

Improving Supplement Documentation through Powerchart

Aim of project

To build a Powerchart database for supplements and herbs in order to improve feasibility of complete medication reconciliation documentation, improved ease, safety and efficacy of supplement prescription by practitioners, and improved patient safety through minimization of medical error.

Background of project

In its current state Powerchart at UNMH does not contain a complete registry of the common over-the-counter (OTC) supplements that are both taken by patients and prescribed by practitioners. This paucity of medical data is a reversible source of potential medical error. Error could easily occur in this situation given the incompleteness of medical documentation as well as the possibilities of adverse drug-supplement interactions. Furthermore, there is a lack of automated dosages for many common supplements, and the dosage regimens that are currently automated are not necessarily evidence based. The lack of auto-populating dosing regimens can make it prohibitively difficult to either document a patient's current supplement regimen or to write a new supplement prescription for a patient.

Planned interventions tested

To first identify the most commonly used OTC supplements in our population with the use of provider and patient surveys. The next phase of this project will be to perform a systematic literature review to determine the evidence based dosing regimens for these common supplements. Once a complete data set of commonly used supplements and common dosing regimens is obtained, this data will be entered into a supplements folder in Powerchart for use in medication reconciliation and prescription order entry.

Prediction of results

The hypothesis of this project is that the renovation of OTC supplement data available in Powerchart will lead to the improved feasibility of complete medication reconciliation documentation, improved ease, safety and efficacy of supplement prescription by practitioners, and improved patient safety through minimization of medical error. We intend to demonstrate these improvements through the use of surveys to providers before and after the construction of the supplement folder.

Next Steps and timeline for project completion

The literature review and data set construction will be completed by April 1, at which time the supplement data set will be submitted to the IT department to be entered into Powerchart as a prescription folder. To assess the efficacy of this quality improvement project before and after surveys will be distributed amongst medical practitioners at three different sites within the UNM system that are currently using Powerchart CPOE. These sites will include the resident run UNM Southwest Mesa clinic, the Westside Clinic, and the Center for Life. The initial survey, to be sent to providers in April 2013, will obtain baseline information on the barriers of supplement documentation and prescription through Powerchart. It will seek to quantify the perceived patient safety related to current OTC supplement documentation practices, the current level of difficulty involved in entering a complete OTC supplement reconciliation into Powerchart, and the level of difficulty involved in writing a new supplement prescription for a patient through Powerchart. The supplement folder is anticipated to go live and be available for use by providers in May 2013, after which a second survey will be distributed amongst the same practitioners to assess for changes in the aforementioned outcomes.

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