Pharmaceutical interventions on hospital discharge prescriptions : challenges for community pharmacists

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BACKGROUND

- Transition between hospital and ambulatory care is a delicate step, which involves several healthcare professionals and presents a considerable risk of drug related problems (DRPs)
- The community pharmacist plays an active role in preventing and solving medication errors and can increase patient safety
- During transition of care, hospital discharge prescriptions present a particularly high risk of DRPs

This study aimed to investigate pharmaceutical interventions performed by community pharmacists on hospital discharge prescriptions from an internal medicine department

METHODS

- **Where?** - 14 community pharmacies
  - A 70-bed internal medicine department in a Swiss regional hospital
- **When?** October 2015 - December 2015 (3 months)
- **Who?** Patients discharged from the internal medicine ward of the hospital (≥ 4 drugs chronically, capable of discernment, patient's approval)
- **What?** Pharmaceutical interventions performed by community pharmacists:
  - number and type of pharmaceutical interventions and propositions
  - time spent dealing with discharge prescriptions
  - number of medication changes during transition of care

RESULTS

Pharmaceutical interventions by community pharmacists	
Number of patients	64
Age, mean ± SD (range), years	78 ± 12 (44-98)
Number of drugs on discharge prescription, mean ± SD (range)	10.3 ± 3.9 (3-19)
Total number of interventions performed by community pharmacists on discharge prescriptions	439
Number of interventions per discharge prescription, mean ± SD (range)	6.9 ± 3.5 (1-16)

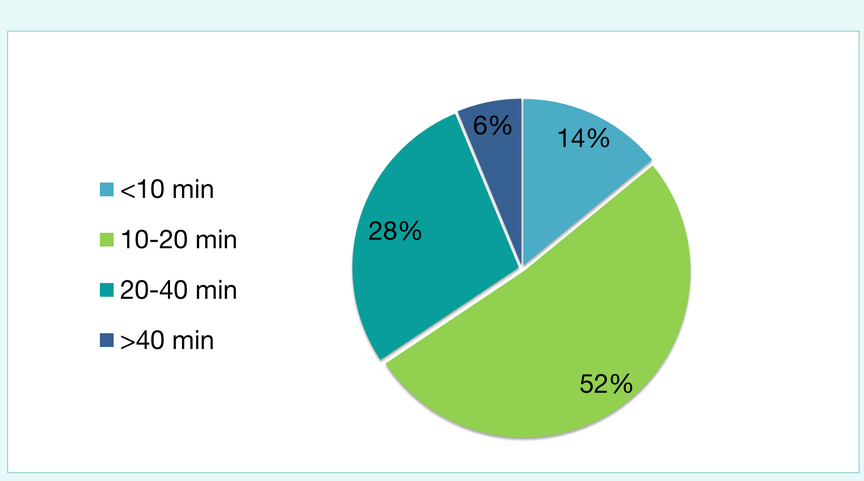


Figure 1: Time spent by community pharmacists dealing with discharge prescriptions

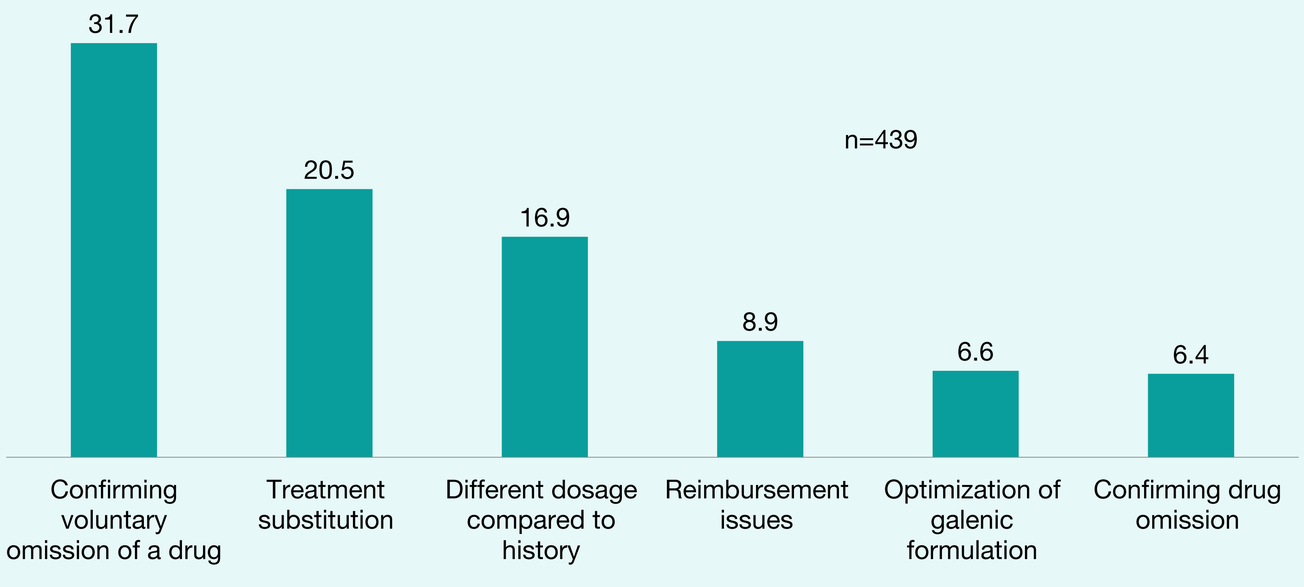


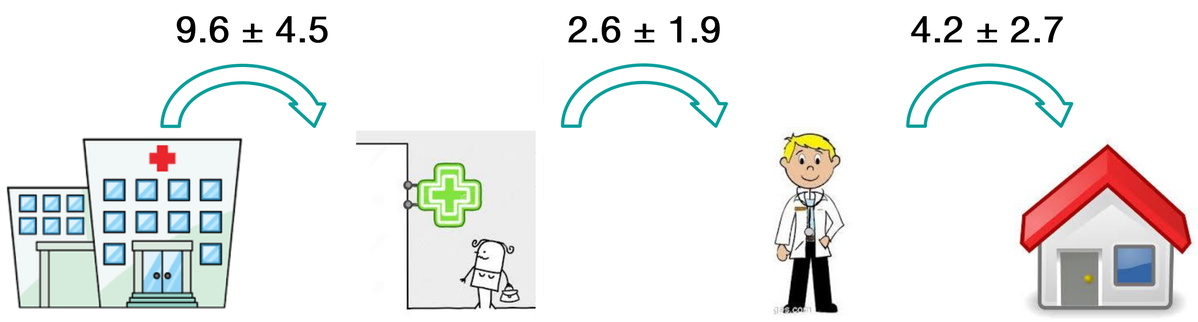
Figure 2: Most frequent pharmaceutical interventions (%)

Therapeutic classes most frequently involved (type of pharmaceutical intervention):

- ✓ **Analgesics** – 17% (reimbursement issues, different dosage compared to history)
- ✓ **Mineral supplements** – 10% (treatment substitution, different dosage compared to history)
- ✓ **Psychotropic drugs** – 7% (treatment substitution, voluntary omission)
- ✓ **Drugs for acid-related disorders** – 6% (treatment substitution, different dosage compared to history)
- ✓ **Agents acting on renin-angiotensin system** – 6% (voluntary omission, treatment substitution)

The most frequent pharmaceutical proposal was the use of a pillbox

In average **16.4 medication changes** during transition of care



CONCLUSIONS

- Hospital discharge prescriptions are often complex and present a risk of medication errors
- Community pharmacists play a key role in preventing and identifying DRPs, but time required for pharmaceutical validation might be a constraint
- Medication reconciliation at hospital admission and a better communication of medication changes at discharge may facilitate community pharmacists' work, ensure continuity of care and thus increase patient safety

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