Improving Practice Guideline Knowledge and Adherence: Impact of an Ambulatory Cardiology Curriculum
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Background and Objective

Background/Needs Assessment:
- The Accreditation Council for Graduate Medical Education (ACGME) recommends curricular fellowship integrator core competencies, including practice-based learning and improvement and systems-based practice.
- Curricular self-assessment and reflection are vital elements of practice improvement, the American Board of Internal Medicine employs practice improvement methods (PIMs) to facilitate this form of quality improvement.
- Few validated approaches exist to incorporate these skills into training.
- Structured educational activity on ambulatory cardiology topics and clinic note documentation is often underwhelming.

Objective:
- To develop, implement, and evaluate a pilot curriculum similar to a PIM using peer review coupled with evidence-based discussion.
- To improve guideline knowledge, adherence, and chart documentation among cardiology fellows in an ambulatory setting.

Curriculum Timeline:

1. Session Format: 4 dedicated 1-hour sessions – 1) stable ischemic heart disease (SIHD), 2) heart failure (HF), 3) atrial fibrillation (AF), 4) aortic valvular disease (AVD).

2. Background and Objective: To improve guideline knowledge, adherence, and chart documentation among cardiology fellows in an ambulatory setting.

Components of Evaluation:

1. Comfort with the guideline: Likert scale 1-5 assessment of comfort with and self-assessed adherence to topic-specific guidelines.
2. Knowledge of the guideline: Multiple-choice test of topic-specific guideline knowledge.
3. Effective documentation and adherence in guideline: Using a novel chart audit score, maximum of 4 points awarded for each reviewed disease process covered in note:
   - Definition of disease severity
   - Documentation of functional status
   - Adherence to relevant class I therapies
   - Documentation of adherence to additional relevant class I recommendations

Curriculum Evaluation

Improvement in Self-Assessed Guideline Knowledge (Likert 1-5)

<table>
<thead>
<tr>
<th>Session</th>
<th>Pre-Intervention</th>
<th>Post-Intervention</th>
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<tbody>
<tr>
<td>1st Year</td>
<td>3.17 ± 0.52</td>
<td>4.20 ± 0.41</td>
</tr>
<tr>
<td>2nd Year</td>
<td>3.77 ± 0.46</td>
<td>4.66 ± 0.50</td>
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<tr>
<td>3rd Year</td>
<td>3.80 ± 0.47</td>
<td>4.70 ± 0.51</td>
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Criteria by Disease Process for Scoring System Utilized in Chart Audit

<table>
<thead>
<tr>
<th>Disease Process</th>
<th>Documentation Effectiveness</th>
<th>Adherence Effectiveness</th>
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<tbody>
<tr>
<td>SIHD</td>
<td>2.71 ± 0.17</td>
<td>4.00 ± 0.12</td>
</tr>
<tr>
<td>HF</td>
<td>2.69 ± 0.16</td>
<td>4.00 ± 0.12</td>
</tr>
<tr>
<td>AF</td>
<td>2.69 ± 0.16</td>
<td>4.00 ± 0.12</td>
</tr>
<tr>
<td>AVD</td>
<td>2.73 ± 0.18</td>
<td>4.00 ± 0.12</td>
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</tbody>
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Assessment of contents is based on documentation or electronic medication list, high intensity statin (atorvastatin 40 mg, rosuvastatin 5 mg, statin 20 mg, rosuvastatin 5 mg), all medications listed in note documentation or electronic medication list; + High intensity statin (atorvastatin 40 mg, rosuvastatin 5 mg, statin 20 mg, rosuvastatin 5 mg).

Conclusions

- Baseline knowledge of, comfort with, and adherence to clinical guidelines in 4 key topics were suboptimal independent of fellowship class, indicating an opportunity for improvement.

Disclosures

None of the authors report disclosures relevant to this abstract.

Limitations

- No control group for comparison
- Limited ability to account for standard learning curve of fellowship training
- Small sample size limiting study robustness

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