



HEALTH FOCUS

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Why the Elderly Need Individualized Pharmaceutical Care

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Many diseases common to the elderly are now treatable due to pharmaceutical innovation.

The ability to treat diseases with prescription drugs rather than with lengthy hospital stays or surgery has reduced the cost of health care, not only for individuals but for the health care system as well. However, the growing use of prescription drugs, especially in the treatment of conditions common in elderly populations, has raised concerns about the coordination of pharmaceutical care and the possibility of conflicting treatments and unnecessary costs.

A “one-drug-fits-all” approach does not work for elderly patients.

Thomas Jefferson University Professor David Nash published a white paper in April of 2000 demonstrating that although drug therapy is the most common medical treatment for the elderly, a “one drug fits all” approach will not work. The elderly are subject to complex health variables and, more than any other group, need access to a wide range of prescription drug options to safely meet their specific needs.

The elderly are faced with unique health variables.

Three of the underlying factors, unique to elderly populations, underscore their need for individualized pharmaceutical care:

- The elderly have higher prevalence of multiple diseases so they receive more prescriptions and see more physicians who then have to coordinate care.

- An older body can react very differently to medicines than a younger one because of changes in metabolism and organ functions.
- The effects of a drug vary more in elderly individuals than in younger patients.

When treating elderly patients with multiple conditions, there is a higher risk of an adverse drug reaction (ADR). An ADR can result in mild to serious injury to the patient. Patients taking five or fewer drugs have a 4% chance of an ADR. With six to 10 medications, the risk increases to 10% and at 11 to 15 medications, the risk of an ADR increases to 28%. ADRs can result from drug-drug interactions, drug-disease interactions, and synergism.

Older bodies also differ in the ways they process drugs: drug absorption rates fluctuate due to changes in certain organs; drugs distribute to different places in the body depending on their chemical structure; drugs are broken down primarily in the liver and there is great variation in liver function among elderly individuals; and, many drugs are eliminated from the body through the kidneys and kidney function may be reduced by as much as 50% by age 75.

With age, organ systems can be more sensitive to drugs and their effects can be enhanced or diminished. Some drug side effects can be used to a patient’s advantage, while other side effects may not be desirable, but can be tolerated. Three types of drug side effects that are particularly significant for elderly patients are effects on the brain, digestive and cardiovascular systems. In some cases, younger patients would not experience these effects at all.

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A “one drug fits all” approach will not work when treating elderly patients.

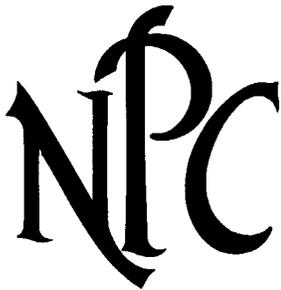
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Policies that restrict an elderly patient's access to individualized pharmaceutical care are detrimental to health outcomes and may increase overall costs.

The elderly population is also at high risk of receiving sub-optimal pharmaceutical care because of the number of physicians and specialists they see. Although the doctors provide quality care to their patients, a disease-by-disease approach may neglect

interactions among diseases and their treatments. Physicians are often unaware of all the medications their patients are taking.

Restrictive drug policies and inadequate insurance plans that limit the availability of pharmaceuticals prevent prescribers from being able to choose the best drug therapy for their patients. These restrictions can compromise the health of the elderly and result in increased utilization of other medical services thereby increasing overall costs.



Since 1953 the National Pharmaceutical Council (NPC) has sponsored and conducted scientific, evidence-based analyses of the appropriate use of pharmaceuticals and the clinical and economic value of pharmaceutical innovation. NPC provides educational resources to a variety of health care stakeholders, including patients, clinicians, payers and policy makers. More than 20 research-based pharmaceutical companies are members of the NPC. For the complete study, or for more information about the National Pharmaceutical Council, please visit www.npcnow.org.

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