Developing quality indicators from clinical guideline recommendations - the Duodecim Current Care approach

Case study: Obesity

Raija Sipilä
MD, Current Care Managing Editor
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No conflicts of interest
Current Care guidelines

• Developed for 16 years in the auspices of the Finnish Medical Society Duodecim
• Public funding
• Guideline working groups:
  – Max 10 persons
  – CC editor, a method expert
  – Multiprofessional, from different geographical areas
• Updates every three years
• Open access (www.kaypahoito.fi)
• 98 national EBM guidelines, 86 patient versions, slide series for 23 guidelines and 9 online coursies
1. Literature search

Research knowledge on each topic
- Working group with information specialist on guideline topic
- Literature review: national and international indicators on guideline topic

Obesity
- 84 evidence summaries with a statement
- Few indicators concerning bariatric surgery (Maggard et al. 2006, Hutter et al. 2009)
- NICE, QOF: The practice can produce a register of patients aged 16 and over with a BMI greater than or equal to 30 in the previous 15 months
Selection and operationalisation of indicators

Guideline working group and editor: What should be changed in clinical practices?

Editorial work:
- Core issues of the guideline / high level recommendations
- List of potential indicators (and standard of care)

1. Description of indicators (and standard of care)
2. Planning the source of data for indicators

1. A gap between the recommendation vs. clinical practice
2. Measurability
### Selection and operationalisation of indicators

**Guideline working group and editor:**
- Recognition of obesity, recording of BMI into the electronic patient record
- How and how often obesity is discussed
- What kind of treatment has been offered

**Editorial work:**
- 84 evidence summaries with a statement
- 7 core issues or statements which were measurable
- 12 indicators were described
<table>
<thead>
<tr>
<th>What should change in clinical practices?</th>
<th>Guideline recommendation (level of evidence) or core issue</th>
<th>Indicator concept</th>
<th>Patient group</th>
<th>Indicator</th>
<th>Possible source of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight and height are not recorded systematically to electronic patient records</td>
<td>Weight can be categorized according to body mass index (BMI)</td>
<td>Process</td>
<td>Primary care, Adult patients who have visited a doctor or a nurse within last three years</td>
<td>The proportion of patients who have up-to-date BMI information in EPR</td>
<td>Audit Electronic patient records</td>
</tr>
<tr>
<td>Weight and height are not recorded systematically to electronic patient records for patients with chronic disease</td>
<td>Weight can be categorized according to body mass index (BMI) Obesity is related to risk of metabolic syndrome (A), T2 diabetes (A), coronary heart disease (A) and sleep apnea (A).</td>
<td>Process</td>
<td>Primary care, Adult patients with a chronic disease who have visited a doctor or a nurse within last two years</td>
<td>The proportion of patients who have up-to-date BMI information in EPR</td>
<td>Audit Electronic patient records, Electronic decision support</td>
</tr>
</tbody>
</table>
Prioritisation

An expert panel:
• Phase 1: A panel evaluates (electronic form) validity, feasibility and clarity of the potential indicators
  • literature review on national and international indicators, each indicator described, instructions and rating sheets
  • Likert scale 1-5
• Phase 2: Feedback on the results and face-to-face discussion and revision (if needed)
  • Median score calculated
  • Agreement: the proportion of panelists rating 4 or 5
• Phase 3: Selection of the best indicators (up to 5/guideline)
Median score for validity, feasibility and clarity (Likert 1-5)

Degree of agreement = proportion of panel members scoring validity and feasibility as 4 or 5
Indicators

• Proportion of adult patients with chronic disease who have BMI recorded (one disease group will be chosen)
• Proportion of patients with gestational diabetes who had blood glucose follow up after one year of giving birth
• Proportion of adult patients with BMI recorded
Piloting

- Registers: is there potential for change?
- Audit sheets tested by end users

Audit of EPR

- 2 big, 2 medium size and 2 small health centers
- Aim: 24 GP-nurse pairs, 10 consecutive patients
- All who have had blood pressure measured: proportion of patients having BMI recorded
- All who have had blood pressure measured: Mean BMI, distribution in different BMI categories
- All hypertensive (>140/85 mmHg) patients: proportion of patients having BMI recorded

Obesity
Literature search
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- Literature review: national and international indicators on guideline topic

Guideline working group and editor
What should be changed in clinical practices?

Editorial work
Core issues of the guideline / high level recommendations

Selection and operationalisation of indicators
1. List of potential indicators
2. Description of indicators (and standard of care)
3. Planning the source of data for indicators

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Piloting
- Registers: is there potential for change?
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The expert panel

- The Social Insurance Institution of Finland
- National Institute for Health and Welfare (representatives from 3 departments)
- The Association of Finnish Local and Regional Authorities
- FIMEA (Finnish Medicines Agency)
- Finnish Institute of Occupational Health
- Hospital districts
- EBMeds (Electronic decision support)
- Conmedic oy (Quality network of health centers)
- PETTU-project
- Representatives from the guideline working group