

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

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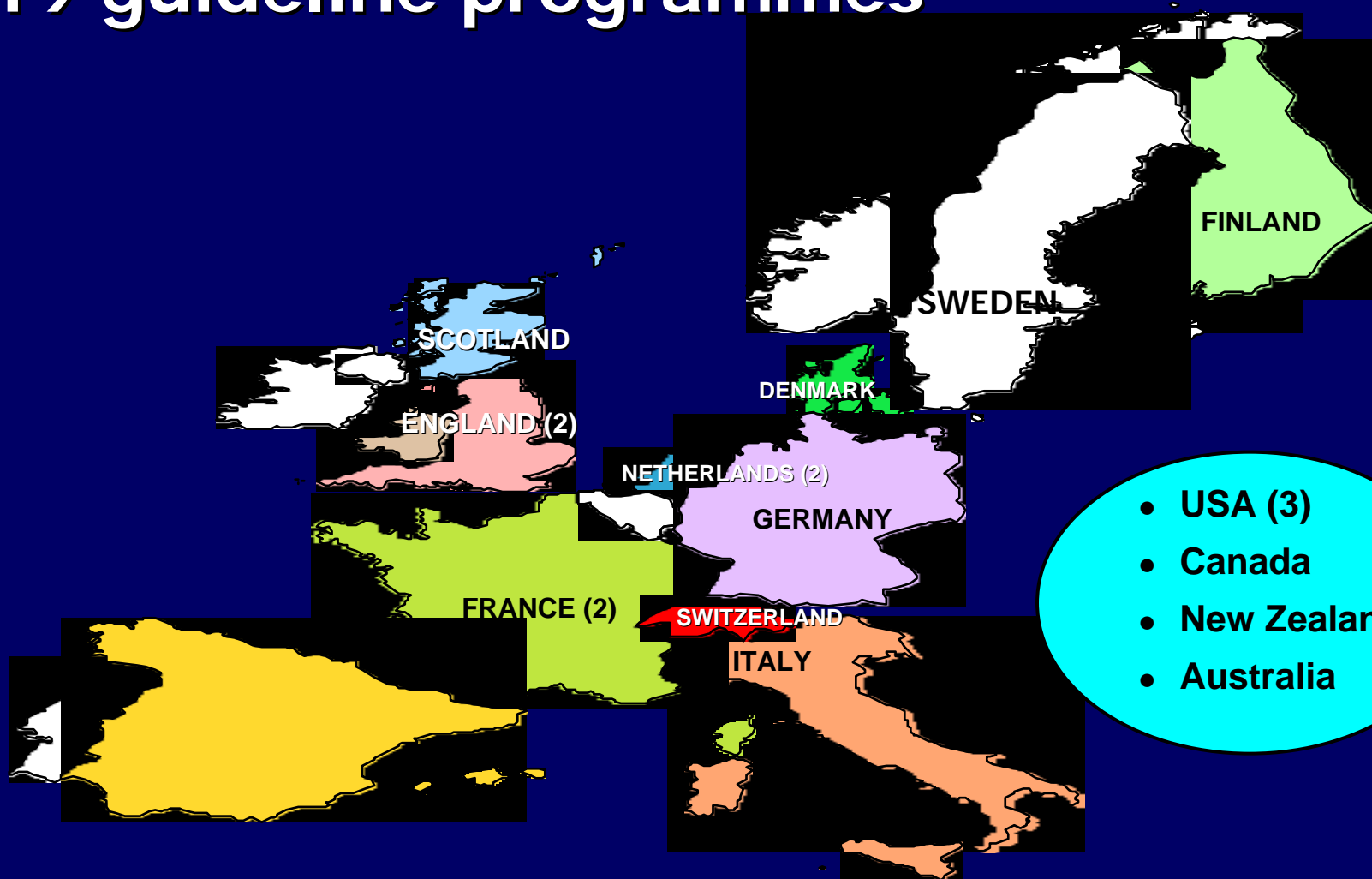
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19 guideline programmes



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

BASIC CHARACTERISTICS

- ✓ 9 professional organisations, 9 governmental or central agencies, 1 academic institution
- ✓ 6 programmes started < 1992, 8 programmes in 1992-1997, 5 programmes in 1998-2000
- ✓ 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

MAIN 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

- ✓ United Kingdom: NICE and SIGN are working together (e.g., lung cancer guideline)
- ✓ England: NICE guideline development series (different target groups), NICE referral guide;
- ✓ Scotland: SIGN guideline developers' handbook, revised grading system for recommendations in guidelines, SIGN guide to AGREE Instrument

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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LEVELS OF ANALYSIS

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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

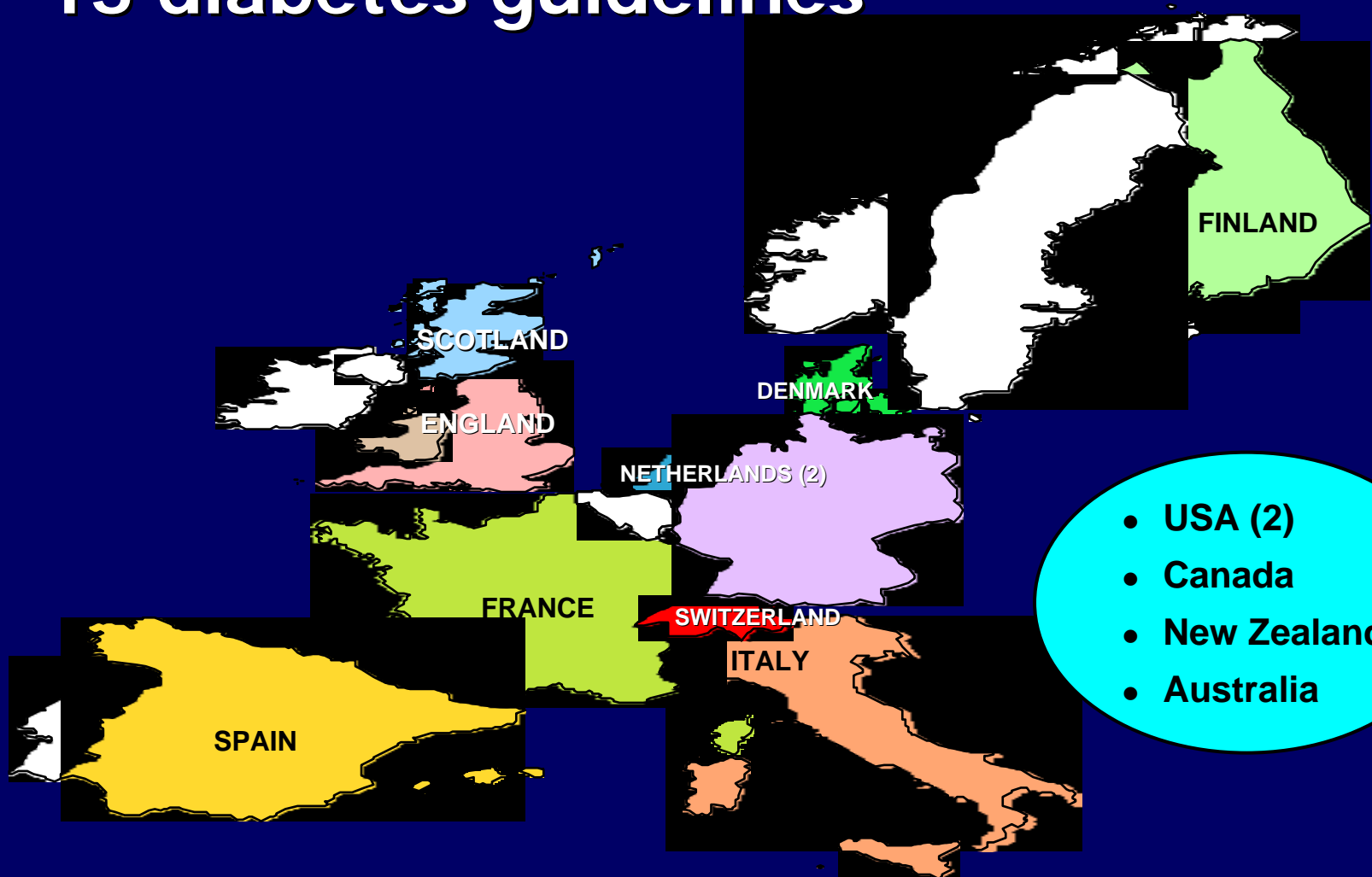
OBJECTIVES

- ✓ 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

- ✓ 5 guidelines from 1994-1996, 5 guidelines from 1997-1998, 5 guidelines from 1999-2000
- ✓ 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

<i>number (%) of citations shared with other guidelines</i>									
Guidelines (n = 12)	0	1	2	3	4	5	6	7	10
Citations (n = 1033)	848 (82.1)	130 (12.6)	22 (2.1)	14 (1.4)	9 (0.9)	6 (0.6)	2 (0.2)	1 (0.1)	1 (0.1)

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 (egs. 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?