ORTHOPAEDIC IMPLANT RESUPPLY CHAIN : BETTER, FASTER, STRONGER !

Authors : M.KAYAL[1], C.MOAFO[1], L.BERGUA[1], S.BERGON[1]
[1]Centre Hospitalier Eure-Seine, Hôpital d'Evreux, Normandie, Eure, Evreux, France

27th - 29th March 2019 | Barcelona, Spain
PERSONALISED HOSPITAL PHARMACY
Meeting the needs of every patient

Abstract number : 5PSQ-139

Background :

The 58 trauma compositions, including surgical instruments and sterilisable orthopaedic implants, are often sent incomplete to the central sterilization (CS) concerning the implants.

⬇

Sterilizing incomplete compositions or keeping them at the CS until them to be completed leads to risk patient such as postponing or delaying surgery.

Objectives :

- Quantifying the incomplete compositions
- Estimating the costs
- Suggesting solutions with a multidisciplinary commission (MC)

Methods :

The sterilization technicians (ST) counted for 3 months the compositions sent incomplete.

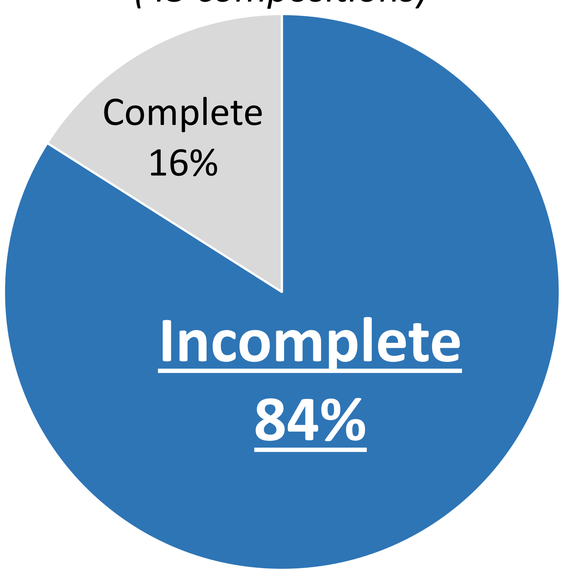
The costs were based on the surgical instrument number per composition , the checking complexity and the employee, water and electricity costs.

Surgeon, nurse, pharmacist and ST reviewed the results and the existing implant resupply chain.

Results :

Compositions sent to the CS

(45 compositions)



Reasons for incomplete compositions

58%

Nurses had forgotten to send the implants to the CS.

42%

Implants had not been delivered yet.

The delivery delay differed from 3 to 10 days.

1/3

Proportion of compositions which stayed at the CS before being completed

The checking by ST could last 1h30 to make sure all the implants were present.

Costs of sterilizing incomplete compositions

= 1156 € =
(for three month study)

Costs of sterile implant packaging elimination

The removal of the incomplete composition sterilization costs offset the sterile implant packaging elimination costs.

Resupply chain modifications by the MC	
BEFORE the MC	AFTER the MC
- *Sterilisable* implants - The *Biomedical service* made the orders.	- **STERILE** implants - The **PHARMACY** made the orders. - Delivery delay shortened to 48H.

Conclusions/ Discussion :

The company provides freely the sterile devices which are paid when implanted. Misusing one only use implants is avoided thanks to sterilisable patterns helping select the right implants. The composition simplification saves time for the checking by the STs and makes the composition available quicker for the operating room (OR). The patient safety is improved thanks to a permanent and computerized implant traceability which also automatically makes an order once done. However, the switch implies to reorganize the OR's storage place.
This new optimized implant resupply chain ensures safety for the OR and patient and cost effectiveness for the hospital.

http://www.eahp.eu/24-5PSQ-139