

Conference abstract

Reducing Medication Reconciliation Discordance Using Printed Medication Lists in Primary Care

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INTRODUCTION

In the fragmented US healthcare system, inaccurate medication reconciliation continues to be a glaring opportunity for medication related errors and subsequent morbidity and mortality. Particularly in patients with complex medical problems and multiple specialists across multiple Electronic Medical Records (EMRs), the ability to rapidly produce an accurate medication list eases care coordination and prevents errors. We expect this project to improve the accuracy of medication reconciliation within the EMR and concurrently improve patients' own ability to list their medications to other providers.

METHODS

The project was divided into two portions, each lasting two weeks. During the first two-week period (Baseline Phase), patients were contacted 3 days after an appointment and asked to list what medications they take every day. This was checked against the most recent medication list for patients in the EMR. This established a baseline for frequency of discordance between EMR medication lists and actual patient medication adherence. In order to assess impact in patients who are highest risk for medication reconciliation discordance, we only included patients taking three or more chronic medications (excluding PRN pain relievers).

During the second two-week period (Intervention Phase), patients were provided with a paper copy of medication lists prior to leaving clinic appointments. They were contacted 3 days following each appointment and asked to list what medications they take every day. This was checked against the most recent medication list for them in the EMR. We compared rates of discordance between the two phases in order to evaluate whether the intervention had any impact on the frequency of discordance between EMR medication lists and actual patient medication adherence.

RESULTS

Thirty-five distinct patient interactions met criteria in the first phase of the project; patients took an average of 7.5 distinct chronic medications. Of these patients, 54% had at least one discrepancy between their reported medication list and their documented list.

Thirty-eight distinct patient interactions met criteria in the second phase of the project; patients took an average of 6.5 distinct chronic medications. Of these patients, 39% had at least one discrepancy between their reported medication list and their documented list.

There was a 27% reduction in medication list discordance in patients receiving a printed list ($p = 0.18$)

CONCLUSIONS

While the results of this project did not reach the typically accepted threshold for statistical significance, we did observe a positive result in the number of patients with concordance between reported and documented medication lists. In this regard, we did achieve the goal of the intervention of reducing rates of medication reconciliation discordance.

A major factor that limits application of the lessons of this study is the amount of provider input that this intervention requires. In the intervention phase of this study, providers were tasked with completing medication reconciliations with patients, as well as printing medication lists and providing them to patients at checkout. This is a massive disruption in workflow. Checkout paperwork that includes a printed medication list is not a novel innovation—however the current iteration of the EMR in use in this clinic does not have this capability.

Future cycles of this project would seek to include medication reconciliation and med list printing in the workflows of ancillary staff.



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