Primary care physicians views on the relevance of clinical guideline recommendations: Delphi panel

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Outline of talk

• Background & research questions
• Methods
  – Stage 1: NICE guideline review
  – Stage 2: Delphi panel & focus groups
  – Stage 3: NICE workshop & recommendations
• Results
• Questions
The problem

- Primary care patients tend to have less severe disease than secondary care
  - Benefit to risk ratio still favourable?
- Heart failure example:
  - 69% mild to moderate HF in primary care
  - Guidelines based on more severe illness
- Professional fatigue with guidelines
- Trust crucial to implementation
Research questions

Stage 1: Are NICE recommendations for primary care supported by primary care research?

Stage 2: What do GPs and primary care nurses think about the relevance of the research base for guidelines for primary care?
1998:
All guidelines in 7 years
Number = 855
Height = 68 cm
Weight = 28 kg

Arthur Hibble, David Kanka, David Pencheon, Fiona Pooles
Guidelines in general practice: the new Tower of Babel?
BMJ 1998;317:862
2012:
NICE primary care guidelines in 2 years
Number = 31
Height = 236 cm
Weight = 111 kg
Stage 1 summary

Guidelines:
- 22 of 45 guidelines highly relevant to primary care
- 22 guidelines contained 1185 recommendations
- 777 of 1185 recommendations relevant to primary care
- 495 of 777 recommendations (64%) based on research

Evidence:
- 1573 studies
  - 590 (38%) relevant to primary care

Russian doll

Based on
Stage 2: Delphi recruitment

• National
  – Society for Academic Primary Care
  – Royal College of General Practitioners

• Regional
  – email from the Primary Care Research Network was sent to 115 family practices in the East of England

• Email link to SurveyMonkey
Delphi round 1

• 14 selected guideline recommendations – across range of relevance to primary care
• Each rated for relevance from 1 – 9
• Rated before and again after reading a brief summary of the evidence base
• Link to each full NICE guideline given
In this section we will be asking you to rate a sample of NICE recommendations from various guidelines that have been specifically selected by a panel of GPs as relevant to patient groups/conditions managed in primary care.

Please rate each recommendation according to the relevance of each recommendation to your practice/patients. By "relevant" we mean how much you would trust the advice or guidance contained in the recommendation to be applicable to your typical primary care patient.

Rate each recommendation on a scale from 1 to 9. A score of 9 would mean a recommendation that you trust, are likely to use, and find highly relevant to your patients, while a score of 1 means the recommendation is completely irrelevant and you would not be likely to implement it with your patients. You are asked to rate each recommendation twice: first after reading the recommendation, and then again after reading a very brief summary of the evidence base for the recommendation.
1a) CG 95 (Chest pain of recent onset):
Recommendation 1.2.1.3:
“Initially assess people for any of the following symptoms which may indicate an ACS (acute coronary syndrome), pain in the chest and/or other areas (for example, the arms, back or jaw) lasting longer than 15 minutes, chest pain associated with nausea and vomiting, marked, sweating, breathlessness, or particularly a combination of these, chest pain associated with haemodynamic instability, new onset chest pain, or abrupt deterioration in previously stable angina, with recurrent chest pain occurring frequently and with little or no exertion, and with episodes often lasting longer than 15 minutes.”

If you require any more information, the full guidance can be viewed here
Evidence base

Evidence: Four studies including 3 systematic reviews and one cohort study. Two of the systematic reviews and the cohort study used patients from primary care and emergency care.

*1b) Having read a summary of evidence source, can you please rate the same recommendation?

<table>
<thead>
<tr>
<th>(1) Not relevant</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
<th>(7)</th>
<th>(8)</th>
<th>(9) Highly relevant</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
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</table>

Any comments
Delphi round 2

- Each participant was sent the mean scores from the previous round, as well as their own scores, and asked to re-rate the 14 recommendations.
- Ratings did not change substantially in the second round, and are not given here.
Delphi results

- 28 family physicians consented
- 25 (89%) completed the first round
- 21 both rounds
- Ratings dropped if less than half of studies were relevant to primary care
- Ratings stayed the same or increased if the majority of studies were relevant
## Delphi results

<table>
<thead>
<tr>
<th>Primary care relevant /total studies</th>
<th>Guideline &amp; recommendation</th>
<th>Rating before evidence mean (range)</th>
<th>Rating after evidence mean (range)</th>
<th>Difference after seeing evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>0/2</td>
<td>CG100/ Alcohol &amp; thiamine</td>
<td>7.2 (4-9)</td>
<td>5.6</td>
<td>-1.6</td>
</tr>
<tr>
<td>0/1</td>
<td>CG101/ Longacting therapy in COPD</td>
<td>7.7 (5-9)</td>
<td>6.0</td>
<td>-1.7</td>
</tr>
<tr>
<td>0/2</td>
<td>CG101/ Postbronchodilator spirometry</td>
<td>7.5 (5-9)</td>
<td>6.0</td>
<td>-1.5</td>
</tr>
<tr>
<td>0/7</td>
<td>CG108/ ACE &amp; betablockers for heart failure</td>
<td>7.8 (3-9)</td>
<td>6.9</td>
<td>-0.9</td>
</tr>
<tr>
<td>0/10</td>
<td>CG116/ Trial elimination of food allergen</td>
<td>6.2 (3-9)</td>
<td>4.6</td>
<td>-1.6</td>
</tr>
<tr>
<td>0/6</td>
<td>CG122/ Serum CA125 in ovarian cancer</td>
<td>7.9 (5-9)</td>
<td>5.8</td>
<td>-2.1</td>
</tr>
<tr>
<td>20/50</td>
<td>CG127/ Ambulatory BP monitoring</td>
<td>7.5 (2-9)</td>
<td>6.5</td>
<td>-1.0</td>
</tr>
<tr>
<td>3/8</td>
<td>CG127/ Home BP monitoring</td>
<td>7.4 (4-9)</td>
<td>6.4</td>
<td>-1.0</td>
</tr>
<tr>
<td>9/16</td>
<td>CG122/ Test for ovarian cancer</td>
<td>7.7 (5-9)</td>
<td>7.1</td>
<td>+0.6</td>
</tr>
<tr>
<td>11/20</td>
<td>CG123/ Depression screening questions</td>
<td>6.6 (1-9)</td>
<td>6.6</td>
<td>0</td>
</tr>
<tr>
<td>2/3</td>
<td>CG108/ Natriuretic peptides in heart failure</td>
<td>8.2 (6-9)</td>
<td>8.3</td>
<td>+0.1</td>
</tr>
<tr>
<td>3/4</td>
<td>CG95/ Acute coronary syndrome</td>
<td>7.8 (5-9)</td>
<td>7.8</td>
<td>0</td>
</tr>
<tr>
<td>4/5</td>
<td>CG102/ Children &amp; meningitis antibiotics</td>
<td>7.1 (2-9)</td>
<td>7.4</td>
<td>+0.3</td>
</tr>
<tr>
<td>4/4</td>
<td>CG101/ Diagnoses after spirometry</td>
<td>7.2 (4-9)</td>
<td>7.6</td>
<td>+0.4</td>
</tr>
</tbody>
</table>

Red statistically significantly lower using paired t-test
Summary

• 38% of the research cited in support of NICE guideline recommendations for primary care patients was conducted in populations considered relevant to primary care

• Primary care providers reduced their ratings of guidelines after being told that under half of the supporting evidence was based on primary care patients
NIHR acknowledgement

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I certify that, to the best of my knowledge, no aspect of my current personal or professional situation might reasonably be expected to affect significantly my views on the subject on which I am presenting, other than the following*:

< insert category of financial relationship and name of company/organisation >
(e.g. employment, consultancy, research grant, honoraria, stock ownership, sponsored education, educational grant, other funding, etc...)

< insert category of non-financial relationship >
(e.g. committee memberships, academic interest, other voluntary engagement, etc...)

* If you have nothing to disclose, delete „other than the following“
Defining ‘primary care specific’

• Primary care specific recommendations inform decisions that are almost always made by primary care health professionals
  – “Primary care healthcare professionals should transfer children and young people with suspected bacterial meningitis or suspected meningococcal septicaemia to secondary care as an emergency by telephoning 999”
Defining ‘primary care relevant’

• Primary care relevant recommendations inform decisions that could be made by health professionals in either primary care or another setting
  – “Consider the possibility of food allergy in children and young people whose symptoms do not respond adequately to treatment for: atopic eczema, gastro-oesophageal reflux disease, chronic gastrointestinal symptoms, including chronic constipation.”
Defining ‘secondary care specific’

• Secondary care specific recommendations inform decisions that would usually be led by professionals who are not based in primary care
  – “Advise women at high risk of pre-eclampsia to take 75 mg of aspirin daily from 12 weeks until the birth of the baby.”
<table>
<thead>
<tr>
<th>Relevance to PC</th>
<th>Population sample selected from</th>
<th>Setting where study conducted</th>
<th>Country</th>
<th>Total score (generalisability to PC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevant</td>
<td>Score 1 if sample is selected from primary care registers or community.</td>
<td>Score 1 if study conducted in PC or community (e.g. observational cohort studies)</td>
<td>Score 1 if study UK based</td>
<td>3 (High relevance) 2 (Moderate relevance)</td>
</tr>
<tr>
<td>Not relevant</td>
<td>Score 0 if population is selected from other sources e.g. hospitals, secondary care centres</td>
<td>Score 0 if study conducted in hospital or other secondary or tertiary care centres</td>
<td>Score 0 for other countries</td>
<td>1 (Low relevance) 0 (No relevance)</td>
</tr>
</tbody>
</table>
Focus group results

General practitioners and nurses:

• Like guidelines
• Use guidelines pragmatically
• Want guidelines to be short, accessible, clear about evidence from primary care
• Want primary care based evidence, and nurse / GP input
• Mistrust Quality & Outcomes Framework