *Evolution towards an efficient chain of supplies*
- *Common system information model.*

*Centralizing without reducing autonomy of the centres management.*



## Corporate and strategic politics(policy) of Systems of Information. “Rede de Saude”



**REDE DE S@UDE**  
Plan de Sistemas de Tecnoloxía da Información da  
Consellería de Sanidade e do Servizo Galego de Saúde

**12.156 Computer equipments and 22.878 system information users.**

- **Main lines** : EHR, e-administration, analytical information systems, public health, business process optimization, infrastructure and services.
- **Corporate Information System**. Tools and common systems.
- **Corporate Network** of Telecommunications.
- Common methodology. Functional Committees.

### The “Commom” project facilitates:

- **Homogeneous Information** that facilitates the comparison.
- **Common procedures** that favor the equity in the use of the sanitary system.
- **Global services** T.I.C. The same service level in every centre.





***Galician Public Health Care System  
Purchasing and Logistics System***

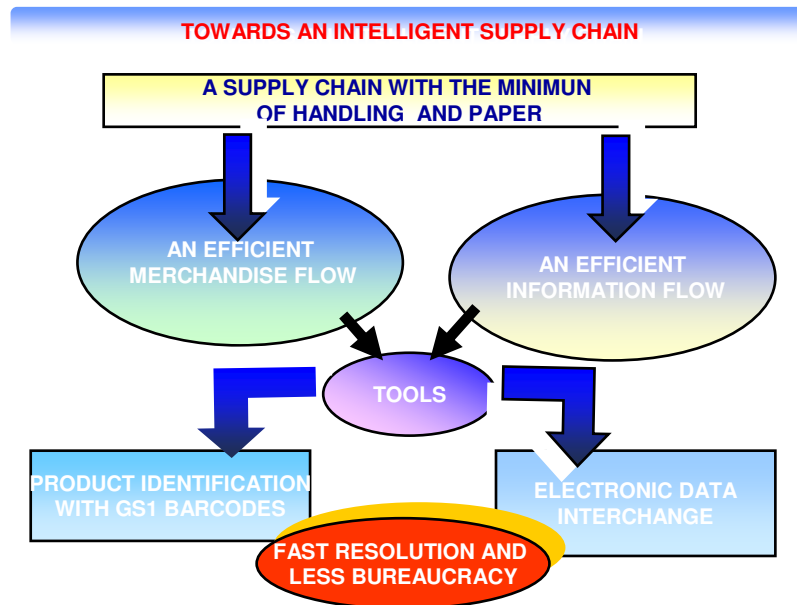


XUNTA DE GALICIA  
CONSELLERÍA DE SANIDADE



## In the year 2000 there begins the corporate project of provisioning management

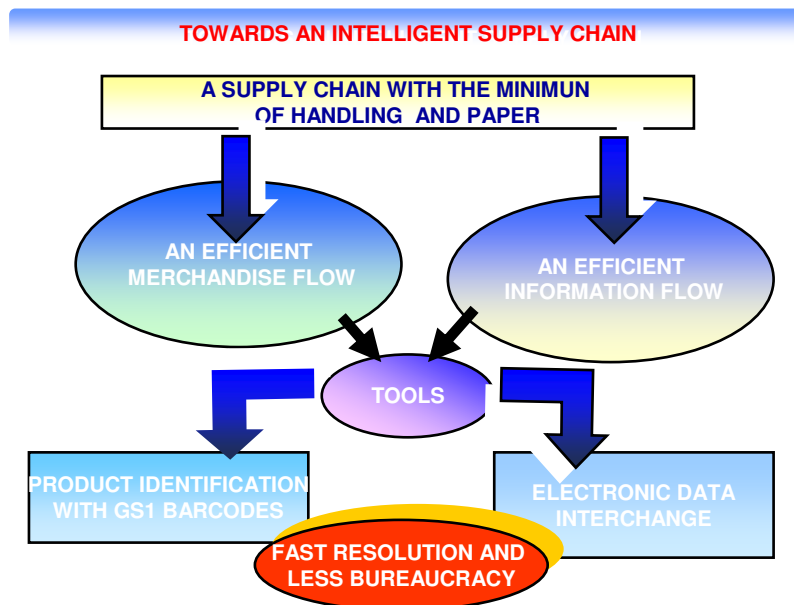
- Definition of a **general model of management**.
- Progressive implantation of a **common ERP** in every centre: Same information model.
- Progressive introduction of the same **culture of the management of the provisioning**: Formation / Conviction.
- Definition of a **common catalogue** of products.
- Integrating the efficient supply chain concepts and tools. **Use of standards**: CDB (EAN) for product's identification, EDI for communication with suppliers





## Difficulties

- Different cultures and organization in every centre.
- Logistics is not main business.
- A huge variety of products.
- Little implication of suppliers in the application of the standards in our process.
- Physical difficulties :
  - ✓ Geografic dispersion (too may point to attend)
  - ✓ Complexity of the productive structure of hospitals
  - ✓ Differents stores conditions.







Nº de centros (todos los centros de at.primaria y especializada)	20
Importe de compras (miles de €)	203.299
Nº de servicios de compras/aprovisionamiento	20
Nº de almacenes	38
Recursos humanos de compras y almacén	292
Nº de proveedores	1.350
Nº de proveedores con códigos EAN	82
Nº de proveedores con EDI	58
Nº de artículos Catálogo Central Productos SERGAS	28.468
Nº de referencias comerciales Catálogo Central Productos SERGAS	67.753
Nº de unidades de consumo - clientes internos	3.228
Nº de pedidos a proveedor	194.538
Nº líneas de pedido a proveedor	462.556
Nº líneas albaranes de entrada en almacén	514.328
Nº líneas de albaranes de salida a unidades de consumo	2.688.426

(\*) Excluidos inversiones, productos farmacéuticos, hemoderivados, gases medicinales, energía, comunicaciones y materiales de mantenimiento



*FPH do Salnes*



*FPH Virxe da Xunqueira*





Year 2006 the situation of the project is checked. Review guidelines.

- To promote 'best practices' in replacement models.

Major availability to the information to all partners involved : intranet, internet, ... as a frame for collaboration.

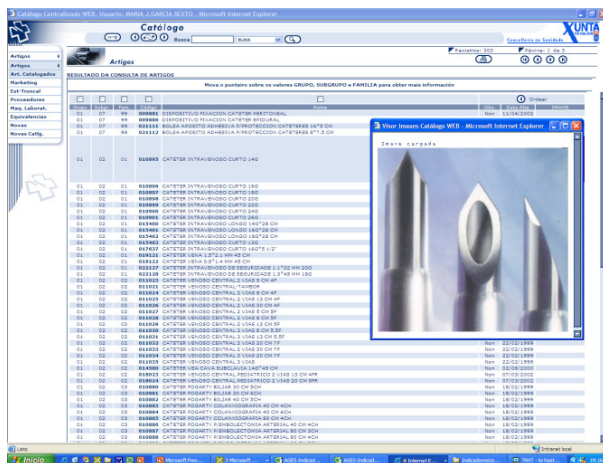
- Continue with standards GS1 as a tool to improve :

- Ask for suppliers more implication.
- Try to increase automation level in supply chain,

**Focus on internal client (units of consumption) : The purpose of logistics organization is to ensure that each point of consumption is being fed with the right product in the right quantity and quality at the right point in time.**



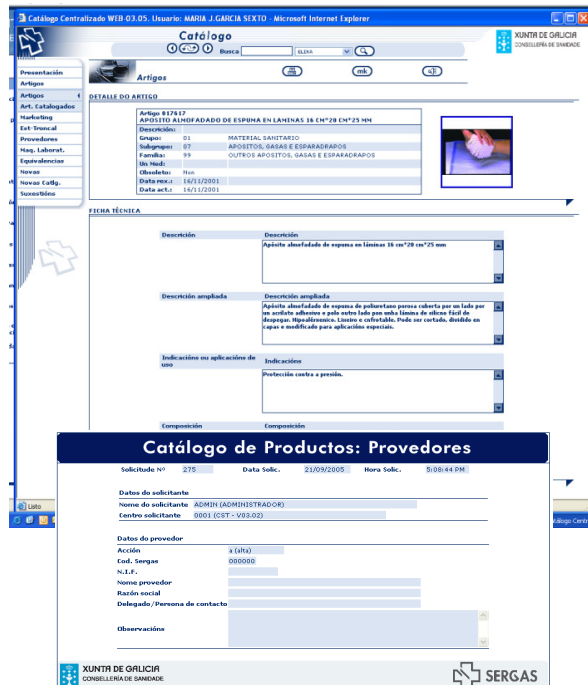
## Normalization of the information. The whole organization with a " common language":



- Consolidation of centralized database of suppliers.
- Consolidation of centralized catalogue of products of Sergas.

<ul style="list-style-type: none"> <li>• <b>Including</b></li> </ul>	<ul style="list-style-type: none"> <li>• Sanitary products, of in vitro diagnosis, and implants.</li> <li>• Not sanitary products: linen, papers, office material, forms and material of cleanliness. .</li> </ul>
<ul style="list-style-type: none"> <li>• <b>Not Including (nowadays)</b></li> </ul>	<ul style="list-style-type: none"> <li>• Pharmaceutical products.</li> <li>• Fixed assets (plans of needs).</li> <li>• Products of maintenance.</li> <li>• External and compound services .</li> </ul>

*The Catalogue of Products answers to the need of the Galician Service of Health to know, of homogeneous and comparable form, the economic impact of the technologies (skills) and materials of medical, sanitary use, and of not sanitary use consumed in the welfare activity.*



- **Classification:** group, subgroup, family. Countable imputation.
- Definition and identification of products. Commercial references. Suppliers.
- **Complementary Information:** images, technical characteristics, use recommendations, ...
- Catalogue's elaboration: **Collaborative work and maintenance procedures.**
  - Needs determined by management centres, coordinated by experts group.
- Diffusion across **intranet** for sanitary and non sanitary professionals.

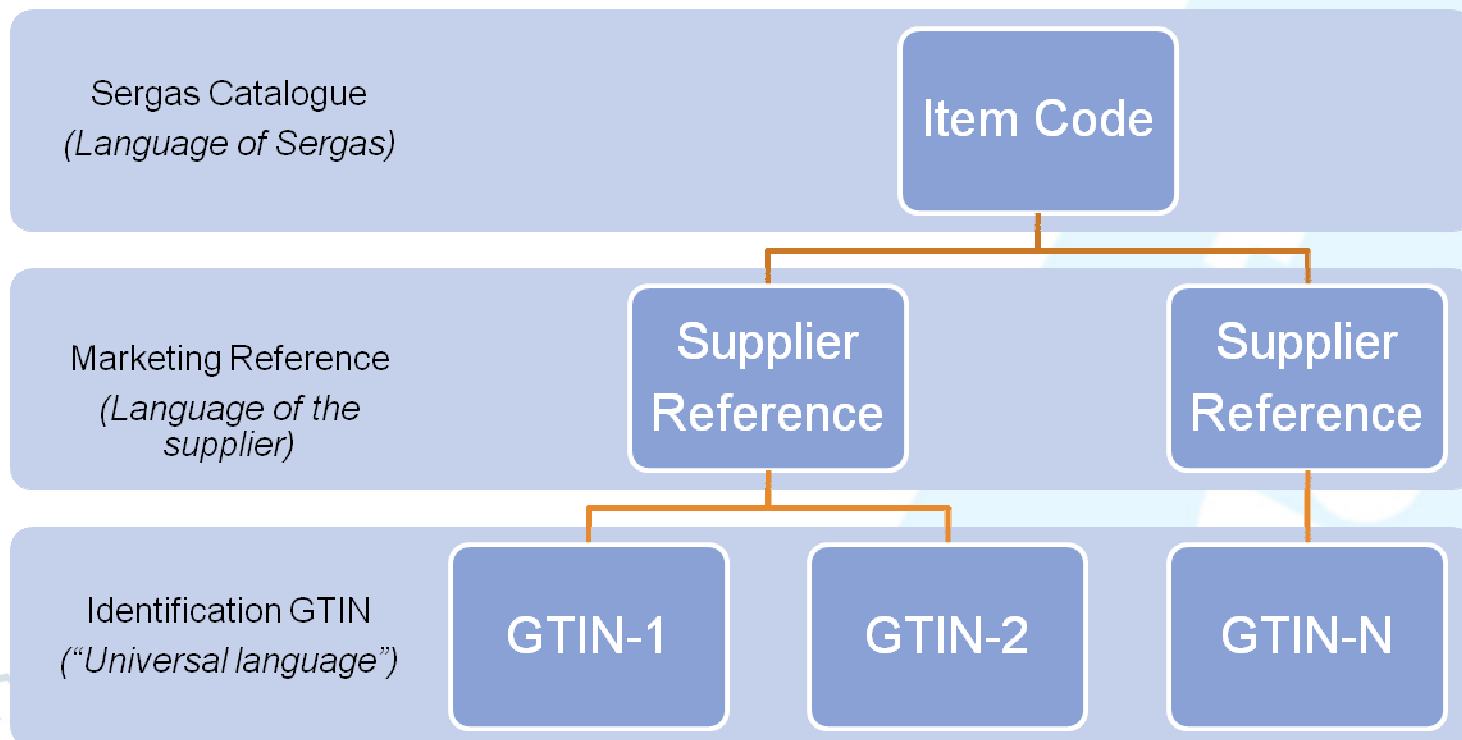
**Adequation to centers activity:** centers determines which products of the catalogue they need. Complete its information with those of management (levels of stock , ubication, ...).



SERGAS has adopted standard GS1 128, for development of its logistic system.

Reference database to align Sergas's catalogue, with the supplier's catalogue and GTIN identification.

3 levels of identification of products :





• Objectives :

- Reduce administrative task.
- Automate repetitive task
- Reduce errors, cost, time, ...
- Increase safety, quality service to internal clients.

• Codification and symbolization :

- Standard GS1 application.

• Mobility :

- Inventory devices, RF





## Logistics points where barcodes are allowed

Different organization models covered, corresponding to diverse realities



- **Stocks Pacts:** Level of stocks to maintain or average values of consumption settled down. Warehouse staff check periodically.
- **Plant Management :** Replacement by out of stock. There is a selfcontrol of the unit level; incomings and outgoings are registered and replacement is automatic in out of stock points. Professionals from unit of consumption assume logistics tasks.
- **Movements in Main Stores:** Inventory, Incoming/outgoing.
- **Management of the Warehouse(Depot).** Traceability of the implant in its movement through the hospital.





Almacenes de frío (tres)

*It is necessary to identify:*

- **Articles / Products** that move for the center.
- **Racks / Locations** of the general store or secondary stores (units of consumption). They identify where the products are placed.
- **Unit of consumption:** identification at the door.
- **Product (implants)** in warehouse(depot).

*2 types of labels*

- **External label.** Supplier label.
- **Internal label.** Where necessary







● **GTIN13 (Non sanitary product)**

❖ It is used to identify the unit



● **GS1 128 (Medical Device)** For the sanitary products, in which it is necessary to control the trazabilidad and the caducity.

❖ Application Identifiers:

- × (01) It precedes the article identification
- × (02) It precedes the contained article identification
- × (37) Quantity
- × (17) It precedes the expiry date (YY/MM/DD)
- × (10) It precedes the batch number

× **Internal IA to compatibility internal and external labels.**

- × (91) *Internal Sergas code*
- × (93) *Location code.*
- × (96) *Internal identification implant.*





Action	Label		Device		
	Ext.	Int.	Ent.by keyboard	Term. Batch	Term. RF
<b>Unit of consumption</b>					
Replacement by out of stock: inventory at units		X		X	
Replacement by out of stock: Outgoing movements.	X	X	X		
Stock level agreement: stocks inventory		X		X	X
<b>Main Store</b>					
Inventory		X		X	X
<b>Others</b>					
Implants	X	X	X		

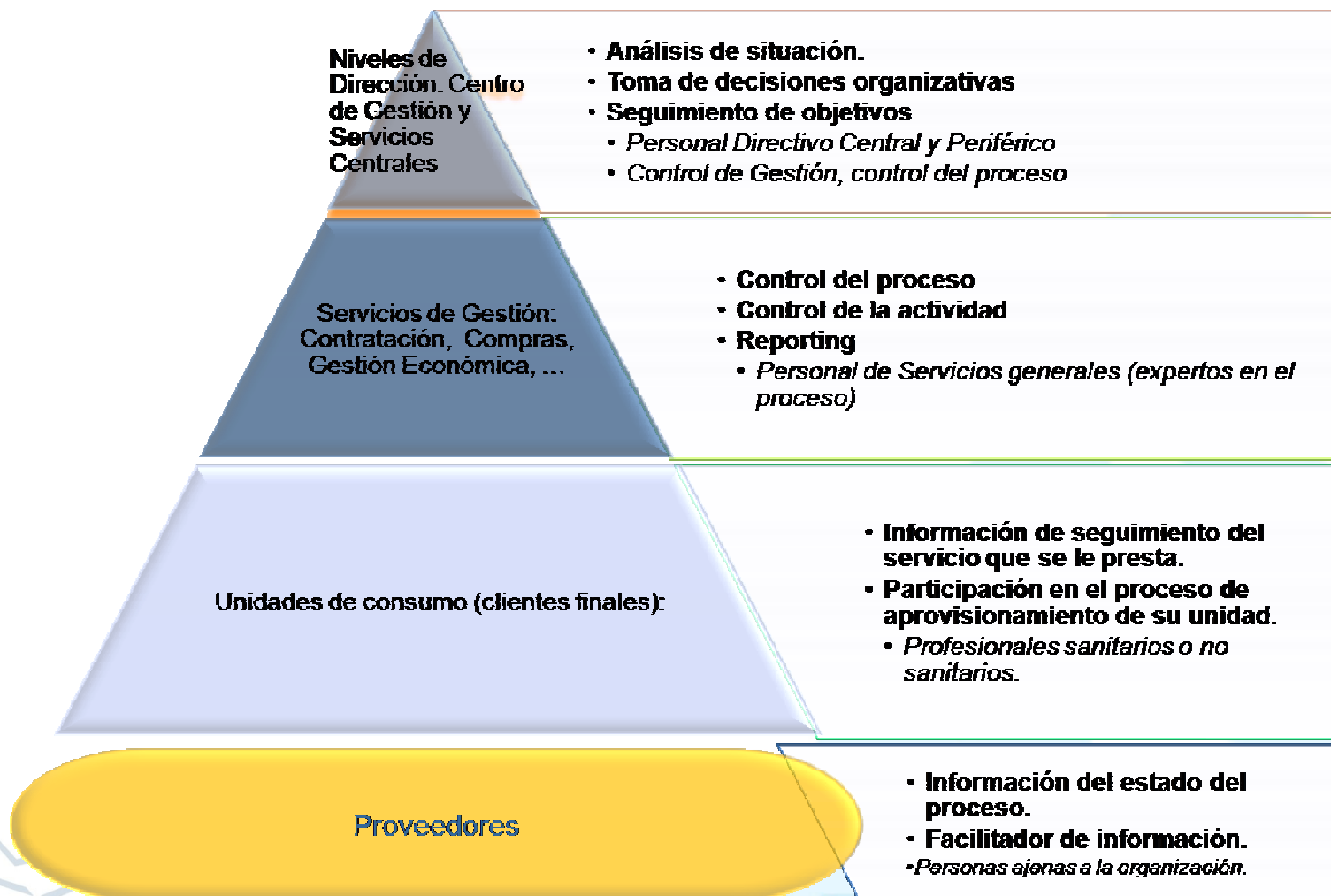


**For the logistic management as important as the flow of goods it is the flow of information.**

Different views of the same information (and same system) attending to what every role needs.  
Intranet / Internet context.

- It means :
  - Transparency. Generation of confidence relations between partners.
  - Reduction of mistakes. Same language.
  - The Systems of Information give support to the processes and also give the pertinent information for the evaluation and improvement.

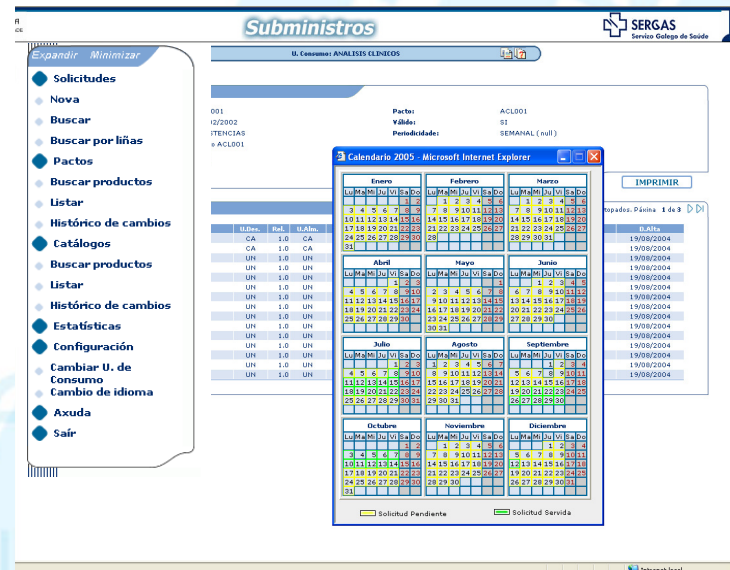
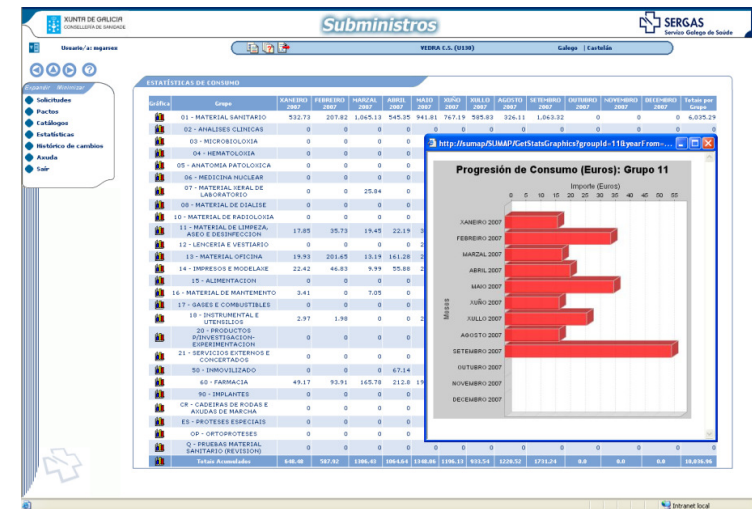






Professionals of the unit of consumption must know that the materials necessary for the accomplishment of their activity will be available when they need them – Intranet context.

- **Participation :**
  - Requests of material.
- **Professional Information:**
  - Available catalogues
  - Technical Information of products.
- **Follow-up of the received service (activity and logistic quality):**
  - Information of consumptions and costs
  - Fulfillment of the agreements of levels of stocks and services.





An internet access for suppliers to the process, in a sure and restricted context.

- **Detailed Information of the economic processing :**
  - invoices / budgetary documents of payment of suppliers.
- **Logistic and provisioning information:**
  - GLNs
  - Consultation of the warehouse(depot) (March2008)



It runs from October 2006.

314 companies registered in the system.

➤ 59 % of the suppliers with superior invoicing to 300.000 € are habitual users of the system.

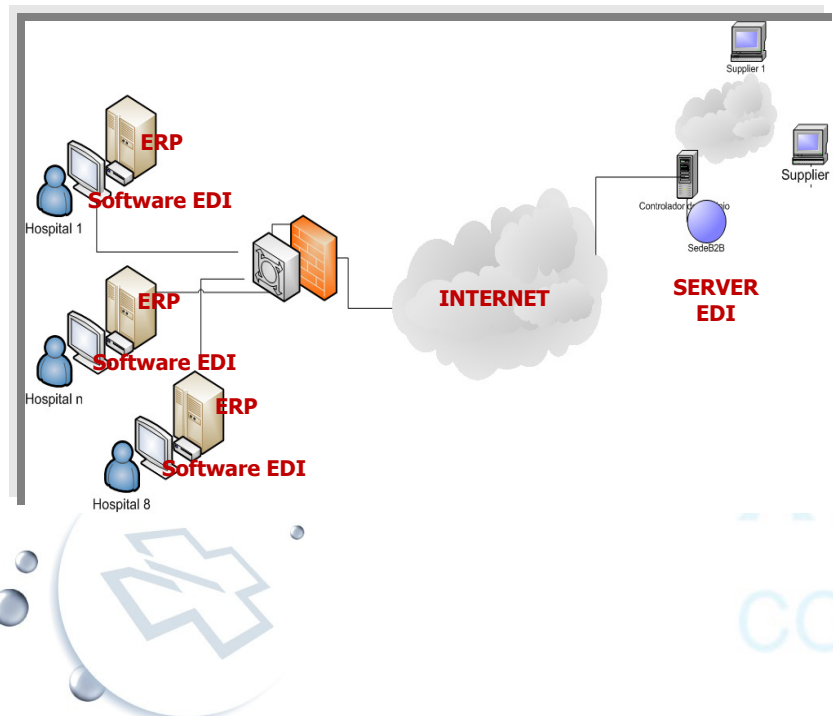
[www.sergas.es/ofpro](http://www.sergas.es/ofpro)



- It begins at 2003 with 7 complex hospitals and 1 Public Foundation
- Two messages implemented:
  - ORDERS:D:96A:UN:EAN008
  - DESADV:D:96A:UN:EAN005

#### Technical implementation :

- **Communications:** EDI through Internet.
- **Estación de Usuario :** Solución tipo 'FRONT-END' :
  - ❖ ERP sends or receives information.
  - ❖ EDIWIN software : data mapping interfaz and flow controlling information.
- **Server EDI Dedicated:** SEDEB2B.





GLN :

84352730xxxxx

3. ESTRUCTURA DE GLNS

Centro de Atención	Cat.	Función	GLN	Descripción
Área Sanitaria de Ferrol	BY / IV	¿ Quien pide? / ¿ A quien se factura?	8435273007003	Área Sanitaria de Ferrol
Área Sanitaria de Ferrol	DP	A quien se entrega?	8435273007010	Almacén Xeral
C.H. Ourense	BY / IV	¿ Quien pide? / ¿ A quien se factura?	8435273005001	C.H. Ourense
C.H. Ourense	DP	A quien se entrega?	8435273005010	Almacén Xeral
C.H. Pontevedra	BY / IV	¿ Quien pide? / ¿ A quien se factura?	8435273006008	C.H. Pontevedra
C.H. Pontevedra	DP	A quien se entrega?	8435273006015	Almacén Xeral
C.H. Xeral-Calde (Lugo)	BY / IV	¿ Quien pide? / ¿ A quien se factura?	8435273004004	C.H. Xeral-Calde (Lugo)
C.H. Xeral-Calde (Lugo)	DP	A quien se entrega?	8435273004011	Almacén Xeral
C.H.U. de Santiago	BY / IV	¿ Quien pide? / ¿ A quien se factura?	8435273003007	C.H.U. de Santiago
C.H.U. de Santiago	DP	A quien se entrega?	8435273003014	Punto Entrega Tránsito
C.H.U. de Santiago	DP	A quien se entrega?	8435273003021	Almacén Hospital Clínico
C.H.U. de Santiago	DP	A quien se entrega?	8435273003030	Almacén Externo C.H.U. Santiago
C.H.U. de Santiago	DP	A quien se entrega?	8435273003045	Almacén Lencería Hospital Clínico
C.H.U. de Santiago	DP	A quien se entrega?	8435273003052	Almacén Hospital de Corco
C.H.U. de Santiago	DP	A quien se entrega?	8435273003069	Almacén Equipo Clínico
C.H.U. de Santiago	DP	A quien se entrega?	8435273003076	Almacén Mantenemento Hospital Clínico
C.H.U. de Vigo	BY / IV	¿ Quien pide? / ¿ A quien se factura?	8435273007005	C.H.U. de Vigo
C.H.U. de Vigo	DP	A quien se entrega?	8435273007012	Almacén C.H.Xeral-Cies
C.H.U. de Vigo	DP	A quien se entrega?	8435273007029	Almacén H. do Meixoeiro
C.H.U. de Vigo	DP	A quien se entrega?	8435273007036	Punto Entrega Tránsito C.H. Xeral-Cies
C.H.U. de Vigo	DP	A quien se entrega?	8435273007043	Punto Entrega Tránsito H. do Meixoeiro

2007 - review of situation and architecture

• 12 new centres : Primary Care, Regional Hospitals and Public Hospital Foundation. → 20 centres → More traffic from Sergas.

• Quality audit of GTIN database.

• The only(unique) Sergas's identification as a corporation.

• Definition of a procedure to integrate new suppliers.

[www.sergas.es](http://www.sergas.es) → Espazo empresa

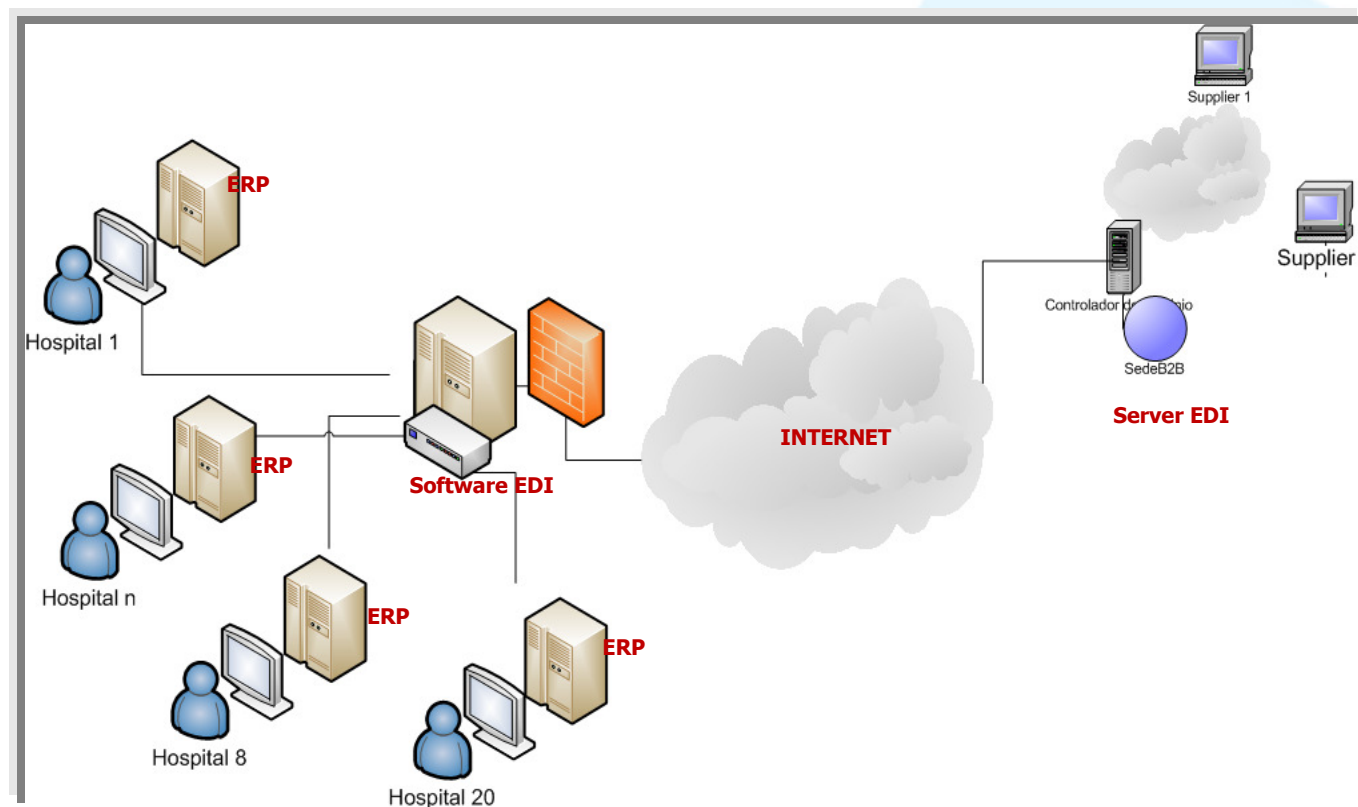
XUNTA DE GALICIA  
CONSELLERÍA DE SANIDADE





## 2007 - review of situation and architecture

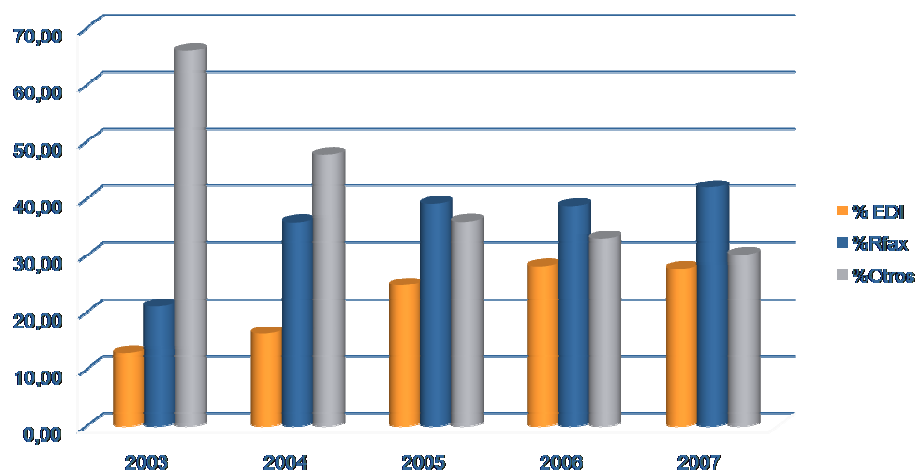
- **Centralized architecture** → Lower maintenance cost.
- **On-line integration with ERP for flow controlling information** → Simplicity for users.





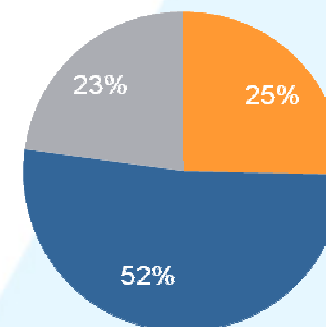
*Business figures*

**%AmountOrder Evolution**



**% PurchaseOrder Evolution (number of purchase order -- 2007)**

■ % EDI ■ %Rfax ■ %Otros



Amount Order	2003	2004	2005	2006	2007
Núm. of Suppliers	43	48	53	51	63
% EDI	12,87	16,30	24,79	28,14	27,72
%Rfax	21,09	35,91	39,21	38,82	42,03
%Otros	66,04	47,78	36,00	33,04	30,25



***Galician Public Health Care System  
Purchasing and Logistics Project  
Use Cases***



XUNTA DE GALICIA  
CONSELLERÍA DE SANIDADE



### Example 1 :

Small hospital. 85 beds. 34 points of consumption.  
41.000 outgoing movements. 9.500 incoming  
movements.

- Main Store - Inventory

- Shelves – Internal Label..
- Inventory online by means of RF infrastructure.



GUANTE CIRUGIA ESTERIL PAR Nº7.5



Art.: 000127 Ubic.: FD03A  
U. Desp.: - CA

(91)000127(93)1FD03A

(91) → Código interno de producto.

(93) Código interno de ubicación



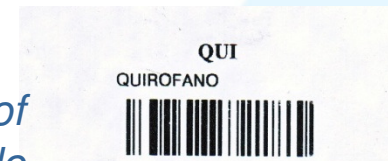


## Unit of consumption (GFH).

- *Stock Pacts : SLA: products, quantities, schedule.*
  - *Locations– Internal Labels*
  - *Inventory offline. Automatic translate to ERP.*
- *Electronic request for non habitual products.*

## Conclusions

- *Low investments.*
- *Few human resources dedicated to the tasks of inventory. Professional from unit of consumption do not participate in daily task of inventory.*
- *Disappearance of the administrative activity of record of requests. Eliminates the flow of paper.*
- *Low level stocks at secondary stores. Frequently inventory.*



KIT PULSERA MADRE-HIJO + Pac. 000200



Cod.: 004328 Ubic.: 96  
U. Desp.: 000001



## Example 2 :

*Complex Hospital. 841 beds. 306 points of consumption.*

### Unit of consumption (GFH).

- *Sanitary units :*
  - *Replacement by out of stock : SLA: products, stock levels,...*
  - *Products labelled GS1 (both internal and external).*
    - *Sanitary professionals register every outgoing movement with barcode scanner.*
    - *Dismiss level generates automatic replacement request to main store.*
- *Administrative Units : Electronic request.*

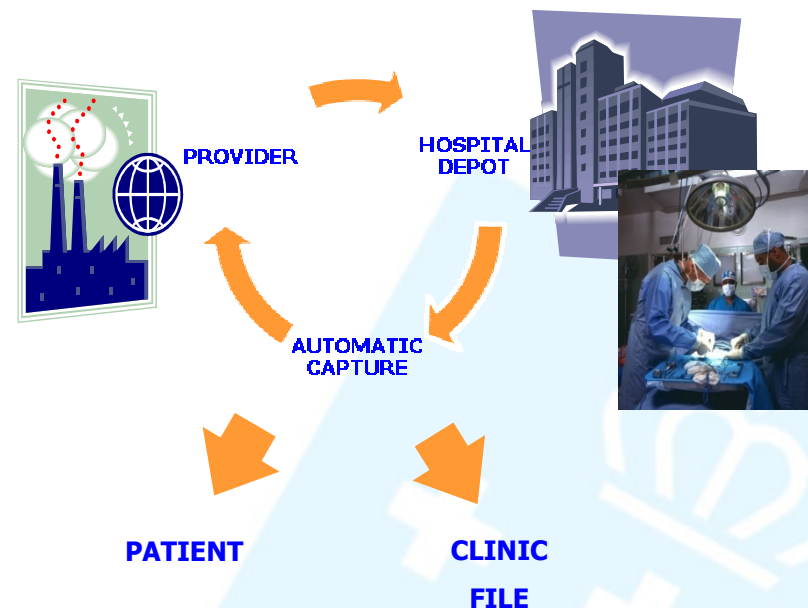




***R.D. 414/1996, 1st of Mars , Article 25, monitoring systems, part 4, says about traceability:***

**“ The implants below listed distributed in Spain must be supported by an implant card”**

- a) Heart and Blood implants
- b) Central nervous system implants
- c) Nervous and muscular stimulators
- d) Spinal column implants
- e) Infusion bombs to be implanted
- f) Artificial hip
- g) Artificial knee
- h) Breast implant
- i) Implanted lens



The implant card includes:

- 📄 Name/ Product model.
- 📄 Batch or Serial number
- 📄 Manufacturer's name and address
- 📄 Health Centre name
- 📄 Implantation date
- 📄 Patient identification number

By triplicate



### 1.- Record of the implant data:

- **Data register through symbolized GS1 128:** Ident. product, serial number, expiry date, lot code, ...
- A serial number assigned to a specific unit. Identify the item throughout the supply chain.
- Item not symbolized : Printing internal label.

Session: Ed. View Commands Script Help  
 Igonfer COMPLEXO HOSPITALARIO-ORENSE 16/05/2005  
 dep001 REGISTRO DE DEPOSITOS PANTALLA

Nº Dep.: 29446 Situación: A **DISPONIBLE**  
 F. Alta: 04/04/2005 Mot. Alta: ALB ALBARAN DE DEPOSITO  
 C. Gasto: 3201 C.H. CRISTAL PIÑOR Resp.:  
**Identificación**  
 G. F. H.: IRAN TRAUMATOLOGIA HOSP. NAI  
 Artic.: 224826 INSERTO POLIETILENO ULTRA-ALTO PESO MOLECULAR CADERA HIBRIDA  
 Prove.: 000046 CLINICA Y CONTROL. S.A.  
 Refer.: KINEITRAS0085 **Cantidad**  
 Nº Serie: N° Lote: 33673 Inicial: 1  
 Marca: V. Económica: 180\_303631 Actual: 1  
 Modelo: Det. Med.:  
 Observ.:  
 Ubicac.: QUIN QUIROFANO STA.M.NAI Alb.P.: DHO/99 F.  
**Reposición**  
 Pedido Reposición: 505025 2005  
 Referencia Repos.: KINEITRAS0085 Re  
 5/1694

OPCIONES: **Seleccionar** Agregar Duplicar Modificar Borra  
 Consulta de los Depositos Registrados.



Article name

Commercial reference

Provider



GFH. : XXXX  
 Loc.: XXXX  
 S.N. : Series n  
 B.N. : Batch n  
 E.D. : yy/mm/dd

(96) Depot n

(96)00037227

(96) → Internal number identification







## **2.- Record of the implant card.**

- Information of the intervention (patient, professional)  
-> Integration with HIS.
- Implanted products: captured by a **barcode scanner**.
- Deduction of implanted element from provider depot.



## **3.- Notification.**

- Issue of the implant card: 3 copies (patient, clinical history, supplier).
- Reposition and invoicing proposal that later is ratified, sending to supplier by : email, fax, or **ORDERS message (EDI)**.
- Then implant card is send by mail (no edi message integrated)

## **4.- Reposition.**

- **DESADV message** from supplier, if its possible.





### ‘Oficina Virtual do Proveedor’

- On-line information for supplier with inventory of bonded goods. Mainly implants.
- *Not included personal information (LOPD).*

Oficina Virtual do Proveedor

Luns, 4 de Febreiro de 2008

WOME DO PROVEEDOR: ALCON CUSI, S.A. CIF/NIF: A08079634 ESTADO: Activo CODIGO SERGAS: 000034

Depósitos-Inventario

Centro de xestión: C.H. XERAL-CALDE Estado: TODOS

Data de alta no depósito: desde ata

Resultado de Procura

Resultados de 1 a 20 dun total de 3371

Centro de Xestión	Referencia	Nome Artigo	D.Caducidade	S/N/L	Lote/Serie	CEH-Ubicación	D.Alta	C.Disp.
C.H. XERAL-CALDE	72157	LENTE INTRAOCULAR C. POSTERIOR ...	31/05/2006	S/N/L	651377.017301	OPTALMOLOGIA H. SAN JOSE - 0002	10/03/2004	0
C.H. XERAL-CALDE	72159	LENTE INTRAOCULAR C. POSTERIOR ...	31/07/2007	S/N/L	722875.024301	OPTALMOLOGIA H. SAN JOSE - 0002	10/03/2004	0
C.H. XERAL-CALDE	72161	LENTE INTRAOCULAR C. POSTERIOR ...	30/04/2006	S/N/L	648389.018301	OPTALMOLOGIA H. SAN JOSE - 0002	10/03/2004	0
C.H. XERAL-CALDE	72167	LENTE INTRAOCULAR C. POSTERIOR PHMA		S/N/L	886933.091301	OPTALMOLOGIA H. SAN JOSE - 0002	25/11/2005	0
C.H. XERAL-CALDE	72169	LENTE INTRAOCULAR C. POSTERIOR ...	30/09/2008	S/N/L	801299.096301	OPTALMOLOGIA H. SAN JOSE - 0002	02/11/2004	0
C.H. XERAL-CALDE	72171	LENTE INTRAOCULAR C. POSTERIOR ...	31/01/2007	S/N/L	689909.027301	OPTALMOLOGIA H. SAN JOSE - 0002	09/03/2004	0
C.H. XERAL-CALDE	72173	LENTE INTRAOCULAR C. POSTERIOR ...	31/05/2008	S/N/L	776733.114301	OPTALMOLOGIA H. SAN JOSE - 0002	09/03/2004	0
C.H. XERAL-CALDE	72175	LENTE INTRAOCULAR C. POSTERIOR ...	31/10/2008	S/N/L	802245.036301	OPTALMOLOGIA H. SAN JOSE - 0002	31/03/2004	0
C.H. XERAL-CALDE	72177	LENTE INTRAOCULAR C. POSTERIOR ...	30/04/2009	S/N/L	832625.087301	OPTALMOLOGIA H. SAN JOSE - 0002	16/06/2005	1
C.H. XERAL-CALDE	72181	LENTE INTRAOCULAR C. POSTERIOR ...	31/08/2006	S/N/L	648586.031301	OPTALMOLOGIA H. SAN JOSE - 0002	18/04/2004	0
C.H. XERAL-CALDE	72183	LENTE INTRAOCULAR C. POSTERIOR ...	31/12/2008	S/N/L	811275.009301	OPTALMOLOGIA H. SAN JOSE - 0002	19/05/2004	0
C.H. XERAL-CALDE	72187	LENTE INTRAOCULAR C. POSTERIOR ...	31/10/2008	S/N/L	803356.021301	OPTALMOLOGIA H. SAN JOSE - 0002	10/03/2004	0
C.H. XERAL-CALDE	72191	LENTE INTRAOCULAR C. POSTERIOR ...	30/06/2008	S/N/L	781886.011301	OPTALMOLOGIA H. SAN JOSE - 0002	09/03/2004	0
C.H. XERAL-CALDE	73802	LENTE INTRAOCULAR C. POSTERIOR ...	01/11/2011	S/N/L	10600782001	OPTALMOLOGIA H. SAN JOSE - 0002	16/11/2007	0
C.H. XERAL-CALDE	73802	LENTE INTRAOCULAR C. POSTERIOR ...	01/11/2011	S/N/L	10600782001	OPTALMOLOGIA H. SAN JOSE - 0002	16/11/2007	0
C.H. XERAL-CALDE	73803	LENTE INTRAOCULAR C. POSTERIOR ...	31/05/2007	S/N/L	713291.005301	OPTALMOLOGIA H. SAN JOSE - 0002	30/04/2004	0



***Galician Public Health Care System  
Purchasing and Logistics Project  
Conclusions***



XUNTA DE GALICIA  
CONSELLERÍA DE SANIDADE



- Three tools to reach more efficient models of management and of service for internal clients :
  - Access to information of purchase and logistic process.
  - Automation of logistic tasks.
  - Standard GS1 to identify and report products movements.
- Difficulties :
  - Few symbolization of products. Few suppliers as EDI trading partners.
  - The most ideal models are still an “exception”.
- A long time consolidation is needed. Tools and information systems are necessary but not enough.





- **Continuity** : with promoting the use of available tools in order to get better quality levels.

**Evolution:** New tools in order to improve the logistics project (and solve some difficulties):

- Pilot models RFID in the management of warehouses(deposits) of implants. (kick off – Feb.08)  
→ In order to improve identification and trazability.
  - Catalogue maintenance through 'Oficina Virtual do Provedor' (2008), or similar → In order to eliminate administrative task, and improve alignment with supplier's catalogues
  - Integrate new messages : pricat (for implantation card), if it's possible. → In order to acquire a complete automatization of implant circuit.
- **Review** of the requirements bases of the ERP to adapt to any area of purchase: pharmacy, maintenance, services, ...