

Drugs and the Elderly, Part 2: Strategies for Improving Prescribing in a Managed Care Environment

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Objective: In part 1 of "Drugs and the Elderly" (December 2000 issue), we reviewed and summarized the vast amount of clinical information on medication use in the elderly for healthcare providers and administrators within managed care. In part 2, we explore the literature on improving prescribing, focusing on those approaches most likely to be useful within a managed care environment.

Study Design: We reviewed the general literature on medication use in the elderly, focusing on problems and systems approaches to the improvement of medication use in managed care. We created a topic list of general interest to health professionals within managed care and fit the available information into those topics. Thus, the result is an authoritative review rather than a systematic literature review.

Patients and Methods: Nonquantitative evaluation of the medical literature.

Results: We identified several hundred articles describing issues related to medication use in the elderly but only a trivial number that in any way addressed the managed care community directly. There is very little literature on how managed care can best incorporate the lessons of geriatric pharmacology and pharmacy.

Conclusions: There is a paucity of literature for the managed care community of health professionals regarding pharmacology, pharmacoepidemiology, drug utilization review, and other issues related to the use of medication in the elderly population.

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In part 1 of "Drugs and the Elderly," we described the issues underlying the problems of prescribing to the elderly and their importance to managed care. In this part, we explore ways to improve prescribing to elderly enrollees in managed care, extrapolating from the literature in the fee-for-service and long-term-care arenas. The challenge facing managed care is how to adapt what has been learned from other medical care environments to

meet the specific needs of managed care and to optimize the use of the extraordinary datasets, information delivery systems, and prescriber networks available within many managed care organizations for the purpose of improving prescribing to the elderly.

... IMPROVING DRUG USE IN THE ELDERLY ...

Optimal medication use begins with appropriate prescribing, followed by excellent pharmacy services and patient education. Follow-up includes monitoring for effectiveness and side effects and periodic evaluation of continued need.¹

Currently, physician education about medication use in the elderly is inadequate.^{2,3} It is estimated that medical students get less than 1 hour of time dedicated to the topic, and only 2 medical schools in the country require geriatric clerkships.³ Specific training in residency programs is usually nonexistent. Continuing medical education is sometimes available, but there is no evidence that those physicians who need it most get such training. Similarly, training for nurses is woefully inadequate. Surprisingly, even pharmacy education has not adequately addressed the elderly. Except for those pharmacists involved in long-term care, there is little evidence that pharmacists are adequately edu-

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cated about the special problems of medication in the elderly and the interventions that are needed to optimize medication use in the elderly.

Thus, professional education is important to improve prescribing. Healthcare organizations may insist on such training through mandatory continuing education, and managed care organizations may determine that such training is so important that they will provide it internally.⁴

The impact of educating the lay public about medication has not been fully determined. It is clear, however, that a growing proportion of the elderly and their families have questions about medication use that are not being adequately answered. They are keenly interested in learning more. Ultimately, that information may serve to encourage dialogue between patients and health professionals and improve the quality of prescribing and drug use. Education can be accomplished through written materials, nursing and pharmacist consultations, and telephone hotlines. The Internet is quickly becoming a forum for getting questions about medical issues answered. Such educational interventions are most likely to begin with pharmacy benefits management providers and managed care organizations. Many educational tools are already available, so managed care organizations need not create them de novo.

... DRUG UTILIZATION REVIEW ...

Drug utilization review (DUR) offers one of the most powerful, efficient, and inexpensive methods of improving prescribing and medication use.^{1,5-8} Although originally established as a means of controlling costs, DUR also can be used to improve the quality of prescribing and medication use by including specific criteria that can identify drugs that should be avoided in the elderly and doses, schedules, and durations of therapy that pose unnecessary risk. Drug utilization review is an excellent way to screen for drug-drug and drug-disease interactions, especially when data on medication use and diagnoses are relatively complete. Such is the case when a managed care organization covers drug use without a floor or ceiling of coverage.

When alerts arise through a DUR system, pharmacists can intervene with prescribers to alter prescriptions. Such a program has been shown to reduce the use of high-risk drugs by nearly 25% in elderly outpatients.⁹ Drug utilization review has been shown to be even more effective in nursing

homes, reducing such use by 30%.¹⁰

Drug utilization review can be used to track patterns of use, indicating overuse and underuse of medications compared with prescription directions. This information can help direct adherence programs. Drug utilization review also can be used to identify prescribers who might need additional education regarding drug use in the elderly.

Some institutions have taken the ultimate step of restricting the use of certain drugs in the elderly when the risk is unacceptably high.⁵ Drug utilization review can be linked to a restricted formulary that requires special approval for the use of certain medications in the elderly. Such programs have been used for pediatric patients and pregnant women and to control the use of expensive antibiotics. In a few settings, restrictions in prescribing have been extended to the elderly, especially when injudicious use of certain drugs (often psychoactive drugs) may pose particularly high risk.⁵ The Health Care Financing Administration implemented guidelines over a decade ago to restrict the use of certain psychoactive drugs and has recently included guidelines for the use of other types of medications in nursing homes.

... IMPROVING ADHERENCE ...

There are indications that simple practices can help improve adherence by the elderly with prescriptions. Simplification of prescribing regimens is often important: schedules should be kept to 3 times a day at maximum and should coordinate with meals when possible.¹¹ Regimens that mix 3-times-daily and 4-times-daily doses are extremely difficult for patients to follow. Writing out medication regimens greatly facilitates compliance as well as communication between patients and their other health professionals, such as pharmacists, visiting nurses, therapists, and other doctors.^{12,13} These written instructions should indicate what the medication is for in simple, understandable terms.

The more patients understand about the usefulness of their medication, the more likely they are to adhere to medication orders.^{11,12} Thus, providing information about a drug improves adherence. Such material exists for most drugs, although it often does not make specific reference to the needs of the elderly.¹² Nonetheless, it is a good idea for pharmacists to provide educational information about medications when they are dispensed.

Prescribers should discuss with patients whether buying medications is posing a financial burden. In managed care, drug benefits vary greatly. Sometimes it is possible to eliminate nonessential drugs, which are often quite costly.¹ It may be necessary to switch to a less-convenient form of a drug if it is substantially less costly. Joining a program that supplies medications through mail order often reduces the cost to the patient when drug benefits are not part of the managed care plan benefits.¹⁴ Finally, most pharmaceutical companies offer special programs for the indigent who must take medication and cannot afford it. It is important for managed care plans to know that placing caps or tight limits on reimbursements for drugs has been shown to be a failure that ultimately increases the cost of providing care.^{15,16} Patients tend to purchase those drugs that treat symptoms and deny themselves those that treat silent diseases such as diabetes, heart failure, and hypertension.

Both physicians and pharmacists can assess the special needs of older patients in the packaging of drugs. Often, childproof caps are not necessary and pose barriers for elders with arthritis or neurological disease. Labels can be printed in large type to help avoid mix-ups. For some, medications must be repackaged into blister packs or distributed into pill holders.¹ These pill holders can be as simple as a plastic container with a series of cells that hold each dose or as sophisticated as a machine with a computer chip that rings a bell and dispenses medications at a preset schedule. All of these issues can be set into policy for pharmacies dealing with the elderly.

... RECOMMENDATIONS FOR PRESCRIBING IN THE MANAGED CARE ENVIRONMENT ...

Clinical Issues

- Always weigh the potential benefit of prescribing against the risk. Each disease or complaint poses a different set of requirements, and each drug poses a different set of risks and potential benefits. Elderly patients, as well as patients with several comorbidities, are more likely to experience adverse reactions. Consider whether the benefit is likely to be clinically significant.
- Prescribe only when prevention is needed or a disease or symptom is serious enough to require treatment.
- Follow up on all chronic prescriptions to be sure that the target goal has been reached and that toxicity has not occurred. Determine the need for continued therapy.

- Avoid prescribing medications that pose high risk to the elderly. Adjust doses or frequency of administration as needed.¹⁷
- Consult with pharmacists knowledgeable about drug interactions and drug use in the elderly.
- Keep accurate records of medication use. Institute mechanisms to screen for drug-drug and drug-disease interactions.
- Encourage compliance by keeping medication regimens as simple as possible, explaining the use of each medication, and giving patients written instructions. Encourage the patient's interaction with the pharmacist for additional drug information. Pharmacists should provide medications in containers that are easy to use and with labels that are easy to read.
- Consider the preventive role of medications, including not only vaccinations but also medications that have been shown to reduce end-organ damage caused by disease.
- Always be suspicious that subtle changes in function in elderly patients might be related to drug toxicity.
- Be aware that dosage regimens previously tolerable to an elderly patient may become toxic as clinical status changes or the patient ages.

Institutional Issues

- Most managed care organizations will need special educational programs to train their physicians, nurses, and pharmacists about optimal drug use in the elderly.
- Formularies that restrict the use of drugs that pose particularly high risk to the elderly may offer benefit in some environments.⁹
- Pharmacies should provide DUR that incorporates criteria for optimizing geriatric prescribing.⁹
- Pharmacies should have policies for providing drugs in ways that improve compliance, including the ability to print labels in large fonts and providing easy-open caps. Pharmacies should be supported in offering compliance programs to patients at high risk.
- Payment policies that do not cover outpatient medication may encourage unhealthy behaviors that ultimately lead to increased healthcare utilization and costs.¹⁸
- Vaccination programs have been shown to decrease overall healthcare costs.¹⁹⁻²¹

... CONCLUSION ...

Most managed care organizations have not adequately addressed issues related to prescribing for their elderly enrollees. While we lack specific information regarding the extent of the problem in man-

aged care and know even less about individual plans, there is every reason to believe that it is as rampant in managed care as in the fee-for-service environment. Pharmacy benefits management companies and long-term-care companies already have implemented systems to improve prescribing to their constituents. However, most managed care organizations are woefully behind in implementing such practices. The structure of managed care makes it far better suited than fee-for-service to review the appropriateness of medication use in the elderly and to intervene inexpensively to improve the quality of care of prescribing. This challenge facing managed care should receive greater priority.

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