Teaching evidence-based patient management and implementation of evidence-based guidelines in Oral Medicine

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Difference between scientific statements and evidence-based guidelines

- Scientific statements provide knowledge to healthcare professionals of effective, state-of-the-art science related to the causes, prevention, detection, or management of specific diseases or conditions.

- Guidelines are defined as “systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances.” *

- Not all guidelines provide the levels of evidence and classes of recommendation. When it does it is an evidence-based guideline.
Applying Classification of Recommendations and Level of Evidence *Data available from clinical trials or registries about the usefulness/efficacy in different subpopulations, such as gender, age, history of diabetes, history of prior myocardial infarction, history of heart failure, and prior aspirin use

<table>
<thead>
<tr>
<th>SIZE OF TREATMENT EFFECT</th>
<th>CLASS I</th>
<th>CLASS IIa</th>
<th>CLASS IIb</th>
<th>CLASS III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit &gt;&gt; Risk</td>
<td>Procedure/Treatment SHOULD be performed/administered</td>
<td>Recommendation in favor of treatment or procedure being useful/effective</td>
<td>Recommendation in favor of treatment or procedure being useful/effective</td>
<td>Recommendation that procedure or treatment is not useful/effective and may be harmful</td>
</tr>
<tr>
<td>Procedure/Treatment MAY BE CONSIDERED</td>
<td>Additional studies with broad objectives needed; additional registry data would be helpful</td>
<td>Recommendation’s usefulness/efficacy less well established</td>
<td>Recommendation’s usefulness/efficacy less well established</td>
<td>Sufficient evidence from multiple randomized trials or meta-analyses</td>
</tr>
<tr>
<td>Procedure/Treatment SHOULD NOT be performed/administered</td>
<td>Greater conflicting evidence from multiple randomized trials or meta-analyses</td>
<td>Greater conflicting evidence from single randomized trial or nonrandomized studies</td>
<td>Evidence from single randomized trial or nonrandomized studies</td>
<td>Evidence from single randomized trial or nonrandomized studies</td>
</tr>
<tr>
<td>Recommendation that procedure or treatment is useful/effective</td>
<td>Sufficient evidence from multiple randomized trials or meta-analyses</td>
<td>Recommendation’s usefulness/efficacy less well established</td>
<td>Recommendation that procedure or treatment is not useful/effective and may be harmful</td>
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</tr>
<tr>
<td>Data derived from multiple randomized clinical trials or meta-analyses</td>
<td>Sufficient evidence from multiple randomized trials or meta-analyses</td>
<td>Recommendation’s usefulness/efficacy less well established</td>
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</tr>
<tr>
<td>ESTIMATE OF CERTAINTY (PRECISION) OF TREATMENT EFFECT</td>
<td></td>
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</tbody>
</table>

**LEVEL A**
- Multiple populations evaluated*
- Data derived from multiple randomized clinical trials or meta-analyses

**LEVEL B**
- Limited populations evaluated*
- Data derived from a single randomized trial or nonrandomized studies

**LEVEL C**
- Very limited populations evaluated*
- Only consensus opinion of experts, case studies, or standard of care

Suggested phrases for writing recommendations:
- Should
- Is recommended
- Is indicated
- Is useful/effective/beneficial
- May/might be considered
- May/might be reasonable
- Usefulness/effectiveness is unknown/unclear/uncertain or not well established
- Not recommended
- Not indicated
- Should not
- Is not useful/effective/beneficial
- May be harmful

Why teach the implementation of guidelines?

- Compliance with evidence-based guidelines is a shortcut to evidence-based practice—a practical embodiment of evidence-based practice.

- Many evidence-based guidelines are highly relevant to management of medically complex dental patients.

- Management of medically complex dental patients is a major component of the OD/OM curriculum.

- Teaching the implementation of guidelines is essential in teaching patient management and evidence-based dental practice.
What is the process in implementation of guidelines?
Process of guideline implementation in dental educational facilities

Guidelines identification

Dissemination

Decision for implementation

Students

Faculty

Public

Clinical manual

Consultation forms

Patient information

Implementation

CE, dental Journals, Med-Ed Portal

Outcome assessment

Student evaluation and feedback

Faculty survey

Patient response survey

Student evaluation and feedback

Faculty survey

Patient response survey
What are the roles of OD/OM section members?

- OD/OM section members play major roles in the process of:
  - Identifying evidence-based guidelines or appraising the guidelines
  - Designing methods to disseminate the guidelines to students and faculty
  - Designing outcomes assessment of students and faculty on evidence-based guidelines interpretation and compliance
  - Designing outcomes assessment of patient compliance
Today’s Presenters

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- Jerek Bradford-Petrous Third year dental student  University of Detroit Mercy  E-Mail : bradfoje@student.udmercy.edu
Thank you.

**NGC - National Guideline Clearinghouse** [www.guideline.gov](http://www.guideline.gov)

**American Heart Association** [http://www.americanheart.org](http://www.americanheart.org)

Appraisal of Guidelines for Research and Evaluation (AGREE) instrument


**The National Institute for Clinical Excellent (NICE) of the United Kingdom** [http://www.nice.org.uk/](http://www.nice.org.uk/)


**Centers for Disease control and Prevention** [http://www.cdc.gov/](http://www.cdc.gov/)