Clinical practice guideline development
An international comparison

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AIMS OF PRESENTATION

✓ give overview of guideline development programmes in 2000
✓ give current snapshot of national programmes from visit to web sites
✓ compare content of national guidelines in one clinical area
LEVELS OF ANALYSIS

- Guideline programme
- Clinical guideline
- Specific recommendations
- Cited evidence
BACKGROUND TO GROWTH OF GUIDELINES

- economic crisis in Western health care and focus on cost containment
- growing concern about variation and evidence of effectiveness
- extra-professional interest: purchasers (governments, insurance companies) and patients
- national or regional government funding of guideline programmes
- proliferation of guidelines using different development methods
TRENDS OVER TIME

✓ sporadic guidelines from professional groups → national programmes
✓ specialist guidance for generalists → primary care guidelines
✓ pure consensus → evidence-based
✓ development → implementation
✓ guidelines for clinicians → patient versions
OUR RESEARCH

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- Guideline programme
- Clinical guideline
- Specific recommendations
- Cited evidence
19 guideline programmes

- USA (3)
- Canada
- New Zealand
- Australia
BASIC CHARACTERISTICS

✓ 9 professional organisations, 9 governmental or central agencies, 1 academic institution


✓ 13 programmes covered both primary and secondary care, 3 programmes exclusively primary care, 2 programmes exclusively secondary care

✓ 17 programmes had a broad scope, 2 programmes covered only cancer care, 1 programme covered only prevention
MAIN RESULTS - PEOPLE INVOLVED

✅ average guideline development group: 10-20 members from 3-5 disciplines

✅ methodological experts involved in 16 programmes (84%)

✅ editorial support by permanent staff in 14 programmes (74%)

✅ patients involved in 11 programmes (58%)
MAIN RESULTS - METHODOLOGY

- 19 programmes (100%) used electronic databases to collect evidence
- 18 programmes (95%) used systematic reviews to analyse the evidence
- 15 programmes (79%) combined evidence-linked and (formal or informal) consensus methods to formulate recommendations
- 18 programmes (95%) used external review, 3 (16%) pilot testing for reviewing draft guidelines
MAI N RESULTS - PRODUCTS

- On average 20-30 guidelines of 20-25 pages each (wide range between guideline programmes)
- All programmes provide summaries with the guidelines
- 12 programmes (63%) provide flowcharts
- 11 programmes (58%) provide patient versions
- All programmes use the internet for dissemination, 6 programmes (32%) also use CD-ROM
Main Results - Evaluation/Update

- 16 programmes (84%) use quality criteria
- 12 programmes (63%) monitor use of guidelines
- 6 programmes (32%) submit guidelines to Clearinghouse
- 12 programmes (63%) have formal update procedure
RECENT DEVELOPMENTS

- Finland: EBM guidelines on Internet (> 1000)
- Germany: Guideline Clearinghouse, guideline reviews, Patient Clearinghouse
- Netherlands: national collaboration of guideline developers
- France: evaluating use and impact of guidelines, wide dissemination of cancer guidelines
RECENT DEVELOPMENTS

Nous avons récemment noté les développements suivants:

- Royaume-Uni: NICE et SIGN se sont concertés (par exemple, la ligne directrice sur le cancer du poumon).
- Angleterre: la série de développement de lignes directrices NICE (directives pour différents groupes cibles), guide de référément NICE;
- Écosse: le manuel pour développeurs de lignes directrices SIGN, système de notation révisé pour les recommandations dans les lignes directrices, guide SIGN pour Instrument AGREE.
RECENT DEVELOPMENTS

- United States: National Guideline Clearinghouse > 1000 guidelines, comparing attributes of guidelines, syntheses of guidelines covering similar topics; AHRQ evidence report on systems to rate strength of scientific evidence

- Australia: NHMRC handbook series on preparing clinical practice guidelines

- New Zealand: involving patients in decision analysis (e.g. ranking treatments of heavy menstrual bleeding)
CONCLUSIONS

✓ All programmes claim to base their guidelines on systematic search, appraisal and review of research evidence (concordance with methods of evidence-based medicine)

✓ Most programmes combine evidence-linkage and (formal or informal) consensus procedures

✓ Future plans show a growing international convergence of key methods for guideline development programmes

✓ All programmes are committed to innovations in development and dissemination
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AIM OF STUDY

✓ test consistency of recommendations in diabetes guidelines from different countries

✓ analyse extent of overlap between research evidence linked to these recommendations
OBJECTIVES

✓ comparison of key recommendations
✓ comparison of cited studies
✓ explore differences (or similarities) in recommendations through analysis of cited studies
SELECTED GUIDELINES

- Type 2 diabetes mellitus
- Ambulatory/outpatient care/primary care
- Treatment and monitoring
15 diabetes guidelines

- USA (2)
- Canada
- New Zealand
- Australia
BASIC CHARACTERISTICS

- Guidelines varied in coverage and scope
- Wide range in length (3 - 350 pages, median 52) and in number of citations (0 - 590, median 77)
- 9 guidelines (60%) linked recommendations to citations
- 4 guidelines (27%) used evidence grading system
RESULTS: MINOR VARIATIONS IN RECOMMENDATIONS

✓ agreement on general management
✓ mostly minor differences in specific diagnostic or treatment recommendations, for example:
  - blood pressure thresholds
  - monitoring investigations for renal function
  - use of acarbose
RESULTS: FEW CITATIONS SHARED

Only 18% (105/1033) of citations were shared by at least one other guideline.

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<td>Guidelines (n = 12)</td>
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<tr>
<td>0</td>
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<td>848 (82.1)</td>
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RESULTS: COUNTRY OF ORIGIN OF AUTHORS

✓ largest proportion from US

✓ except for Australia country guidelines significantly more likely to cite studies from their own countries

✓ citations in English, Scottish and New Zealand guidelines predominantly from UK

✓ all others, except Dutch, predominantly from US
RESULTS: CASE STUDIES (link between citations and recommendations)

- Use of metformin in obese patients: little overlap between citations, with exception of UKPDS; citations were largely consistent with recommendations.

- Self-monitoring of blood glucose: even less overlap of primary studies, but more use of meta-analyses and systematic reviews; most cited studies not consistent with recommendations.
CONCLUSIONS

✓ recommendations mostly overlap, evidence often does not
✓ recommendations can be inconsistent with the cited evidence
✓ large trials (e.g., DCCT, UKPDS) widely cited
✓ globalisation of recommendations but not of evidence? (But can’t generalise between guidelines)
QUESTIONS

✓ To what extent is guideline development a social as well as technical task?

✓ To what extent can guideline recommendations as well as evidence be globalised?

✓ Will this vary by clinical condition?

✓ What role for medical and national cultural differences between countries in guidelines?