



Presenting research evidence in clinical guidelines – can we do a better job?

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Guidelines - convenient but..

Decisions should be influenced not only by the best estimates of the expected effect but also by the ***confidence*** in these estimates.



An example - hormone replacement therapy

The American College of Physicians recommended hormone replacement therapy* for postmenopausal women for over a decade based on *very low quality* evidence

*Ann Intern Med 1992;117:1038-41.



An example - hormone replacement therapy

Later evidence from trials* showed that doctors following these recommendations ***were not providing better clinical care*** and may have inadvertently been doing harm.

The recommendations should have considered the ***quality of evidence***, not just the estimate of effect.

*JAMA 1998;280:605-13.

*JAMA 2002;288:321-33.

The DECIDE EC FP7 Project

Developing and **E**valuating
Communication strategies to support
Informed **D**ecisions and practice
based on **E**vidence



DECIDE: the basics

- Coordinated by the University of Dundee
- 10 partners in 7 countries + WHO
- €3 million budget over 5 years
- 8 Workpackages (5 science, 1 tools, 1 dissemination, 1 management)
- Lots of external collaborators, especially the GRADE Working Group



GRADE



DECIDE: the ten partners

- University of Dundee
- Norwegian Knowledge Centre for the Health Services
- Iberoamerican Cochrane Centre
- Italian Cochrane Centre
- University of Amsterdam
- World Health Organisation (WHO)
- German Cochrane Centre
- National Institute for Health and Clinical Excellence (NICE)
- Scottish Intercollegiate Guidelines Network (SIGN)
- Finnish Medical Society Duodecim

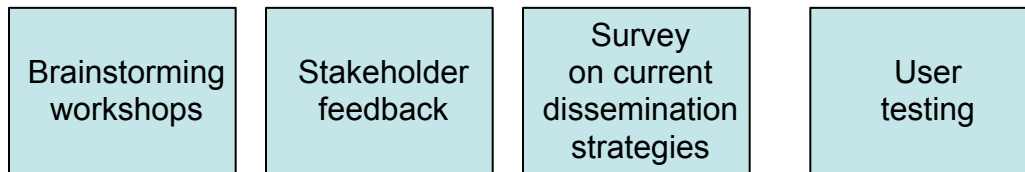
Kick-off meeting was two weeks ago in Geneva.



Cut to the chase - what will we have in five years' time?

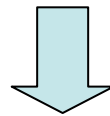
- A range of dissemination strategies for evidence-based recommendations that are tailored to particular audiences (eg. health professionals, the public)
- Evidence that these strategies are effective
- Have tried out strategies in real guidelines eg. those of WHO, NICE, SIGN
- Tools to support effective dissemination strategies

Science WPs: a picture

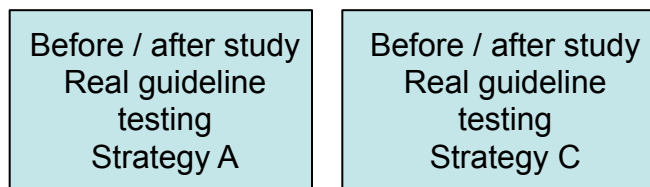
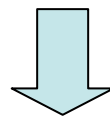


Phase 1: strategy development and user testing

DECIDE strategies A, B and C



Phase 2: Evaluation of strategies



Phase 2: Testing strategies with real guidelines



GRADE working group

http://www.gradeworkinggroup.org/index.htm

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What's new

- New **2011** GRADE series launched in JCE







Announcements

- More and more organizations chose GRADE

Welcome



The Grading of Recommendations Assessment, Development and Evaluation (short GRADE) Working Group began in the year 2000 as an informal collaboration of people with an interest in addressing the shortcomings of present grading systems in health care. The working group has developed a common, sensible and transparent approach to grading quality of evidence and strength of recommendations. Many international organizations have provided input into the development of the approach and have started using it. [»» learn more](#)

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A GRADE Evidence Profile

GRADE evidence profile: antibiotics for children with acute otitis media

Quality assessment						Summary of findings					
No of studies (Design)	Limitations	Inconsistency	Indirectness	Imprecision	Publication bias	Number of patients		Relative risk (95% CI)	Absolute risk		Quality
						Placebo	Antibiotics		Control risk ^a	Risk difference (95% CI)	
Pain at 24h 5 (RCT)	No serious limitations	No serious inconsistency	No serious indirectness	No serious imprecision	Undetected	241/605	223/624	RR 0.9 (0.78–1.04)	367/1,000	Not Significant	⊕⊕⊕⊕ High
Pain at 2–7 d 10 (RCT)	No serious limitations	No serious inconsistency	No serious indirectness	No serious imprecision	Undetected	303/1,366	228/1,425	RR 0.72 (0.62–0.83)	257/1,000	72 fewer per 1,000 (44–98)	⊕⊕⊕⊕ High
Hearing, inferred from the surrogate outcome abnormal tympanometry—1 mo 4 (RCT)	No serious limitations	No serious inconsistency	Serious indirectness (because of indirectness of outcome)	No serious imprecision	Undetected	168/460	153/467	RR 0.89 (0.75–1.07)	350/1,000	Not Significant	⊕⊕⊕○ Moderate

Quality

Summary of Findings

Summary of Findings for policymakers

Routine childhood immunizations

Patients or population: Children up to the age of 7

Settings: Diverse, some low income, in USA (11 studies) and Australia (1 study)

Intervention: Reminder and recall interventions to promote immunization uptake

Comparison: Usual care, except one study which used a printed schedule of routine immunizations

Outcomes	Comparative risks*		Relative effect (95% CI)	Number of participants (studies)	Quality of the evidence (GRADE)
	Without reminder/recall	With reminder/recall (95% CI)			
Immunized	30 per 100	38 per 100 (35 to 42)	OR 1.45 (1.28 to 1.66)	13 818 (12 studies)	⊕⊕⊕○ Moderate

CI: Confidence interval; OR: Odds ratio GRADE: GRADE Working Group grades of evidence (see above and last page)

*Illustrative comparative proportions of children with up-to-date immunizations for an assumed proportion of 30 per 100 without reminders or recall, based on the overall relative effect (OR = 1.45).



Conclusions

- Guidelines are often inconsistent in how they deal with uncertainty
- Guidelines are generally one-size-fits-all
- DECIDE will tailor how research evidence is presented and evaluate the effectiveness of these new strategies
- Promising strategies will be used in real guidelines through partners such as NICE and SIGN



Thank you!

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Strength of recommendations

Quality of evidence

High quality	⊕ ⊕ ⊕ ⊕ or A
Moderate quality	⊕ ⊕ ⊕ ○ or B
Low quality	⊕ ⊕ ○ ○ or C
Very low quality	⊕ ○ ○ ○ or D

Strength of recommendation

Strong recommendation for using an intervention	↑ ↑ or 1
Weak recommendation for using an intervention	↑ ? or 2
Weak recommendation against using an intervention	↓ ? or 2
Strong recommendation against using an intervention	↓ ↓ or 1



Methods for the science WPs

- Brainstorming
- Stakeholder (advisory) groups
- Surveys
- User testing
- Randomised controlled trials
- Testing in real guidelines



Guidelines - convenient but..

Decisions should be influenced not only by the best estimates of the expected effect but also by the ***confidence*** in these estimates.

Guidelines are typically developed as a ***one-size-fits-all*** package with no attempt at tailoring the guideline for particular audiences.



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The scope of the science WPs

- Aspects of how guidelines are developed that can affect their dissemination
- How evidence and other information is presented
- How recommendations and other judgements are formulated
- How information is disseminated

Our objective

To ***improve the dissemination*** of evidence-based recommendations by building on the work of the GRADE Working Group to ***develop and evaluate*** methods that address the targeted dissemination of guidelines.

Kick-off meeting was two weeks ago in Geneva.



July 2008–SUPPORT Summary of a systematic review

Does integration of primary healthcare services improve health care delivery and outcomes?

Primary healthcare in many low and middle-income countries is organised through a series of vertical programmes for specific health problems such as tuberculosis control or immunisation of children. Vertical programmes can help deliver particular technologies, but may lead to service duplication, inefficiency and service fragmentation. The World Health Organization and other organizations promote integration, where inputs, delivery, management and organization of particular service functions are brought together, as a solution to such problems.



Who is this summary for?

People deciding whether to integrate primary healthcare services

This summary is based on the following systematic review:

Briggs CJ, Garner P. Strategies for integrating primary health services in middle- and low-income countries at the point of delivery. *Cochrane Database of Systematic Reviews* 2006, Issue 2.

What is a systematic review?

A summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise the relevant research, and to collect and analyse data from the included studies.

