Preparing Summary of Findings tables for Cochrane Reviews

Introduction

Translating and presenting numbers

GRADEing the evidence

Applicability and Recommendations Methods Group
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Content

- Introduction to Summary of Findings Tables
- Format of Summary of Findings Tables
- Translating and presenting results from systematic reviews
- GRADEing the evidence from systematic reviews
- GRADEpro software to create Summary of Findings Tables

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[1]
Comparison: usual care

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk usual care	Corresponding risk self management				
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)	⊕⊕⊕⊝ **moderate**[2]	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 **0.53 lower** (0.96 to 0.1 lower)		144 (2)	⊕⊕⊝⊝ **low**[3,4]	Lower score indicates improvement
Number and severity of exacerbations[5]	See comment	See comment	Not estimable[6]	591 (3)	See comment	Effect is uncertain
Respiratory-related hospital admissions (follow-up: 3 to 12 months)	**Low risk population**[8]		OR 0.64 (0.47 to 0.89)	966 (8)	⊕⊕⊕⊝ **moderate**[7]	
	10 per 100	**7 per 100** (5 to 9)				
	High risk population[8]					
	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 **0.1 higher** (0.2 lower to 0.3 higher)		328 (4)	⊕⊕⊕⊝ **moderate**[4]	
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)	⊕⊕⊕⊝ **moderate**[8]	

*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;

Summary of Findings Table

- presentation of the **results** of a review that is easier to understand
- a rating of the **quality of the evidence** (how confident we are in the effect and the size of the effect)

Summary of key information from systematic reviews: PICO

Self-management education for patients with chronic obstructive pulmonary disease (Review)

Effing T, Monninkhof EM, van der Valk PDLPM, van der Palen J, van Herwaarden CLA, Partidge MR, Walters EH, Zielhuis GA

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ABSTRACT

Background
There is great interest in chronic obstructive pulmonary disease (COPD) and the associated large burden of disease. COPD is characterised by frequent day by day fluctuations, and repetitive clinical exacerbations are typical. Self-management is a term applied to educational programmes 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. In COPD, the value of self-

Summary of key information from systematic reviews: results

and one study (Howland 1986) scored one point (Jadad 1996).

RESULTS

Health-related quality of life

Instruments for measurement of HRQoL differed widely among the studies. COPD-specific HRQoL was measured by means of the St. George's Respiratory Questionnaire (SGRQ) in seven studies (Watson 1997; Gallefoss 1999a; Bourbeau 2003; Monninkhof 2003; Martin 2004; Boxall 2005; (Coultas 2005a; Coultas 2005b)). The SGRQ-total and -domain scores in the self-management groups were all lower (indicating a better HRQoL) or equal to the scores in the usual care groups. The differences on the SGRQ-total (WMD -2.58; 95% CI (-5.14 to -0.02)) and impact scores (WMD -2.83; 95% CI (-5.65 to -0.02)) reached statistical significance at the 5% level, but did not reach the clinically relevant improvement of 4 points. No significant or clinically relevant difference was found on the SGRQ-symptom score (WMD -1.45; 95% CI (-4.41 to 1.51)). The SGRQ-domain physical activity did not show a statistically significant effect in favour of treatment (WMD -2.88; 95% CI (-5.9 to 0.13)). The level of statistical heterogeneity for this outcome may be related to the outlying effect reported in Watson 1997, since its removal led to a lower I square statistic (65% versus 0%). Exploration of varying study character-

eral HRQoL was not significantly different between the self-management and control group. Gourley 1998 showed significantly improved scores for the well-being dimension of the Health Status Questionnaire 2.0 in the intervention group. Coultas 2005b found a statistically significant improvement in the perceived Illness Intrusiveness instrument in one of the intervention groups (nurse assisted collaborative management) compared with usual care. However, the author noted that the clinical relevance of this finding was uncertain.

Symptoms

The effect of self-management education on COPD symptoms was examined in five studies (Gourley 1998; Watson 1997; Bourbeau 2003; Monninkhof 2003; Boxall 2005). In the studies by Gourley 1998 and Boxall 2005, dyspnoea was assessed with the BORG-scale. Meta-analysis showed a small but significant effect at the 5% level in favour of treatment (WMD -0.53; 95% CI (-0.96 to -0.10)). In the study by Gourley 1998, the Global Assessment Scale (measuring symptom severity on a 6-point scale) was also used. It showed a reduction (not statistically significant) in symptom severity in the self-management education group, while in the control group no reduction was observed. In the study by Watson 1997, patients scored their respiratory status in symptom diaries on a four-point scale (usual; mild; moderate; severe). They found no significant between-group differences in the proportion of days rated as mild, moderate or severe. In the study by Monninkhof

Summary of key information from systematic reviews: Forest and Funnel Plots

Analysis 01.01. Comparison 01 Self-management versus control, Outcome 01 HRQOL: SGRQ total

Review: Self-management education for patients with chronic obstructive pulmonary disease

Comparison: 01 Self-management versus control

Outcome: 01 HRQOL: SGRQ total

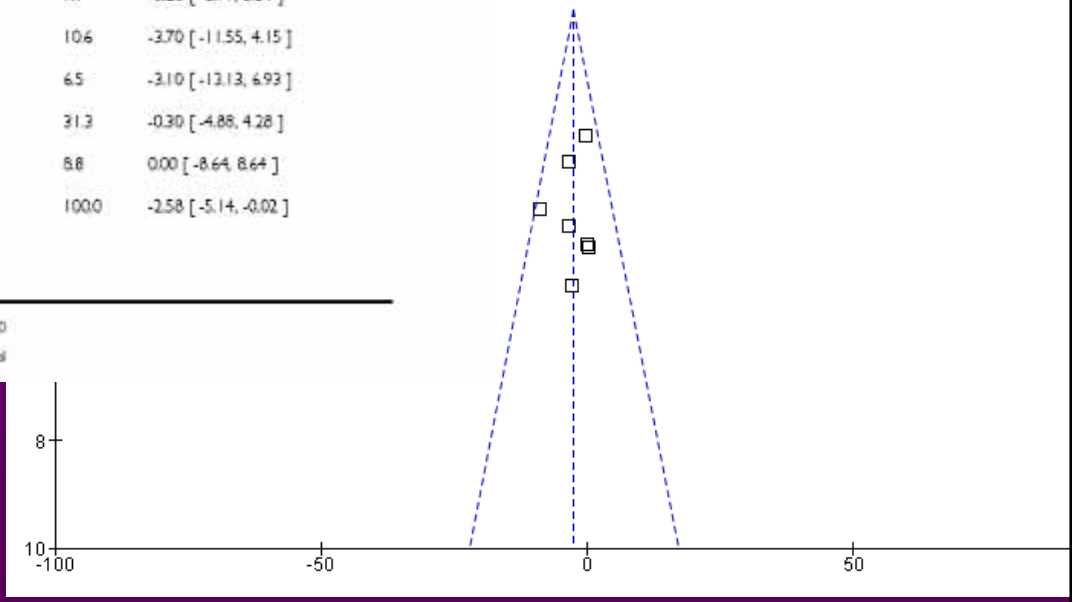
Study	Treatment N	Treatment Mean(SD)	Control N	Control Mean(SD)	Weighted Mean Difference (Fixed) 95% CI	Weight (%)	Weighted Mean Difference (Fixed) 95% CI
Bourbeau 2003	81	50.60 (17.80)	76	54.20 (17.60)		21.4	-3.60 [-9.14, 1.94]
Boxall 2005	23	50.70 (11.80)	23	59.60 (13.30)		12.4	-8.90 [-16.17, -1.63]
Coultas 2005a	49	58.60 (20.40)	26	58.80 (16.40)		9.1	-0.20 [-8.71, 8.31]
Coultas 2005b	51	55.10 (16.40)	25	58.80 (16.40)		10.6	-3.70 [-11.55, 4.15]
Gallefoss 1999a	26	40.00 (16.00)	27	43.10 (21.00)		6.5	-3.10 [-13.13, 6.93]
Monninkhof 2003	122	37.40 (18.80)	113	37.70 (17.00)		31.3	-0.30 [-4.88, 4.28]
Watson 1997	29	39.00 (17.00)	27	39.00 (16.00)		8.8	0.00 [-8.64, 8.64]
Total (95% CI)	381		317			100.0	-2.58 [-5.14, -0.02]

Test for heterogeneity chi-square=4.72 df=6 p=0.58 I^2 =0.0%

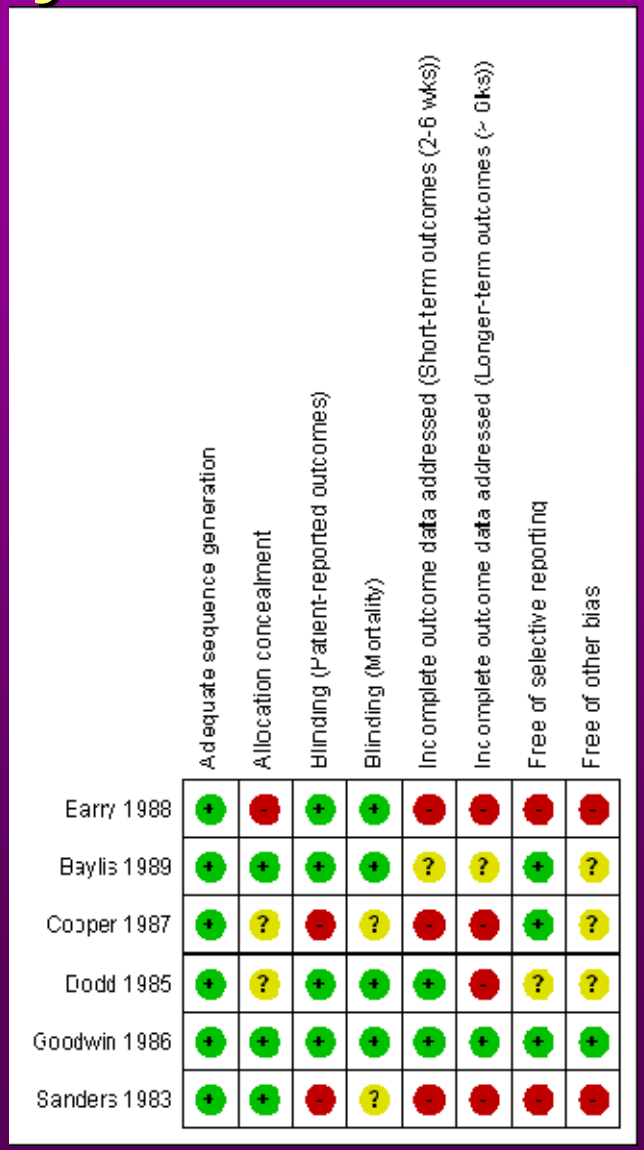
Test for overall effect z=1.98 p=0.05

-100.0 -50.0 0 50.0 100.0

Favours treatment Favours control



Summary of key information from systematic reviews: Bias



Risk of

Bias Tables

Summary of key information from systematic reviews: Abstract

ABSTRACT

Background

There is great interest in chronic obstructive pulmonary disease (COPD) and the associated large burden of disease. COPD is characterised by frequent day by day fluctuations, and repetitive clinical exacerbations are typical. Self-management is a term applied to educational programmes 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. In COPD, the value of self-management education is not yet clear. The first Cochrane review about self-management was published in 2003. It was intended to shed light on the effectiveness of self-management programmes in COPD and the relative efficacy of their constitutive elements. No conclusions about the effectiveness of self-management could be drawn because of the large variation in outcome measures used in the limited number of included studies. This article describes the first update of this review.

Objectives

The objective of this review was to assess the settings, methods and efficacy of COPD self-management education programmes on health outcomes and use of health care services.

Search strategy

We searched the Cochrane Airways Group trial register, MEDLINE (January 1985 to January 2006), reference lists, and abstracts of medical conferences.

Selection criteria

Controlled trials (randomised and non-randomised) of self-management education in patients with COPD. Studies focusing mainly on pulmonary rehabilitation and studies without usual care as a control group were excluded.

Data collection and analysis

Two reviewers independently assessed study quality and extracted data. Investigators were contacted for additional information.

Main results

The reviewers included 15 group comparisons drawn from 14 trials. They assessed a broad-spectrum of interventions and health outcomes with different follow-up times. Meta-analyses could often not appropriately be performed because of heterogeneity among studies. The studies showed a significant reduction in the probability of at least one hospital admission among patients receiving self-management education compared to those receiving usual care (OR 0.64; 95% CI (0.47 to 0.89)). This translates into a one year NNT ranging from 10 (6 to 35) for patients with a 51% risk of exacerbation, to an NNT of 24 (16 to 80) for patients with a 13% risk of exacerbation. On the disease specific SGRQ, differences reached statistical significance at the 5% level on the total score (WMD -2.58; 95% CI (-5.14 to -0.02)) and impact domain (WMD -2.83; 95% CI (-5.65 to -0.02)), but these difference did not reach the clinically relevant improvement of 4 points. A small but significant reduction was detected in dyspnoea measured with the BORG-scale (WMD -0.53; 95% CI (-0.96 to -0.10)). No significant effects were found either in number of exacerbations, emergency department visits, lung function, exercise capacity, and days lost from work. Inconclusive results were observed in doctor and nurse visits, on symptoms other than dyspnoea, the use of courses of oral corticosteroids and antibiotics, and the use of rescue medication.

Authors' conclusions

It is likely that self-management education is associated with a reduction in hospital admissions with no indications for detrimental effects in other outcome parameters. This would in itself already be enough reason for recommending self-management education in COPD. However, because of heterogeneity in interventions, study populations, follow-up time, and outcome measures, data are still insufficient to formulate clear recommendations regarding the form and contents of self-management education programmes in COPD. There is an evident need for more large RCTs with a long-term follow-up, before more conclusions can be drawn.

Summary of Findings Table: A summary of key information from systematic reviews

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[1]
Comparison: usual care

Outcomes	Illustrative comparative risks* (95% CI) Assumed risk usual care	Corresponding risk self management	Relative effect (95% CI)	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 **2.58 lower** (5.14 to 0.02 lower)		698 (7)	⊕⊕⊕⊖ **moderate**[2]	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 **0.53 lower** (0.96 to 0.1 lower)		144 (2)	⊕⊕⊖⊖ **low**[3,4]	Lower score indicates improvement
Number and severity of exacerbations[5]	See comment	See comment	Not estimable[6]	591 (3)	See comment	Effect is uncertain
Respiratory-related hospital admissions (follow-up: 3 to 12 months)	**Low risk population**[8]		**OR 0.64** (0.47 to 0.89)	966 (8)	⊕⊕⊕⊖ **moderate**[7]	
	10 per 100	**7 per 100** (5 to 9)				
	High risk population[8]					
	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 **0.1 higher** (0.2 lower to 0.3 higher)		328 (4)	⊕⊕⊕⊖ **moderate**[4]	
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)	⊕⊕⊕⊖ **moderate**[8]	

*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).

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Summary of Findings table

- New to Cochrane reviews & RevMan 5
- User tested, based on a broader system of evaluating and presenting evidence
- SoFs and evidence profiles are starting to be used by a variety of organisations (WHO, NICE, CADTH, guideline developers, etc.) – is a record of the evidence
- increases the usability of reviews and helps people make better informed decisions

EXAMPLE: Should self management programmes be recommended/funded for people with COPD?

- Will people have a better quality of life if they attend? Fewer exacerbations? Fewer visits to see their doctor? Fewer visits to emergency?
- If you tell me that research says it improves my COPD, how much does it improve? Will that make a difference in a person's life?
- How likely is it that scientists are going to change their mind tomorrow and tell me it doesn't improve symptoms?

Summary of Findings Table answers these questions

Format of a Summary of Findings Table

- PICO
- Outcomes
- Results
  - Participants and studies
  - Relative effects
  - Baseline/Assumed Risk and Intervention/Corresponding Risks
- Quality of the Evidence
- Comments
- Footnotes

Participants, interventions, comparisons, outcomes

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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 **0.1 higher** (0.2 lower to 0.3 higher)		328 (4)	⊕⊕⊕⊖ **moderate**[4]	

Primary outcomes – up to 7

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Doctor and nurse	The mean doctor	The mean doctor		629	⊕⊕⊕⊖	

- primary outcomes
- patient important outcomes
- outcomes with or without results
- Better description of the outcomes – more meaning

Results – Number of Participants/studies

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- Moves away from simply saying "this review found 12 low to moderate quality studies" and these are the results
- More clear that only some studies contributed information about an outcome

Results – Relative effects

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- From meta-analysis
- Relative Risks, Odds ratios, Hazard ratios, etc.

Results – Baseline risks (Assumed Risk)

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- Indication of what happens to people without intervention
- Representative of population at different levels of risk

Results – Risk with intervention (Corresponding Risk)

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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 **0.53 lower** (0.96 to 0.1 lower)		144 (2)	⊕⊕⊖⊖ **low**[3,4]	Lower score indicates improvement
Number and severity of exacerbations[5]	See comment	See comment	Not estimable[5]	591 (3)	See comment	Effect is uncertain
Respiratory-related hospital admissions (follow-up: 3 to 12 months)	**Low risk population**[6]		**OR 0.64** (0.47 to 0.89)	966 (8)	⊕⊕⊕⊖ **moderate**[7]	
	10 per 100	**7 per 100** (5 to 9)				
	High risk population[6]					
	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 **0.1 higher** (0.2 lower to 0.3 higher)		328 (4)	⊕⊕⊕⊖ **moderate**[4]	
Doctor and nurse	The mean doctor	The mean doctor		629	⊕⊕⊕⊖	

- What happens to people with the intervention
- Calculated using Relative Effects or Mean Differences
- Confidence intervals provided

Quality 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[1]
Comparison: usual care

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk usual care	Corresponding risk self management				
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)	⊕⊕⊕⊖ **moderate**[2]	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 **0.53 lower** (0.96 to 0.1 lower)		144 (2)	⊕⊕⊖⊖ **low**[3,4]	Lower score indicates improvement
Number and severity of exacerbations[5]	See comment	See comment	Not estimable[5]	591 (3)	See comment	Effect is uncertain
Respiratory-related hospital admissions (follow-up: 3 to 12 months)	**Low risk population**[6]		**OR 0.64** (0.47 to 0.89)	966 (8)	⊕⊕⊕⊖ **moderate**[7]	
	10 per 100	**7 per 100** (5 to 9)				
	High risk population[6]					
	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 **0.1 higher** (0.2 lower to 0.3 higher)		328 (4)	⊕⊕⊕⊖ **moderate**[4]	

- Evidence for each outcome is graded
- Based on the GRADE approach
- Uses information from the Risk of Bias tables

Comments

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[1]
Comparison: usual care

Outcomes	Illustrative comparative risks* (95% CI) Assumed risk usual care	Corresponding risk self management	Relative effect (95% CI)	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 **2.58 lower** (5.14 to 0.02 lower)		698 (7)	⊕⊕⊕⊖ **moderate**[2]	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 **0.53 lower** (0.96 to 0.1 lower)		144 (2)	⊕⊕⊖⊖ **low**[3,4]	Lower score indicates improvement
Number and severity of exacerbations[5]	See comment	See comment	Not estimable[5]	591 (3)	See comment	Effect is uncertain
Respiratory-related hospital admissions (follow-up: 3 to 12 months)	**Low risk population**[6]		**OR 0.64** (0.47 to 0.89)	966 (8)	⊕⊕⊕⊖ **moderate**[7]	
	10 per 100	**7 per 100** (5 to 9)				
	High risk population[6]					
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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 **0.1 higher** (0.2 lower to 0.3 higher)		328 (4)	⊕⊕⊕⊖ **moderate**[4]	

- More description
- EG. relevance of findings, notes when no data, no meta-analysis, or meta-analysis plus studies not in meta-analysis

Footnotes

[1] 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.

[2] Seven other studies were not pooled and some showed non-significant effects.

[3] No allocation concealment in 1 study. Incomplete follow-up.

[4] Sparse data.

[5] 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%).

[7] 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.

[8] Unexplained heterogeneity.

- Clarification
- Judgements
- Transparency

Where do the numbers come from?

Dichotomous and Continuous Outcomes

DICHOTOMOUS OUTCOMES YES/NO

Outcomes	Illustrative comparative risks* (95% CI) Assumed risk Control	Corresponding risk Amantadine	Relative effect (95% CI)	No of Parti (studies)
Cases of Infection with prophylaxis (follow up: 14-18 weeks)	**Medium risk population**		**RR 0.11** (0.04 to 0.3)	773 (2)
	10 per 100	**1 per 100** (0 to 3)		

Amantadine to prevent the influenza

Outcome: cases of infection (infection or not)

Results from meta-analysis: Relative Risk, Odds Ratio…

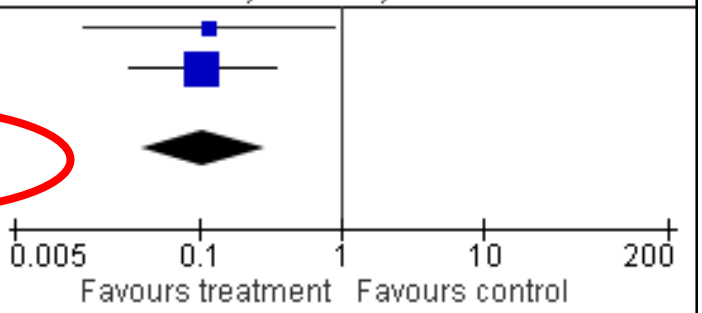
Results presented as: #s per 100/1000

Information from Meta-analysis

Study or Subgroup	Treatment Events	Treatment Total	Control Events	Control Total	Weight	Risk Ratio M-H, Random, 95% CI
Finklea 1967	1	104	11	133	25.1%	0.12 [0.02, 0.89]
Payler 1984	3	267	29	269	74.9%	0.10 [0.03, 0.34]
Total (95% CI)		**371**		**402**	**100.0%**	**0.11 [0.04, 0.30]**
Total events	4		40			

Heterogeneity: Tau² = 0.00; Chi² = 0.01, df = 1 (P = 0.93); I² = 0%

Test for overall effect: Z = 4.30 (P < 0.0001)



DICHOTOMOUS OUTCOMES YES/NO

Outcomes	Illustrative comparative risks* (95% CI) Assumed risk Control	Corresponding risk Amantadine	Relative effect (95% CI)	No of Parti (studies)
Cases of Infection with prophylaxis (follow-up: 14-18 weeks)	**Medium risk population**		**RR 0.11** (0.04 to 0.3)	773 (2)
	10 per 100	**1 per 100** (0 to 3)		

Converting RR to # per 100

RR = 0.11

The risk of infection is less likely in people who take amantadine

or…

The risk of infection in the amantadine group is 0.11 times the risk in the group not taking amantadine

DICHOTOMOUS OUTCOMES YES/NO

Outcomes	Illustrative comparative risks* (95% CI) Assumed risk Control	Corresponding risk Amantadine	Relative effect (95% CI)	No of Parti (studies)
Cases of Infection with prophylaxis (follow-up: 14-18 weeks)	**Medium risk population**		RR 0.11 (0.04 to 0.3)	773 (2)
	10 per 100	**1 per 100** (0 to 3)		

Step 1: Assumed Risk

How many people have an infection without amantadine?

- Based on a median risk in the control groups from the studies
- or, baseline risk from observational studies
- or, different risk groups (low to high) in studies

In this case, there were 2 studies in the meta-analysis, calculation of the median risk was representative

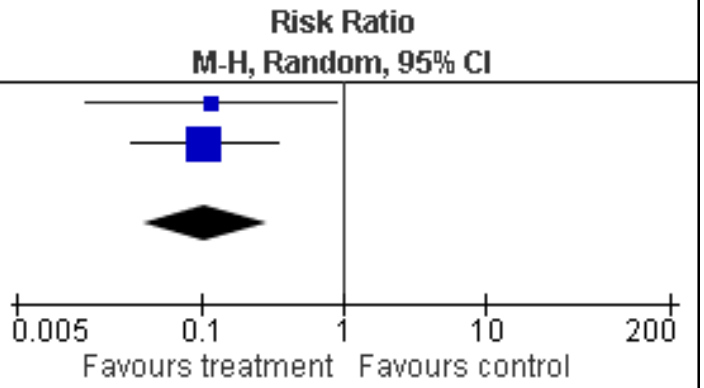
- 10 out of 100 people have the infection if they don't take amantadine

Information from Meta-analysis

Study or Subgroup	Treatment Events	Total	Control Events	Total	Weight	Risk Ratio M-H, Random, 95% CI
Finklea 1967	1	104	11	133	25.1%	0.12 [0.02, 0.89]
Payler 1984	3	267	29	269	74.9%	0.10 [0.03, 0.34]
Total (95% CI)		**371**		**402**	**100.0%**	**0.11 [0.04, 0.30]**
Total events	4		40			

Heterogeneity: $Tau^2 = 0.00$; $Chi^2 = 0.01$, $df = 1$ ($P = 0.93$); $I^2 = 0\%$

Test for overall effect: $Z = 4.30$ ($P < 0.0001$)



DICHOTOMOUS OUTCOMES YES/NO

Outcomes	Illustrative comparative risks* (95% CI) Assumed risk Control	Corresponding risk Amantadine	Relative effect (95% CI)	No of Parti (studies)
Cases of Infection with prophylaxis (follow-up: 14-18 weeks)	**Medium risk population**		**RR 0.11** (0.04 to 0.3)	773 (2)
	10 per 100	**1 per 100** (0 to 3)		

Step 2: Relative effect

- RR = 0.11

Step 3: Corresponding Risk

How many people have an infection with amantadine?

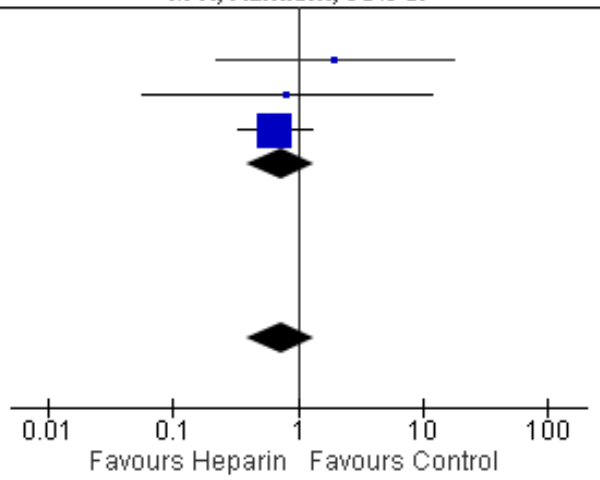
assumed risk X relative risk = corresponding risk

10 X 0.11 = 1

- 1 per 100 people have the infection if they take amantadine

Example: Heparin to reduce clots – outcome death

Study or Subgroup	Heparin Events	Heparin Total	Control Events	Control Total	Weight	Risk Ratio M-H, Random, 95% CI
1.1.1 LMWH vs. Control						
Karthaus 2006	4	285	1	140	8.1%	1.96 [0.22, 17.42]
Monreal 1996	1	16	1	13	5.4%	0.81 [0.06, 11.77]
Verso 2005	13	191	20	194	86.5%	0.66 [0.34, 1.29]
Subtotal (95% CI)		**492**		**347**	**100.0%**	**0.73 [0.39, 1.36]**
Total events	18		22			
Heterogeneity: Tau² = 0.00; Chi² = 0.89, df = 2 (P = 0.64); I² = 0%						
Test for overall effect: Z = 0.99 (P = 0.32)						
Total (95% CI)		**492**		**347**	**100.0%**	**0.73 [0.39, 1.36]**
Total events	18		22			
Heterogeneity: Tau² = 0.00; Chi² = 0.89, df = 2 (P = 0.64); I² = 0%						
Test for overall effect: Z = 0.99 (P = 0.32)						



- Median assumed risk = 7.7%

Outcomes	Illustrative comparative risks* (95% CI) Assumed risk no treatment	Corresponding risk heparin	Relative effect (95% CI)	No of Parti (studies)
Death	Medium risk population		RR 0.73 (0.39 to 1.36)	839 (3)
	8 per 100	6 per 100 (3 to 10)		

Corresponding Risk = Assumed Risk X Relative Risk

Relative Risk 0.73

7.7 per 100 X 0.73 = 5.621 = **6 per 100**

Confidence intervals (0.39 to 1.36)

7.7 per 100 X 0.39 = 3.003 = **3 per 100**

7.7 per 100 X 1.36 = 10.472 = **10 per 100**

Note: in this case we used "per 100", in some cases "per 1000" may illustrate the differences between the groups better

Odds ratio

Respiratory-related hospital admissions (follow-up: 3 to 12 months)	Low risk population[c]		OR 0.64 (0.47 to 0.89)	966 (8)
	10 per 100	7 per 100 (5 to 9)		
	High risk population[c]			
	50 per 100	39 per 100 (32 to 47)		

- Need to first convert the OR to an RR
- Based on formula in handbook

$$RR = \frac{OR}{1 - (R_{as} \times (1 - OR))}$$

CONTINUOUS OUTCOMES Mean Difference

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)
	Assumed risk **usual care**	Corresponding risk **self management**		
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)

Self management programmes to improve quality of life in people with COPD

Outcome: Quality of Life scale (0 to 100 scale)

Results from meta-analysis: Mean differences (WMD or SMD)

Results presented as: points on a scale

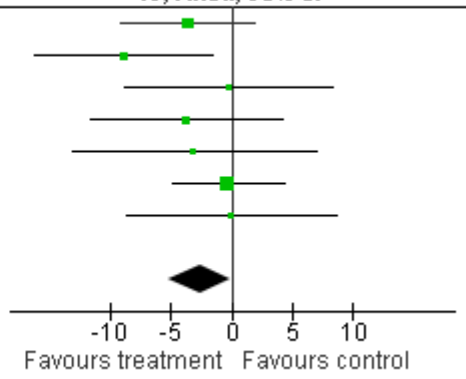
CONTINUOUS OUTCOMES

Mean Difference

Study or Subgroup	Treatment Mean	Treatment SD	Treatment Total	Control Mean	Control SD	Control Total	Weight	Mean Difference IV, Fixed, 95% CI
Bourbeau 2003	50.6	17.8	81	54.2	17.6	76	21.4%	-3.60 [-9.14, 1.94]
Boxall 2005	50.7	11.8	23	59.6	13.3	23	12.4%	-8.90 [-16.17, -1.63]
Coultas 2005a	58.6	20.4	49	58.8	16.4	26	9.1%	-0.20 [-8.71, 8.31]
Coultas 2005b	55.1	16.4	51	58.8	16.4	25	10.6%	-3.70 [-11.55, 4.15]
Gallefoss 1999a	40	16	26	43.1	21	27	6.5%	-3.10 [-13.13, 6.93]
Monninkhof 2003	37.4	18.8	122	37.7	17	113	31.3%	-0.30 [-4.88, 4.28]
Watson 1997	39	17	29	39	16	27	8.8%	0.00 [-8.64, 8.64]
Total (95% CI)			**381**			**317**	**100.0%**	**-2.58 [-5.14, -0.02]**

Heterogeneity: Chi² = 4.72, df = 6 (P = 0.58); I² = 0%

Test for overall effect: Z = 1.98 (P = 0.05)



Step 1: Assumed Risk

In people who don't do a self management programme, what is their score on the Quality of Life scale?

- Based on the range of mean scores in the control groups from the studies
- or, range from observational studies

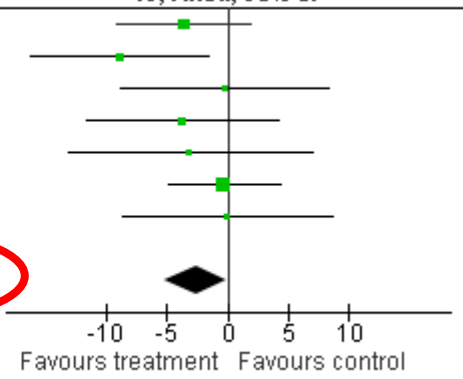
In this case, there were 7 studies in the meta-analysis, range of scores was from

- 38 to 60 points

CONTINUOUS OUTCOMES Mean Difference

Study or Subgroup	Treatment Mean	Treatment SD	Treatment Total	Control Mean	Control SD	Control Total	Weight	Mean Difference IV, Fixed, 95% CI
Bourbeau 2003	50.6	17.8	81	54.2	17.6	76	21.4%	-3.60 [-9.14, 1.94]
Boxall 2005	50.7	11.8	23	59.6	13.3	23	12.4%	-8.90 [-16.17, -1.63]
Coultas 2005a	58.6	20.4	49	58.8	16.4	26	9.1%	-0.20 [-8.71, 8.31]
Coultas 2005b	55.1	16.4	51	58.8	16.4	25	10.6%	-3.70 [-11.55, 4.15]
Gallefoss 1999a	40	16	26	43.1	21	27	6.5%	-3.10 [-13.13, 6.93]
Monninkhof 2003	37.4	18.8	122	37.7	17	113	31.3%	-0.30 [-4.88, 4.28]
Watson 1997	39	17	29	39	16	27	8.8%	0.00 [-8.64, 8.64]
Total (95% CI)			**381**			**317**	**100.0%**	**-2.58 [-5.14, -0.02]**

Heterogeneity: Chi² = 4.72, df = 6 (P = 0.58); I² = 0%
Test for overall effect: Z = 1.98 (P = 0.05)



Step 2: Effect

The effect is expressed as the Mean Difference between the Quality of life score with a self management programme and the score without self management.

MD = - 2.58 (- 5.14, - 0.02)

When doing a self management programme, the score on the Quality of Life scale is 2.58 points better on average.

CONTINUOUS OUTCOMES Mean Difference

Self management for patients with chronic obstructive pulmonary disease

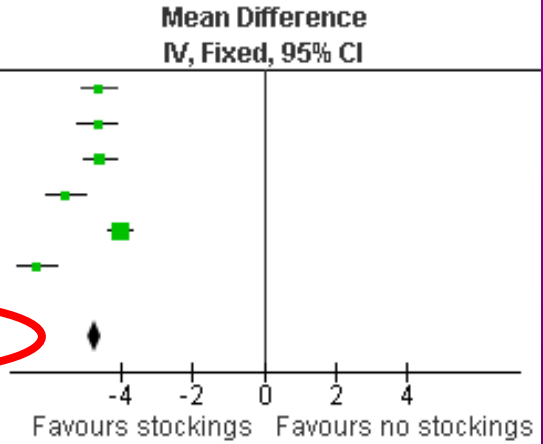
Patient or population: patients with chronic obstructive pulmonary disease
Settings: primary care, community, outpatient
Intervention: self management[1]
Comparison: usual care

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)
	Assumed risk **usual care**	Corresponding risk **self management**		
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)

Example: compression stockings to prevent thrombosis in people flying – outcome oedema

Study or Subgroup	Stockings Mean	SD	Total	No stockings Mean	SD	Total	Weight	Mean Difference IV, Fixed, 95% CI
LONFLIT 4 - Kendall1	2.3	1	72	6.9	2	72	13.7%	-4.60 [-5.12, -4.08]
LONFLIT 4 - Kendall2	3.3	1.2	66	7.94	2	66	11.6%	-4.64 [-5.20, -4.08]
LONFLIT 4 - Scholl1	2.16	1.1	179	6.74	3.1	179	15.8%	-4.58 [-5.06, -4.10]
LONFLIT 4 - Scholl2	2.56	1.5	136	8.08	2.9	135	12.1%	-5.52 [-6.07, -4.97]
LONFLIT 4 - Traveno1	2.4	1	97	6.4	1.3	98	34.7%	-4.00 [-4.33, -3.67]
LONFLIT 4 - Traveno2	2.56	1.3	75	8.9	2	71	12.1%	-6.34 [-6.89, -5.79]
Total (95% CI)			**625**			**621**	**100.0%**	**-4.72 [-4.91, -4.52]**

Heterogeneity: Chi² = 60.81, df = 5 (P < 0.00001); I² = 92%
Test for overall effect: Z = 48.26 (P < 0.00001)



- Oedema scale from 0 to 10

Summary of Findings for compression stockings to prevent thrombosis in people flying – outcome oedema

Oedema Post-flight values.. Scale from: 0 to 10.	The mean oedema ranged across control groups from **6 to 9**	The mean Oedema in the intervention groups was **4.7 lower** (4.9 to 4.5 lower)		1246 (6)

CONTINUOUS OUTCOMES

Re-expressing SMD using a familiar scale

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)
	Assumed risk	Corresponding risk		
	no treatment	**glucosamine**		
Pain Scale from: 0 to 10. (follow-up: 1-3 months)	The mean pain in the control groups was **6.6**	The mean Pain in the intervention groups was **0.8 lower** (2.1 lower to 0.5 higher)		1111 (8)

Glucosamine to improve arthritis

Outcome: Pain (many scales used)

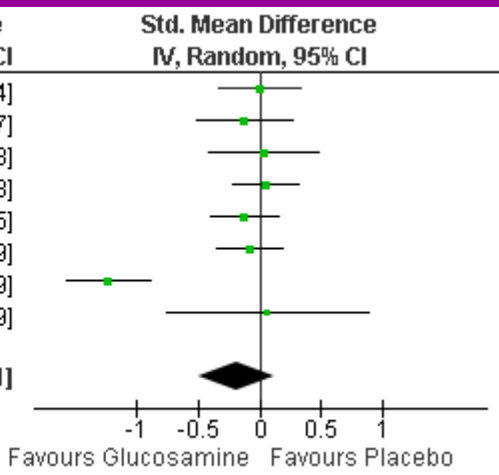
Results from meta-analysis: Standard Mean difference (SMD)

Results presented as: points on a scale

CONTINUOUS OUTCOMES SMD

Study or Subgroup	Glucosamine Mean	SD	Total	Placebo Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Cibere 2004	129.72	113.23	71	129.62	118.02	66	13.3%	0.00 [-0.33, 0.34]
Houpt 1999	7.14	4.01	45	7.65	4.13	53	12.4%	-0.12 [-0.52, 0.27]
Hughes 2002	7.5	4.81	39	7.35	4.38	39	11.8%	0.03 [-0.41, 0.48]
McAlindon 2004	6.8	3.3	101	6.6	4.2	104	14.0%	0.05 [-0.22, 0.33]
Pavelka 2002	4.61	3.45	101	5.03	3.13	101	14.0%	-0.13 [-0.40, 0.15]
Reginster 2001	156.1	101.9	106	164.2	104.5	106	14.0%	-0.08 [-0.35, 0.19]
Rovati 1997	24.3	19.3	79	50	22	77	13.1%	-1.24 [-1.58, -0.89]
Zenk 2002	-74.7	26.3	13	-76.5	25.1	10	7.3%	0.07 [-0.76, 0.89]
Total (95% CI)			**555**			**556**	**100.0%**	**-0.19 [-0.50, 0.11]**

Heterogeneity: Tau² = 0.15; Chi² = 42.29, df = 7 (P < 0.00001); I² = 83%
Test for overall effect: Z = 1.22 (P = 0.22)



Step 1: Assumed Risk

In people who don't take glucosamine, what is their pain score?

- Based on the scores in the control groups of studies using a familiar scale

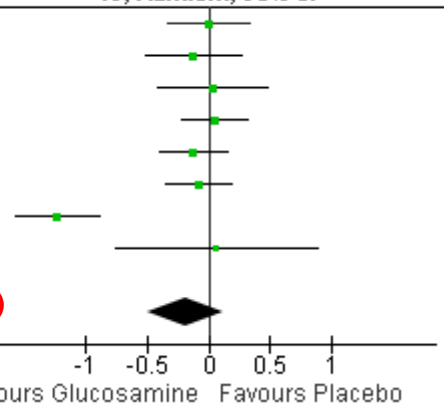
In this case, the McAlindon study was representative and used the WOMAC pain scale

- pain scale was 0 to 20
- 3 other studies used this scale (Houpt, Hughes, Pavelka)
- second highest and second lowest scores represented assumed risk

CONTINUOUS OUTCOMES SMD

Study or Subgroup	Glucosamine Mean	SD	Total	Placebo Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Cibere 2004	129.72	113.23	71	129.62	118.02	66	13.3%	0.00 [-0.33, 0.34]
Houpt 1999	7.14	4.01	45	7.65	4.13	53	12.4%	-0.12 [-0.52, 0.27]
Hughes 2002	7.5	4.81	39	7.35	4.38	39	11.8%	0.03 [-0.41, 0.48]
McAlindon 2004	6.8	3.3	101	6.6	4.2	104	14.0%	0.05 [-0.22, 0.33]
Pavelka 2002	4.61	3.45	101	5.03	3.13	101	14.0%	-0.13 [-0.40, 0.15]
Reginster 2001	156.1	101.9	106	164.2	104.5	106	14.0%	-0.08 [-0.35, 0.19]
Rovati 1997	24.3	19.3	79	50	22	77	13.1%	-1.24 [-1.58, -0.89]
Zenk 2002	-74.7	26.3	13	-76.5	25.1	10	7.3%	0.07 [-0.76, 0.89]
Total (95% CI)			**555**			**556**	**100.0%**	**-0.19 [-0.50, 0.11]**

Heterogeneity: Tau² = 0.15; Chi² = 42.29, df = 7 (P < 0.00001); I² = 83%
Test for overall effect: Z = 1.22 (P = 0.22)



Step 2: Effect

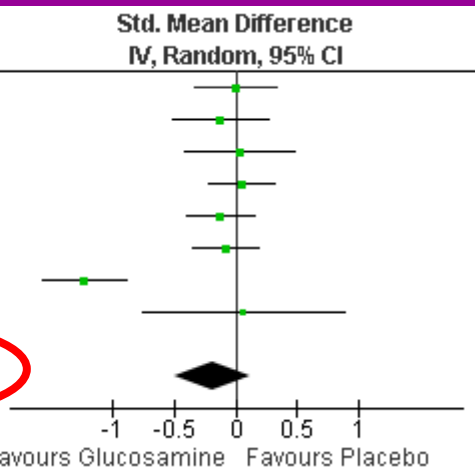
The effect is expressed as a Mean Difference between the pain score with glucosamine and the score without glucosamine. The difference has been standardised because different scales were used in the studies.

SMD = - 0.19 (- 0.50, 0.11)

CONTINUOUS OUTCOMES SMD

Study or Subgroup	Glucosamine Mean	SD	Total	Placebo Mean	SD	Total	Weight	Std. Mean Difference IV, Random, 95% CI
Cibere 2004	129.72	113.23	71	129.62	118.02	66	13.3%	0.00 [-0.33, 0.34]
Houpt 1999	7.14	4.01	45	7.65	4.13	53	12.4%	-0.12 [-0.52, 0.27]
Hughes 2002	7.5	4.81	39	7.35	[illegible]	39	11.8%	0.03 [-0.41, 0.48]
McAlindon 2004	6.8	3.3	101	6.6	4.2	104	14.0%	0.05 [-0.22, 0.33]
Pavelka 2002	4.61	3.45	101	5.03	[illegible]	101	14.0%	-0.13 [-0.40, 0.15]
Reginster 2001	156.1	101.9	106	164.2	104.5	106	14.0%	-0.08 [-0.35, 0.19]
Rovati 1997	24.3	19.3	79	50	22	77	13.1%	-1.24 [-1.58, -0.89]
Zenk 2002	-74.7	26.3	13	-76.5	25.1	10	7.3%	0.07 [-0.76, 0.89]
Total (95% CI)			**555**			**556**	**100.0%**	**-0.19 [-0.50, 0.11]**

Heterogeneity: Tau² = 0.15; Chi² = 42.29, df = 7 (P < 0.00001); I² = 83%
Test for overall effect: Z = 1.22 (P = 0.22)



Step 3: Corresponding Risk – using familiar scale

<u>What is the difference in pain score with glucosamine?</u>

SMD X SD of representative study = corresponding risk

From meta-analysis, McAlindon study, SD = 4.2

- 0.19 X 4.2 = - 0.798 = 0.8 points lower

NOTE: many times the mean and SD may not be included in the meta-analysis – consult original study

CONTINUOUS OUTCOMES

Re-expressing SMD using a familiar scale

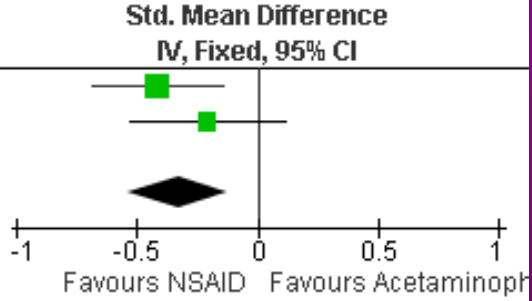
Summary of Findings
for glucosamine for osteoarthritis - outcome pain

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk **no treatment**	Corresponding risk **glucosamine**				
Pain WOMAC[1]. Scale from: 0, no pain to 20, worst pain. (follow-up: mean 3 months)	The mean pain ranged across control groups from **6.8 to 7.1**	The mean Pain in the intervention groups was **0.8 lower** (2.1 lower to 0.5 higher)		1111 (8)	⊕⊕OO **low**[2,3]	Scores estimated using a standardised mean difference of -0.19 (-0.50 to 0.11)

Example: NSAIDs vs acetaminophen for osteoarthritis – outcome global assessment

Study or Subgroup	NSAID Mean	NSAID SD	NSAID Total	Acetaminophen Mean	Acetaminophen SD	Acetaminophen Total	Weight	Std. Mean Difference IV, Fixed, 95% CI
Pincus 2001	35.41	18.11	101	43.83	21.63	11	58.6%	-0.42 [-0.69, -0.15]
Williams 1993	2.31	0.55	74	2.44	0.67	73	41.4%	-0.21 [-0.54, 0.11]
Total (95% CI)			**175**			**184**	**100.0%**	**-0.33 [-0.54, -0.12]**

Heterogeneity: Chi² = 0.92, df = 1 (P = 0.34); I² = 0%
Test for overall effect: Z = 3.13 (P = 0.002)



- Pincus representative study (scale 0 to 100)
- -0.33 X 21.63 = 7.1379

Summary of Findings for glucosamine for osteoarthritis - outcome pain

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)
	Assumed risk **acetaminophen**	Corresponding risk **NSAID**		
Overall well-being Scale from: 0 to 100. (follow-up: 3-6 months)	The mean overall well-being in the control groups was **44 points**	The mean Overall well-being in the intervention groups was **7 lower** (12 to 3 lower)		280 (2)

GRADEing the evidence

Evidence is GRADEd from

- HIGH, MODERATE, LOW, VERY LOW

⊕⊕⊕⊕ **High**	Further research is very unlikely to change our confidence in the estimate of effect.
⊕⊕⊕◯ **Moderate**	Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.
⊕⊕◯◯ **Low**	Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.
⊕◯◯◯ **Very low**	We are very uncertain about the estimate.

GRADEing the evidence

RCT evidence in systematic reviews start at HIGH

Downgraded by a level or two based on

- biases in the studies
- results of the meta-analysis

Biases are organised into 5 categories/criteria

GRADEing the evidence

5 criteria

- Limitations of design (Risk of Bias Tables)
- Inconsistency (heterogeneity)
- Indirectness (PICO)
- Imprecision
- Reporting Bias/Publication Bias (Funnel plots)

GRADEing the evidence

Consider the criteria and how they impact

the confidence in the effect

and

the magnitude of the effect

GRADEing the evidence

Be transparent!

Footnotes available to let users know how you GRADEd the evidence

[1] 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.

[2] Seven other studies were not pooled and some showed non-significant effects.

[3] No allocation concealment in 1 study. Incomplete follow-up.

[4] Sparse data.

[5] Different definitions of exacerbations used and studies could not be pooled.

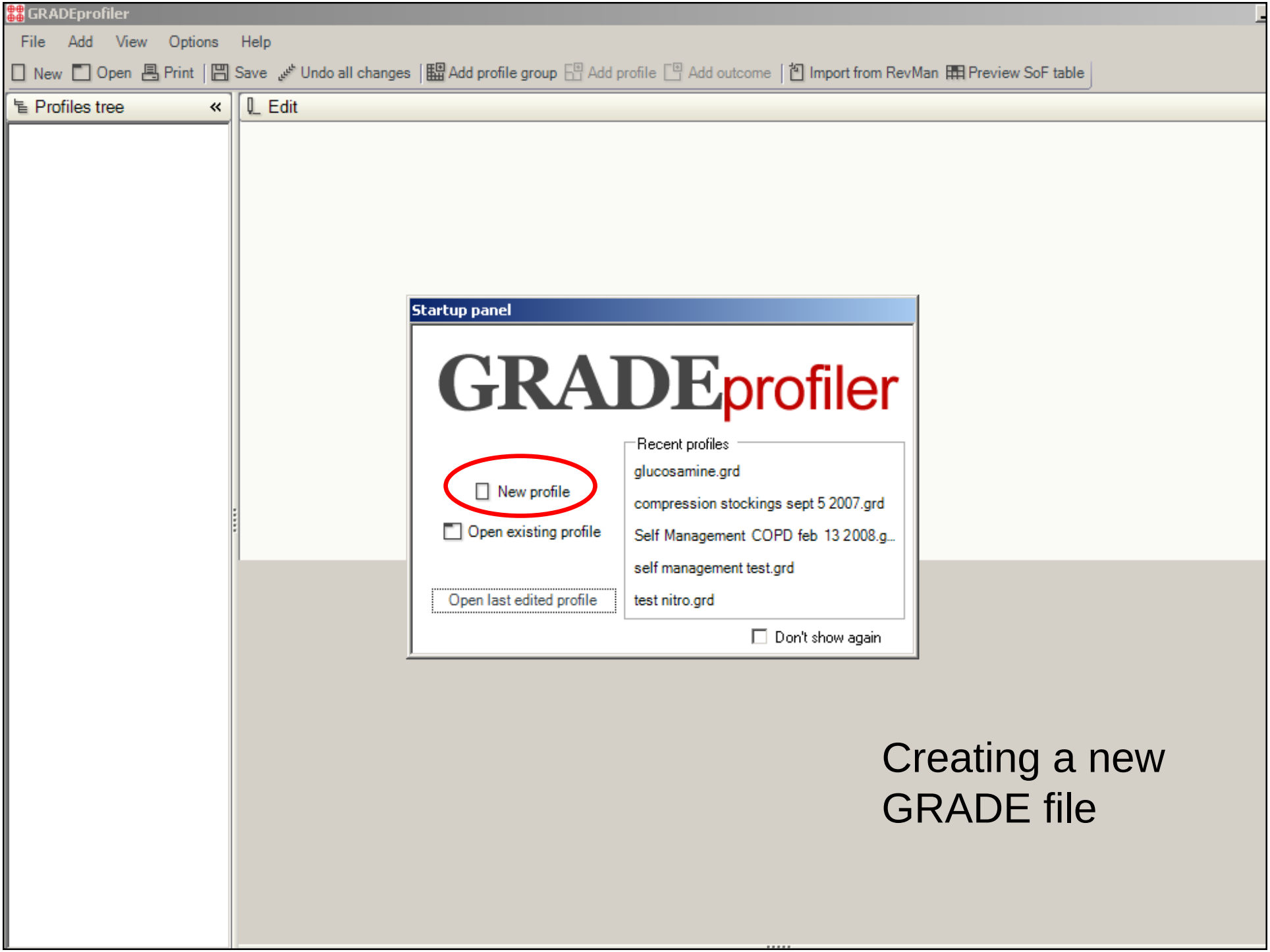
[6] The low and high risk values are the two extreme numbers of admissions in the control groups from two studies (8% was rounded to 10% and 51% to 50%).

[7] 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.

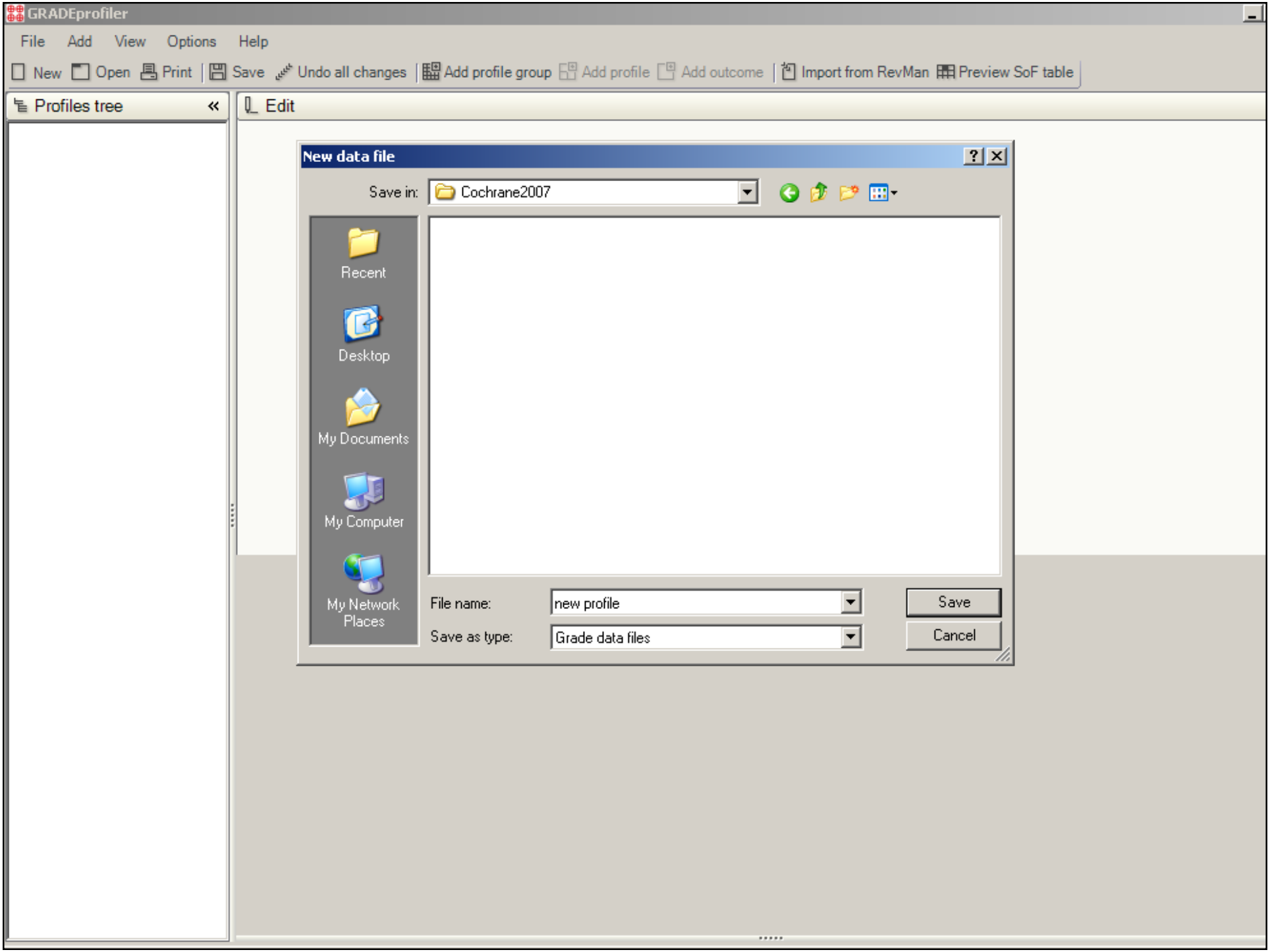
[8] Unexplained heterogeneity.

HOW DO I CREATE a SUMMARY of FINGINGS TABLE?

- GRADEpro – software to create SoF
- Import data from RevMan 5 into GRADEpro
- Create table – author makes decisions about information to present and GRADEs the evidence
- Export table from GRADEpro and import into RevMan 5



Creating a new GRADE file


GRADEprofiler
File
Add
View
Options
Help
New
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Print
Save
Undo all changes
Add profile group
Add profile
Add outcome
Import from RevMan
Preview SoF table
Profiles tree
Edit
New data file
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My Computer
My Network Places
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Grade data files
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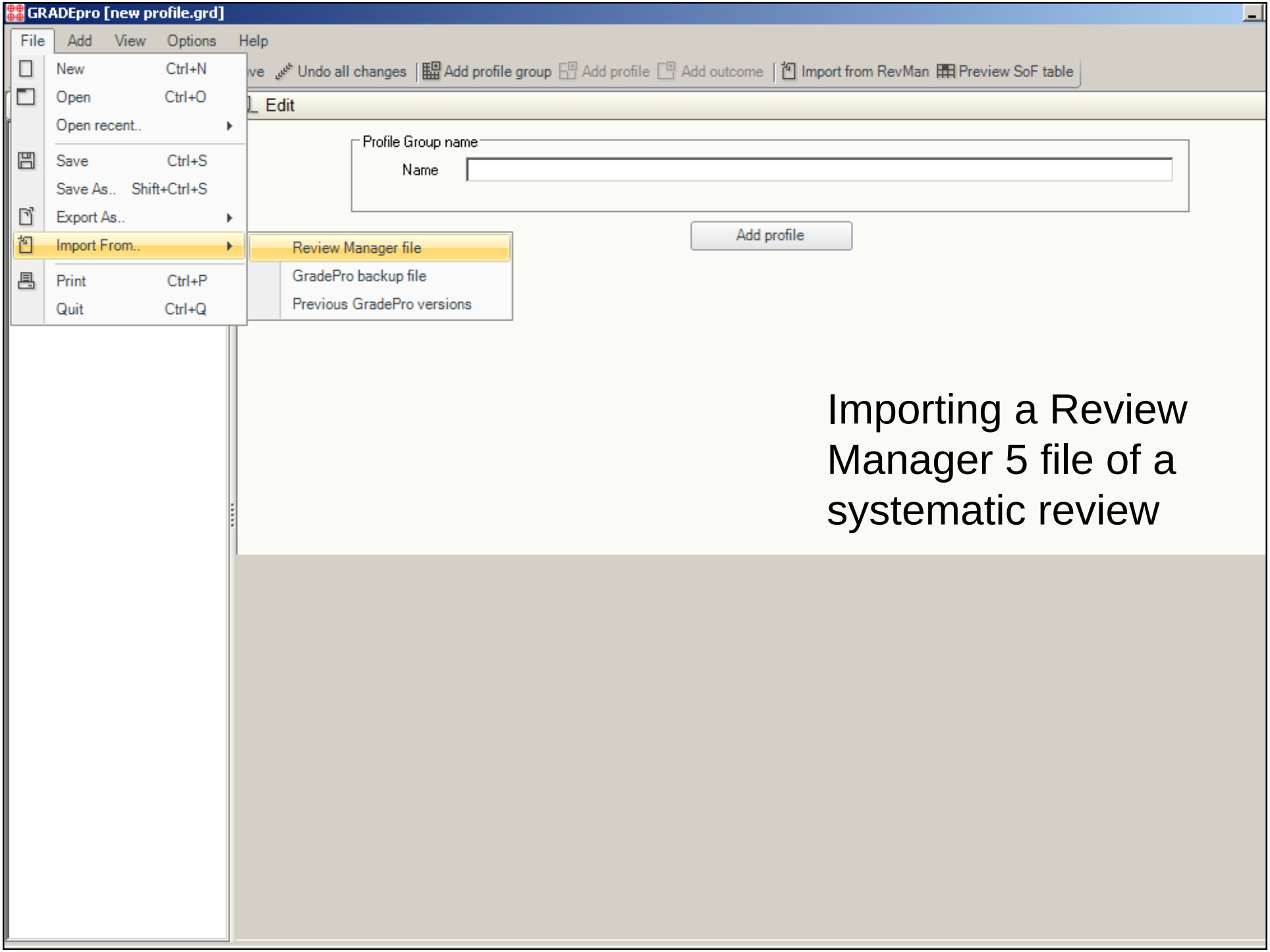
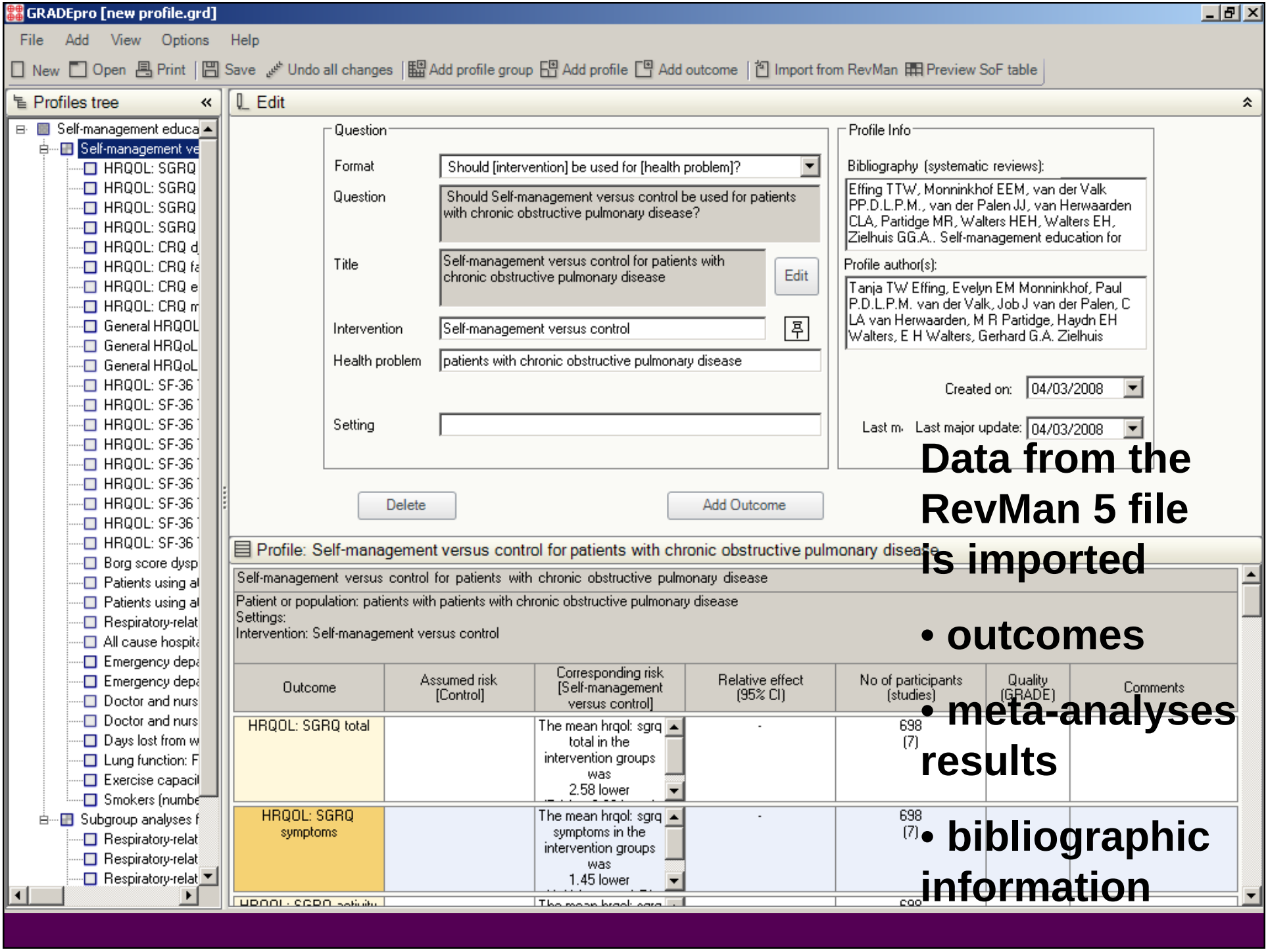
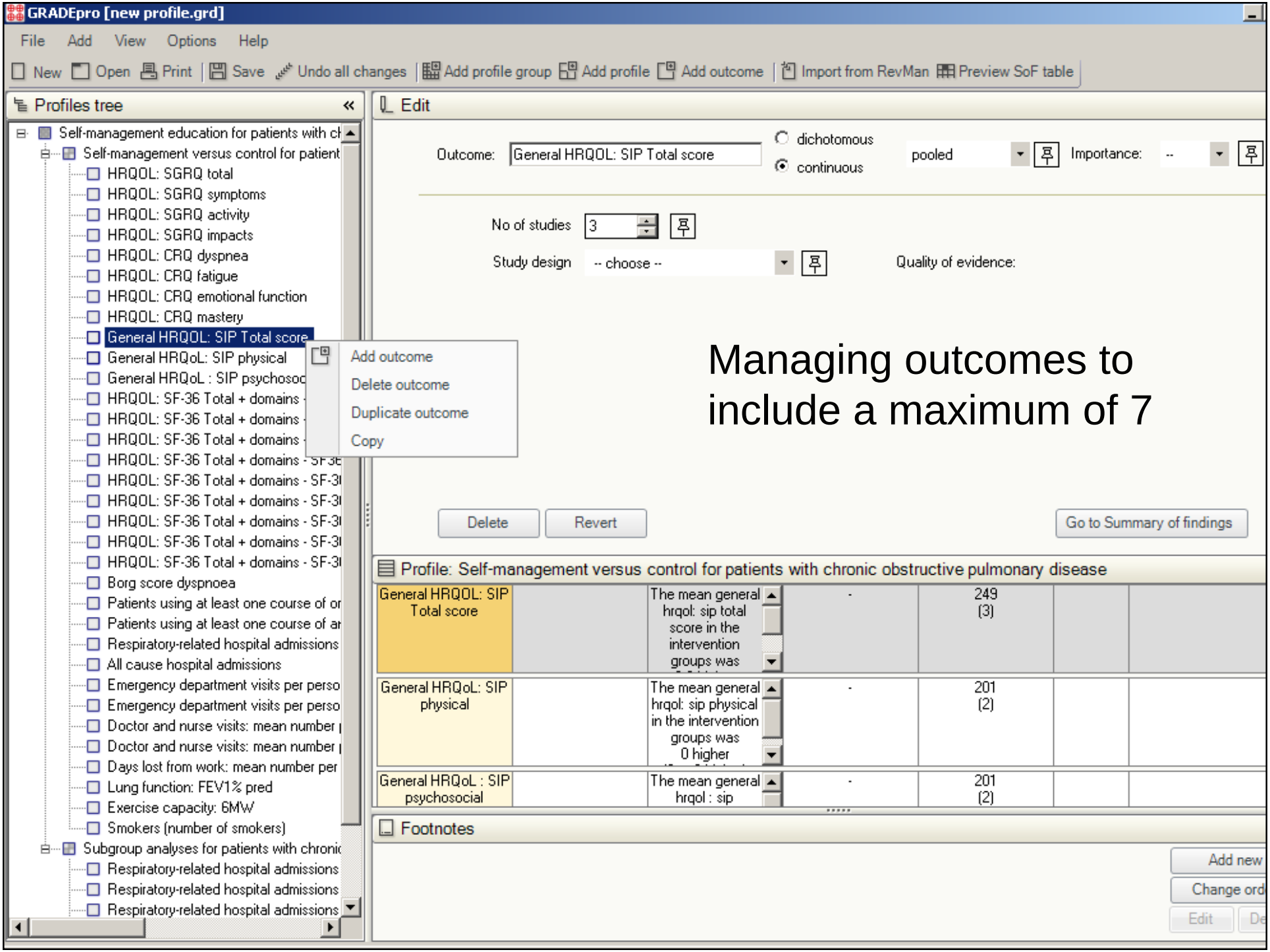


Importing a Review Manager 5 file of a systematic review



Data from the RevMan 5 file is imported

- **outcomes**
- **meta-analyses results**
- **bibliographic information**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File
Add
View
Options
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Undo all changes
Add profile group
Add profile
Add outcome
Import from RevMan
Preview SoF table
Profiles tree
Self-management education for patients with ch
Self-management versus control for patient
HRQOL: SGRQ total
HRQOL: SGRQ symptoms
HRQOL: SGRQ activity
HRQOL: SGRQ impacts
HRQOL: CRQ dyspnea
HRQOL: CRQ fatigue
HRQOL: CRQ emotional function
HRQOL: CRQ mastery
General HRQOL: SIP Total score
General HRQoL: SIP physical
General HRQoL : SIP psychosoc
HRQOL: SF-36 Total + domains
HRQOL: SF-36 Total + domains
HRQOL: SF-36 Total + domains
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HRQOL: SF-36 Total + domains - SF-3
HRQOL: SF-36 Total + domains - SF-3
Borg score dyspnoea
Patients using at least one course of or
Patients using at least one course of ar
Respiratory-related hospital admissions
All cause hospital admissions
Emergency department visits per perso
Emergency department visits per perso
Doctor and nurse visits: mean number
Doctor and nurse visits: mean number
Days lost from work: mean number per
Lung function: FEV1% pred
Exercise capacity: 6MW
Smokers (number of smokers)
Subgroup analyses for patients with chronic
Respiratory-related hospital admissions
Respiratory-related hospital admissions
Respiratory-related hospital admissions
Add outcome
Delete outcome
Duplicate outcome
Copy
Edit
Outcome:
General HRQOL: SIP Total score
dichotomous
continuous
pooled
Importance:
No of studies
3
Study design
-- choose --
Quality of evidence:
Delete
Revert
Go to Summary of findings
Profile: Self-management versus control for patients with chronic obstructive pulmonary disease
General HRQOL: SIP Total score
The mean general hrqol: sip total score in the intervention groups was
-
249
(3)
General HRQoL: SIP physical
The mean general hrqol: sip physical in the intervention groups was 0 higher
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201
(2)
General HRQoL : SIP psychosocial
The mean general hrqol : sip
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Footnotes
Add new
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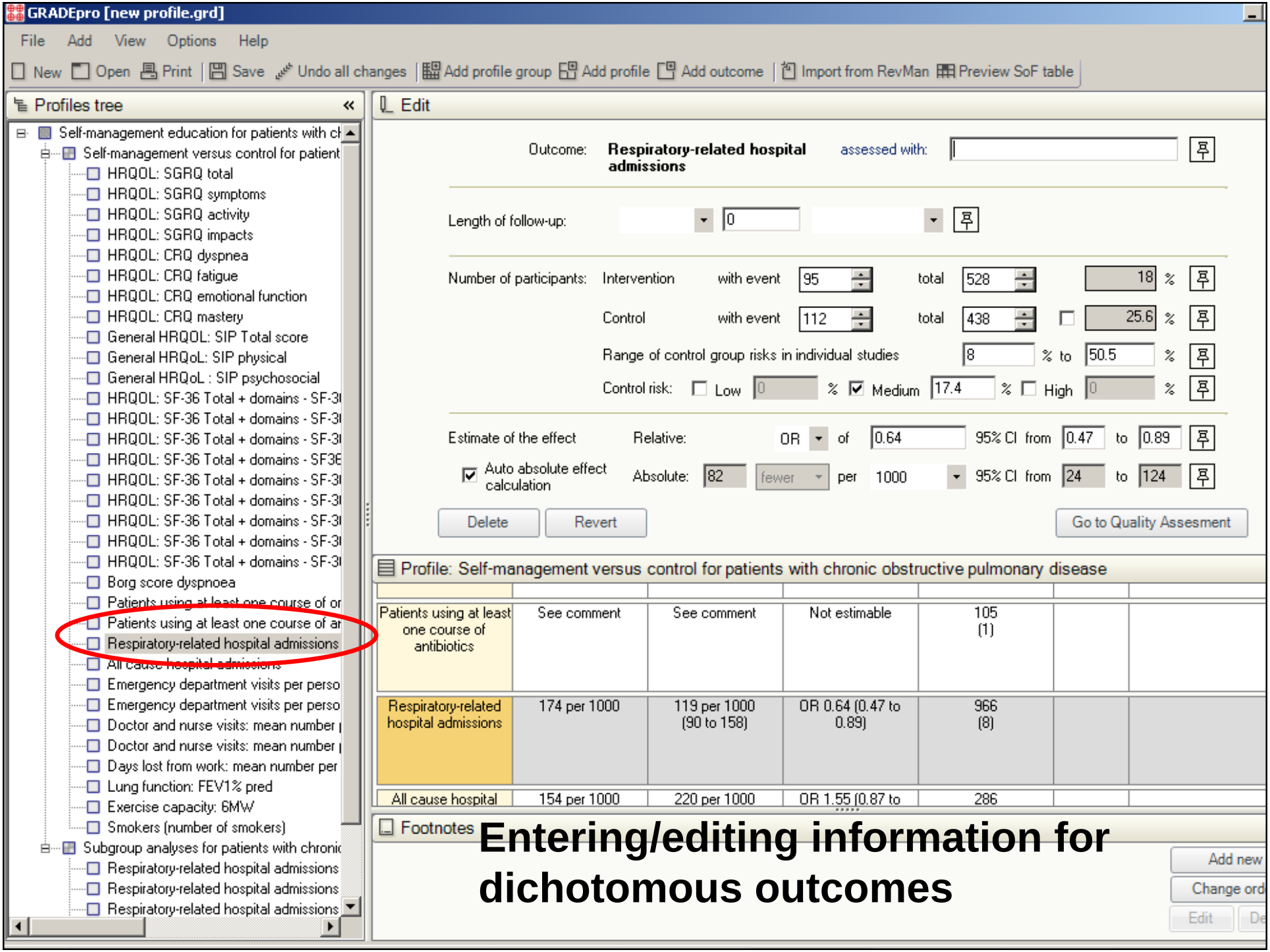
Managing outcomes to include a maximum of 7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Self-management versus control for patient
HRQOL: SGRQ total
HRQOL: SGRQ symptoms
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Borg score dyspnoea
Patients using at least one course of ar
Respiratory-related hospital admissions
Emergency department visits per perso
Emergency department visits per perso
Doctor and nurse visits: mean number
Doctor and nurse visits: mean number
Days lost from work: mean number per
Lung function: FEV1% pred
Exercise capacity: 6MW
Smokers (number of smokers)
Subgroup analyses for patients with chronic
Respiratory-related hospital admissions
Respiratory-related hospital admissions
Respiratory-related hospital admissions
Edit
Outcome: Respiratory-related hospital admissions assessed with:
Length of follow-up: 0
Number of participants: Intervention with event 95 total 528 18 %
Control with event 112 total 438 25.6 %
Range of control group risks in individual studies 8 % to 50.5 %
Control risk: Low 0 % Medium 17.4 % High 0 %
Estimate of the effect Relative: OR of 0.64 95% CI from 0.47 to 0.89
Auto absolute effect calculation Absolute: 82 fewer per 1000 95% CI from 24 to 124
Delete Revert Go to Quality Assesment
Profile: Self-management versus control for patients with chronic obstructive pulmonary disease
Patients using at least one course of antibiotics | See comment | See comment | Not estimable | 105 (1)
Respiratory-related hospital admissions | 174 per 1000 | 119 per 1000 (90 to 158) | OR 0.64 (0.47 to 0.89) | 966 (8)
All cause hospital | 154 per 1000 | 220 per 1000 | OR 1.55 (0.87 to | 286
Footnotes
Add new
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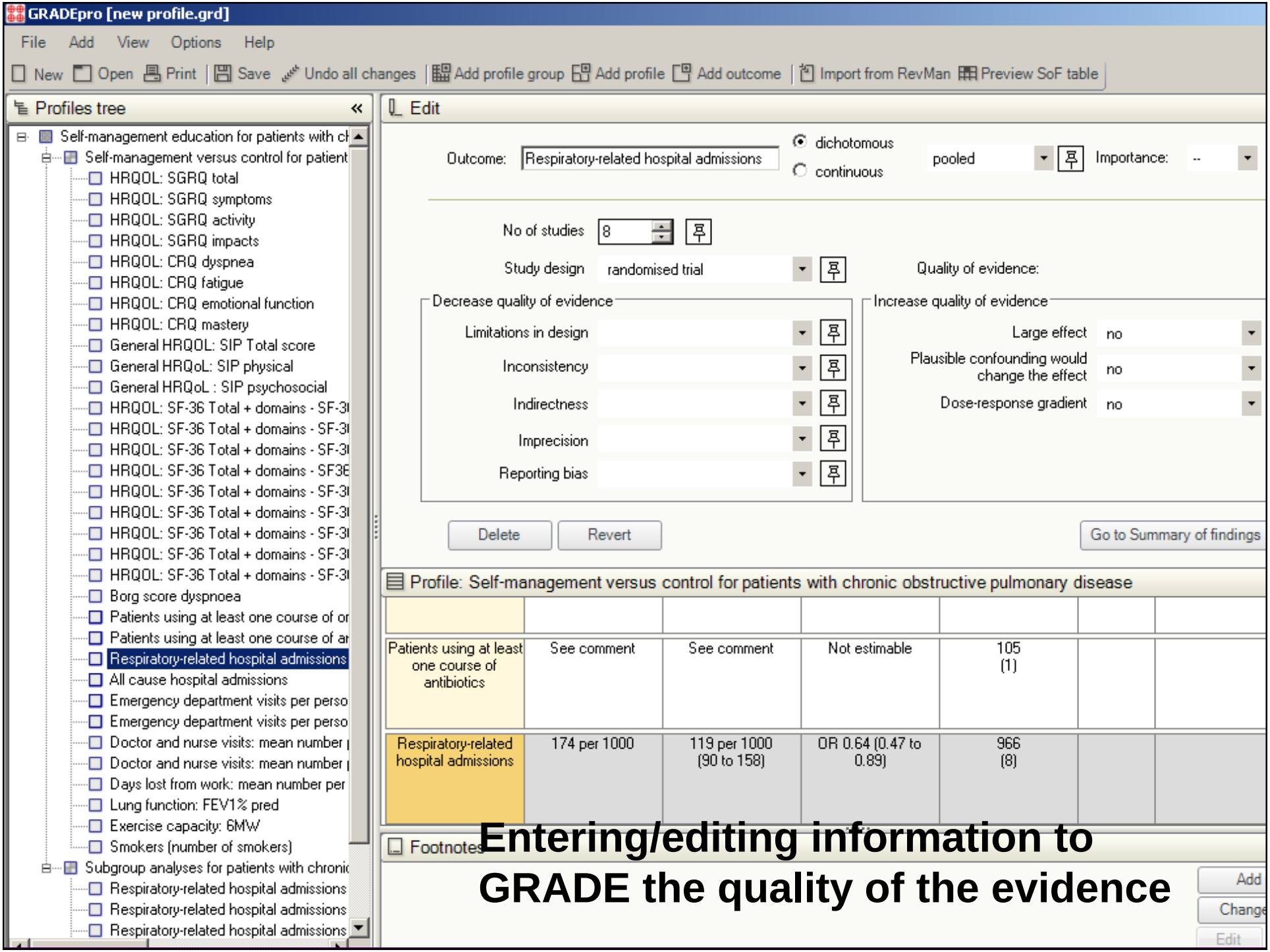
Entering/editing information for dichotomous outcomes


GRADEpro [new profile.grd]
File Add View Options Help
New Open Print Save Undo all changes Add profile group Add profile Add outcome Import from RevMan Preview SoF table
Profiles tree
Edit
Outcome: Respiratory-related hospital admissions
dichotomous
continuous
pooled
Importance: --
No of studies 8
Study design randomised trial
Quality of evidence:
Decrease quality of evidence
Limitations in design
Inconsistency
Indirectness
Imprecision
Reporting bias
Increase quality of evidence
Large effect no
Plausible confounding would change the effect no
Dose-response gradient no
Delete
Revert
Go to Summary of findings
Profile: Self-management versus control for patients with chronic obstructive pulmonary disease
Patients using at least one course of antibiotics
See comment
See comment
Not estimable
105 (1)
Respiratory-related hospital admissions
174 per 1000
119 per 1000 (90 to 158)
OR 0.64 (0.47 to 0.89)
966 (8)
Footnotes
Add
Change
Edit
Entering/editing information to GRADE the quality of the evidence

GRADEprofiler help(Created by WinCHM Prov3.34 unregistered version!)

Hide Back Forward Print

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      - Factors determining the
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          - Imprecision in c
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- Alphabetical list of topics
- System requirements
- Technical support
- GRADE Working Group

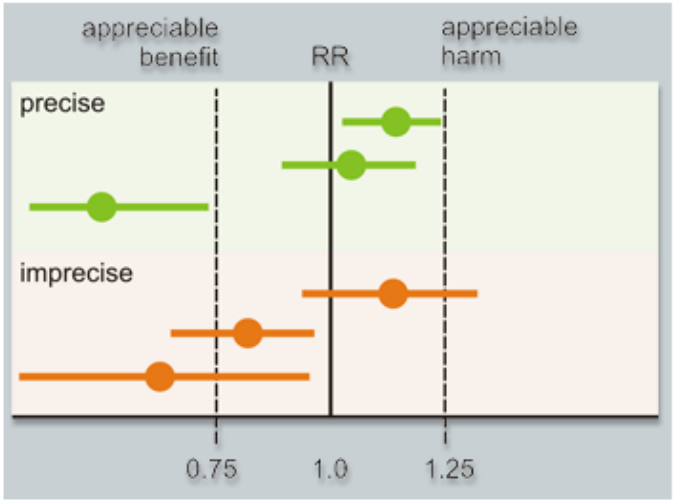
About Imprecision for Authors of Systematic Reviews

In systematic reviews **each outcome is considered separately.**

For dichotomous outcomes

We suggest downgrading the quality of evidence for **either** of the following three reasons:

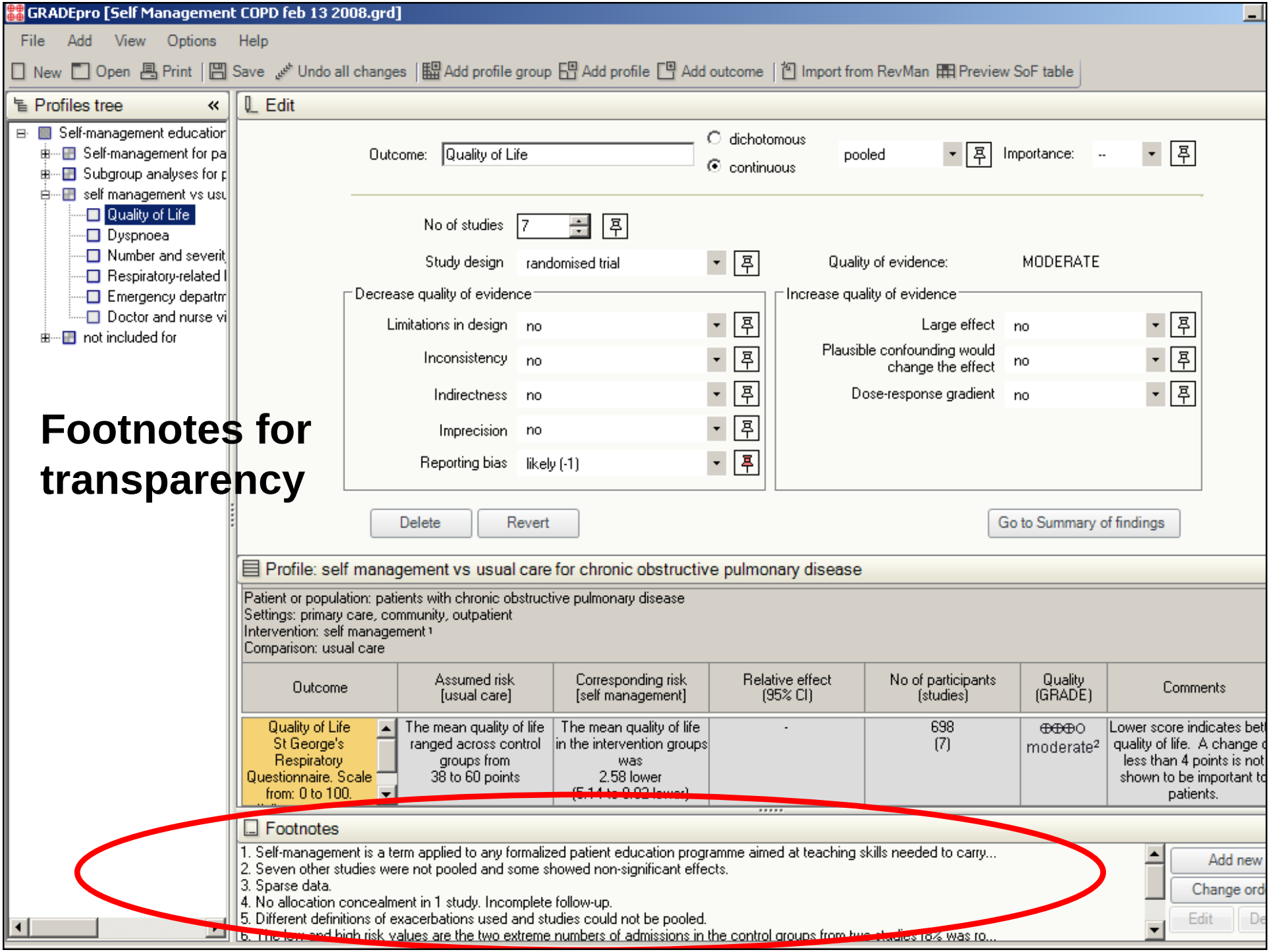
1. total (cumulative) sample size is lower than the calculated optimal information size (OIS)
2. total number of events is less than 300 (based on: Mueller, Montori, Bassler, Koenig, Guyatt. Ethical Issues in Stopping Randomized Trials Early Because of Apparent Benefit. Ann Intern Med. 2007;146:878-881)
3. 95% confidence interval (or alternative estimate of precision) around the pooled or best estimate of effect includes both negligible effect and appreciable benefit or appreciable harm. GRADE suggests that threshold for "appreciable benefit" or "appreciable harm" that warrants downgrading is a relative risk reduction (RRR) or relative risk increase (RRI) greater than 25%.



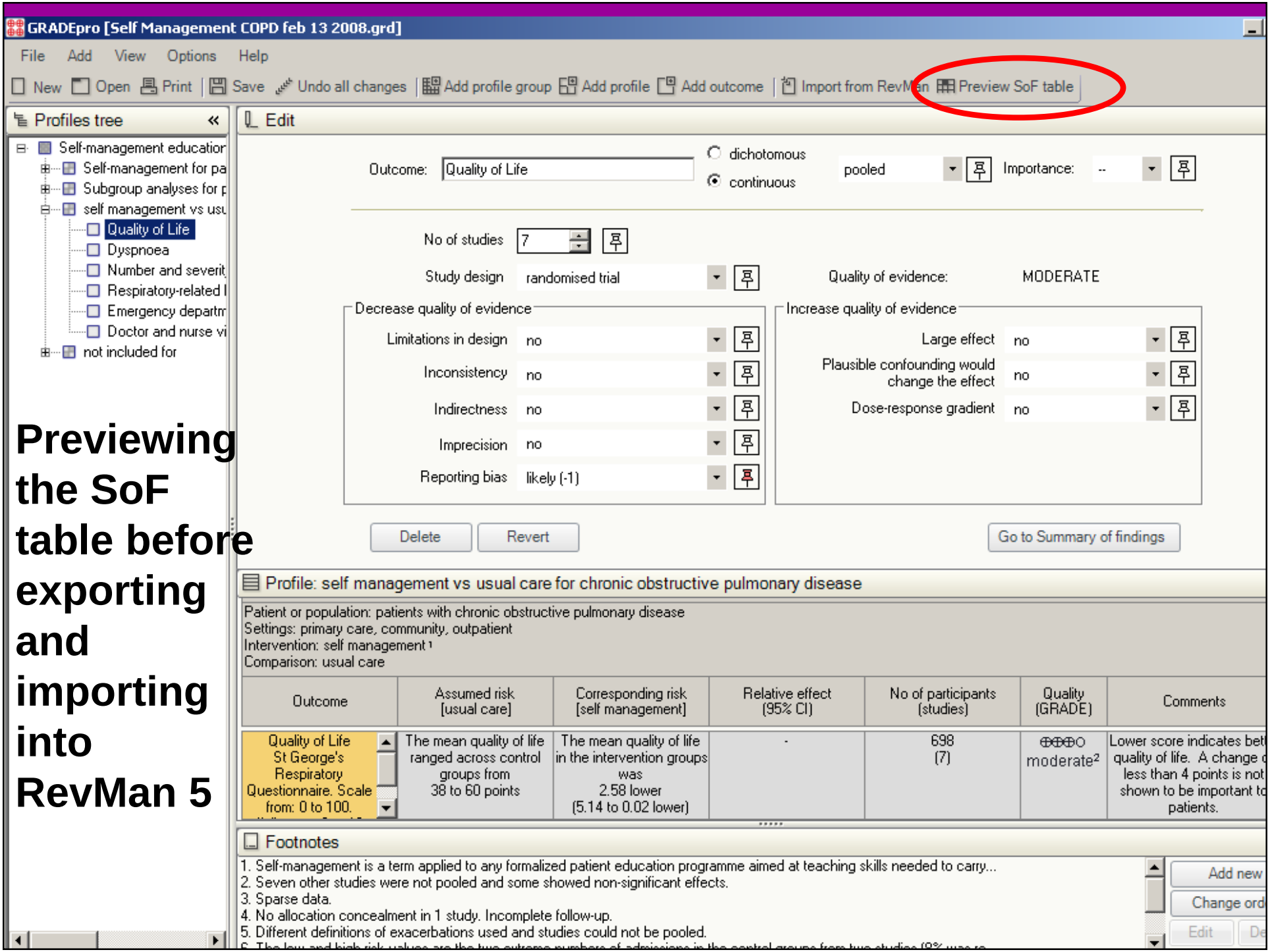
HELP files when GRADEing the evidence

Exception

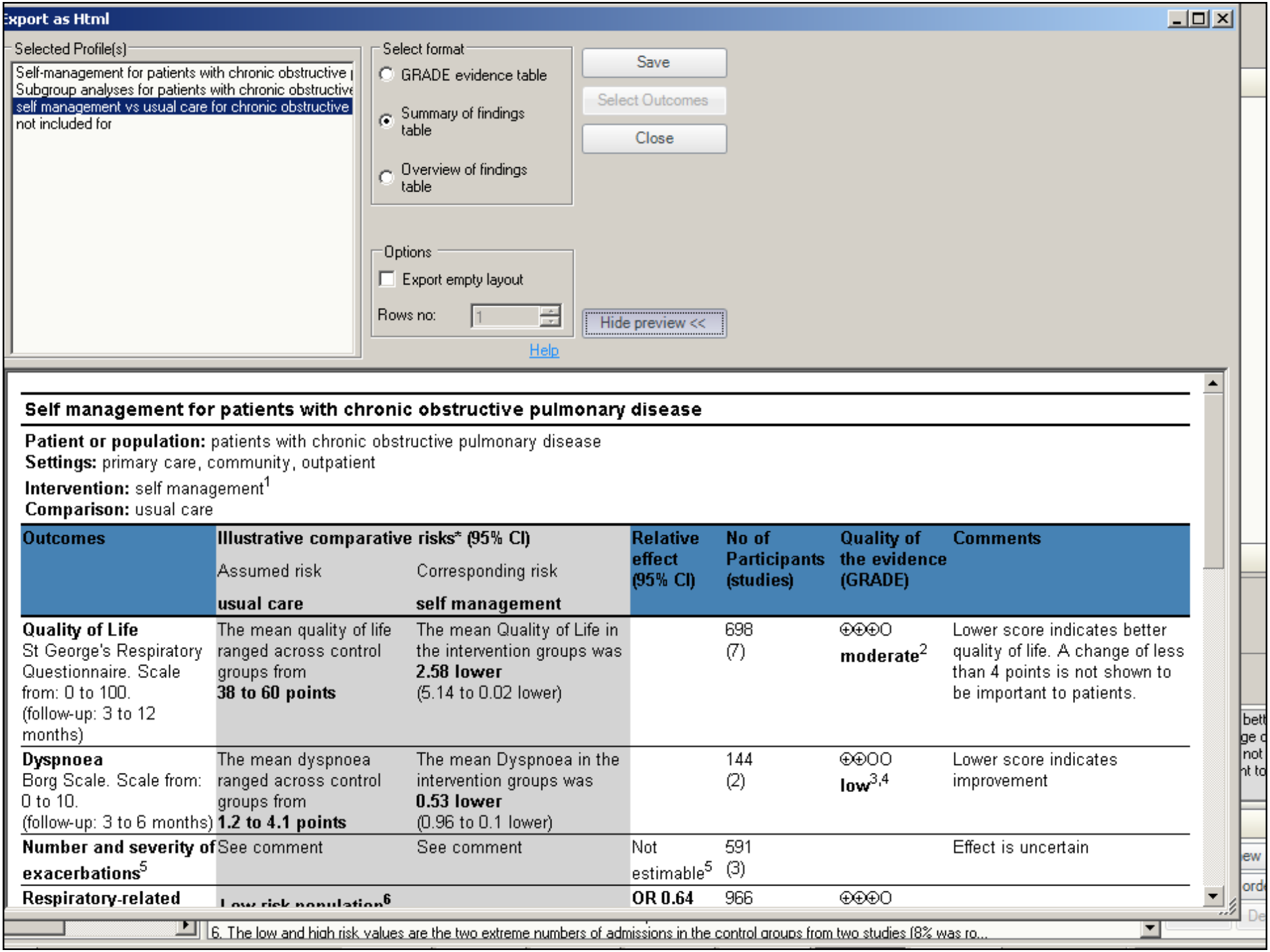
When event rates are very low, 95% confidence intervals around relative effects can be very wide, but 95% confidence intervals around absolute effects may be narrow. Under such circumstances one may not downgrade the quality of evidence for imprecision.



Footnotes for transparency



Previewing the SoF table before exporting and importing into RevMan 5

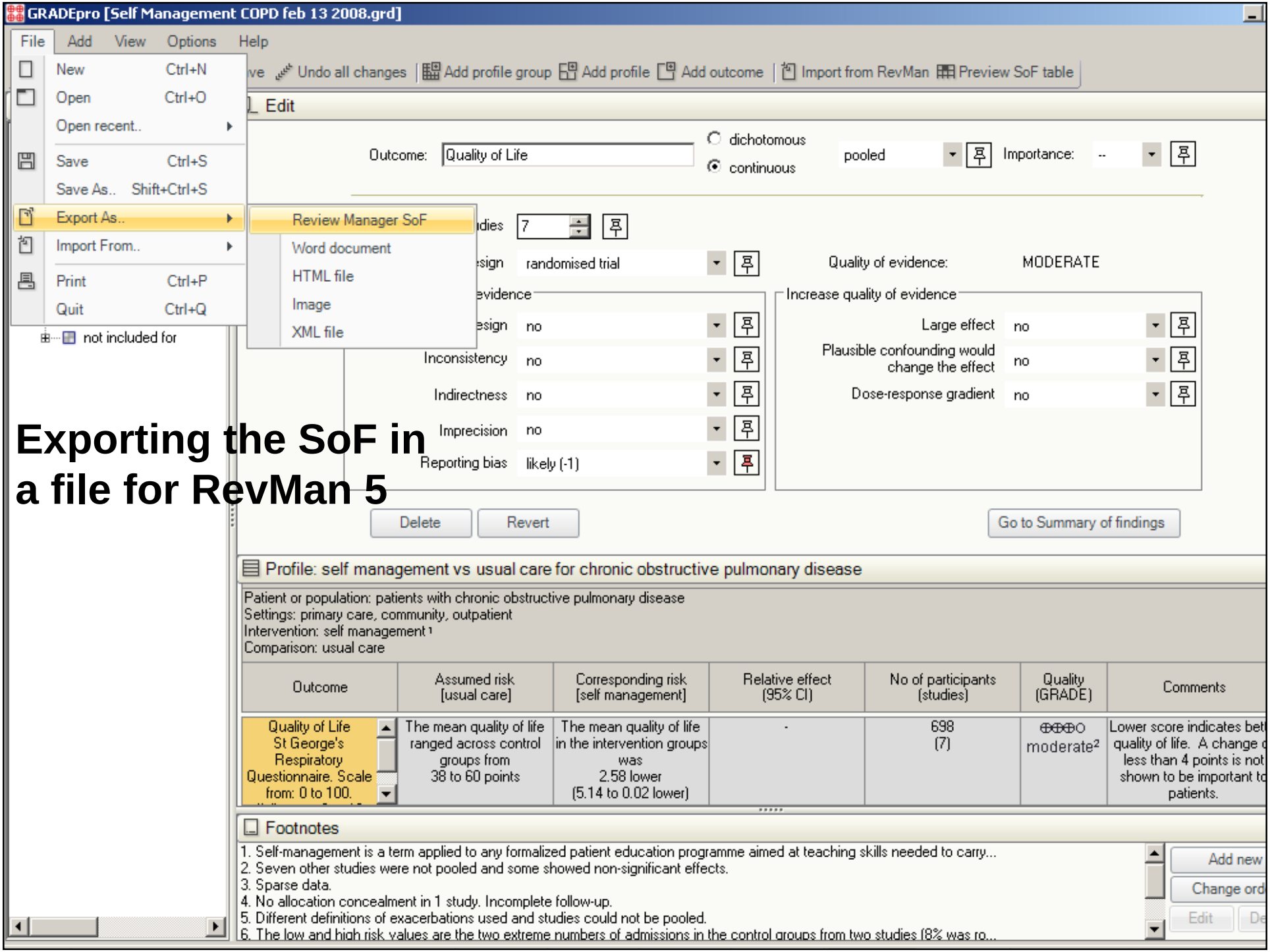


Self management for patients with chronic obstructive pulmonary disease

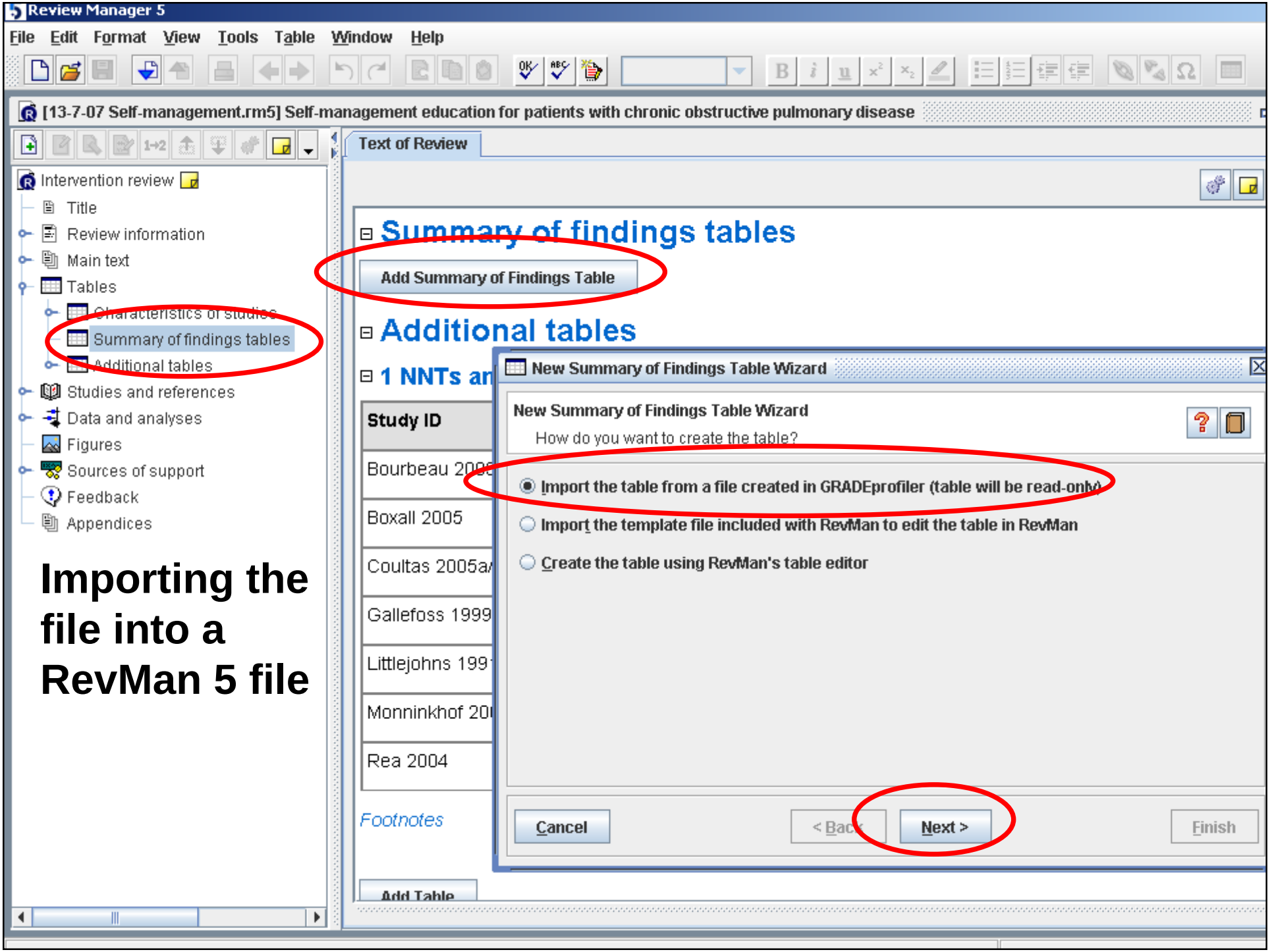
Patient or population: patients with chronic obstructive pulmonary disease
Settings: primary care, community, outpatient
Intervention: self management[1]
Comparison: usual care

Outcomes	Illustrative comparative risks* (95% CI)		Relative effect (95% CI)	No of Participants (studies)	Quality of the evidence (GRADE)	Comments
	Assumed risk **usual care**	Corresponding risk **self management**				
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 **moderate**[2]	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 **0.53 lower** (0.96 to 0.1 lower)		144 (2)	⊕⊕OO **low**[3,4]	Lower score indicates improvement
Number and severity of exacerbations[5]	See comment	See comment	Not estimable[5]	591 (3)		Effect is uncertain
Respiratory-related	**Low risk population**[6]		**OR 0.64**	966	⊕⊕⊕O	

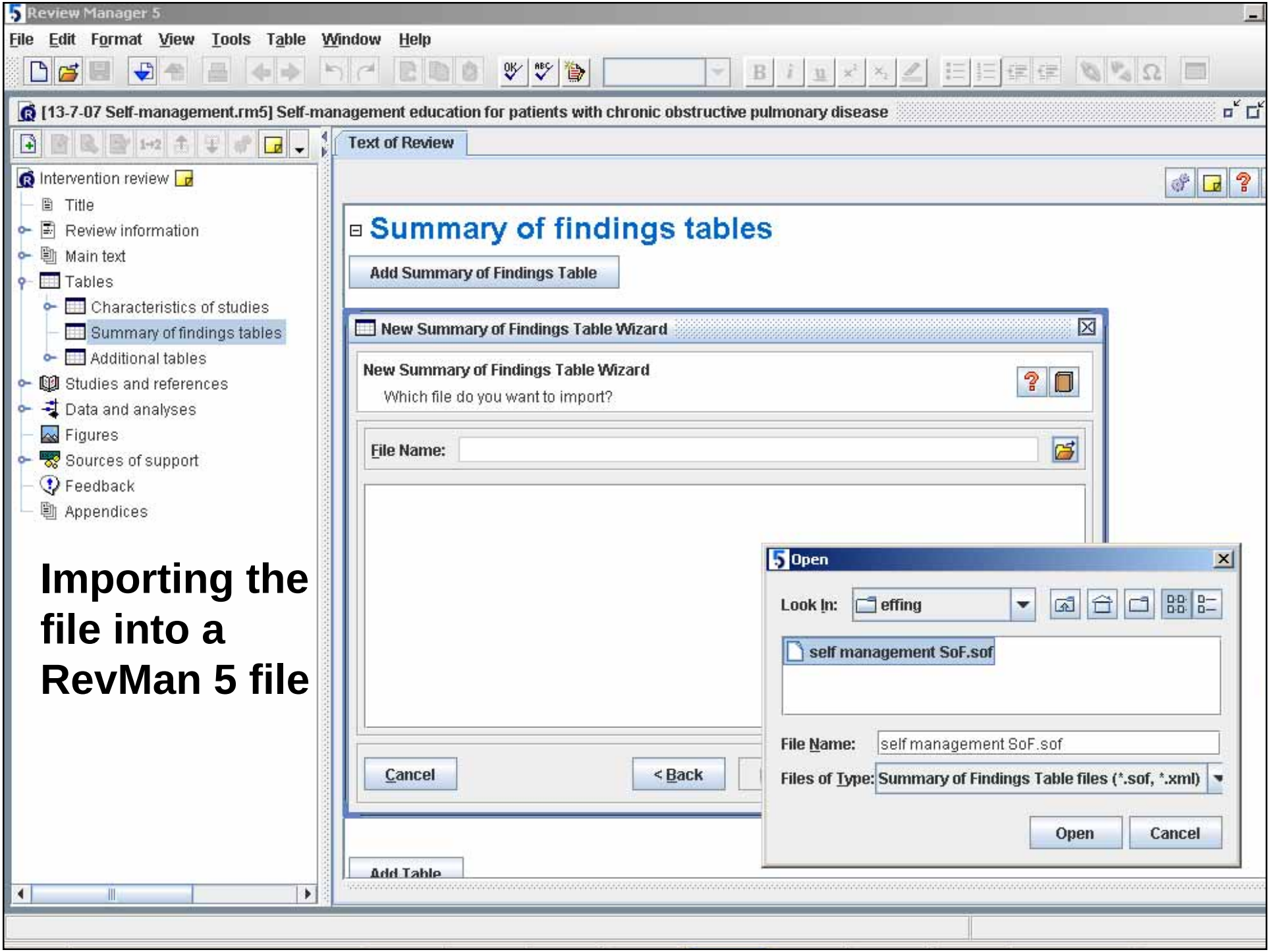
6. The low and high risk values are the two extreme numbers of admissions in the control groups from two studies (8% was ro...



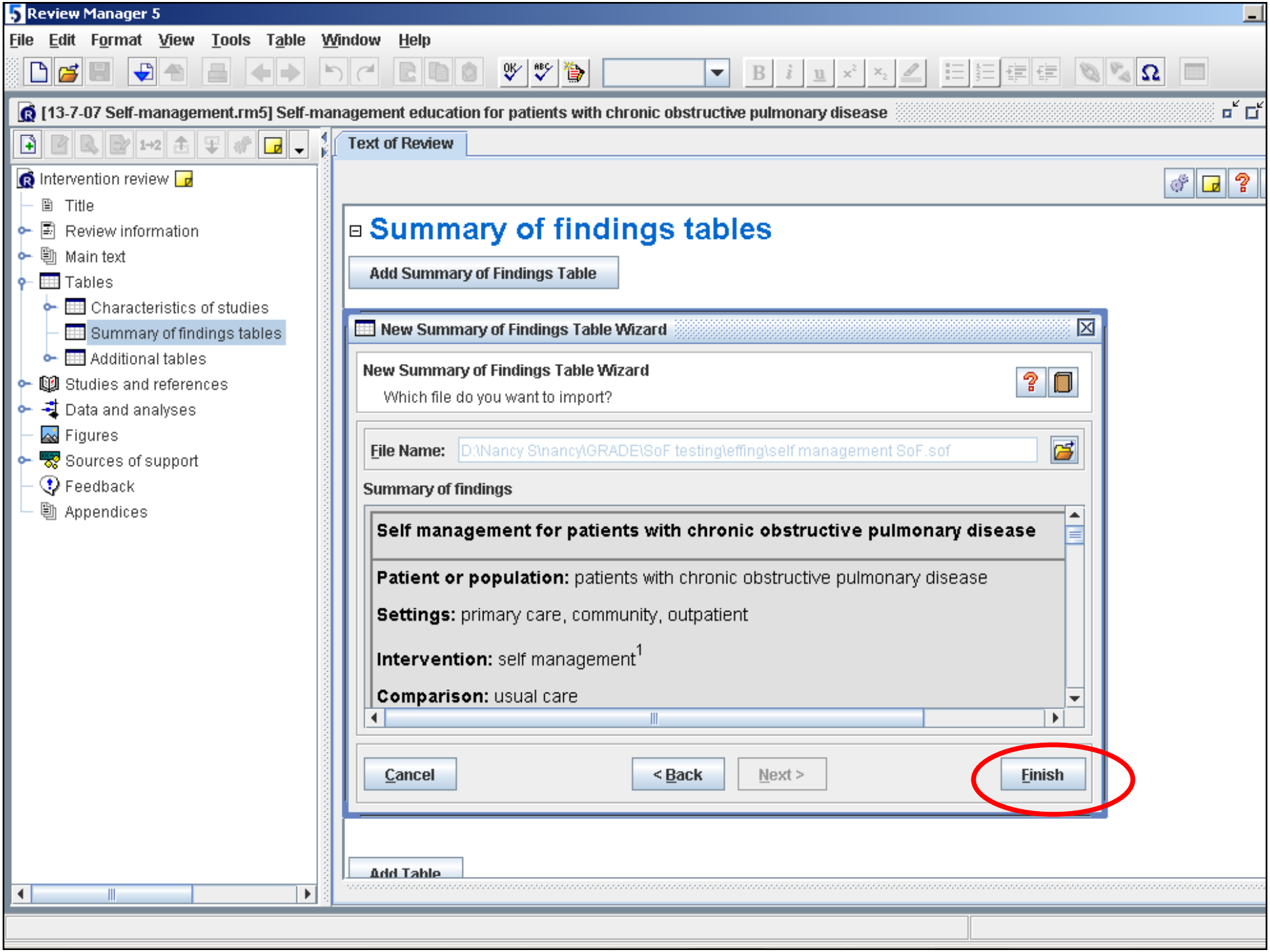
Exporting the SoF in a file for RevMan 5



Importing the file into a RevMan 5 file



Importing the file into a RevMan 5 file


Review Manager 5
File Edit Format View Tools Table Window Help
[13-7-07 Self-management.rm5] Self-management education for patients with chronic obstructive pulmonary disease
Intervention review
Title
Review information
Main text
Tables
Characteristics of studies
Summary of findings tables
Additional tables
Studies and references
Data and analyses
Figures
Sources of support
Feedback
Appendices
Text of Review
Summary of findings tables
Add Summary of Findings Table
New Summary of Findings Table Wizard
New Summary of Findings Table Wizard
Which file do you want to import?
File Name: D:\Nancy S\nancy\GRADE\SoF testing\effing\self management SoF.sof
Summary of findings
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[1]
Comparison: usual care
Cancel
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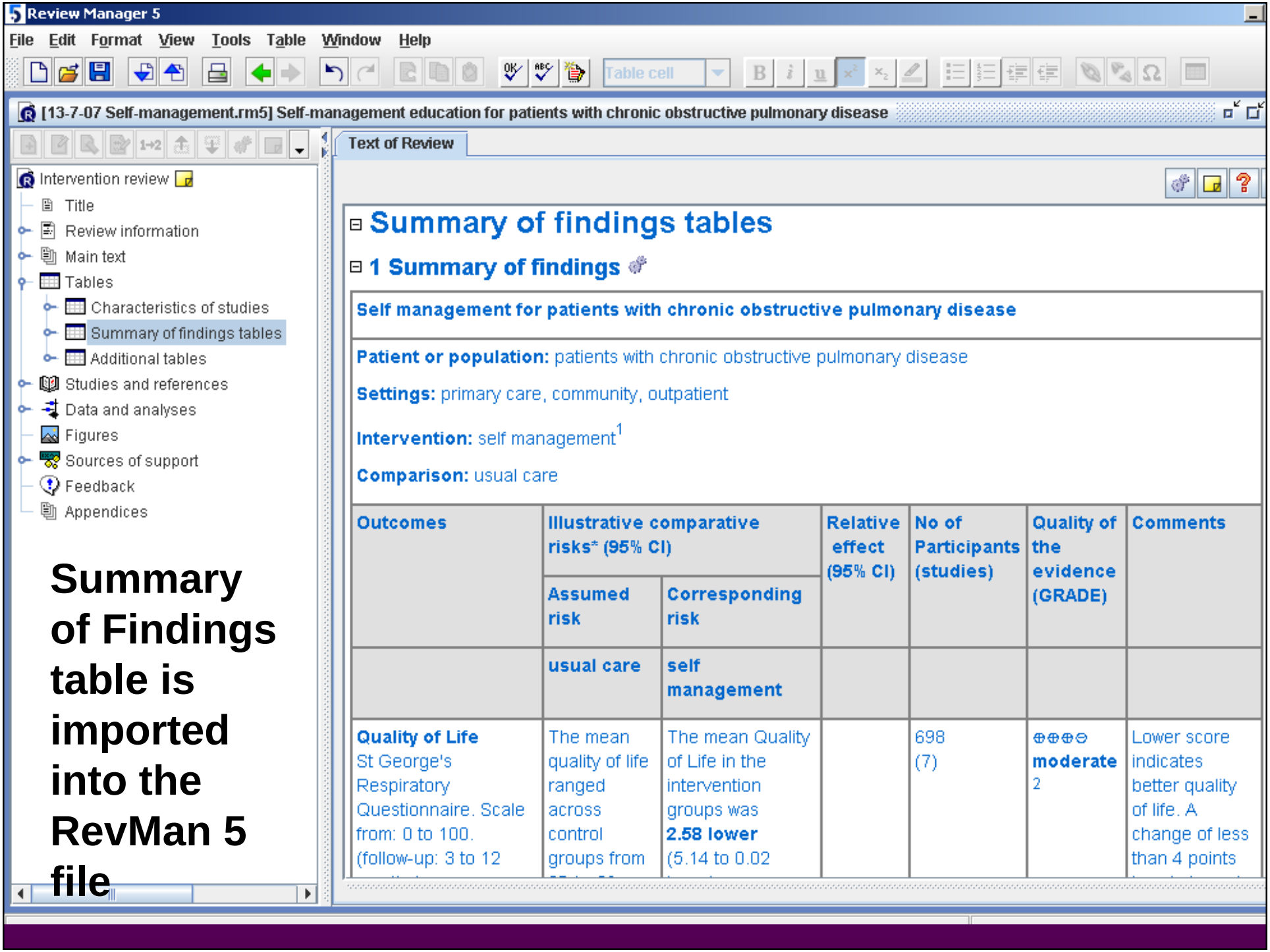
Next >
Finish
Add Table



Summary of Findings table is imported into the RevMan 5 file

Resources

- Cochrane Handbook
  - *Chapter 11: Presenting results and 'Summary of findings' tables*
  - *Chapter 12: Interpreting results and drawing conclusions*

www.cochrane-handbook.org (See Part 2)

- GRADEpro software and other resources at

http://www.cc-ims.net/gradepro

Resources

- BMJ series of papers in press.
- Schunemann, et al. An official ATS statement: Grading the quality of evidence and strength of recommendations in ATS guidelines and recommendations.
  American Journal of Respiratory and Critical Care Medicine. 174(5):605-14, 2006
- GRADE Working Group. Grading quality of evidence and strength of recommendations.
  BMJ 2004; 328: 1490-1494.
- Support at support@gradepro.org