Problems with continuity of care identified by community pharmacists post-discharge.

Ensing, Rik 1, Koster, Ellen 2, van Dooren, Ad 3, Bouvy, Marcel 4.
1Utrecht University of Applied Sciences, Research Group Process Innovations in Pharmaceutical Care, Utrecht, the Netherlands. 2Utrecht Institute for Pharmaceutical Sciences (UIPS), Department of Pharmacoepidemiology & Pharmacotherapy, Utrecht University, Utrecht, the Netherlands. 3Utrecht University of Applied Sciences, Research Group Process Innovations in Pharmaceutical Care, Utrecht, the Netherlands. 4Utrecht Institute for Pharmaceutical Sciences (UIPS), Department of Pharmacoepidemiology & Pharmacotherapy, Utrecht University, Utrecht, the Netherlands

Background Medication errors at hospital discharge are common. They are frequently evoked by medication regimen changes during hospital admission and inadequate documentation and information transfer between healthcare providers. In the Netherlands, community pharmacies are well-informed about their patients’ pre-admission medication history.

Purpose This accurate medication history enables community pharmacies to verify the received hospital discharge information post-discharge. Therefore, our aim was to study the frequency and nature of all possible problems with continuity of care that community pharmacists experienced at admission to primary care.

Method A cross-sectional study was conducted in pharmacies belonging to the Utrecht Pharmacy Practice network for Education and Research in the Netherlands. All discharge prescriptions presented by adult patients discharged from the hospital to their own home during the study period were eligible for inclusion. In the Netherlands, a discharge prescription contains the complete list of medication that the patient should use post-discharge according to the in-hospital physician. Structured checklists were used to evaluate the problems with continuity of care, defined as the frequency and nature of (1) medication discrepancies, (2) administrative problems and (3) the necessity for patient education.

Findings In forty-four pharmacies (42 community and 2 outpatient pharmacies) checklists were completed for 403 patients. The majority of the discharge prescriptions (n = 372, 92.3%) contained at least one problem with continuity of care. In 54.3% of the prescriptions the pharmacy contacted the prescriber and the remaining were clarified by (additional) patient contact or within the pharmacy. In total, 1154 problems were encountered (2.9 ± 2.0 problems per prescription). A total of 356 medication discrepancies (mean of 0.9 ± 1.1 per prescription) and 392 administrative problems (mean 1.0 ± 1.0) were encountered. Additional patient education was necessary in 406 times (mean 1.0 ± 1.0). Medication discrepancies (n=356) resulted mainly from missing pre-admission medication (n=106) and dose regimen changes (n=55) on the discharge prescription. Administrative problems (n=392) originated mainly from administrative incompleteness (n=177), e.g. missing reimbursement authorization forms or supply issues (n=150), e.g. insufficient pharmacy stock. The patients’ lack of knowledge concerning their medication post-discharge was illustrated by the necessity for patient education (n=406) on both medication information and medication regimen management.

Conclusion Community pharmacists are still confronted with problems due to inadequate documentation at discharge which can inflict harm to patients if not properly addressed. Furthermore, this study illustrates that solely providing medication information at discharge is likely not sufficient; a post-discharge follow-up is crucial to identify possible knowledge gaps.