

Assessing Implementability of Guidelines

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Statement of Disclosure

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- I have no commercial or academic conflicts of interest
 - Employment: Northwest Permanente Medical Group, which works exclusively with the Kaiser Foundation Health Plan in the US
 - Member: US National Heart, Lung and Blood Institute (NHLBI) Expert Panel on Integrated Cardiovascular Risk Reduction
 - Co-Chair: NHLBI Implementation Science Work Group
 - Member: State of Oregon Health Evidence Review Commission (HERC)
 - Chair: HERC Evidence-Based Guidelines Subcommittee

Implementation Science Work Group

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Overview

- **Background**
 - Guidelines must be implemented to impact health outcomes
 - Appraising and addressing potential barriers to implementation can improve implementability
- **Topics**
 - Briefly explore the GuideLine Implementability Appraisal (GLIA) Tool
 - Describe NHLBI activities and learnings in our effort to improve implementability of recommendations
- **Learning Objectives**
 - Attendees will recognize and describe potential impact of implementability assessment

Implementation Science Work Group Charge

- To improve implementability of clinical guidelines sponsored by the NHLBI by assessing and providing feedback regarding applicability, adaptability, practicality, and clarity of the reports
- To provide input into NPRCR partner efforts targeting health care systems and providers/clinicians by examining scientific evidence to identify effective approaches and best practices for improving care delivery and patient health

Institute of Medicine, March 2011

Clinical Practice Guidelines We Can Trust

- **Standard 6: Articulation of recommendations**
 - **6.1 Recommendations should be articulated in a standardized form detailing precisely what the recommended action is and under what circumstances it should be performed.**
 - **6.2 Strong recommendations should be worded so that compliance with the recommendation(s) can be evaluated.**
- **To help the Expert Panels (EPs) and Work Groups (WGs) address these standards, the Implementation Science Work Group (ISWG) undertook implementability appraisal.**

Assessing Implementability

- **GuideLine Implementability Appraisal (GLIA) Tool**
 - **Shiffman, et al, Yale Center for Medical Informatics**
 - **Purpose:**
 - **Expose potential barriers to implementation**
 - **Not Pass/Fail**
 - **30 Questions in 9 Dimensions**
 - **<http://gem.med.yale.edu/eglia2>**

GLIA Dimensions

- **Global Considerations**
- **Executability**
- **Decidability**
- **Validity**
- **Flexibility**
- **Effect on Process of Care**
- **Measurability**
- **Novelty/Innovation**
- **Computability**

Example GLIA Questions: Decidability

- **Would the guideline's intended audience consistently determine whether each condition in the recommendation has been satisfied?**
 - **Is each and every condition described clearly enough so that reasonable practitioners would agree when the recommendation should be applied?**
- **Are all reasonable combinations of conditions addressed?**
- **If this recommendation contains more than one condition, is the logical relationship (ANDs and ORs) between conditions clear?**

Decidability Example

- **From JNC 7**
 - **“The classification (of HTN) is based on the average of 2 or more properly measured, seated BP readings on each of 2 or more office visits.”**
 - **Minimum or maximum time interval?**
 - **Last readings, any 2 readings, or all readings in the interval?**
 - **Average versus majority of BP readings over the threshold?**
 - **Different number of readings for different thresholds?**

Decidability Example

- **From Kaiser Permanente**
 - **Undiagnosed HTN, in people without comorbidities**
 - **No diagnosis code for HTN on Problem List, AND**
 - **(The last 1 BP is >189 systolic or >109 diastolic, OR**
 - **The last 2 BPs recorded (on separate days) within the past 36 months are >159 systolic or >99 diastolic, OR**
 - **Two of the last 3 BPs recorded (on separate days) within the past 36 months are >139 systolic or >89 diastolic)**

GLIA Training Processes

- **Training sessions were designed to help EPs and WGs recognize potential barriers to implementation, and write more implementable guidelines**
- **Hypertension EP**
 - **November 4, 2010 & November 11, 2010**
- **Obesity EP and Lifestyle WG**
 - **February 11, 2011 & March 4, 2011**
- **Cholesterol EP and Risk Assessment WG**
 - **February 22, 2011 & March 11, 2011**

GLIA Implementation Processes

- **Implementation Science Work Group (ISWG) performed GLIA appraisals on the draft guideline reports**
 - **During Expert Peer and Federal Partners review period**
 - Appraisals completed in 2 weeks
 - **4-7 appraisers**
 - ISWG members (mostly, not on EP/WG)
 - NHLBI Staff
 - Kaiser Permanente clinicians involved in implementation
 - University of Rochester Preventive Cardiology Fellows

GLIA Implementation Processes

- **Lifestyle Work Group**
 - July 2012
- **Cholesterol Panel**
 - August 2012
- **Risk Assessment Work Group**
 - September 2012
- **Hypertension Panel**
 - March 2013
- **Obesity Panel**
 - April 2013

GLIA Implementation Processes

- **Examples of implementability issues:**
 - Evidence statements and “talking points” presented as recommendations
 - Use of terms such as “consider, should be encouraged, use caution, might be reasonable”
 - Discordance between language and stated strength of recommendation
 - Inconsistency of thresholds and terms used within a guideline
 - Applicability of assessment or treatment recommendations in specific subgroups
- **EPs & WGs considered GLIA appraisal findings when they revised their reports**

Implementability Appraisal Summary

- **EPs and WGs were trained in GLIA processes, which helped them write more implementable guidelines**
- **GLIA appraisals were carried out during Expert Peer and Federal Partners review period**
 - **Five appraisals completed, with no impact on overall guideline development timelines**
 - **Feedback on GLIA appraisals has been positive**
 - **Appraisal findings used to revise reports**
- **Implementable guidelines are necessary, but insufficient to ensure guideline adoption, implementation and adherence, and to improve health outcomes**

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