

Advancing in the Cataract Surgery Management: introducing a Smart Consignment of intraocular lenses in a Catalan Public Hospital

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Abstract

We have implemented Smarts Cabinets with RFID tagged intraocular lenses in a Catalan public hospital for the management of the inventory of IOLs during the cataract surgery process. Smart Cabinets with RFID technology are extremely valuable to manage IOLs in the cataract surgery process saving operating costs, enhancing patient safety, allowing process automation and providing valued information for strategic decision making.

THE IOL CONSIGNMENT MANAGEMENT ISSUES

- Need of real time information for strategic planning of the surgery.
- Optimize stock rotation: avoid expiries & ensuring availability of all IOLs at time of surgery.
- Mandatory implant to patient record (Orden SCO/3603/2003 & MDR 2017/745).
- Manual management of invoice & replace orders upon consumption of the IOL.



RFID TAGGED IOLS & SMART CABINETS SOLUTIONS

- Real time information at cabinet location (touchscreen) or website (laptop)
- Reports for optimization of IOL rotation (inventory, transactions, caducity & missing stock reports).
- Planned automatic implant to patient record.
- Automation of invoice & replace orders upon consumption of the IOL.

IOL MANAGEMENT PROCESS MAIN CHANGES

1- Consignment



OLD
IOLs were in **consignment**
Anyone could access the stock
Poor visibility of inventory status

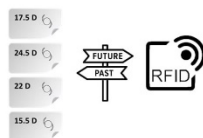


FUTURE
IOLs are in a **smart cabinet**
Restricted-used access
Full inventory **visibility**
FEFO Management

2- IOL Consumption



IOLs were used & **implant cards** stored for EMR entry & order to provider

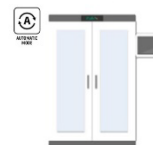


IOLs are used.
Implant cards can be **removed**

3- EMR IOL Record



MANUAL entry of IOL information in the EMR of each patient

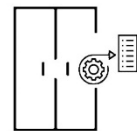


Smart Cabinet
AUTOMATICALLY feeds EMR with Patient/IOL info

4- Order



MANUAL reporting of implanted IOLs to Alcon & ordering of a replacement



Automatic order & replace using **Smart Cabinet Data**

Conclusions

Smart Cabinets with RFID technology are extremely valuable to manage IOLs in the cataract surgery process saving operating costs, enhancing patient safety, allowing process automation and providing valued information for strategic decision making.

Solution Providers

Dyane SmartCabinet (Palex Medical), RFID Tagged IOLs & consultancy were provided by Alcon Healthcare (Spain) in the framework of a public value based tender contract.