CAN TRANSPARENCY IN THE SUPPLY CHAIN IMPROVE DRUG SUPPLY TO HOSPITAL PHARMACIES?

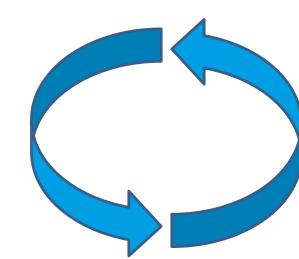
Yes, well known processes from other industries have improved drug supply for Hospital Pharmacies

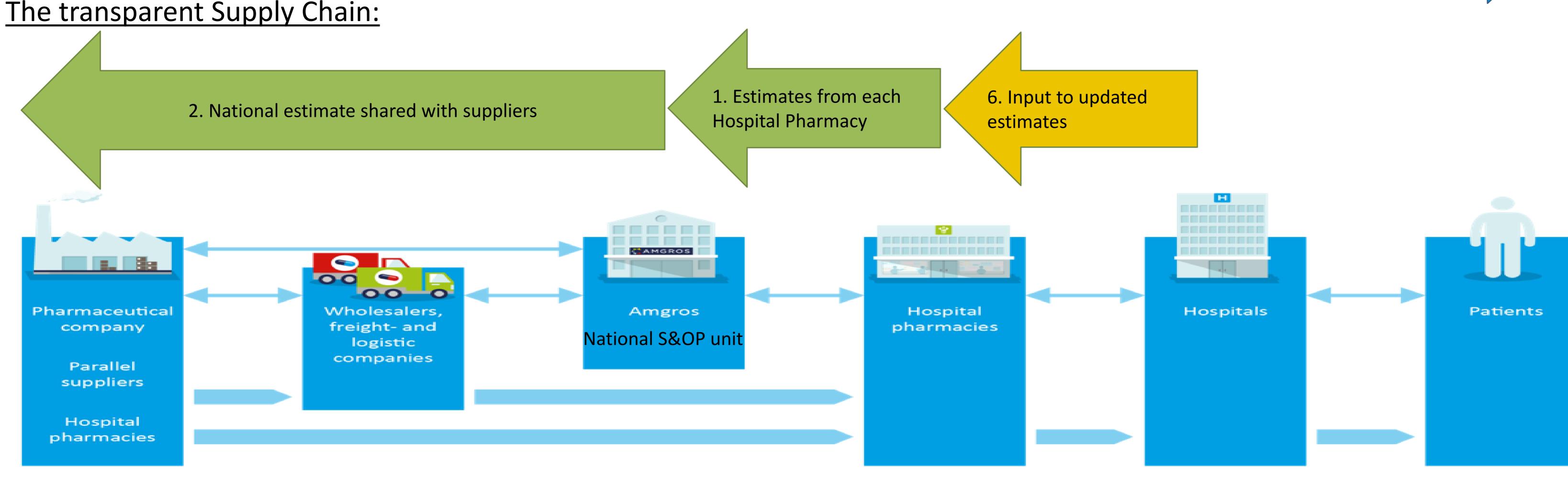
What was done

(GPI no.: SPD7010)

We established a national Sales&Operations Planning (S&OP) unit, in order to develop and implement a national S&OP process for drugs on national tenders:

- All Hospital Pharmacies estimate their expected purchase volume [number of packages] on each item-number (Arrow 1 on figure below)
- National estimates for each item-number are shared on a national supplier web portal. Suppliers are advised about new estimates by e-mail (Arrow 2)
- Suppliers confirm drug supply capability (Arrow 3a) or report potential supply problems (Arrow 3b)
- The national S&OP unit initiates and identifies proactive solutions for potential supply problems (Arrow 3b)
- Suppliers share production lead-time to give better understanding of their capabilities, e.g. to support planning of drug changes and decision making
- Monthly review process in place: Hospital Pharmacies/Clinical Pharmacy update their estimates for changes in drug use (Arrows 4, 5 and 6)
- Suppliers re-confirm their supply capabilities, and national solutions are made for any identified supply problems (Arrows 1, 2, 3a and 3b)





3a. Confirmation of supply capability according to national estimate
OR
3b. Early info on potential supply problems -> solutions identified

4. Significant deviations between estimate and actual purchases

Information flow

5. Questions to Clinical Pharmacy about changes in drug consumption

Material flow

Update according to changes in drug consumption

Why it was done

After years of increasing medicines shortages and unplanned drug changes implemented under time pressure in the hospitals, we decided in 2017 to replace firefighting with proactiveness through better transparency between Hospital Pharmacies and suppliers.

How it was done

- I. Involvement of Hospital Pharmacies and suppliers in the step-by-step development of the process. Help to Hospital Pharmacies with estimation procedure
- II. Help to identify estimates that needed revision through quantitative and qualitative models, to improve estimate accuracy and supply security
- III. Active communication of estimates and revised estimates to suppliers
- V. Rebuilt suppliers' trust in our estimates as accuracy improved
- V. Asked suppliers to confirm supply capability and report potential supply problems

Demand / Supply Information

I. Open and **cross-functional communication** about possible solutions to potential supply problems

What was achieved

- Proactive solutions for potential supply problems have improved the overall supply situation, and have improved patient safety as fewer unplanned drug changes are implemented under time pressure
- Number of backorders have stabilised during 2017-2018 whilst other countries have experienced a sharp increase
- Transparency across the supply chain has generated trust and enabled more value adding and cross-functional dialogue e.g. sharing causes for estimate changes and early sharing of knowledge about potential supply problems
- Positive feedback from both Hospital Pharmacies and suppliers on the benefits of participating in the national S&OP process

What is next

- Continue to improve the S&OP process and tools by involvement, help, active communication, trust and cross-functional communication
- Increased focus on education of Clinical Pharmacy staff and physicians, in order for them to give early input to Hospital Pharmacies prior to changes in drug usage
- Help Hospital Pharmacies to predict changes in drug estimates, based on impact from national decisions about drug selection in the therapeutic areas

