#### Imprecision Inconsistency



### Relation between PICO and available evidence









### High confidence in the effects

 Table 1. Summary of Findings Table Showing the Relative Risks and Absolute Effects over 12 Months for Each Important Outcome after Treatment with a Low-Molecular-Weight Heparin in Patients Receiving Chemotherapy for Cancer.\*

Outcome after 12 Months	Participants	Relative Risk (95% CI)	Anticipat	ted Absolute Effect	Quality of Evidence (GRADE) and Comments†
			Risk without LMWH	Risk Difference with LMWH (95% CI)	
	no. (no. of studies)		no. of ever	nts per 1000 patients	
Death	6245 (10)	0.94 (0.88–1.00)	501	30 fewer (60 fewer to 0 more)	
Symptomatic VTE	5979 (9)	0.57 (0.40–0.81)	46	20 fewer (27 fewer to 9 fewer)	High-quality evidence; the data are combined for pulmonary embolism and symptomatic deep
No	downgrad	ling:			venous thrombosis
No se	erious Risk	of bias		to 9 more)	
No se	rious incons	sistency		to s morej	
No se	erious impr	ecision			
Undeted	cted publica	ation bias	J	5 more (3 fewer to 15 more)	
No se	erious indire	ectness		,	-
Qua	lity remains	<u>s high</u>			

 Table 1. Summary of Findings Table Showing the Relative Risks and Absolute Effects over 12 Months for Each Important Outcome after Treatment with a Low-Molecular-Weight Heparin in Patients Receiving Chemotherapy for Cancer.\*

Outcome after 12 Months	Participants	Relative Risk (95% CI)	Anticipated Absolute Effect		Quality of Evidence (GRADE) and Comments†
			Risk without LMWH	Risk Difference with LMWH (95% CI)	
n	no. (no. of studies	5)	no. of eve	nts per 1000 patients	
Death	6245 (10)	0.94 (0.88–1.00)	501	30 fewer (60 fewer to 0 more)	Moderate-quality evidence owing to imprecision and concern about publication bias; a survival analysis based on data from 9 studies shows a hazard ratio of 0.83 (95% CI, 0.72–0.95)
Symptomatic VTE	5979 (9	Combinatio	on of	(27 fewer o 9 fewer)	High-quality evidence; the data are combined for pulmonary embolism and symptomatic deep venous thrombosis
Major bleeding	651	judgmen Reporting	ts: bias ision	ore (5 fewer to 9 more)	Moderate-quality evidence owing to imprecision; the increase may be acceptable to patients, given that VTE, which occurs more frequently, may be equally unpleasant
Minor bleeding	6020		151011	more (3 fewer to 15 more)	Moderate-quality evidence owing to imprecision; however, this outcome is unlikely to be criti- cal for decision making

### Interpreting the certainty of the evidence

Certainty rating	Definitions
⊕⊕⊕⊕ High	The panel is very confident that the true effect lies close to that of the estimate of the effect
⊕⊕⊕⊖ Moderate	The panel is moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different
⊕⊕⊖⊖ Low	The panel's confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect
⊕୦୦୦ Very low	The panel has very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect

### Terminology - clarifications

- GRADE approach or system interventions?
  - Prognosis, test accuracy, values and preferences
  - Describes GRADE's conceptual underpinnings
- GRADE critoria
  - Decis
- GRADE

GRADE

- Certainty in evidence
  - Involves assessing evidence transparently

GRADEpro GDT

PROJECT ADMINISTRA
 TASKS
 TEAM

⊙ SCOP

ID DOCUMENT SEC

M PROGNOS

# COMPARISON

GRADE DECIDE Interactive Evidence to Decision Framework

- For groups making recommendations
- Question
  - Details
  - Subgroups
  - Background
- Assessment
  - Criteria
  - Judgements
  - Research evidence
- Additional considerations
   Conclusions
- Type of recommendation
- Recommendation
- Justification
- Implementation considerations
- Monitoring and evaluation
- Research considerations

Schünemann, JCE 2016



#### Determinants of certainty in a body of evidence: GRADE

• <u>Criteria</u> on which a

Prohably ups

- <u>Judgements</u> that m each criterion
- <u>Research evidence</u>
- <u>Additional consider</u> explain each judger

• A body of evidence starts as: high  $I \oplus \oplus \oplus \oplus$ 

S

- 5 factors that can lower quality 1. Risk of bias criteria
  - Lack of randomization (observational studies) lowers confidence to low

Ē

- Inconsistency (or heterogeneity)
   Indirectness (PICO and applicability)
- Indirectness (PICO and applicabil
   Imprecision
- Imprecision
   Publication bias

#### • 3 factors can increase quality

- 1. large magnitude of effect
- 2. opposing plausible residual bias or confounding
- 3. dose-response gradient

### GRADE-CERQual background:

Assessing our confidence in evidence from reviews of qualitative research



### What is qualitative research?

Attitudes and experiences
«How» and «why» questions
Words, not numbers

### Background

- Evidence about *benefits and harms* routinely called for in guideline processes
- Decision makers are now also asking for evidence regarding other aspects of a decision

#### **GRADE** CERQual



### Background

- In 2010, WHO initiated a guideline on health worker optimisation
- Which tasks for maternal and newborn care can be delivered by lower level health workers?





### Task-shifting: a complex issue

- Involves social, behavioural and organisational change
- Can involve shift in settings as well as shift in cadre
- Hailed as cheap solution
- Accused of being "second class care for the poor"
- Has met with resistance from professional organisations











### Different types of evidence called for

- WHO called for evidence about potential *benefits and harms*
- But also wanted evidence on:
  - The *acceptability* of different options to patients, health workers and others
  - The *feasibility* of different options
  - The *resources* required

**CERQual** 

GRADE

#### Evidence Criteria where available **Problem size** and priority **Benefits & harms** of the options Values **Resource use** Equity Acceptibility **Feasibility**

# Gathering evidence on acceptability and feasibility

- We wanted to bring the same level of rigour to these questions as to questions of effectiveness
- Decision to use reviews of qualitative research to answer these questions
- Methods to do this have matured and technical team members had relevant skills





# What sort of findings did the reviews give us?

Acceptability and feasibility influenced by:

- Health worker-recipient relationship
- Health worker-health worker relationship
- Role of local community
- Training and supervision
- Supplies
- Referral systems
- Transport
- Incentives

#### But no system for assessing the certainty of these findings

#### **GRADE** CERQual

### CERQual developed

- Consultation with wide group of stakeholders, including researchers, methodologists, guideline developers
- Tested in multiple qualitative evidence syntheses



### Relationship to GRADE

**GRADE** CERQua

- CERQual is part of the GRADE Working Group and shares the same aim as the GRADE tool used to assess the certainty of evidence of *effectiveness*
- However, CERQual is grounded in the principles of qualitative research

**GRADE** working group

# Assessing our certainty / confidence in the evidence





### Assessing our certainty in the evidence

(Holger/Elena: Describe the components of GRADE. In the next slides, Claire will describe how CERQual has shared feature)



### The CERQual components





### Methodological limitations

- The extent to which there are problems in the design or conduct of the primary studies supporting a review finding
- (Similar to "risk of bias" in GRADE)





# Concerns about methodological limitations



- A critical appraisal tool for qualitative studies should be used to make this assessment
- Currently no widespread agreement about the best tool research agenda in place



### Coherence

- An assessment of how *clear and cogent the fit is* between the data from the primary studies and the review finding
- Similar to "inconsistency" in GRADE)





### Concerns about coherence



We are less confident that the finding reflects the phenomenon of interest when:

- Some of the data contradict the finding
- Some of the data are ambiguous



### Adequacy of data

• The degree of *richness* and *quantity* of data supporting a review finding

• (Similar to "imprecision" in GRADE)





### Concerns about adequacy



- We are less confident that the finding reflects the phenomenon of interest when the data underlying a review finding are *not sufficiently rich* or *only come from a small number* of studies or participants
- Review authors need to make a judgement in the context of a specific review finding on what constitutes data that are not sufficiently rich or are drawn from too small a number of studies



### Relevance

- The extent to which the body of evidence from the primary studies supporting a review finding is *applicable to the context* specified in the review question
- (Similar to "indirectness" in GRADE)





### Concerns about relevance



 We are less confident that the finding reflects the phenomenon of interest when the contexts of the primary studies underlying a review finding are substantively different from the context of the review question



### Making an overall assessment





# Confidence can be assessed as high, moderate, low or very low

- **High confidence**: It is highly likely that the review finding is a reasonable representation of the phenomenon of interest
- Moderate confidence: It is likely that the review finding is a reasonable representation of the phenomenon of interest
- Low confidence: It is possible that the review finding is a reasonable representation of the phenomenon of interest
- Very low confidence: It is not clear whether the review finding is a reasonable representation of the phenomenon of interest



### Dissemination bias in qualitative research

Toews I, Glenton C, Lewin S, Berg RC, Noyes J, Booth A, Marusic A, Malicki M, Munthe-Kaas HM, Meerpohl JJ. Extent, Awareness and Perception of Dissemination Bias in Qualitative Research: An Explorative Survey. PLoS One, 2016 Aug 3;11(8)

Toews I, Booth A, Berg RC, Lewin S, Glenton C, Munthe-Kaas HM, Noyes J, Schroter S, and Meerpohl JJ. Dissemination Bias in Qualitative Research: conceptual considerations. Journal of Clinical Epidemiology (in press)





# Presenting the results of a GRADE / GRADE-CERQual assessment





### Cochrane reviews....

...interpret results and draw conclusions? GRADE criteria (*MECIR standards: mandatory*)

....present results to reader/users?

Summary of Findings Tables (MECIR standards: highly desirable)

#### Self management for patients with chronic obstructive pulmonary disease

Patient or population: patients with chronic obstructive pulmonary disease Settings: primary care, community, outpatient Intervention: self management<sup>1</sup>

Comparison: usual care

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect	No of Participants	Quality of the	Comments
	Assumed risk usual care	Corresponding risk self management	(95% CI)	(studies)	evidence (GRADE)	
Quality of Life St George's Respiratory Questionnaire. Scale from: 0 to 100. (follow-up: 3 to 12 months)	The mean quality of life ranged across control groups from 38 to 60 points	The mean quality of Life in the intervention groups was 2.58 lower (5.14 to 0.02 lower)		698 (7)	⊕⊕⊕O moderate²	Lower score indicates better quality of life. A change of less than 4 points is not shown to be important to patients.
Dyspnoea Borg Scale. Scale from: 0 to 10. (follow-up: 3 to 6 months)	The mean dyspnoea ranged across control groups from 1.2 to 4.1 points	The mean dysphoea in the intervention groups was 0.53 lower (0.96 to 0.1 lower)		144 (2)	⊕⊕00 low <sup>3,4</sup>	Lower score indicates improvement
Number and severity of exacerbations⁵	See comment	See comment	Not estimable⁵	591 (3)	See comment	Effect is uncertain
Respiratory-	Low risk populati	OR 0.64	966	⊕⊕⊕0 _		
related hospital admissions	10 per 100	7 per 100 (5 to 9)	(0.47 to 0.89)	(8)	moderate'	
(follow-up. 5 to 12 months)	High risk population					
	50 per 100	39 per 100 (32 to 47)				
Emergency department visits for lung diseases (follow-up: 6 to 12 months)	The mean emergency department visits for lung diseases ranged across control groups from 0.2 to 0.7 visits per person per year	The mean emergency department visits for lung diseases in the intervention groups was <b>0.1 higher</b> (0.2 lower to 0.3 higher)		328 (4)	⊕⊕⊕O moderate⁴	
Doctor and nurse visits (follow-up: 6 to 12 months)	The mean doctor and nurse visits ranged across control groups from 1 to 5 vists per person per year	The mean doctor and nurse visits in the intervention groups was 0.02 higher (1 lower to 1 higher)		629 (8)	⊕⊕⊕O moderate <sup>®</sup>	

\*The basis for the assumed risk (e.g. the median control group risk across studies) is provided in footnotes. The corresponding risk (and its 95% confidence interval) is based on the assumed risk in the comparison group and the relative effect of the intervention (and its 95% CI).

CI: Confidence interval; OR: Odds ratio;

#### Self management for patients with chronic obstructive pulmonary disease

Patient or population: patients with chronic obstructive pulmonary disease

Settings: primary care, community, outpatient Intervention: self management<sup>1</sup>

Comparison: usual care

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect	No of Participants	Quality of the ovider of	Comments
	Assumed risk usual care	Corresponding risk self management	(35% CI)	(studies)	(GRADE)	
Quality of Life St George's Respiratory Questionnaire. Scale from: 0 to 100. (follow-up: 3 to 12 months)	The mean quality of life ranged across control groups from 38 to 60 points	The mean quality of Life in the intervention groups was 2.58 lower (5.14 to 0.02 lower)		698 (7)	⊕⊕⊕O moderate²	Lower score indicates better quality of life. A change of less than 4 points is not shown to be important to patients.
Dyspnoea Borg Scale. Scale from: 0 to 10. (follow-up: 3 to 6 months)	The mean dyspnoea ranged across control groups from 1.2 to 4.1 points	The mean dysphoea in the intervention groups was 0.53 lower (0.96 to 0.1 lower)		144 (2)	⊕⊕OO low <sup>3,4</sup>	Lower score indicates improvement
Number and severity of exacerbations⁵	See comment	See comment	Not estimable⁵	591 (3)	See comment	Effect is uncertain
Respiratory-	Low risk populati	on <sup>6</sup>	OR 0.64	966	⊕⊕⊕0 _	
related hospital admissions	10 per 100	7 per 100 (5 to 9)	(0.47 to 0.89)	(8)	moderate'	
(follow-up: 3 to 12 months)	High risk population					
	50 per 100	39 per 100 (32 to 47)				
Emergency department visits for lung diseases (follow-up: 6 to 12 months)	The mean emergency department visits for lung diseases ranged across control groups from 0.2 to 0.7 visits per person per year	The mean emergency department visits for lung diseases in the intervention groups was r0.1 higher (0.2 lower to 0.3 higher)		328 (4)	⊕⊕⊕O moderate <sup>4</sup>	
Doctor and nurse visits (follow-up: 6 to 12 months)	The mean doctor and nurse visits ranged across control groups from 1 to 5 vists per person per year	The mean doctor and nurse visits in the intervention groups was 0.02 higher (1 lower to 1 higher)		629 (8)	⊕⊕⊕O moderate <sup>8</sup>	

### Information about the systematic review and clinical question: Participants, interventions and comparisons

Self management for patients with chronic obstructive pulmonary disease							
Patient or population: patients with chronic obstructive pulmonary disease Settings: primary care, community, outpatient Intervention: self management <sup>1</sup> Comparison: usual care							
Outcomes	Illustrative compa (95% CI) Assumed risk usual care	rative risks* Corresponding risk self management	Relative effect (95% Cl)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments	
Quality of Life St George's Respiratory Questionnaire. Scale from: 0 to 100. (follow-up: 3 to 12 months)	The mean quality of life ranged across control groups from 38 to 60 points	The mean quality of Life in the intervention groups was <b>2.58 lower</b> (5.14 to 0.02 lower)		698 (7)	⊕⊕⊕O moderate <sup>2</sup>	Lower score indicates better quality of life. A change of less than 4 points is not shown to be important to patients.	
Dyspnoea Borg Scale. Scale from: 0 to 10. (follow-up: 3 to 6 months)	The mean dyspnoea ranged across control groups from <b>1.2 to 4.1 points</b>	The mean dysphoea in the intervention groups was 0.53 lower (0.96 to 0.1 lower)		144 (2)	⊕⊕OO low <sup>3,4</sup>	Lower score indicates improvement	
# Outcomes – most important for decision making

#### Self management for patients with chronic obstructive pulmonary disease

Patient or population: patients with chronic obstructive pulmonary disease Settings: primary care, community, outpatient Intervention: self management<sup>1</sup>

Comparison: usual care

Outcomes	Illustrative compa (95% CI)	rative risks*	Relative effect	No of Participants	Quality of the	Comments
	Assumed risk <b>usual care</b>	Corresponding risk self management	(95% CI)	(studies)	evidence (GRADE)	
Quality of Life St George's Respiratory Questionnaire. Scale from: 0 to 100. (follow-up: 3 to 12 months)	The mean quality of ife ranged across control groups from 38 to 60 points	The mean quality of Life in the intervention groups was <b>2.58 lower</b> (5.14 to 0.02 lower)		698 (7)	⊕⊕⊕O moderate <sup>2</sup>	Lower score indicates better quality of life. A change of less than 4 points is not shown to be important to patients.
Dyspnoea Borg Scale. Scale from: 0 to 10. (follow-up: 3 to 6 months)	The mean dyspnoea ranged across control groups from <b>1.2 to 4.1 points</b>	The mean dysphoea in the intervention groups was <b>0.53 lower</b> (0.96 to 0.1 lower)		144 (2)	⊕⊕OO low <sup>3,4</sup>	Lower score indicates improvement
Number and severity of exacerbations⁵	See comment	See comment	Not estimable⁵	591 (3)	See comment	Effect is uncertain
Respiratory-	Low risk population	on°	OR 0.64	966	⊕⊕⊕O _	
related hospital admissions (follow, up: 3 to 12	10 per 100 7 per 100 (5 to 9)		(0.47 to 0.89)	(8)	moderate'	
months)	High risk populatio	on⁵				

## Results – Number of Participants/studies

#### Self management for patients with chronic obstructive pulmonary disease

Patient or population: patients with chronic obstructive pulmonary disease Settings: primary care, community, outpatient Intervention: self management<sup>1</sup>

Comparison: usual care

Outcomes	Illustrative compa (95% CI)	rative risks*	Relative effect	No of Participants	Quality of the	Comments
	Assumed risk <b>usual care</b>	Corresponding risk self management	(95% CI)	(studies)	evidence (GRADE)	
Quality of Life St George's Respiratory Questionnaire. Scale from: 0 to 100. (follow-up: 3 to 12 months)	The mean quality of life ranged across control groups from 38 to 60 points	The mean quality of Life in the intervention groups was <b>2.58 lower</b> (5.14 to 0.02 lower)		698 (7)	⊕⊕⊕O moderate <sup>2</sup>	Lower score indicates better quality of life. A change of less than 4 points is not shown to be important to patients.
Dyspnoea Borg Scale. Scale from: 0 to 10. (follow-up: 3 to 6 months)	The mean dyspnoea ranged across control groups from 1.2 to 4.1 points	The mean dysphoea in the intervention groups was <b>0.53 lower</b> (0.96 to 0.1 lower)		144 (2)	⊕⊕OO Iow <sup>3,4</sup>	Lower score indicates improvement
Number and severity of exacerbations <sup>5</sup>	See comment	See comment	Not estimable	591 <sup>5</sup> (3)	See comment	Effect is uncertain
Respiratory-	Low risk populati	on°	OR 0.64	966	⊕⊕⊕⊖	
related hospital admissions (follow up: 3 to 12)	10 per 100	<b>7 per 100</b> (5 to 9)	(0.47 to 0.89)	(8)	moderate'	
months)	High risk population	on⁵				
	50 per 100	<b>39 per 100</b> (32 to 47)				
Emergency department visits for lung diseases (follow-up: 6 to 12 months)	The mean emergency department visits for lung diseases ranged across	The mean emergency department visits for lung diseases in the intervention groups		328 (4)	⊕⊕⊕O moderate <sup>4</sup>	

## Results – Relative effects

#### Self management for patients with chronic obstructive pulmonary disease

Patient or population: patients with chronic obstructive pulmonary disease Settings: primary care, community, outpatient Intervention: self management<sup>1</sup> Comparison: usual care

Outcomes	Illustrative compa (95% CI)	arative risks*	Relative effect	No of Participants	Quality of the	Comments		
	Assumed risk <b>usual care</b>	Corresponding risk self management	(95% CI)	(studies)	evidence (GRADE)			
Quality of Life St George's Respiratory Questionnaire. Scale from: 0 to 100. (follow-up: 3 to 12 months)	The mean quality of life ranged across control groups from <b>38 to 60 points</b>	The mean quality of Life in the intervention groups was <b>2.58 lower</b> (5.14 to 0.02 lower)		698 (7)	⊕⊕⊕O moderate <sup>2</sup>	Lower score indicates better quality of life. A change of less than 4 points is not shown to be important to patients.		
Dyspnoea Borg Scale. Scale from: 0 to 10. (follow-up: 3 to 6 months)	The mean dyspnoea ranged across control groups from 1.2 to 4.1 points	The mean dyspnoea in the intervention groups was <b>0.53 lower</b> (0.96 to 0.1 lower)		144 (2)	⊕⊕OO low <sup>3,4</sup>	Lower score indicates improvement		
Number and severity of exacerbations <sup>5</sup>	See comment	See comment	Not estimable	591 (3)	See comment	Effect is uncertain		
Respiratory-	Low risk populati	on⁵	OR 0.64	966	⊕⊕⊕⊙			
related hospital admissions (follow, up: 2 to 12)	10 per 100	<b>7 per 100</b> (5 to 9)	(0.47 to 0.89)	(8)	moderate'			
months)	High risk population	on⁵						
-	50 per 100	<b>39 per 100</b> (32 to 47)						
Emergency department visits for lung diseases (follow-up: 6 to 12 months)	The mean emergency department visits for lung diseases ranged across	The mean emergency department visits for lung diseases in the intervention groups		328 (4)	⊕⊕⊕O moderate <sup>4</sup>			

## Results – Absolute effects

#### Self management for patients with chronic obstructive pulmonary disease

Patient or population: patients with chronic obstructive pulmonary disease Settings: primary care, community, outpatient Intervention: self management<sup>1</sup>

Comparison: usual care

Outcomes	Illustrative compa (95% CI)	arative risks*	Relative effect	No of Participants	Quality of the	Comments
	Assumed risk <b>usual care</b>	Corresponding risk self management	(95% CI)	(studies)	evidence (GRADE)	
Quality of Life St George's Respiratory Questionnaire. Scale from: 0 to 100. (follow-up: 3 to 12 months)	The mean quality of life ranged across control groups from <b>38 to 60 points</b>	The mean quality of Life in the intervention groups was <b>2.58 lower</b> (5.14 to 0.02 lower)		698 (7)	⊕⊕⊕O moderate <sup>2</sup>	Lower score indicates better quality of life. A change of less than 4 points is not shown to be important to patients.
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Number and severity of exacerbations <sup>5</sup>	See comment	See comment	Not ∍stimable <sup>5</sup>	591 (3)	See comment	Effect is uncertain
Respiratory-	Low risk populati	on⁰	OR 0.64	966	⊕⊕⊕⊙	
related hospital admissions (follow up: 2 to 12)	10 per 100	<b>7 per 100</b> (5 to 9)	(0.47 to ).89)	(8)	moderate <sup>/</sup>	
months)	High risk population	on⁵				
	50 per 100	<b>39 per 100</b> (32 to 47)				
Emergency department visits for lung.¢liseases (follow-up: 6 to 12 months)	The mean emergency department visits for lung diseases ranged across	The mean emergency department visits for lung diseases in the intervention groups		328 (4)	⊕⊕⊕O moderate <sup>4</sup>	

what happens to people with and without interventio n

## Certainty of the Evidence

#### Self management for patients with chronic obstructive pulmonary disease

Patient or population: patients with chronic obstructive pulmonary disease

Settings: primary care, community, outpatient

Intervention: self management<sup>1</sup>

Comparison: usual care

Outcomes	Illustrative compa (95% CI)	rative risks*	Relative effect	No of Participants	Quality of the	Comments
	Assumed risk <b>usual care</b>	Corresponding risk self management	(95% CI)	(studies)	evidence (GRADE)	
Quality of Life St George's Respiratory Questionnaire. Scale from: 0 to 100. (follow-up: 3 to 12 months)	The mean quality of life ranged across control groups from 38 to 60 points	The mean quality of Life in the intervention groups was <b>2.58 lower</b> (5.14 to 0.02 lower)		698 (7)	⊕⊕⊕O moderate <sup>2</sup>	Lower score indicates better quality of life. A change of less than 4 points is not shown to be important to patients.
Dyspnoea Borg Scale. Scale from: 0 to 10. (follow-up: 3 to 6 months)	The mean dyspnoea ranged across control groups from 1.2 to 4.1 points	The mean dysphoea in the intervention groups was <b>0.53 lower</b> (0.96 to 0.1 lower)		144 (2)	⊕⊕OO low <sup>3,4</sup>	Lower score indicates improvement
Number and severity of exacerbations <sup>5</sup>	See comment	See comment	Not estimable⁵	591 (3)	See comment	Effect is uncertain
Respiratory-	Low risk populati	on°	OR 0.64	966	⊕⊕⊕O ੁ	
related hospital admissions	10 per 100	<b>7 per 100</b> (5 to 9)	(0.47 to 0.89)	(8)	moderate'	
months)	High risk population	on⁵				
	50 per 100	<b>39 per 100</b> (32 to 47)				
Emergency department visits for lung diseases (follow-up: 6 to 12 months)	The mean emergency department visits for lung diseases ranged across	The mean emergency department visits for lung diseases in the intervention groups		328 (4)	⊕⊕⊕O moderate <sup>4</sup>	

# Explanations

<sup>1</sup> Self-management is a term applied to any formalized patient education programme aimed at teaching skills needed to carry out medical regimens specific to the disease, guide health behaviour change, and provide emotional support for patients to control their disease and live functional lives. Of the 14 studies, there were four in which the education delivery mode consisted of group education; nine which were individual education and one study which was written education material only. In six studies the use of an action plan for self-treatment of exacerbations was assessed.

<sup>2</sup> Seven other studies were not pooled and some showed non-significant effects.

<sup>3</sup> No allocation concealment in 1 study. Incomplete follow-up.

<sup>4</sup> Sparse data.

<sup>5</sup> Different definitions of exacerbations used and studies could not be pooled.

 $^{6}$  The low and high risk values are the two extreme numbers of admissions in the control groups from two studies (8% was rounded to 10% and 51% to 50%).

<sup>7</sup> Two studies with very severe COPD patients weighted heavily in meta-analysis. Therefore, there is some uncertainty with the applicability of effect to all risk groups.

<sup>8</sup> Unexplained heterogeneity.

### Clarification

- Judgements
- Transparency

## Preparatory work

- revealed that users would appreciate a summary of the findings upfront to facilitate interpretation
- evaluated the type and amount of information users want
- e.g. number of outcomes  $\leq 7$
- presenting information on all important outcomes
- ordering of outcomes

## Pilot study of Cochrane review groups

- 17 Cochrane Review groups participated
- 20 review authors participated (20 new or updated reviews)
- spent an additional 4 hours (2 to 40 hours)

Preliminary summary of findings table for Cochrane systematic reviews:

Outline and pilot test

Gunn E Vist, Andrew D Oxman, Paul Glasziou and Holger J. Schünemann

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# Results of first pilot

- layout clear
- generally found to be helpful
- 11/17 increased accessibility
- 5/17 improved quality
- 1/17 rephrased conclusions
- software difficulties
- Additional user testing!!!

# What do SoF tables add?



Journal of Clinical Epidemiology 63 (2010) 620-626

Journal of Clinical Epidemiology

Summary-of-findings tables in Cochrane reviews improved understanding and rapid retrieval of key information Sarah E. Rosenbaum<sup>a,\*</sup>, Claire Glenton<sup>b</sup>, Andrew D. Oxman<sup>a</sup>

- RCTs
  - 1 EBCP workshop (N 72); 2 Cochrane entities meeting (N 33)
- RCT 1: easy to find results, SoF versus no: 68 vs. 40% (p = 0.02)
- RCT 2: SoF more correct answers to two questions re results
  - 93% vs 44% (p = 0.003) and 87% vs. 11% (p < 0.001)
- SoF participants spent average of 90 seconds to find key information vs 4 minutes without SoF table

# Cochrane method innovation fund project

- Enhancing the acceptance and implementation of SoF tables in Cochrane reviews
- Initiated in 2012

Feedback from Cochrane review groups User-testing of potential solutions

Formal testing of formats RCT

# Enhancing the acceptance and implementation of SoF tables in Cochrane reviews

### **User testing**

- More than 40 participants
- Cochrane review users (clinicians, guideline developers, researchers)
- Participants prefer simple, less crowded SoF tables
- Dichotomous: NNTs and Risk Difference over natural frequencies
- Continuous: Minimal important difference units over MD and SMD
- "what happens" column:
  - statement of presence/direction of effect and qualitative statement of confidence

#### **Current formats (Table B)**

- 1 Inclusion of the N° of participants and studies column
- Quality of evidence presented with symbols and labeled as High, moderate, low, or very low.Reasons for downgrading presented in the footnotes
- 3 "Footnotes" label
- 4 Baseline risk and corresponding risk expressed as natural frequencies
- 5 No column presenting absolute risk reduction (risk difference) or mean difference
- 6 Comments column included
- 7 No "what happens" column\*
- 8 Description of the GRADE Working Group grades of evidence definitions below the table

#### Alternative formats (Table A)

Exclusion of the N° of participants and studies column. Information presented in the outcomes column Quality of evidence presented with main reasons for downgrading in the same column (e.g. MODERATE due to imprecision)

"Explanations" label

Baseline risk and corresponding risk expressed as percentages

Inclusion of a column presenting absolute risk reduction (risk difference) or mean difference

Comments column deleted

"What happens" column included\*

No description of the GRADE Working Group grades of evidence definitions

Probiotics as an adjunct to antibiotics for the prevention of pediatric antibiotic-associated diarrhea in children

Patient or population: children given antibiotics Settings: inpatients and outpatient Intervention: probiotics Comparison: no probiotics

Outcomes	Illustrative com (95% CI)	parative risks*	Relative effect	No of participants	Quality of the evidence	Comments
	Assumed risk	Corresponding risk	(95% CI)	(studies)	(GRADE)	
	No probiotics	Probiotics				
Incidence of Diarrhea:	Children < 5 yea	ars	RR 0.4 <sup>1</sup>	1474	$\Theta \oplus \Theta \Theta$	
Problotic dose (equal to/greater than) 5 billion CFU/day Follow-up: 10 days to 3 months	223 per 1000 <sup>1</sup>	<b>89 per 1000</b> (65 to 122)	(0.29 to 0.55)	(7 studies)	moderate <sup>2</sup>	
	Children > 5 yea	ars	RR 0.8 <sup>1</sup>	624	$\Theta \Theta \Theta \Theta$	
	112 per 1000 <sup>1</sup>	<b>90 per 1000</b> (59 to 136)	(0.53 to 1.21)	(4 studies)	low <sup>2, 3</sup>	
Adverse events Follow-up: 10 to 44 days	18 per 1000¹	<b>23 per 1000</b> (8 to 38)	Not estimable <sup>4</sup>	1575 (11 studies)	⊕⊕⊖⊖ low <sup>5, 6</sup>	Side effects: rash, nausea, gas, flatulence, vomiting, increased phlegm, chest pain, constipation, taste disturbance, and low appetite
<b>Duration of diarrhea</b> Follow-up: 10 days to 3 months	The mean duration of diarrhea in control groups was <b>4 days</b>	<b>0.6 fewer days</b> (1.18 to 0.02 fewer days)		897 (5 studies)	⊕⊕⊖⊝ low <sup>7,8</sup>	

#### Probiotics as an adjunct to antibiotics for the prevention of pediatric antibiotic-associated diarrhea in children

Patient or population: children given antibiotics Settings: inpatients and outpatient Intervention: probiotics Comparison: no probiotics

Outcomes	Relative effects	Anticipated ab	solute effects*	Quality of the evidence	What happens	
No of Participants (studies)	(95% CI)	Without probiotics	With probiotics	Difference	(GRADE)	
Incidence of Diarrhea: Probiotic dose 5 billion CFU/day		Children < 5 ye	ears			
Children <5 years 1474 (7 studies)	<b>RR 0.4</b> <sup>1</sup> (0.29 to 0.55)	<b>22.3%</b> <sup>1</sup>	<b>8.9%</b> (6.5 to 12.2)	13.4% fewer children <sup>1</sup> (10.1 to 15.8 fewer)	⊕⊕⊕⊝ moderate <sup>2</sup> Due to risk of bias	Probably decreases the incidence of diarrhea
		Children > 5 ye	ears		$\oplus \oplus \ominus \ominus$	May decrease
Children >5 years 624 (4 studies)	<b>RR 0.8</b> <sup>1</sup> (0.53 to 1.21)	<b>11.2%</b> <sup>1</sup>	<b>9%</b> (5.9 to 13.6)	2.2% fewer children <sup>1</sup> (5.3 fewer to 2.4 more)	Due to risk of bias and imprecision	the incidence of <u>diarrhea</u>
Adverse events <sup>4</sup> Follow-up: 10 to 44 days	-	<b>1.8%</b> <sup>1</sup>	<b>2.3%</b> (0.8 to 3.8)	0.5% more adverse events⁵ (1 fewer to 2 more)	⊕⊕⊖⊖ low <sup>6,7</sup> Due to risk of bias and inconsistency	There may be little or no difference in adverse events
1575 (11 studies)						

# Enhancing the acceptance and implementation of SoF tables in Cochrane reviews

### **RCT design**

- Clinicians, guideline developers, researchers (300)
- Alternative vs current formats
- Understanding, accessibility, satisfaction, preference



	Alternative formats	<b>Current formats</b>
1	Quality of evidence presented with main reasons for downgrading in the same column (e.g. MODERATE due to imprecision)	Quality of evidence presented with symbols and labeled as High, moderate, low, or very low. Reasons for downgrading presented in the footnotes
2	Baseline risk and corresponding risk expressed as percentages	Baseline risk and corresponding risk expressed as natural frequencies
3	Inclusion of a column presenting absolute risk reduction (risk difference) expressed as percentage for benefit and harm or mean difference	No specific column presenting absolute risk reduction (risk difference) or mean difference
4	No description of the GRADE Working Group grades of evidence definitions	Description of the GRADE Working Group grades of evidence definitions below the table

# Enhancing the acceptance and implementation of SoF tables in Cochrane reviews

Percentage of participants that answered correctly understanding questions

Concept	Question asked	Alternative formats (N=122)	Current formats (N=168)	Difference	P value
Ability to determine risk difference	How many fewer children < 5 years will have diarrhea if they have probiotics than if they do not?	98%	35%	63%	<0.001
Understanding of quality of evidence and treatment effect	Which of the following statements best represents the results informing the outcome adverse events?	88%	26%	62%	<0.001

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GRADEpro GDT	Self-management	education for patier	nts with chronic obs	tructive pulmonary d	lisease		B A @	santesna@	∂mcmaster	.ca 🗸		
									_	_		
Should self management vs. usual care be used for chronic obstructive pulmonary disease? Should self management vs. usual care be used for chronic obstructive pulmonary disease?												
Self management for patients with chronic obstructive pulmonary disease												
TASKS		Anticipated absolu	ite effects (95% CI)									
😤 ТЕАМ	Outcome	Risk with usual care	Risk with self management	Relative effect (95% CI)	№ of participants (studies)	Quality		Comments		≡		
• SCOPE	Quality of Life assessed with: St	The mean quality of Life was <b>0</b>	MD <b>2.58 lower</b> (5.14 lower to 0.02	-	704 (7 RCTs)	⊕⊕⊕⊖ MODERATE ª	A change of less t be important to p	than 4 points is not patients.	shown to			
	George's Respiratory Questionnaire		lower)							Ø		
主 COMPARISONS	follow up: range 3 to 12 months to											
EVIDENCE TABLE	Dyspnoea assessed with: Borg	The mean dyspnoea was <b>0</b>	MD <b>0.53 lower</b> (0.96 lower to 0.1		144 (2 RCTs)	⊕⊕⊖⊖ LOW <sup>a,b,c</sup>						
RECOMMENDATIONS	Scale follow up: range 3		lower)							C		
PRESENTATIONS	to 6 months to					****						
A PANEL VOICE	of exacerbations	see comment	see comment	-	585 (3 RCTs)	VERY LOW <sup>a,d,e,f</sup>				Ø		
DOCUMENT SECTIONS	Respiratory-related hospital admissions	Low		<b>OR 0.64</b> (0.47 to 0.89)	966 (8 RCTs)	⊕⊕⊕⊖ MODERATE <sup>g</sup>						
DISSEMINATION	(admissions) follow up: range 3	10 per 100	<b>7 per 100</b> (5 to 9)							<b>F</b> %		
	to 12 months to	High								Ľ		
		50 per 100 <b>39 per 100</b> (32 to 47)										
	Emergency	The mean emergency	MD 0.1 higher	-	328	$\oplus \oplus \oplus \bigcirc$						
				E	xplanations			5	56	^		

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RADEpro GDT 🛛 🗸	KSA 2014 Acute and Chronic Mana	agement of Sickle Cell Disease		\$ A	⑦         schuneh@mcmaster.ca
	✓ Should Deferasirox vs. deferoxa	mine be used for managing transfusional iro	n overload in people with sickle cell disease [Data c	only. When citing this recc 🔗 🗄	explanations ? Help 💿 🕞
<b>9</b> PROJECT ADMINISTRA					GRADE evidence profile
<u>ាំ</u> TASKS	Outcomes	Plain language statements	Absolute Effect	Relative effect	Summary of Findings table
🕄 ТЕАМ			Deferasirox Deferasirox	N° of participants & studies	GRADE profile (v2)
SCOPE	UNDESIRABLE EFFECTS				Summary of Findings table (v2)
DOCUMENT SECTIONS	Iron overload Follow-up: 0 undefined	Empty summary	0 0 🔄	MD 440.69 (11.73 to 869.64)	Summary of Findings table (v3)
PROGNOSIS			Average difference: NaN fewer	Based on data from 283 patients in 2 studies	
E COMPARISONS			(95% Cl: 11.73 to 869.64 more )		
EVIDENCE TABLE					
RECOMMENDATIONS	Kidney injury Follow-up: 0 und	defined			
PRESENTATIONS OF R	,				
) DISSEMINATION	Satisfaction Follow-up: 0 undefined	Empty summary	238 745 per 1000 7er 1000 Difference: 507 higher per 1000 patients (95% Cl: 236 to 936 higher per 1000 patients)	RR 3.13 (1.99 to 4.93) Based on data from 195 patients in 1 study	Moderate
	<b>Discontinuations - Overall</b>	Discontinuations Follow-up: 0 undefined			
	Mortality     Follow-up: 24 weeks	Empty summary	0 7 per 1000 To per 1000 To figure 1000 per 1000 per 1000 patients (95% CI: 0 to 0 lower per 1000 patients)	RR 1.26 (0.05 to 30.41) Based on data from 191 patients in 1 study	
	End organ damage (incider	nce of diabetes) Follow-up: 24 weeks			

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A TEAM	( <sup>TT</sup> ) Outroome	our bes	t estimat	te of the di	fference.	the Derend		evelop un	outcome e	ompureu (	.o without. I	1113 13				
O SCOPE	Uutcome												es	evie	dence RADE	
DOCUMENT SECTIONS	UNDESIRABLE EFFECT	<b>WITHOU</b> 44	<b>T</b> Deferasir	ox: 238 out o	<b>f 1000</b> patie	nts will deve	lop an outcon	те				1000				
	Iron ove	I												$\oplus \Theta$	Ð⊕O	
主 COMPARISONS	Follow-up: (												nts	Mo	derate	
EVIDENCE TABLE		1										1000				
RECOMMENDATIONS		44 <b>WITH</b> De	ferasirov	745 out of 10	<b>00</b> natients v	vill develop :	an outcome					1000				
PRESENTATIONS OF R		WITT DO	.101831107.1	45 OUL 01 10	oo patients v		an outcome									
DISSEMINATION	Kidney i	0	100	200	300	400	500	600	700	800	900	1,000				
	Satisfac									_	(1.0	0 += 4.07)		$\oplus \oplus$	)⊕O	
	Follow-up: 0 u	undefined					pe	r 1000	per 1000		(1.9 Based on data in	9 to 4.93) a from 195 patie 1 study	nts	Mo	derate	
							(95% CI:	1000 pat 236 to 936 highe	ients er per 1000 patier	its)		,				
	Discontinu	uations - Ov	erall Disco	ntinuations Fo	llow-up: 0 undefi	ned										
	Mortality Empty summary							0	7	•	R	R 1.26		Ð	000	
	Follow-up: 24	weeks					pe	r 1000	per 1000		(U.U: Based on data in	a from 191 patie	nts	Ve	ry low	-
							L (95%	1000 pat	igner per ients er 1000 patients)							

# Interactive Summary of Findings tables

**GRADE** DECIDE Interactive Summary of Findings

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#### Hpv vaccine for preventing cervical cancer

Study characteristics

Participants: Girls age 10 to 12

Intervention: HPV vaccine (3 doses at age 10 to 12)

About this summary

Ad	d or remove columns:		III Visual o	overview		
	Outcome	Plain language summary	Absolut Without HPV vaccine	te Effect With hpv vaccine	Relative effect (95% CI) N° of participants & studies	Certainty of the evidence (GRADE)
•	Lifetime risk of death from cervical cancer	May slightly decrease the lifetime risk of dying from cervical cancer	2 <sup>i</sup> per 1000	<b>1</b> per 1000	<u>RR</u> 0.52 (0.43 to 0.63)	⊕⊕⊖⊖ Low <sup>i</sup>
			Difference 1 less   (95% Cl: 0 to 1 less	per 1000 patients s per 1000 patients)	Based on data from 10000 patients in 5 studies	

- Lifetime risk of cervical cancer
- High grade cervical lesions (Grade 2 CIN or worse) follow-up: 1.5 to 5 years
- Any cervical lesion
- External genital lesions follow-up: 1.5 to 5 years
- Serious adverse effects follow-up: 1.5 to 5 years

# Ultrasound for patients suspected of having a deep venous thrombosis



### **Probabilities**

People's risk for Recurrent VTE during 3 months follow up	Pre-test Probability of having Recurrent VTE during 3	Number o who would be correctly	mber of people rectly diagnosed with this test:			
	months follow up	reopte with disease	reopte without disease			
<ul> <li>Low probability         Typically seen in patients with only one risk factor         Medium probability         Typically seen in patients with one r.     </li> </ul>	<b>5%</b> of the people in this risk group have Recurrent VTE during 3 months follow up	<b>90.3%</b> of people who have Recurrent VTE during 3 months follow up will be diagnosed correctly	97.8% of people who do not have Recurrent VTE during 3 months follow up will be diagnosed correctly			
<ul> <li>High probability</li> <li>Typically seen in patients with sever</li> </ul>		Show confiden Show dia	ce intervals agram			

## Correct diagnosis



### Positive and negative test results



EVIDENCE TABLE

RECOMMENDATIONS

PRESENTATIONS OF R...

DISSEMINATION

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~ !	Should Compression Ultrasound be used	to diagnose Recurrent VTE d	luring 3 months follow up in DVT?	🖈 Explanations	? Help 💿
O PROJECT ADMINISTRA					
TASKS	Probabilities Positives / Negatives	Sensitivity / Specificity	Correctly Diagnosed Plain Language Summary		
A TEAM	People's risk for Recurrent VTF	Pre-test	Pos	t-test	Certainty of
● SCOPE	during 3 months follow up	Probability of having Recurrent VTE during 3	Probability of a person having Recu with tes	rrrent VTE during 3 months follow up st results:	the evidence
DOCUMENT SECTIONS		months follow up	With POSITIVE test result	With NEGATIVE test result	(GRADE)
PROGNOSIS	• Low probability	E 0/	600/	1 0/ 5	
主 COMPARISONS	Typically seen in patients with only one risk factor	<b>J 70</b> of the people in this risk group have	OO /O of people with a positive test result have Recurrent VTE during 3	of people with a negative test result have Recurrent VTE during 3	Low
OUTCOMES	Medium probability      Typically seen in patients with one r	Recurrent VTE during 3 months follow up	(95% CI: 61% to 75%)	(95% CI: 1% to 0%)	
SEARCHING	○ High probability				
SCREENING	Typically seen in patients with sever		Hide confider	nce intervals	
DATA EXTRACTION			Hide di	agram	
RISK OF BIAS			Out of <b>10</b>	00 people	
ANALYSES			with a low probability of having Rec there w	urrent VTE during 3 months follow up <i>v</i> ould be:	
EVIDENCE TABLE					
RECOMMENDATIONS					
PRESENTATIONS OF R			66	934	
			positive test results	negative test results	
			45 <sub>(68%)</sub> 21 <sub>(32%)</sub>	929 <sub>(99%)</sub> 5 <sub>(1%)</sub>	



DISSEMINATION

	<ul> <li>For EtD paper</li> </ul>						Ş	<b>€1 ⑦</b> s	chuneh@mcmas	ter.ca 🗸
	✓ Should Compression	on Ultrasound be use	ed to diagnose Recu	rrent VTE during 3 mo	nths follow up in DVT?			🖈 Explanations	? Help 🥝	) F
O PROJECT ADMINISTRA										
TASKS	Probabilities	Positives / Negatives	Sensitivity / Spe	ecificity Correctly Dia	gnosed Plain Languag	e Summary				
A TEAM	Prova		Deeply	a with	Deeplo	with	Pooled	Number of	Quality of the	-
• SCOPE	FIEVd	Prevalence		test result	NEGATIVE test result		Pooled Sensitivity/Specificity	participants	evidence	
DOCUMENT SECTIONS			positives	positives	Irue False negatives negatives			(studies)	(GRADE)	
PROGNOSIS	Proportion of persons a	affected with a	4 5	21 45	020	г 4 <b>5</b>	Consitivity	Pasad on data from	<b>AAOO</b>	
主 COMPARISONS	particular disease at a s Prevalence rates obtain	specified time. hed from high quality	<b>45</b> per 1000	<b>Z L</b> per 1000	929 per 1000	<b>)</b> per 1000	0.903	0 individuals in 22	Low	
OUTCOMES	studies can inform pret	iest probabilities.	( <u>95% CI</u> :	(95% CI:	(95% CI:	(95% CI:	( <u>95% C1</u> : 0.884 to 0.92) Specificity	studies.	-	
SEARCHING	per 1000 Typically seen in pa	atients with one r	44 to 46 per 1000)	28 to 15 per 1000)	922 to 935 per 1000)	6 to 4 per 1000)	0.978 (95% CI: 0.97 to 0.984)			
SCREENING	○ <b>1</b> 50 per 1000						\			
DATA EXTRACTION	Typically seen in pa	atients with sever								
RISK OF BIAS										
ANALYSES										
EVIDENCE TABLE										
RECOMMENDATIONS										
PRESENTATIONS OF R										
DISSEMINATION										

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	✓ Should Compression Ultrasound	be used to diagnose Recurrent VTE during 3 mo	onths follow up in DVT?		🖈 Explanations	? Help 💿 🕒
O PROJECT ADMINISTRA						
TASKS	Probabilities Positives / Ne	gatives Sensitivity / Specificity Correctly Di	agnosed Plain Language Summary			
A TEAM	Prevalence	People with	People with	Pooled	Number of	Quality of the
O SCOPE	Trevatence	POSITIVE test result	NEGATIVE test result	Sensitivity/Specificity	participants	evidence
DOCUMENT SECTIONS		positives positives	negatives negatives		(studies)	(GRADE)
	• 50	15	020 5 🎺	Sensitivity	Based on data from	$\oplus \oplus \bigcirc \bigcirc$
主 COMPARISONS	per 1000 Typically seen in patients with only one risk factor	per 1000 Flip cell for tex	tt version ber 1000 per 1000	0.903 (95% CI: 0.884 to 0.92)	0 individuals in 22 studies.	Low
OUTCOMES	· 100	(95% CI: (95% CI: 44 to 46 per 1000) 28 to 15 per 1000)	(95% CI: (95% CI: 922 to 935 per 1000) 6 to 4 per 1000)	Specificity		
SEARCHING	per 1000 Typically seen in patients with one r			0.978 (95% Cl: 0.97 to 0.984)		
SCREENING	○ <b>1</b> 50 per 1000					
DATA EXTRACTION	Typically seen in patients with sever					
RISK OF BIAS						

EVIDENCE TABLE RECOMMENDATIONS PRESENTATIONS OF R... DISSEMINATION



EVIDENCE TABLE

RECOMMENDATIONS

PRESENTATIONS OF R...

DISSEMINATION

	<ul> <li>For EtD paper</li> </ul>	ß	Ð	0	schuneh@mc	master.ca 🗸
	Should Compression Ultrasound be used to diagnose Recurrent VTE during 3 months follow up in DVT?		<b>s</b> ? Ex	planatior	ns <b>?</b> Help	• B
O PROJECT ADMINISTRA						
TASKS	Probabilities         Positives / Negatives         Sensitivity / Specificity         Correctly Diagnosed         Plain Language Summary					
😤 ТЕАМ						
● SCOPE	Researchers reviewed studies comparing one/two tests to Recurrent VTE during 3 months follow up: the test and the Compression relevant studies up to [date] and found 22 relevant studies.	Jltraso	ound te	st. They	searched for a	.L
DOCUMENT SECTIONS	What are and Compression Ultrasound tests?					
	The and the Compression Ultrasound tests are tests that a clinician performs to check for Recurrent VTE during 3 months follow up. T	his dis	ease ca	n.		
主 COMPARISONS	The test checks if a person has Recurrent VTE during 3 months follow up. The test is done in the following way: [description of how the	ie test	is done	e].		
OUTCOMES	The Compression Ultrasound test also checks if a person has Recurrent VTE during 3 months follow up. The test is done in the follow	ng way	y:			
SEARCHING	What the research says about the tests					
SCREENING	What are Compression Ultrasound and ? The and Compression Ultrasound tests check for Recurrent VTE during 3 months follow up.					
DATA EXTRACTION	What the research says about the tests					
RISK OF BIAS	A positive test should mean that the person has Recurrent VTE during 3 months follow up. A negative test should mean the person does not have Recurrent VTE d are perfect and two problems can occur. A positive test could incorrectly say that a person has Recurrent VTE during 3 months follow up when in fact s/he does not	uring 3 ot (calle	months f d a "false	ollow up. positive")	But very few tests . As a consequenc	e,
ANALYSES	this person may have more testing, be worried or treated for no reason. A negative test could incorrectly say that a person does not have Recurrent VTE during 3 nonths follow up (called a "false negative"). In this person, Recurrent VTE during 3 months follow up would be missed by the test and s/h	onths f may n	ollow up	when in f the nece	act s/he does hav ssary treatment.	2
EVIDENCE TABLE	When the quality of the evidence is low or very low as opposed to moderate or high, the size of this problem can be considerably larger or smaller than what the	lumbers	indicate			
RECOMMENDATIONS	(For frequencies use)					
PRESENTATIONS OF R	The test Correctly says that:					
DISSEMINATION	<ul> <li>879 out of 1000 people do not have Recurrent VTE during 3 months follow up</li> <li>16 out of 1000 women do have Recurrent VTE during 3 months follow up</li> </ul>					

## Plain language summary

# Inadvertent user test(imonial)

I have twice been asked by the BBC to discuss a review I haven't read before at 20 minutes notice. If there is a summary of findings table it is possible. If not, I am in trouble!

David Tovey, Editor-in-Chief, Cochrane Collaboration

# Evidence profile

Summary of review finding	Studies contributing to the review finding	Methodological limitations	Coherence	Adequacy	Relevance**	CERQual assessment of confidence in the evidence	Explanation of CERQua assessment
1. Use of force: Women across the world reported experiencing physical force by health providers during childbirth. In some cases, women reported specific acts of violence committed against them during childbirth, but women often referred to these experiences in a general sense and alluded to beatings, aggression, physical abuse, a rough touch and use of extreme force. Pinching, hitting and slapping, either with an open hand or an instrument were the most commonly reported specific acts of physical violence.	6, 9, 10, 13, 21, 61, 67, 68, 73, 75, 77, 80, 84, 86, 87, 91, 96, 97	Moderate methodological limitations (6 studies with minor, 6 studies with moderate (unclear recruitment and sampling), and 3 studies with serious methodological limitations (unclear reflexivity, insufficiently rigorous data analysis))	No or very minor concerns about coherence (Good fit between data from primary studies and the review finding)	No or very minor concerns about adequacy (15 studies total from 10 countries. Rich data.)	Minor concerns about relevance (5 studies with direct relevance, 8 studies with partial relevance, and 1 study with unclear relevance. 15 studies total from 10 countries, including 1 high income, 2 middle income and 7 low income countries. Geographical spread: 2 studies in Asia, 1 study in Europe, 1 study in LAC, 1 study in MENA, 1 study in South America, and 8 studies from sub-Saharan Africa.)	High confidence	15 studies with moderate methodological limitations. Thick data from 10 countries across all geographical regions, but predominantly sub- Saharan Africa. No or very minor concerns about coherence.

### **GRADE** CERQual

# Summary of Qualitative Findings

Objective: To synthesize qualitative and quantitative evidence on the mistreatment of women during childbirth in health facilities.

Perspective: Experiences and attitudes of stakeholders in any country about the mistreatment of women during childbirth

Summary of review finding	Studies contributing to the review finding	CERQual assessment of confidence in the evidence	Explanation of CERQual assessment
1. Use of force: Women across the world reported experiencing physical force by health providers during childbirth. In some cases, women reported specific acts of violence committed against them during childbirth, but women often referred to these experiences in a general sense and alluded to beatings, aggression, physical abuse, a rough touch and use of extreme force. Pinching, hitting and slapping, either with an open hand or an instrument were the most commonly reported specific acts of physical violence.	6, 9, 10, 13, 21, 61, 67, 68, 73, 75, 77, 80, 84, 86, 87, 91, 96, 97	High confidence	15 studies with moderate methodological limitations. Thick data from 10 countries across all geographical regions, but predominantly sub-Saharan Africa. No or very minor concerns about coherence.
2. Physical restraint: Women reported physical restraint during childbirth through the use of bed restraints and mouth gags.	86, 97	Very low confidence	Two studies (Tanzania and Brazil) with moderate methodological limitations. Limited, thin data from 2 countries. Minor concerns about coherence but limited data available.
#### Using the results of a GRADE / GRADE-CERQual assessment





# Now that we have transparent evidence summaries

 Table 1. Summary of Findings Table Showing the Relative Risks and Absolute Effects over 12 Months for Each Important Outcome after Treatment with a Low-Molecular-Weight Heparin in Patients Receiving Chemotherapy for Cancer.\*

Outcome after 12 Months Participants		Relative Risk (95% CI)	Anticipated Absolute Effect		Quality of Evidence (GRADE) and Comments†					
			Risk without LMWH	Risk Difference with LMWH (95% CI)						
no. (no. of studies)			no. of events per 1000 patients							
Should every cancer patient receive heparin?										
	(510 (11)		16		venous thrombosis					
Major bleeding	6518 (11)	1.06 (0.71–1.57)	16	1 more (5 fewer to 9 more)	Moderate-quality evidence owing to imprecision; the increase may be acceptable to patients, given that VTE, which occurs more frequently, may be equally unpleasant					
Minor bleeding	6020 (9)	1.18 (0.89–1.55)	27	5 more (3 fewer to 15 more)	Moderate-quality evidence owing to imprecision; however, this outcome is unlikely to be criti- cal for decision making					



# Balancing desirable and undesirable consequences



### Many different ways to get at importance of outcomes

- Qualitative studies
- Standard gamble
- Time trade off
- Visual analogue scales
- Willingness to pay
- Utility indices



#### Summary of finding table

Question: What are the views about the relative value/importance of outcomes of interest in decision making for patients with chronic obstructive pulmonary disease?

Full health	Health state/Outcome (Categories of values and preferences)	Estimates of outcome importance (range across studies / pooled mean, 95% CI)	No. of participants /studies	Certainty in evidence	Interpretation of findings
0.70 0.60 0.50 0.40	Exacerbation (Utility* measured with visual analogue scale <sup>1</sup> )	range across studies: 0.259-0.466/ pooled mean: 0.377 (95% CI: 0.294, 0.461) <sup>2</sup>	1076 participants/ 4 studies <sup>2</sup>	⊕⊕⊕ Moderate certainty due to inconsistency <sup>2</sup>	Most people find exacerbation of COPD probably has a large impact on lives. There is likely no important variability for this assessment.
WORST IMAGINABLE HEALTH STATE Death	Exacerbation (EQ-5D Utility <sup>3</sup> )	range across studies 0.43-0.683/ pooled mean: 0.525 (95% CI: 0.434, 0.615) <sup>4</sup>	927 participants/ 3 studies <sup>4</sup>	⊕⊕ Low certainty due to inconsistency and indirectness <sup>4,5</sup>	Most people find exacerbation of COPD probably has a large impact on lives. There is likely no important variability for this assessment.
*Utilities represent the strength of an individual's preferences for different outcomes. They are measured on an interval scale, with zero reflecting states of health equivalent to death/worst imaginable health and one (or 100 in some cases) reflecting perfect health/ best imaginable health.	Exacerbation (disutility) <sup>6</sup>	Visual analogue scale: One non-serious exacerbation: -0.037 (0.005); Two non-serious exacerbations: -0.068 (0.005); One serious exacerbation: -0.090 (0.007); One non-serious and one serious exacerbation: - 0.130 (0.007) Time trade off: One non-serious exacerbation: -0.010 (0.007); Two non-serious exacerbations: -0.021 (0.007); One serious exacerbation: -0.042 (0.009); One non-serious and one serious exacerbation: - 0.088 (0.009)	239 participants/ 1 study	⊕⊕⊕⊕ High certainty	Most people find exacerbation of COPD has an impact on lives, which grows larger as the severity of exacerbation progresses. There is likely no important variability for this assessment.

But more than estimates of intervention effects influence the recommendation

- Priority of the problem
- Disease/condition frequency and burden
- Balance of the benefits harms
- For example, VTE unnecessary bleeds
- Patients' values and preferences related to VTE outcomes
- Equity
  - Can all patients be given the same attention and care
- Acceptability of intervention by different stakeholders
- Feasibility of administering the intervention