Self-assessment tool for screening patients at risk for drug therapy problems

John Rovers and Harry Hagel

Abstract

Objective: To describe the development, use, and evaluation of a patient self-assessment tool for screening patients at risk for drug therapy problems (DTPs) and potentially interested in receiving a personal consultation with a pharmacist.

Design: Quasiexperimental, nonrandomized, controlled study.

Setting: Area Agency on Aging–affiliated senior centers in Florida from April 2005 to December 2005.

Participants: 175 clients of an Area Agency on Aging.

Intervention: While attending a free seminar on obtaining the best value from their medications, participants completed a 12-item self-assessment tool. The tool was designed to (1) identify participants who were at risk for a DTP and (2) motivate those at risk to participate in a personal pharmacotherapy consultation with a pharmacist on a fee-for-service basis.

Main outcome measure: Relationship between total score on self-assessment tool and patient acceptance of offer of personal pharmacotherapy consultation.

Results: Of 175 participants who attended a free seminar, 69 (39.4%) accepted the offer of a personal pharmacotherapy consultation. The median score on the self-assessment tool in these participants was significantly higher compared with participants who declined a consultation (3 vs. 1, $P = 0.0489$). The number of DTPs eventually identified during the personal pharmacotherapy consultation was significantly and positively correlated with the total score on the self-assessment tool ($\rho = 0.3259$, $P = 0.0110$).

Conclusion: The self-assessment tool appeared to be of use in predicting individuals who were likely to accept the offer of a personal consultation. Higher scores on the self-assessment tool may also predict patients who are likely to have a higher number of DTPs.

Keywords: Pharmacists, patients, self-assessments, drug therapy problems, personal consultations.

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During the previous decade, pharmacists in ambulatory and community pharmacy settings have developed and implemented a variety of new and advanced patient care services. Examples of these services include comprehensive pharmaceutical care, various disease management programs, and, most recently, medication therapy management services.[1–4]

Pharmacists offering such services face three separate but interrelated problems. One problem is clinical: Pharmacists must identify the actual and potential problems patients may be having that are either caused by or can be alleviated with medication. These are known as drug therapy problems (DTPs). The DTPs identified in the literature are needs additional drug therapy, dose too high, dose too low, adverse drug effect, wrong choice of drug therapy, nonadherence, and unnecessary drug therapy.[5] Apart from strictly educational pharmacist services, most advanced patient care performed by pharmacists requires identification of DTPs.

The literature is replete with questionnaires and other tools that have been developed to identify adverse drug effects or medication adherence problems.[6–24] Some of these tools have been specifically developed to identify a more comprehensive range of DTPs.[19–24]

The second problem faced by pharmacists offering new or advanced patient care services has a stronger relation to marketing than clinical care. Although identifying DTPs is clinically necessary, doing so is useful only if patients allow pharmacists to provide the care necessary to prevent or correct such problems. Simply stated, how do pharmacists identify patients who may benefit from an advanced service and convince them to accept the pharmacist as an appropriate health professional to provide it? Although the tools cited above have varying degrees of utility in identifying DTPs, few were specifically designed to help pharmacists attract patients to receive a new or advanced care service.[6–23] One tool that was designed to identify patients who may benefit from a medication management program has only been published as an abstract.[24] A second study designed to identify patients at risk for problems with their medications did not use a DTP taxonomy to identify the patients.[22]

The third problem is as follows: At which point in the patient care process does it become necessary to identify DTPs? Should the pharmacist identify problems and then offer a care service to the patient? Or can the pharmacist convince the patient to accept the offer of a service and identify DTPs afterwards? If the former method is necessary, the pharmacist runs the risk of spending time and effort to identify a problem, only to find that the patient goes elsewhere to resolve it. Ideally, the patient would accept the offer of a clinical service before the pharmacist has identified any attendant DTPs.

In this report, we attempt to address these problems from the perspective that the immediate problem is of a marketing nature. That is, how does one identify patients who are willing to accept the pharmacist's offer of an advanced clinical service? If patients are unwilling to accept the pharmacist's offer of care, then how and when DTPs are identified are perforce of secondary concern.

We describe and evaluate a patient self-assessment tool that patients completed while attending a free seminar on obtaining the best value from their medications. We hypothesized that such a self-assessment tool would (1) identify patients at risk for DTPs, (2) motivate at-risk patients to accept the offer of a personal consultation with the pharmacist, and (3) demonstrate that the DTPs only need to be identified definitively during the personal consultation and not identified before patients accept the consultation offer.

At a Glance

Synopsis: A self-assessment tool given to 175 elderly participants appeared to be effective in predicting individuals who were likely to accept the offer of a personal consultation. Although it was not specifically intended to uncover drug-related problems (DTPs), the instrument demonstrated a correlation between higher self-assessment scores and the number of DTPs eventually uncovered during patient consultation. The authors also demonstrated that identifying DTPs before enrolling patients in the service was not necessary.

Analysis: *The self-assessment tool reported here can help identify patients who are likely to be willing to receive new or advanced pharmacist services. For pharmacists who offer group education sessions, introducing the concept of DTPs and having patients complete the self-assessment tool may be an effective means of convincing patients to receive a personalized service. For pharmacists who do not offer group education sessions but provide new or advanced clinical services, patients could complete the self-assessment tool while waiting for a prescription to be filled or while receiving services already offered in the pharmacy. Pharmacists can review the results of the self-assessment, interpret the score, and encourage the patient to receive additional services.*

Objective

Our objective was to describe the development, use, and evaluation of a patient self-assessment tool used to screen for patients at risk for a DTP and potentially interested in receiving a personal consultation with the pharmacist.

Methods

We developed the self-assessment tool described here as part of a larger project to be described elsewhere. The original design of that project is described briefly below.

We created a free seminar entitled BeMedSmart – Helping You Get the Most From Your Medicine that pharmacists could give during group presentations in their pharmacies or elsewhere. The seminar provided attendees with information on