CONFORMITY OF THE DRUG-USE PROCESS IN PATIENT CARE AREAS: A 5-YEAR DESCRIPTIVE STUDY

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BACKGROUND
- Pharmacy practice is highly regulated and the drug-use process is complex in patient care areas
- Pharmacists are responsible of the drug-use process and audits should be performed to insure a safe and optimal drug circuit.

PURPOSE
- To describe and compare the conformity of the drug-use process in patient care areas

METHODS
- This is a prospective cross-sectional descriptive study conducted in all in-patients care areas of a 500-bed teaching hospital.
- An audit was conducted annually.
- A paper checklist of 26 to 35 criteria grouped in 13 categories was used during a 2 week round of healthcare unit.
- Two research assistant evaluated the conformity of each criteria per patient care areas (e.g. compliant, partially compliant or not compliant) by direct observation.
- A conformity report was written, checked by decentralized clinical pharmacists and transmitted to patient care area managers with suggested corrective measures.

RESULTS
- Twenty-seven patient care areas have been audited each year since 2012.
- The intermediate conformity were 71%, 65%, 72%, 70% and 73%.
- The global conformity were 71%, 65%, 78%, 64% and 62%.
- Between 2015 and 2016, a significant decrease in conformity was observed for the following six criteria:
  - Presence of a yellow bin for pharmaceutical wastes
  - Presence of a drug tray for resuscitation carts without expired drugs
  - Nurse or assistant-nurse knowledge about:
    - What to do in case of a technical problems with drug related technologies
    - How to report an adverse drug reaction
    - Where they can find antimicrobial drug use rules
    - How to use personal protection equipment when administering
- Between 2015 and 2016, a significant increase in conformity was observed for two criteria related to the medication reconciliation process.

DISCUSSION
- While this audit has been conducted since 2012, we observed a plateau in intermediate conformity but a decrease in global conformity that can be explained by the addition of nine criteria overtime and the fact that some criteria relied on the evaluation of a single respondent (e.g. the assistant-nurse available at the time of the audit).
- Initial criteria were developed to audit the drug-use process itself while the additional criteria added in the last two audits were developed to better evaluate the knowledge and the use of the intranet and the drug-related technologies (e.g. carts and automated dispensing cabinets).
- As audits are performed by different research assistant every year, there might be some variability between raters regarding “partial conformity”.
- External accreditation visits can contribute to an upward shift of the results (e.g. last visit in December 2014).

CONCLUSION
- Periodical audits of the drug-use process is essential to ensure a safe and optimal drug circuit. This study demonstrates it is feasible to conduct such audit periodically.
- While a 100% conformity should be targeted by all stakeholders for all criteria, this study shows it is not realistic to reach full conformity, considering numerous factors. While decentralized pharmacists in patient care programs can contribute to optimal direct patient care, a centralized audit of the drug-use process is necessary to ensure a transversal evaluation of the drug-use process.
- New strategies should be identified and considered to further improve the conformity of the drug-use process.