Author’s response to reviews

Title: Impact of Pharmacy-Led Medication Reconciliation on Admission to Internal Medicine Service: Experience in Two Tertiary Care Teaching Hospitals

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Impact of Pharmacy-Led Medication Reconciliation on Admission to Internal Medicine Service: Experience in Two Tertiary Care Teaching Hospitals Lamis Karaoui, PharmD; Nibal Chamoun, PharmD; Jessica Fakhir, PharmD; Wael Abi Ghanem, PharmD; Sara El Droubi, PharmD; Abdul Rahman Diab Marzouk, BS Pharm; Nabila Droubi, PharmD; Hiba Masri, PharmD; Elsy Ramia, Pharm.D., MPH
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Technical Comments:

Editor Comments:

1. The abstract methods need updating to reflect changes in the manuscript. Details regarding the version of SPSS and tests used are less important in the abstract and should be replaced with information regarding what analyses specific to the study objectives (not general descriptions about “categorical variables evaluated using Pearson chi2”) were run, including dependent and independent variables.

Thank you for your query.
The authors updated the abstract methods to reflect changes in the manuscript. Details regarding the version of spss and tests used were replaced with information regarding the analysis done specific to the study objectives, including dependent and independent variables. The abstract methods section now reads as follows: “This is a pilot prospective study conducted at two tertiary care teaching hospitals in Lebanon. Student pharmacists who were properly trained and closely supervised, collected the medication history, and pharmacists at the corresponding sites performed the reconciliation process. Interventions related to the unintended discrepancies were relayed to the medical team. The main outcome was the number of unintended discrepancies identified. The time needed for medication history, and the information sources used to complete the Best Possible Medication History (BPMH) were also assessed. The unintended discrepancies were classified by medication class and route of medication administration, by potential severity, and by proximal cause leading to the discrepancy. For the bivariate and multivariable analysis, the dependent variable was the incidence of unintended discrepancies. The “total number of unintended discrepancies” was dichotomized into yes (≥ 1 unintended discrepancy) or no (0 unintended discrepancies). Independent variables tested for their association with the dependent variable consisted of the following: gender, age, creatinine clearance, number of home medications, allergies, previous adverse drug reactions, and number of information sources used to obtain the BPMH. Results were assumed to be significant when p was <0.05.” (Abstract methods section, pages 3-4, lines 101-117)

2. Page 7, lines 236-240. Please remove the description of the toolkit as promoting a “successful approach” or provide evidence from an adequately controlled study showing the program’s “success” (and define what success means). Further describe whether all pieces of the MATCH toolkit were included in this intervention or if only the pharmacist med rec tool was used. Further, describe whether this med rec tool has been validated, as reviewer #2’s original question remains unanswered.

Thank you for your comment.
The authors removed the word “successful” from the description of the toolkit, and replaced it by the word “detailed”.
The authors used the MATCH toolkit critical thinking process to identify, clarify, and classify discrepancies. The information included in the medication reconciliation assessment form and the tips for conducting the patient medication interview were also obtained from the MATCH Toolkit. The authors amended the methods section of the manuscript to reflect the above (Methods section, pages 9-10, lines 238-254): “The information included in the medication reconciliation assessment form and the tips for conducting the patient medication interview were obtained from the Medications at Transitions and Clinical Handoffs (MATCH) Toolkit for Medication Reconciliation. The MATCH Toolkit for Medication Reconciliation is a public document developed through the support of the Agency for Healthcare Research and Quality (AHRQ), in collaboration with the Joint Commission. This toolkit promotes a detailed approach to medication management and reconciliation that emphasizes standardization of the process for doctors, nurses, and pharmacists within the facility. It documents and confirms a patient’s home medication list upon admission.12 The Institute for Healthcare Improvement (IHI) recommends the MATCH Toolkit – among other tools – as a guiding material for developing a medication reconciliation process in the hospital or outpatient practice setting.6

Main Outcomes and Measures
The pharmacist identified, analyzed, and classified discrepancies according to the MATCH Toolkit critical thinking process: no discrepancies (one-to-one match), intended discrepancies (discrepancies were appropriate based on the patient’s plan of care) and unintended discrepancies (discrepancies required clarification because there was no explanation based on the patient’s clinical condition or care plan).12”

There are no published studies regarding the validation of the MATCH Toolkit. The recommendations and the approach to medication reconciliation summarized in the MATCH Toolkit emanate from a published study titled: “Results of the Medications At Transitions and Clinical Handoffs (MATCH) Study: An Analysis of Medication Reconciliation Errors and Risk Factors at Hospital Admission” and from the experiences and lessons learned from staff of facilities that have implemented MATCH and facilities that received technical assistance on MATCH through the AHRQ Quality Improvement Organization (QIO) Learning Network.1,2 The authors leave it to the Editor’s discretion to add the above details if deemed necessary.

3. Throughout the document, change descriptions of past events to past tense. One example is page 10, line 258 “In the context of this study, the proximal case is defined as the apparent reason,...” should be changed to “In the context of this study, the proximal case was defined as the apparent reason,...” There are many places throughout the report where the tense changes from past to present, especially in the newly added text.

Thank you for your query. The authors changed the descriptions of past events to past tense throughout the document: Page 10 line 268; Page 17 line 379; Page 17 line 381; Page 18 line 408; and Page 21 line 467). The authors could not identify other places that need to be changed.

References: