IMPACT OF MEDICATION RECONCILIATION AND PHARMACEUTICAL CARE ON AMBULATORY CARE PATIENTS WITH CANCER

Abadi S, Jang D, de Lemos M, Koke P, Walisser S, Kuik K, Maric C, Cheng W, de Haan N, Fuller Blamey S, Blanke C, BC Cancer Agency

ABSTRACT

Background: Medication discrepancies and drug-related problems place patients, including those with cancer, at a significant risk for experiencing adverse health outcomes. There is a paucity of literature evaluating the impact of medication reconciliation and pharmaceutical care in ambulatory care patients with cancer.

Objectives: The primary objective of this study was to determine the impact of medication reconciliation (Med Rec) and pharmaceutical care (PC) on the number of medication discrepancies in new ambulatory care cancer patients. The secondary objectives of this study were to determine the types of medication discrepancies and the numbers and types of drug-related problems (DRPs) identified and resolved after Med Rec and PC implementation. The costs associated with Med Rec and PC implementation were also evaluated.

Methods: This was a prospective, open-label, multi-centre study in five similar ambulatory care cancer centres in Canada. Using standardized case report forms, pharmacists were asked to document their interventions pre and post medication reconciliation and pharmaceutical care implementation.

Results: 590 medication discrepancies were identified in 1448 patients (41%) with Med Rec and PC versus 150 discrepancies in 859 patients (17%) at baseline. 412 (70%) undocumented intentional discrepancies were identified post-intervention versus 21 (14%) at baseline. The majority (≥ 97%) of the discrepancies were resolved in both groups. 1049 DRPs were identified in 1448 patients (72%) post-intervention versus 494 in 859 patients (58%) at baseline, the majority (≥ 96%) of which were resolved in both groups. Most of the discrepancies and DRPs were clinically important in nature. 2.5 pharmacists were allocated to Med Rec and PC delivery, resulting in approximately $230,000 pharmacy resource utilization.

Conclusion: Med Rec and PC resulted in the identification and resolution of a significantly higher number of clinically important medication discrepancies and DRPs.

Alignment with CSHP 2015 Goals and Objectives:[1]

This project aligns well with goal 2, objectives 2.1 and 2.2, as it has increased the extent to which pharmacists help individual non-hospitalized patients achieve the best use of medications, through the effective implementation of medication reconciliation and pharmaceutical care for patients receiving complex and high-risk medications, e.g., chemotherapy, in collaboration with other healthcare providers, and through patient counseling activities in specialized ambulatory care oncology clinics.[1]

This project also aligns well with goal 3, objectives 3.1, as it has increased the extent to which pharmacists apply evidence-based methods to improve medication therapy through the provision of pharmaceutical care services.[1]

This project also aligns well with goal 4, objective 4.1, as it has increased the extent to which pharmacists have improved the safety of medication use through medication reconciliation and the documentation of medication errors, such that medication safety could be improved.[1]

This project also aligns well with goal 5, objectives 5.5 and 5.6, as it has increased the extent to which pharmacists applied technology effectively to improve the safety of medication use through the use of medication-relevant portions of patients' electronic medical records and patient information to manage medication therapy and ensure continuity of pharmaceutical care.[1]

Impact of Project:

This project has had a significant impact on improving the safety of medication therapy in ambulatory care patients with cancer by reducing a large number of clinically important medication discrepancies and drug-related problems through the effective provision of medication reconciliation and pharmaceutical care in 1448 patients.

It has also served to promote clinical pharmacy services through its innovative combination of medication reconciliation with pharmaceutical care, thus serving as a great model for other outpatient clinics in Canada and elsewhere.

This project has raised the standard of care for ambulatory care clinics in the centres, where it was initiated. It continues to have a direct and beneficial impact on patient care and has raised the profile of pharmacists working within the organization. ☺

Reference:

1. Canadian Hospital Pharmacy 2015 (CSHP 2015). Ottawa (ON): Canadian Society of Hospital Pharmacists; 2007 [cited 2013Oct11]. Available from: http://cshp.ca/dms/dmsView/2_CSHP-2015-Goals-and-Objectives-Feb-25%2707-w-Appdx-rev-May%2708.pdf.