Transition of care: a set of pharmaceutical interventions improves hospital discharge prescriptions from an internal medicine ward

Marine Neeman[1], Maria Dobrinas[1], Sophie Maurer[1,2], Damien Tagan[3], Annelore Sautebin[3], Anne-Laure Blanc[1]*, Nicolas Widmer[1,4]*

[1]*Pharmacie des Hôpitaux de l'Est Lémanique (PHEL), Vevey, Switzerland*
[2]*Pharmacie du Marché, Vevey, Switzerland*
[3]*Hôpital Riviera-Chablais (HRC),Vevey, Switzerland*
[4]*Division of Clinical Pharmacology, Lausanne University Hospital, Lausanne, Switzerland*

**Anne-Laure Blanc and Nicolas Widmer contributed equally to the supervision of this work*.

Abstract

Background & Purpose: Continuity of care between hospitals and community pharmacies needs to be improved to ensure medication safety. This study aimed to evaluate whether a set of pharmaceutical interventions to prepare hospital discharge facilitates the transition of care.

Methods: This study took place in the internal medicine ward and in surrounding community pharmacies. The intervention group's patients underwent a set of pharmaceutical interventions during their hospital stay: medication reconciliation at admission, medication review, discharge planning. The two groups were compared with regards to: number of community pharmacist interventions, time spent on discharge prescriptions, number of treatment changes.

Results: Comparison between the groups showed a much lower (77% lower) number of community pharmacist interventions per discharge prescription in the intervention (n=54 patients) compared to the control group (n=64 patients): 6.9 versus 1.6 interventions, respectively ($p < 0.0001$); less time working on discharge prescriptions; less interventions requiring a telephone call to a hospital physician.
The number of medication changes at different steps was also significantly lower in the intervention group: 40% fewer ($p < 0.0001$) changes between hospital admission and discharge, 66% fewer ($p < 0.0001$) between hospital discharge and community pharmacy care, and 25% fewer ($p = 0.002$) between community pharmacy care and care by a general practitioner.

Conclusion: An intervention group underwent significantly fewer medication changes in subsequent steps in the transition of care after a set of interventions performed during their hospital stay. Community pharmacists had to perform fewer interventions on discharge prescriptions, thus improving continuity of care.

Published in : European Journal of Internal Medicine doi: 10.1016/j.ejim.2016.11.004
Contact: annelaure.blanc@phel.ch