



Bay of Kotor, Montenegro

## PIC QUESTION OF THE WEEK: 10/24/11

Q: Is there an updated version of the *Beers* list?

A: The risk of ADEs (adverse drug events) increases in the aging population because of numerous factors: physiological change, variation in pharmacodynamic and pharmacokinetic parameters, poly-pharmacy, and an increased risk of developing additional disease states. Considering these factors, it is necessary to possess a tool to guide appropriate drug therapy. The standard resource for identifying inappropriate medications in the elderly has been the Beers list. Named after its creator, Dr. Mark H. Beers, the list was initially published in 1991 and most recently updated in 2003. Because of the large number of ADEs and hospitalizations that continue to occur in the elderly, this list has come under closer scrutiny. This prompted the development of another list referred to as the STOPP (Screening Tool of Older Persons' potentially inappropriate Prescriptions) criteria. The use of STOPP criteria in patients sixty-five years and over appears to reduce the frequency of ADEs and hospitalization to a greater degree than does the Beers list. The enhanced STOPP criteria improve upon the Beers list because of improved organization, addition of a broader array of prescription drugs, a format that highlights drug class duplication and drug interactions, and an expanded number of potentially harmful medications. In one study, hospitalized patients 65 years and older were assessed for medication related ADEs based on use of the STOPP versus Beers criteria. A total of 4,523 medications were reviewed and 329 ADEs were identified. Medications were considered a *direct* cause of 219 ADEs. Using the STOPP criteria, 170 events were a result of potentially inappropriate medications compared with the Beers list which identified only 67 events. The study concluded that use of the STOPP criteria could have predicted hospitalization due to ADEs 2.54 times more frequently than the Beers criteria. Additional studies have produced similar results. In addition to STOPP, the START criteria (Screening Tool to Alert doctors to Right Treatment) include medications (assuming no contraindication) that are considered preferable for the treatment of various disease states. Although use of these criteria appears to be preferable to dependence on the Beers list, there is currently no consensus that these tools consistently reduce morbidity or health care costs. The reader should refer to the references below for specific information on the STOPP and START criteria.

### References:

- Gallagher P, O'Mahony D. STOPP (screening tool of older persons' potentially inappropriate prescriptions): application to acutely ill elderly patients and comparison with Beers' criteria. *Age and Ageing* 2008. 37: 673-79.
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- Barry PJ, Gallagher P, Ryan C, et al. START (screening tool to alert doctors to the right treatment) – an evidence-based screening tool to detect prescribing omission in elderly patients. *Age Ageing* 2007;36:632-8.

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