Why are regular medication reviews useful?

A large proportion of patients – especially elderly patients – are prescribed too many medications, typically by different clinicians. In addition, there are over-the-counter medications and natural health products taken by patients themselves. In most cases, there is no one doctor who has reviewed and coordinated the use of all medications. As a result, patients face potential overtreatment, use of “counteracting” medications, inadequate dosing regimens and adverse drug interactions. To deal with this problem, patients should request a drug review.

Who benefits from the reviews?
Organized medication reviews are a recent development. Your health plan, pharmacy or hospital may offer this service. The patients who would benefit the most are those who take five or more medications. It has been estimated that among patients age 65 or older, between 30 percent and 40 percent meet this definition. The main beneficiaries are the patients; they typically have fewer adverse effects and feel better. The overall cost of medications also drops, which benefits the patients (lower co-payments) and the health plan.

Which questions are addressed during a review?
The first priority in a drug review is to determine which of the patient’s medical conditions are the most important ones to treat today. It is common to find that a medication was started for a good reason some time in the past, but that the indication is no longer present. Unfortunately, patients often continue to take these “obsolete” medications. Is each one of the prescribed medications appropriate? There is a long list of medications that ought to be avoided in elderly patients. The Screening Tool of Older Persons’ Prescriptions criteria list 65 individual medications or classes of medications to be avoided in elderly patients independent of diagnosis, as they carry a risk of serious adverse effects. It also lists those medical conditions for which these harmful medications are typically used.

Another question considered in a drug review: Is the dosing reasonable? As discussed in Chapters 55 and 56, elderly patients and those with liver or kidney diseases, in general, may require lower drug doses. Among the prescribed medications, are there those which interact or have counteracting
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effects? For example, medications for urinary incontinence (which block the cholinergic system) should not be used together with medications for Alzheimer’s disease (which stimulate the cholinergic system).

Patients can initiate their own medication review by creating a medication grid listing all prescribed and over-the-counter medications, and times of administration over the previous week. A review of this grid could be part of the patients’ annual examination. Alternatively, your pharmacist could review the grid and highlight concerns. However, only your physician should change the list.

In addition, it is important to determine whether a treatment is conveying the anticipated benefit and whether there is evidence of adverse drug reactions. This may require modifications of the treatment. Finally, the review may also reveal that the patient has a new condition that ought to be treated.

**What are the most common findings?**

A very common finding is that the reasons for initiating certain medications are not specified in the medical record. It is also common to find medications that elderly patients should avoid. Over-dosing and under-dosing also are frequent observations. A typical outcome is that one or more medications are terminated, or their doses are reduced. Changes to the prescribed medications also are common.

**Key messages**

- Patients are often prescribed medications by several clinicians without any single one reviewing and coordinating the use of all medications.
- Medication reviews are conducted to determine the appropriateness of patients’ medication use.
- Overtreatment and use of inappropriate medications are common, especially among elderly patients.
- A common outcome is that one or more medications can be terminated, inappropriate medications be replaced and medication doses reduced. As a result, patients often have fewer adverse drug effects and they feel better.
- The reviews may also lead to substantial cost savings.