Evidence-based Guidelines

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When to use EB CG

• To inform clinical decision (EBP)
• To teach the management of a condition or the use of an intervention (CE)
• As instruments for self-assessment or peer-review (CE)
• To set benchmark criteria for audits of practice (QI)
Nurses’ Use of Evidence in Clinical Decision-Making

Decisions made by nurses

• intervention/effectiveness
• communication
• service organisation, delivery, and management
• interpretation of cues in the process of care

What were the barriers?

- Problems in interpreting and using research
- Lack of organisational support
- Research products and researchers lacks clinical credibility
- Some nurses lacked the skills and the motivation
Increase the use of EB CG

• Methods used to develop the guidelines
• Dissemination strategies used
• Implementation strategies used
• Methods used to evaluate effectiveness
• Methods used to update guidelines
• The clinical setting

NICS Do guidelines make a difference to health care outcomes. Oct 2006
• EBP PICU Nursing working party formed in 2003
• To develop and test a systematic process for the development of new or review existing clinical practice guideline in the PICU
• To provide research support
NHMRC Resources

National Health and Medical Research Council. *A guide to the development, implementation and evaluation of clinical practice guidelines* 1999, 2005

- How to Review the evidence
- How to use the evidence
- How to put the evidence into practice
- How to compare the costs and benefits
NICS Resources

- Practical strategies
Additional Resources for Nurses

Evidence-based journals:

Centres for evidence:
• JBI
• CRD -DARE
• WHO NMEB
• Cochrane
Role of the working party

Identify and Prioritise CPG

- Identify existing CPG
- Identify the need for new guidelines
- Prioritise the review or development
- Convene a guideline team to develop or review a specific guideline
- Provide guidance and support to the team
- Endorse guideline
- Disseminate of the guideline
- Evaluate the process
- Evaluate the clinical impact of the guideline
Evidence Mapping

• Characterise all prognostic, diagnostic, and therapeutic evidence in a broad clinical area (e.g. TBI)
  1. Map of key issues using clinician expert and consumer input
  2. Retrieve evidence
  3. Detailed assessments of priority areas
Role of the team

Identify & Appraise the evidence

- Syst. Reviews
- Critical Reviews
- Individual Studies
- Textbooks
### NHMRC Levels of evidence

<table>
<thead>
<tr>
<th>Level</th>
<th>Evidence Type</th>
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<tbody>
<tr>
<td>I</td>
<td>Systematic Reviews</td>
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<tr>
<td>II</td>
<td>Randomised controlled trials</td>
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<tr>
<td>III-1</td>
<td>Pseudo randomised controlled trials</td>
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<tr>
<td>III-2</td>
<td>Comparative studies with concurrent controls</td>
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<tr>
<td>III-3</td>
<td>Comparative studies without concurrent controls</td>
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<tr>
<td>IV</td>
<td>Case-series with either post-test or pre-test/post-test</td>
</tr>
</tbody>
</table>
Make Recommendations actionable

Clarity
- What needs to be done
- How it should be done
- When (in which situation)
- Where (in which patient group)
- Why (why it should be done)

Action
- Greater certainty about whether appropriate action has been taken

Evaluation
- Easier development of benchmarks or performance indicators
Grades of Recommendations

Based on 5 components:
- Strength and volume of evidence
- Consistency of studies included
- Clinical importance
- Generalisability
- Applicability

Components rated:
- A (Excellent)
- B (Good)
- C (Satisfactory)
- D (Poor)
Final Recommendation

A body of evidence can be trusted to guide practice
B body of evidence can be trusted to guide practice in most situations
C body of evidence provides some support for recommendation(s), but care should be taken in its application
D body of evidence is weak and recommendation must be applied with caution

Endorsement
Endorsement

- Evaluation of the process
- The process must be traceable e.g. How the literature search was conducted
- Should be seen as a positive learning process
- Evaluation of our process to be presented this afternoon @ 15:15 (NFP 4 Role Development session)
Dissemination

- Multiple interventions more effective than single interventions
- Interactive small groups meetings are most effective
- Reminders
- Multi-professional collaboration
- Nurses prefer humanistic and local information

Thompson et al. NHS R&D Report
www.ihi.org
## Implementation Phase I

- Identify barriers

<table>
<thead>
<tr>
<th>Type of barriers</th>
<th>Interventions</th>
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</thead>
<tbody>
<tr>
<td>Lack of knowledge</td>
<td>Interactive educational sessions</td>
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<tr>
<td></td>
<td>Decision aids</td>
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<tr>
<td>Perception/reality mismatch</td>
<td>Audit and feedback</td>
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<td></td>
<td>Reminders</td>
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<tr>
<td>Lack of motivation</td>
<td>Incentives/sanctions</td>
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<td></td>
<td>Leadership</td>
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<td>Beliefs/attitudes</td>
<td>Peer influence</td>
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<td></td>
<td>Opinion leaders</td>
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<tr>
<td>System of care</td>
<td>Process redesign</td>
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</tbody>
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Implementation Phase II

- Education/Information
- Pilot test (allows for feedback)
- Pre-test evaluation
Evaluation

• The application
  How well are the guidelines known and to what extent are they valued?

• The applicability
  To what extent are the recommendations applied?

• The impact on patients’ outcomes
  To what extent are they effective?
Impact of EBN Care on Patient Outcomes

- Individuals’ clinical expertise
- Patient’s values and expectations
- Patient outcome
- Best available evidence

From: http://www.libraries.psu.edu/instruction/ebpt/index.htm
From Evaluation to Improvement

• Post-test evaluation
• Feedback
• Continuous process
Concluding Remarks

• High expectations to deliver the best possible care
• Process that takes considerable time and resources
• Costs and benefits
• Maximise resources that are available
• Strengthen relationships
Thank You...