

Patient Safety Tip of the Week

September 30, 2014

More on Deprescribing

It was only earlier this year that we first saw the term “**deprescribing**” (see our March 4, 2014 Patient Safety Tip of the Week “[Evidence-Based Prescribing and Deprescribing in the Elderly](#)”). But we’ve obviously long been big advocates of discontinuing medications which no longer have a positive benefit:harm ratio (see the list of all our previous columns on inappropriate medications at the end of today’s column).

This month the Medical Journal of Australia has several good articles on deprescribing. The first article ([Scott 2014](#)) chronicles the statistics on the consequences of polypharmacy and then describes the barriers to deprescribing.

The first barrier to deprescribing noted by Scott and colleagues is an **underappreciation of the magnitude of polypharmacy-related harm**. They note that many times symptoms in the elderly (such as falls, delirium, lethargy, depression) are not recognized as adverse drug events.

A second barrier is the **increasing intensity of medical care**. Prescription of many medications is driven by clinical guidelines, quality measures, and performance incentives. They note that this often results in “prescribing cascades” in which more drugs are added for new illness, including some that are actually adverse drug events (ADE’s) misinterpreted as new illnesses.

A very important point raised by Scott et al. is **the drugs on which we focus may be wrong**. Many of the potentially inappropriate medications on Beers’ List actually probably account for relatively few adverse drug events in aggregate. In our June 21, 2011 Patient Safety Tip of the Week “[STOPP Using Beers’ List?](#)” we noted that the STOPP criteria identified potentially avoidable ADE’s impacting on hospitalization over twice as often as did Beers’ criteria and that such ADE’s are extremely common. Scott et al. point out the work of Budnitz and colleagues ([Budnitz 2011](#)) that showed most emergency hospitalizations for recognized adverse drug events in older adults resulted from a few commonly used medications (eg. warfarin, antiplatelet agents, insulins, oral hypoglycemic agents) and relatively few resulted from medications typically designated as high-risk or inappropriate in such lists.

One of the barriers to deprescribing noted by Scott and colleagues is a **reluctance by physicians to discontinue a medication started by another physician**, especially those started by a specialist. We agree that such is a barrier. But one equally big barrier we see is **reluctance to discontinue medications that they themselves started**. We've previously described an initiative in a health system in which physicians were made aware of the potential adverse effects of amitriptyline in the elderly. The number of new prescriptions for amitriptyline decreased but almost never did the physicians discontinue amitriptyline they had already prescribed for their patients.

The **patient's fear or ambivalence** is another barrier. Patients are often reluctant to stop a drug that had improved symptoms in the past or had been expected to prolong life or have other long-term benefits. They may perceive deprescribing as "abandonment" rather than as an attempt to improve their quality of life or decrease risks of adverse events.

Scott and colleagues mention, but don't emphasize, what we consider to be a huge barrier: **limited time and remuneration for deprescribing**. It is very time consuming to sit down and go over all the medications, go back in history to find out why and by whom certain medications were prescribed, discuss the pros and cons of medication cessation with the patient, communicate with other physicians about discontinuation, and then monitor the patient for unwanted effects once a medication is discontinued. Most of that time is not reimbursed in our current payment systems. (But that is where exists an opportunity to fully utilize other members of the healthcare team to do some of the legwork.)

Scott et al. offer several potential solutions. One important one is **reframing** the issue, to make sure the patient understands deprescribing is an attempt to improve their quality of life or decrease risks of adverse events and not an act of abandonment. That's extremely important in maintaining trust and preserving the physician-patient relationship. We need to **discuss the benefit:harm tradeoffs** for discontinuation of each drug and **assess the patient's willingness** to try discontinuation. They suggest **targeting those patients at highest risk for ADE's**. That includes not only patients on the most drugs but also those with past history of ADE's, frailty, multiple comorbidities, multiple prescribers, and those in residential settings.

They suggest **targeting drugs most likely to be non-beneficial**, which they consider in 5 categories:

- Those on lists such as Beers' and STOPP lists
- Those not showing desired effect despite optimal adherence and duration
- Those patients are unwilling or unable to take (cost, inability to handle, toxicities, etc.)
- Those lacking substantial indications (eg. inconclusive diagnosis, etc.)
- Those preventive drugs unlikely to alter outcomes within patient's remaining life span

Giving the **physician access to specific discontinuation regimens** is important and Scott et al. provide links to websites and other resources in their article. Lastly, Scott et al.

recommend **interdisciplinary meetings** with other prescribers and clinical pharmacologists or pharmacists, and stress the importance of having the **same generalist clinician** overseeing the process over multiple visits.

We had actually previously mentioned Dr. Scott's approach to deprescribing (see our March 4, 2014 Patient Safety Tip of the Week "[Evidence-Based Prescribing and Deprescribing in the Elderly](#)"). Scott and colleagues ([Scott 2012](#)) had developed a 10 step conceptual framework for minimizing inappropriate medications in older populations and deprescribing:

1. Ascertain all current medications
2. Identify patients at high risk for or experiencing ADR's
3. Estimate life expectancy in high-risk patients
4. Define overall care goals in the context of life expectancy
5. Define and confirm current indications for ongoing treatment
6. Determine the time until benefit for disease-modifying medications
7. Estimate the magnitude of benefit vs. harm in relation to each medication
8. Review the relative utility of different drugs
9. Identify drugs that may be discontinued
10. Implement and monitor a drug minimization plan, with ongoing reappraisal of drug utility and patient adherence by a single nominated clinician

The second MJA article ([Reeve 2014](#)), also supportive of deprescribing in general, is a bit more cautious and points out that there is actually a dearth of evidence on actual patient outcome benefits of deprescribing. Reeve and colleagues note that of the multiple studies demonstrating interventions that successfully reduce polypharmacy only half included outcome measures other than number of drugs and only one-third of the latter showed a benefit in clinical outcomes. Similarly, the effect of programs to reduce potentially inappropriate medications on clinical outcomes has not been rigorously studied.

Reeve et al. discuss several potential harms of deprescribing. One is the occurrence of **withdrawal reactions**. They cite previous studies that showed 26% of medication cessations in older adults resulted in adverse withdrawal reactions, sometimes resulting in ER visits or even hospitalizations. However, they note that appropriate **tapering** of medications prior to cessation can prevent many such reactions.

They also note that **drug interactions may affect medications other than the one being discontinued**. Our May 27, 2014 Patient Safety Tip of the Week "[A Gap in ePrescribing: Stopping Medications](#)" described one such example. So it is imperative that patients be monitored after medication cessation just as we would monitor patients at the start of a new medication.

Return of the medical condition for which the drug was originally prescribed is a concern for both patients and physicians. But, generally, restarting the medication in such instances is usually successful. They note particularly that the impact of cessation of **preventive medications**, where the benefit is many years from now, has not been well studied.

There are several good resources available that have algorithms or frameworks for discontinuing medications ([Scott 2013](#), [Bain 2008](#), [Garfinkel 2010](#)). The 2013 Scott ([Scott 2013](#)) and 2010 Bain ([Bain 2008](#)) articles have examples of drugs that are commonly associated with discontinuation or withdrawal symptoms and signs. The 2013 article by Scott et al. ([Scott 2013](#)) also has a table with good questions to ask about the utility of a drug.

But there is one area in which the greatest opportunity exists to help in medication cessation – when you first prescribe a drug! When you prescribe a medication for a patient you should have an **exit strategy**. You should be asking yourself (and discussing with your patient) the following questions:

- What are we attempting to treat? (is the drug for symptom relief, disease control, prevention, etc.?)
- What other considerations must be considered? (eg. contraindications, allergies, renal function, drug-drug or drug-food interactions, affordability, adherence, etc.)
- What side effects do we need to look for?
- How will we know if it is effective? (eg. symptoms better, lab values improved, etc.)
- What will we do if it is not better in a specific time frame? (eg. increase the dose, add another drug, switch to another drug, etc.)
- How long do we need to continue the drug? (eg. for a specified time frame vs. indefinitely, etc.)
- How will we be reminded to reconsider continuation of the drug? (eg. computer-generated alert?)
- Are there circumstances that would change the need for a drug? (eg. would a condition that will limit lifespan obviate the need for the drug?)
- How will we know when we can stop the drug?
- If we decide to stop it, do we have to taper it?
- If we stop it, will other medications be affected? (i.e. do we need to change the dose of other medications)
- What will we look for when we stop the drug? How will we monitor? (eg. recurrence of symptoms, withdrawal signs, worsening lab tests, etc.)
- When we stop it, how and where will we document the reason for cessation (eg. ineffective, side effect, allergy, etc.)
- When we stop it, who else do we need to notify (eg. other physicians, community pharmacy, etc.)

In many ways, stopping a medication is much more complex than starting one. Deprescribing, particularly in the elderly, can be a very important process in improving patient quality of life, reducing risk of adverse consequences, and reducing morbidity. Once drugs with poor benefit:risk ratios are discontinued, patients may also become more adherent to other medications which may have high benefit:risk ratios.

Some of our past columns on Beers' List and Inappropriate Prescribing in the Elderly:

Patient Safety Tips of the Week:

- January 15, 2008 "[Managing Dangerous Medications in the Elderly](#)"
- October 19, 2010 "[Optimizing Medications in the Elderly](#)"
- September 22, 2009 "[Psychotropic Drugs and Falls in the SNF](#)"
- June 21, 2011 "[STOPP Using Beers' List?](#)"
- May 7, 2013 "[Drug Errors in the Home](#)"
- January 28, 2014 "[Is Polypharmacy Always Bad?](#)"
- March 4, 2014 "[Evidence-Based Prescribing and Deprescribing in the Elderly](#)"

What's New in the Patient Safety World columns:

- June 2008 "[Potentially Inappropriate Medication Use in Elderly Hospitalized Patients](#)"
- September 2010 "[Beers List and CPOE](#)"
- December 2011 "[Beers' Criteria Update in the Works](#)"
- November 2013 "[More on Inappropriate Meds in the Elderly](#)"

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