### Using Wisely: A Reminder on the Proper Use of the American Geriatrics Society Beers Criteria®

Goldilocks was hungry. She tasted the porridge from the first bowl. "This porridge is too hot!" she exclaimed. So, she tasted the porridge from the second bowl. "This porridge is too cold," she said. So, she tasted the last bowl of porridge. "Ahhh, this porridge is just right," she said happily, and she ate it all up.

—"The Story of Goldilocks and the Three Bears"<sup>1</sup>

Consensus criteria (as well as clinical practice guidelines) have the potential to improve quality of care and outcomes that are important to patients. They also may have substantial downsides. Even when applied correctly, unintended consequences can occur. Yet perhaps a bigger problem is their misuse, misapplication, and a lack of understanding of the ideal use of clinical recommendations and guidelines. The American Geriatrics Society (AGS) guiding principles for patients with multiple chronic conditions summarize some of the pitfalls of following diseasespecific guidelines when treating complex, frail older adults.<sup>2</sup> Recommendations intended to be applied with attention to individual patient circumstances can be treated as "black or white," with little room for clinical nuance and individualized person-centered care. And attempts to improve care quality by translating consensus recommendations into quality measures and point-of-care reminders can sometimes incentivize care in harmful ways. The solution is not to give up on developing recommendations to guide individual clinicians in clinical practice or on the quality measures entirely, but to find an appropriate middle path that delineates their optimal use and balances the imperatives of quality improvement with clinical nuance supporting clinicians and the healthcare system to carry out the right action for the right patient at the right time.

The 2019 AGS Beers Criteria® is a list of criteria that provides recommendations for medications that should often be avoided for older adults.³ These criteria, developed through a modified Delphi consensus process, is no exception to the potential for promises and pitfalls. To promote optimal use of the criteria, in 2015 a subgroup of the update expert panel published a companion paper, "How

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to Use the American Geriatrics Society 2015 Beers Criteria®—A Guide for Patients, Clinicians, Health Systems, and Payors." Coincident with the release of the current update, we wish to remind readers of the seven key principles articulated in that companion paper (Table 1). These principles are intended to guide use of the AGS Beers Criteria® in a way that maximizes their benefits while minimizing unintended harms, and reflects the spirit in which they were developed. The just-right porridge is waiting. We encourage you to eat.

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### KEY PRINCIPLE 1: MEDICATIONS IN THE AGS BEERS CRITERIA® ARE POTENTIALLY INAPPROPRIATE, NOT DEFINITELY INAPPROPRIATE

Medications are included in the criteria on the basis of having an unfavorable balance of benefits and harms for many older adults compared with alternative treatments. However, in some circumstances the medications included in the AGS Beers Criteria<sup>®</sup> can be appropriate for older adults.

### Table 1. Key principles to guide optimal use of the American Geriatrics Society Beers Criteria®

- 1 Medications in the 2019 AGS Beers Criteria® are potentially inappropriate, not definitely inappropriate.
- 2 Read the rationale and recommendations statements for each criterion. The caveats and guidance listed there are important. 3 Understand why medications are included in the AGS Beers Criteria®, and adjust your approach to those medications accordingly.
- 4 Optimal application of the AGS Beers Criteria® involves identifying potentially inappropriate medications and where appropriate offering safer nonpharmacologic and pharmacologic therapies.
- 5 The AGS Beers Criteria® should be a starting point for a comprehensive process of identifying and improving medication appropriateness and safety.
- 6 Access to medications included in the AGS Beers Criteria® should not be excessively restricted by prior authorization and/or health plan coverage policies.
- 7 The AGS Beers  $\operatorname{Criteria}^{\otimes}$  are not equally applicable to all countries.

Abbreviation: AGS, American Geriatrics Society. Source: Adapted from reference 4.

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For example, this situation can occur when alternative treatments are contraindicated or infeasible, or when an older adult has a well-established history of the medication being highly effective, and after careful examination has little evidence of current harms and low potential for future harms. Patient preferences also play a vital role, particularly in the context of shared decision making whereby choice of an AGS Beers Criteria® medication over alternative treatment options aligns with a patient's values and goals. Although these considerations are important, they should be approached carefully. For example, a patient and clinician may attribute resolution of symptoms to an AGS Beers Criteria® medication and thus wish to maintain it, without realizing the symptoms would have improved by themselves. In addition, subtle harms such as cognitive slowing, mild balance impairment, or occasional falls may result from the use of certain AGS Beers Criteria® medications, but these symptoms are often not reported by patients, and even when reported may not be recognized by clinicians as potentially related to medication use.

## KEY PRINCIPLE 2: READ THE RATIONALE AND RECOMMENDATIONS STATEMENTS FOR EACH CRITERION. THE CAVEATS AND GUIDANCE LISTED THERE ARE IMPORTANT

Many medications listed in the criteria are considered potentially inappropriate only in certain circumstances. Understanding what these circumstances are and the rationale behind the recommendations is essential for tailoring treatment appropriately. Also, the AGS Beers Criteria<sup>®</sup> in general are not intended for use among patients at the end of life because unique prescribing considerations often come into play in this clinical setting.

### KEY PRINCIPLE 3: UNDERSTAND WHY MEDICATIONS ARE INCLUDED IN THE AGS BEERS CRITERIA® AND ADJUST YOUR APPROACH TO THOSE MEDICATIONS ACCORDINGLY

Understanding the rationale behind each criterion can guide appropriate care including assessing the patient's baseline risk of the potential harms associated with a medication. For example, medications included in the criteria because they increase the risk of falls are especially important to avoid in older adults who have a high likelihood of falling. In contrast, older adults with a low fall risk should not be prescribed these medications indiscriminately, but the concern for causing harms may be lower, thus potentially changing the risk-benefit calculation.

### KEY PRINCIPLE 4: OPTIMAL APPLICATION OF THE AGS BEERS CRITERIA® INVOLVES IDENTIFYING POTENTIALLY INAPPROPRIATE MEDICATIONS AND WHERE APPROPRIATE OFFERING SAFER NONPHARMACOLOGIC AND PHARMACOLOGIC THERAPIES

It is not enough to simply say "do not use this medication." Patients and clinicians who have relied on medications for years need guidance and reassurance about substitute treatments and an understanding of what comes next. This may involve alternative pharmacologic and nonpharmacologic treatment strategies—or sometimes something as simple as education about normal aging changes, good sleep habits, or why the potentially inappropriate medication is no longer needed. To address this, in 2015 the AGS published a list of treatment alternatives for medications present on the 2015 update of the criteria. This list is not comprehensive and requires expansion and updating, but it is a good starting place for identifying alternative treatment strategies.

# KEY PRINCIPLE 5: THE AGS BEERS CRITERIA® SHOULD BE A STARTING POINT FOR A COMPREHENSIVE PROCESS OF IDENTIFYING AND IMPROVING MEDICATION APPROPRIATENESS AND SAFETY

The AGS Beers Criteria® represent only a fraction of the medication-related problems that older adults encounter. For example, serious adverse events commonly occur with anticoagulants, insulins, and other high-risk medications. For the most part, these medications are not included in the AGS Beers Criteria® because for many older adults the potential benefits of these medications substantially outweigh the risks. Nonetheless, it is imperative to ensure that these medications are used appropriately and safely. Moreover, other types of medication misadventures including underuse of beneficial therapies, ongoing use of medications with no indication, burdensome medication costs and regimens, nonadherence, and discordance of medication regimens with patient preferences and care goals are outside the scope of the AGS Beers Criteria®, but they are no less critical to address.

## KEY PRINCIPLE 6: ACCESS TO MEDICATIONS INCLUDED IN THE AGS BEERS CRITERIA® SHOULD NOT BE EXCESSIVELY RESTRICTED BY PRIOR AUTHORIZATION AND/OR HEALTH PLAN COVERAGE POLICIES

There is a role for health systems to flag medications on the AGS Beers Criteria<sup>®</sup> for extra scrutiny. However, this needs to be balanced with the recognition that for many older adults the use of these medications is appropriate, and harms can arise from overly restricting access. Excessive or highly burdensome restrictions may not only hinder access to appropriate medications but may engender an adversarial dynamic where the AGS Beers Criteria<sup>®</sup> feel more like a cudgel than a tool to educate clinicians and patients and improve care. This is not helpful.

### KEY PRINCIPLE 7: THE AGS BEERS CRITERIA® ARE NOT EQUALLY APPLICABLE IN ALL COUNTRIES

The AGS Beers Criteria® are developed by US-based clinicians and for the most part focus on medications available in the US market. The intent is not to be parochial but to comment on medications familiar to the panel through our clinical, educational, programmatic, and research work. We firmly recognize the need to adapt the AGS Beers Criteria® to other countries that have a different bundle of available medications. In doing so, the principles behind the criteria

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recommendations should still hold. For example, except in highly unusual circumstances, the criteria on benzodiazepines and strongly anticholinergic medications should apply to medications with these characteristics that are available in other countries but are not listed in the AGS Beers Criteria® because they are not available on the US market.

Assuring the safe and effective use of medications by older adults is a cornerstone of high-quality medical care and a superb arena for interprofessional practice. When used correctly, the AGS Beers Criteria<sup>®</sup> can be an important tool to help achieve this goal, serving as a teaching tool, quality guide, and vehicle for practice improvement. Use the AGS Beers Criteria<sup>®</sup> well, and use them wisely.

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#### REFERENCES

- The Story of Goldilocks and the Three Bears. https://www.dltk-teach. com/rhymes/goldilocks\_story.htm. Accessed October 30, 2018.
- AGS Expert Panel on the Care of Older Adults with Multimorbidity. Guiding principles for the care of older adults with multimorbidity: an approach for clinicans: American Geriatrics Society Expert Panel on the Care of Older Adults with Multimorbidity. J Am Geriatr Soc 2012;60:E1-E25.
- American Geriatrics Society 2019 Beers Criteria Update Expert Panel. American Geriatrics Society updated AGS Beers Criteria for potentially inappropriate medication use in older adults. J Am Geriatr Soc 2019; doi: 10.1111/jgs.15767.
- Steinman MA, Beizer JL, DuBeau CE, Laird RD, Lundebjerg NE, Mulhausen P. How to use the American Geriatrics Society 2015 Beers Criteria—a guide for patients, clinicians, health systems, and payors. J Am Geriatr Soc 2015;63:e1-e7.
- Hanlon JT, Semla TP, Schmader KE. Alternative medications for medications in the use of high-risk medications in the elderly and potentially harmful drug-disease interactions in the elderly quality measures. J Am Geriatr Soc 2015:63:e8-e18.