Application of the 2019 Beers Criteria in Practice Teaching

Strategy

Overview of Teaching Strategy

The Beers Criteria® is a tool that provides guidance in optimizing safe medication practices for older adults. The tool is used to identify potentially inappropriate medications (PIM) for a target population of adults over the age of 65. As a highly complex population, certain medications, or classes of medications, could be detrimental to older adults and should be avoided or dosed differently to avoid harmful effects.

The Beers Criteria has been updated by the American Geriatric Society since 2011. The most current iteration, from 2019, includes new recommendations based on evidence to not only address metabolic and age-related changes of the population, but also to help practitioners negotiate challenges in treating the geriatric population. While the literature contains many references about details of the updated 2019 Beers Criteria, the 2019 criteria is no longer available as a free resource. Therefore, previous references to the Beers Criteria in the ACE.S and ACE.Z cases have been removed.

This teaching strategy offers an opportunity to use currently available free references related to 2019 updated Beers Criteria in evaluating PIM in older adults. It is directed at helping students understand potential medication concerns specific to older adults. It provides an opportunity for students to evaluate older adults and it advocates for safe medication administration. It should be noted that the Beers Criteria is intended to be used as a guide, and risks vs benefits should be part of the conversation when assessing the medications of older adults. The tool should not be used for the population of older adults in hospice or palliative care.

Learning Objectives

Students will use the Beers Criteria to:

- Review a case study of a complex older adult and identify medications that are potentially harmful or could lead to harmful “drug-drug” interactions and should be avoided or dosed differently.
- Using a risk-benefit mode, analyze how potentially problematic medications are used in practice and how to assume a position of advocacy when questioning the use of medications in older adults.
- Evaluate the physiologic concerns associated with aging that could render a medication more harmful to older adults.
Learner Pre-Work

To gain a better understanding of the Beers Criteria, students should read the *2019 American Geriatrics Society Updated Beers Criteria® for Potentially Inappropriate Medication Use in Older Adults*. See Hartford Foundation ConsultGeri resources.

Suggested Learning Activities

1. In the clinical setting, ask students to review assigned client’s medication and be alert to any medications on the *2019 American Geriatrics Society Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults*. As students review medications, have them consider the following:
   - Is the medication on the list of Beers Criteria?
   - What is the recommendation on the Beers Criteria regarding use of this medication?
   - What are the potential problems associated with this medication for older adults as noted on the Beers Criteria?
   - Is there a rationale for using the medication on the Beers Criteria? (Is it being used routinely or on an as-needed basis?)
   - How would you articulate your concern about this medication being used by your older adult client to the interprofessional team of caregivers?

   The following chart can be used by students as a reference to organize a client’s medications according to the Beers Criteria:

<table>
<thead>
<tr>
<th>Medication</th>
<th>Is medication on the Beers Criteria? Yes/No</th>
<th>If medication is on the Beers Criteria, Avoid/ Avoid with Certain Parameters?</th>
<th>What is the rationale for being concerned about use of this medication by older adults?</th>
<th>How would you communicate your concerns regarding this medication to the health care team?</th>
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<tbody>
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2. The sample medication lists below can be used in conjunction with any of the ACE.S or ACE.Z unfolding cases or as part of teacher-crafted case studies. The lists include medications on the Beers Criteria. As students review and assess these medications, have them consider the following:
- Is the medication on the Beers Criteria?
- What is the recommendation on the Beers Criteria regarding use of this medication?
- What are the potential problems associated with this medication for older adults as noted on the Beers Criteria?
- Is there a rationale for using the medication on the Beers Criteria? (Is it being used routinely or on an as-needed basis?)
- How would you articulate your concern about this medication being used by your older adult client to the interprofessional team of caregivers?

The following chart is used as reference for students to organize the medications on the list in relation to the Beers Criteria

<table>
<thead>
<tr>
<th>Medication</th>
<th>Is medication on the Beers Criteria? Yes/No</th>
<th>If the medication is on the Beers Criteria, Avoid/Avoid with Certain Parameters?</th>
<th>What is the rationale for being concerned about use of this medication by older adults?</th>
<th>How would you communicate your concerns regarding this medication to the health care team?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doxazosin extended release 4 mg daily</td>
<td>Yes</td>
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<tr>
<td>Lisinopril 10 mg daily</td>
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<tr>
<td>Donepezil 10 mg at 9 pm</td>
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<tr>
<td>Risperidone 0.25 mg 1 pm &amp; 9 pm</td>
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<tr>
<td>Levothyroxine 225 mcg 6 am daily</td>
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<tr>
<td>Ibuprofen 600 mg prn x2 daily for pain</td>
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</table>

Patient with diagnosis of hypertension, hypothyroidism, neurocognitive impairment, degenerative joint disease, and gastrointestinal ulcer (3 years ago):

Doxazosin extended release 4 mg daily
Lisinopril 10 mg daily
Donepezil 10 mg at 9 pm
Risperidone 0.25 mg 1 pm & 9 pm
Levothyroxine 225 mcg 6 am daily
Ibuprofen 600 mg prn x2 daily for pain
Patient with Parkinson’s disease, hyperlipidemia, urinary incontinence, osteoporosis, and sleep disturbance:

- Carbidopa-Levodopa 25/100 8 am, 2 pm, & 8 pm daily
- Simvastatin 10 mg at 9 am
- Alendronate sodium 10 mg daily
- Melatonin 3 mg at hs
- Diphenhydramine 25 mg hs
- Pimavanserin 34 mg at 9 am
- Tolterodine LA 30 mg at 9 am
- Lorazepam 1 mg prn for dental visits

Patient with diabetes mellitus type 2, diabetic neuropathy, constipation, anxiety, congestive heart failure, gait dysfunction:

- Amiodarone 400 mg daily
- Metformin 750 mg daily
- Nortriptyline 75mg q hs
- Senna 8.6 mg daily
- Escitalopram 20 mg at 9 am
- Alprazolam q 6 hours prn for anxiety

Additional Materials

The website of the Hartford Institute for Geriatric Nursing at New York University Rory Meyers College of Nursing contains many evidence-based assessment tools. The article on the Beers Criteria is available on this site: https://consultgeri.org/try-this/general-assessment/issue-16

Suggested Reading


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