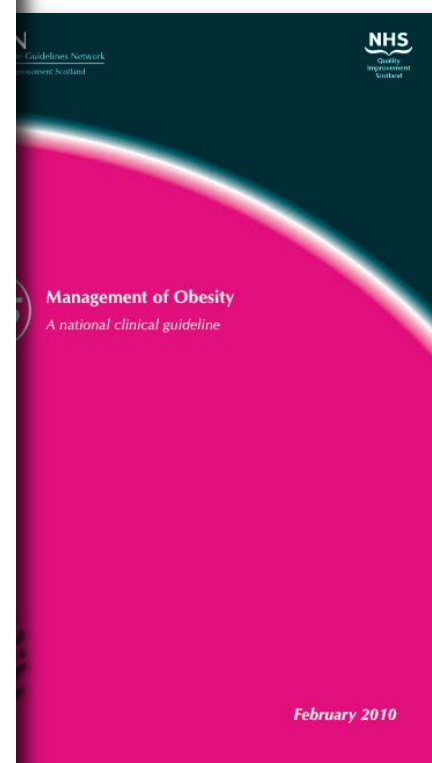
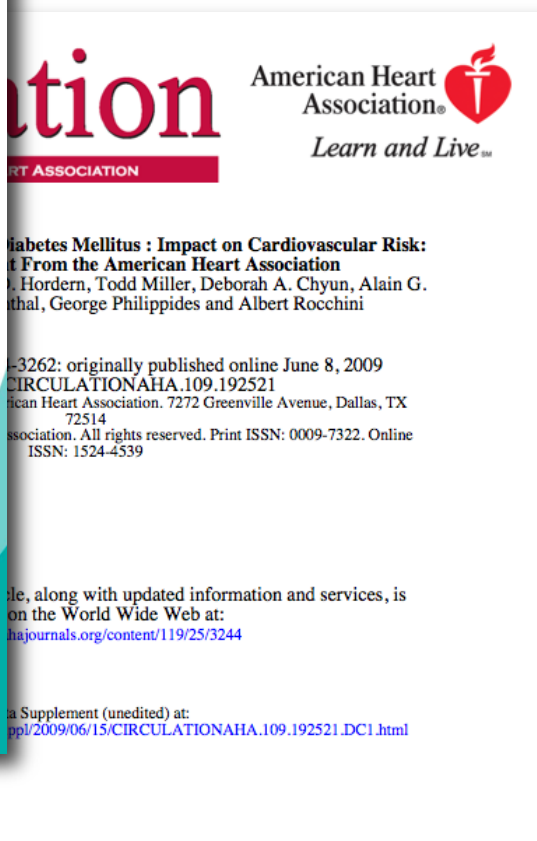
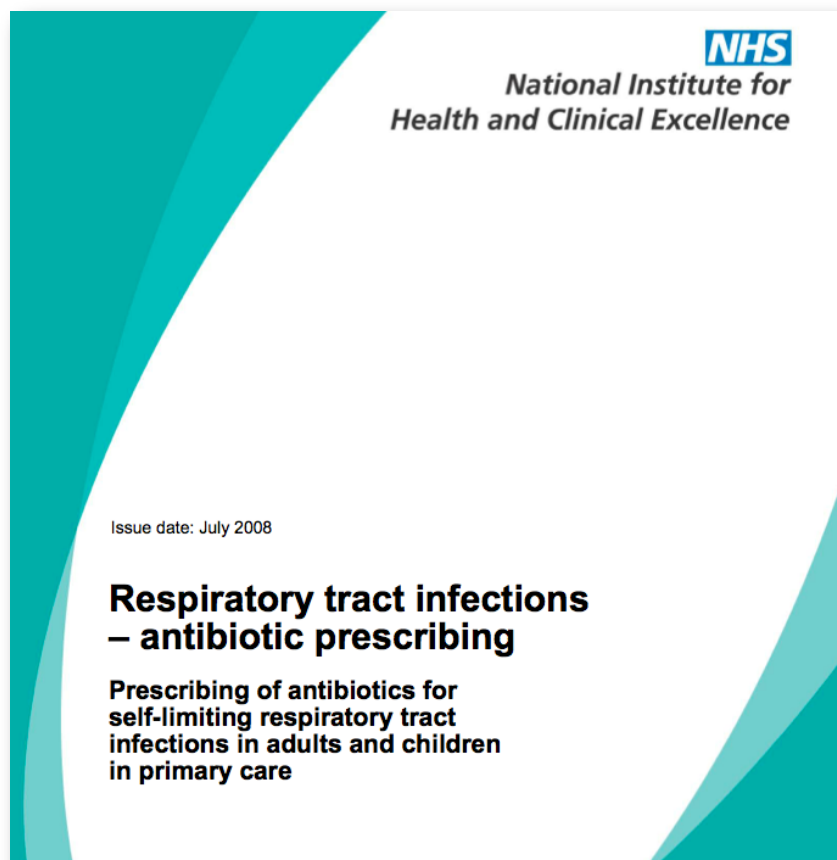


# Can we make guidelines better?

## An overview of the DECIDE project

Shaun Treweek  
University of Dundee, UK  
[streweek@mac.com](mailto:streweek@mac.com)

# Guidelines - convenient



# Presentation is important

Providing information is good but the people you intend to use that information must be able to understand and use it.

From a family doctor -

*‘You need to be able to do EBM at 2am.’*



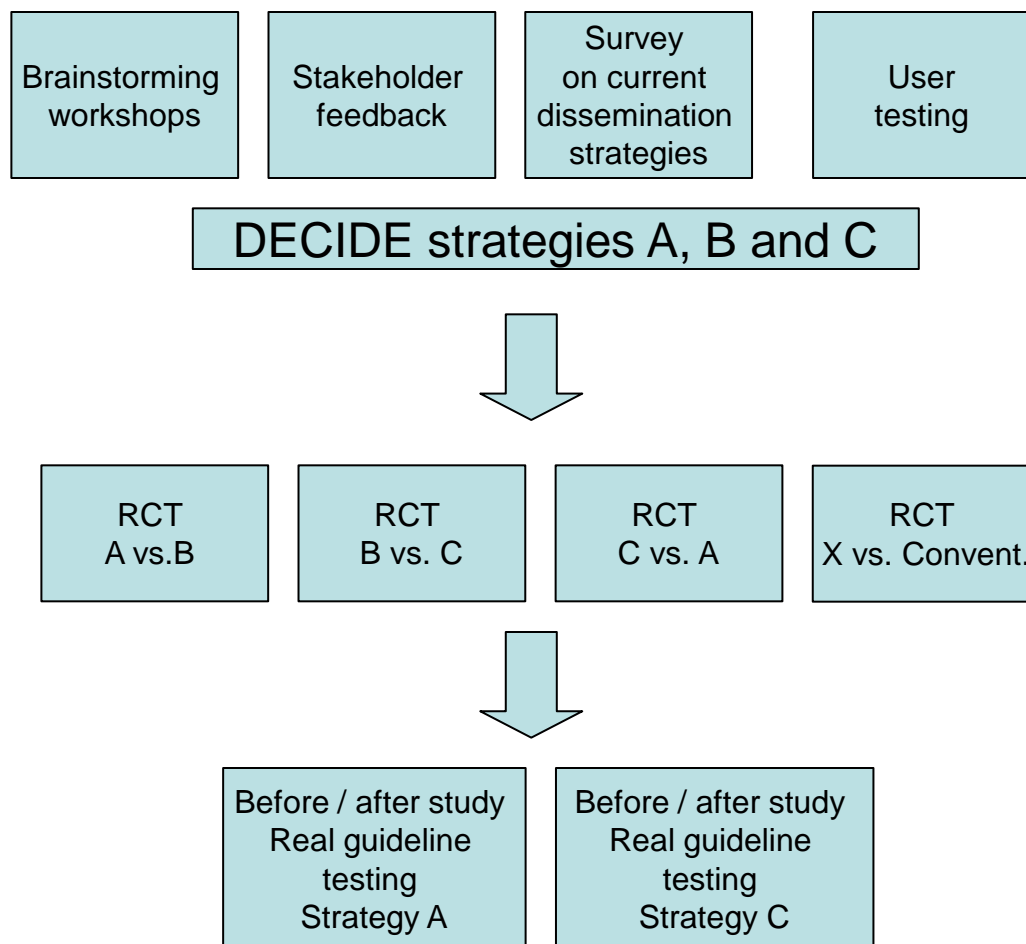
**D**eveloping and **E**valuating **C**ommunication  
strategies to support **I**nformed **D**ecisions and  
practice based on **E**vidence

## DECIDE: the ten partners

- University of Dundee, UK
- Norwegian Knowledge Centre for the Health Services, Norway
- Iberoamerican Cochrane Centre, Spain
- Azienda Sanitaria Locale Roma E, Italy
- University of Amsterdam, the Netherlands
- World Health Organisation (WHO), International
- German Cochrane Centre, Germany
- National Institute for Health and Clinical Excellence (NICE), UK
- Scottish Intercollegiate Guidelines Network (SIGN), UK
- Finnish Medical Society Duodecim, Finland

..and very strong links with the GRADE Working Group

## DECIDE: a picture



**Phase 1: strategy development and user testing**

**Phase 2: Evaluation of strategies**

**Phase 3: Testing strategies with real guidelines**

	WP1 health professionals	WP3 consumers	WP4 diagnostic tests	WP2 coverage decisions	WP5 health system decisions
Presentation of evidence and recommendations	Top Layer presentation				
	Explanations of key concepts				
	Interactive SoF tables/ videos				
Frameworks for going from evidence to recommendations	Evidence to recommendation frameworks				Evidence to recommendation framework
				Costing frameworks	
Decision support	Decision aids		Decision aids & Evidence to decision frameworks	Evidence to decision frameworks	
Communication strategies	Point of care applications	Point of care applications & Guidance and tools for guideline producers	Adaptation of point of care applications & Guidance and tools for guideline producers		

	WP1 health professionals	WP3 consumers	WP4 diagnostic tests	WP2 coverage decisions	WP5 health system decisions
Presentation of evidence and recommendations	Top Layer presentation				
	Explanations of key concepts				
	Interactive SoF tables/ videos				
Frameworks for going from evidence to recommendations	Evidence to recommendation frameworks				Evidence to recommendation framework
				Costing frameworks	
Decision support	Decision aids		Decision aids & Evidence to decision frameworks	Evidence to decision frameworks	
Communication strategies	Point of care applications	Point of care applications & Guidance and tools for guideline producers	Adaptation of point of care applications & Guidance and tools for guideline producers		



## WP1: Top Layer presentation

- The recommendation(s) and its strength  
Information on four key factors that influence the strength of recommendation:  
Confidence in the estimates of effect  
Balance between benefits and harms  
Values and preferences  
Resource use  
The rationale for the recommendation: the guideline panels' integration of the four factors above.

18:32

ACCP Anticoagulation treatment  
**Recommendations**  
Updated 04.07.11

Back

1.0 Primary prevention of cardiovascular disease

For persons age 50 years or older without symptomatic cardiovascular disease we suggest low dose aspirin 75-100 mg daily over no aspirin therapy **Weak**

2. Secondary prevention of cardiovascular events

For patients with established coronary artery disease (CAD) (including patients after the first year post acute coronary syndrome [ACS] and/or with prior coronary artery bypass surgery [CABG])

We recommend long-term single antiplatelet therapy with aspirin 75-100 mg daily or clopidogrel 75 mg daily over no antiplatelet therapy **Strong**

We suggest single over dual antiplatelet therapy with aspirin plus clopidogrel **Weak**

For patients in the first year after an ACS who have not undergone PCI

We recommend dual antiplatelet therapy (ticagrelor 90 mg twice daily plus low-dose aspirin 75-100 mg daily or clopidogrel 75 mg daily plus low dose aspirin 75-100 mg daily) over single antiplatelet therapy **Strong**

We suggest ticagrelor 90 mg daily plus low dose

18:32

ACCP Anticoagulation treatment  
**Recommendations**  
Updated 04.07.11

Back

1.0 Primary prevention of cardiovascular disease

For persons age 50 years or older without symptomatic cardiovascular disease we suggest low dose aspirin 75-100 mg daily over no aspirin therapy **Weak**

**Benefits and harms** (10 year time frame, in 1000 people treated with aspirin):  
Combined in all risk groups aspirin will prevent 3 deaths (CI 6-0 fewer). In people at low risk aspirin will prevent 2 MI's (CI 1-3 fewer) at the cost of 3 more major bleeds (CI 2-4 more). In people at moderate to high risk aspirin will prevent 14 MI's (CI 8-18 fewer) at the cost of 12 more major bleeds (from 7 to 14 more) *more...*

**Moderate Confidence in effect** Our confidence in the results is moderate (mortality and stroke) to high (myocardial infarction and major bleeds) *more...*

**Preference and values** Whatever their risk status, people who are averse to taking medication over a prolonged time period for very small benefits will be *more...*

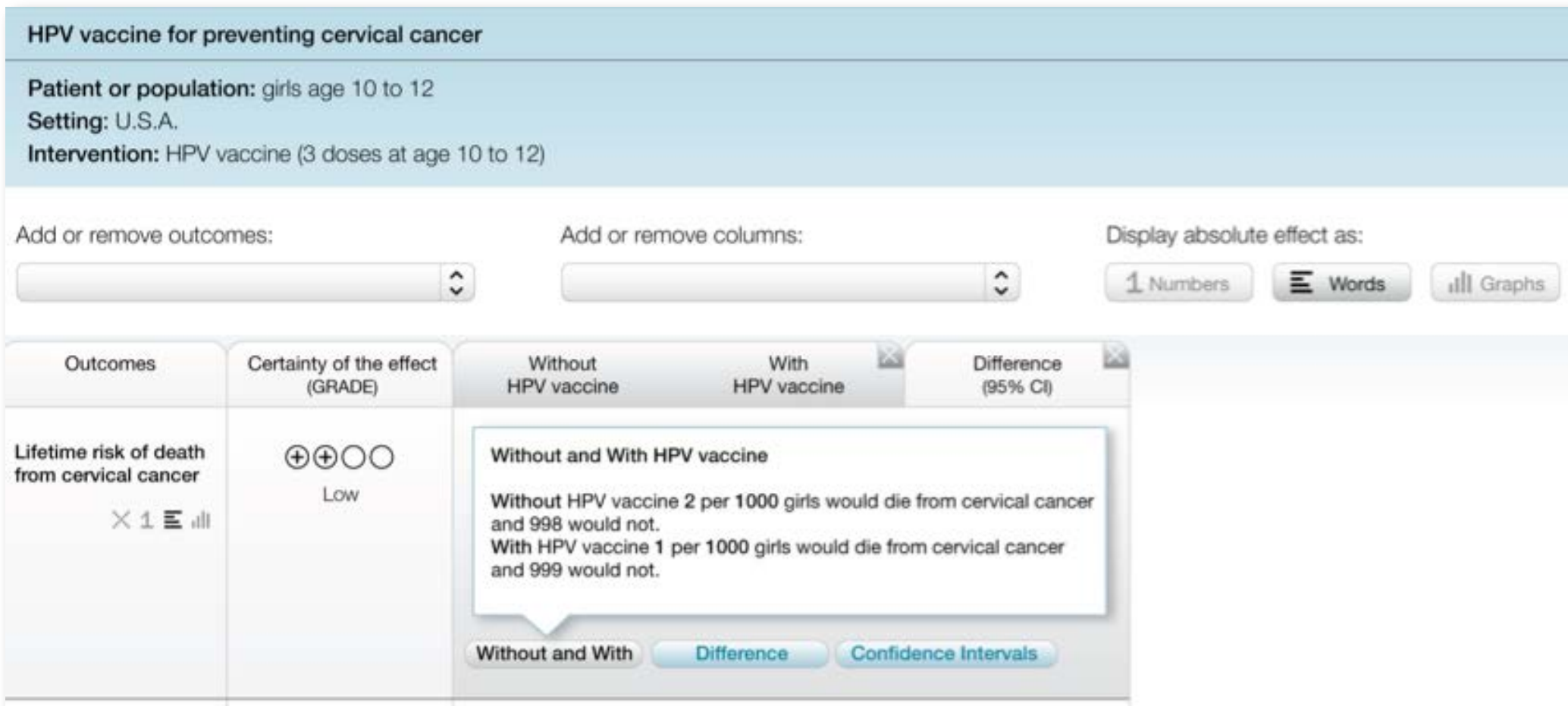
**Resources** The costs of Aspirin is negligible *more...*

Summary of findings table Recommendation Rationale

2. Secondary prevention of cardiovascular events



# Interactive Summary of Findings table



# Alternative, non-tabular presentations

Outcome	Without HPV vaccine	With HPV vaccine	
<b>Lifetime risk of death from cervical cancer</b> ⊕⊕○○ a low grade finding <i>HPV vaccine may slightly reduce the lifetime risk of dying from cervical cancer</i>	<b>2</b> per 1000	<b>1</b> per 1000	That's 1 fewer, a relative effect of 0.52, based on data from 10,000 participants in 6 studies
<b>High grade cervical lesions over 1.5 to 5 years</b> ⊕⊕⊕○ a moderate grade finding <i>HPV vaccine probably reduces the number of cervical lesions with a high risk of becoming cancerous. <a href="#">See more...</a></i>	<b>15</b> per 1000	<b>8</b> per 1000	That's 7 fewer, a relative effect of 0.52, based on data from 18,170 participants in 5 studies.

[Show 95% CI](#)

# Evidence to decision frameworks (WP2)

	CRITERIA	EVIDENCE	JUDGEMENT	COMMENTS
Severity	What is the severity of the condition?		Very low <input type="checkbox"/> Low <input type="checkbox"/> Uncertain <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/>	
Equity	What would be the impact on health inequities?		Increased <input type="checkbox"/> Probably Increased <input type="checkbox"/> Little or uncertain <input type="checkbox"/> Probably reduced <input type="checkbox"/> Reduced <input type="checkbox"/>	
Appropriate use	Is inappropriate use likely to be an important problem?		Yes <input type="checkbox"/> Probably <input type="checkbox"/> Uncertain <input type="checkbox"/> Probably not <input type="checkbox"/> No <input type="checkbox"/>	

## Evidence to decision frameworks (WP5 - health systems)

- Priority
- Lots of people affected
- Large effect
- Undesirable effects small
- Overall certainty
- Desirable effects large relative to undesirable effects
- ...



## Should patients with acute stroke be treated in stroke units, stroke units with early discharge or general medical wards?

<u>Balance of consequences</u>	<i>Undesirable consequences clearly outweigh desirable consequences</i>	<i>Undesirable consequences probably outweigh desirable consequences</i>	<i>Desirable/undesirable consequences closely balanced or uncertain</i>	<i>Desirable consequences probably outweigh undesirable consequences</i>	<i>Desirable consequences clearly outweigh undesirable consequences</i>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>Decision</u>	<i>Do not implement the option</i>	<i>Postpone a decision</i>	<i>Do a pilot study</i>	<i>Implement with an impact evaluation</i>	<i>Implement the option</i>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
We conclude that patients with acute stroke should be cared for in stroke units with early discharge. All urban hospitals must, therefore, have a stroke unit and communities must have arrangements for early discharge from those units.					
<u>Justification</u>	Stroke units with early supported discharge probably will reduce mortality and dependency and save money. The cost-effectiveness analysis suggests that this conclusion is robust.				
<u>Other implementation considerations</u>	Implementing this option requires establishing responsibility and accountability for establishing and maintaining stroke units and early discharge, and aligning financial incentives for hospitals and communities; e.g. by compensating hospitals for the costs of establishing and maintaining a stroke unit.				
<u>Monitoring</u>	We suggest using the following indicators to monitor the implementation of this decision and inform decisions about the need for further action: establishment of stroke units at all urban hospitals, whether stroke patients are managed in stroke units and discharged early, survival, dependency, institutionalization, hospital costs and costs of community-based health and social services.				
<u>Evaluation</u>	Although further evaluation could increase the certainty of the anticipated effects, this is not likely to change the decision. Therefore evaluation of the impacts of this decision is not considered a priority.				



## WP3: what do patients and the public want?

- Screened over 5000 abstracts, 41 included in a review
- Almost 2000 people surveyed about knowledge of guidelines
- Over 50 individuals (patients, the public, clinicians and journalists) involved in focus groups

## WP3: what do patients and the public want?

- There is very poor awareness of guidelines (including that guidelines exist) among the public
- Less than 5% of those responding to NICE's survey thought guidelines were for patients/public
- Patients and the public want shared decision-making up to a point

## WP3: what do patients and the public want?

*'I don't know because ... to a certain extent you do have to rely on professionals making judgements about the strength of evidence, and em you know I can't do everybody's job [m-mmm], at some point you have to trust them.'*

*(Dundee focus group participant (public))*

## Conclusion

- The presentation of guideline content can be improved
- DECIDE has proposals for how this might be done for different types of user
- These proposals are being tested and will be modified, improved and supplemented by others
- GRADE provides a solid foundation but how to present GRADE to users can be a challenge

# Thanks for listening!

[streweek@mac.com](mailto:streweek@mac.com)



The **DECIDE** project has received funding from the European Community's Seventh Framework Programme (FP7/2007-2013) under Grant Agreement no **258583**

**G-I-N Conference**  
Berlin 2012



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Your view of the balance of desirable and undesirable consequences of the intervention	Yes	Probably	Don't know	Probably not	No
	Desirable consequences clearly outweigh undesirable consequences	Desirable consequences probably outweigh undesirable consequences	Consequences equally balanced or uncertain	Undesirable consequences probably outweigh desirable consequences	Undesirable consequences clearly outweigh desirable consequences
Decision	Yes	Coverage with evidence development		No	
<b>Justification</b> (reason for deciding the intervention should be covered, covered with evidence development or not covered)					
<b>Implementation</b> (details regarding the decision, including any restrictions on coverage and conditions for coverage with evidence development)					



<b>Adverse effects</b> Are the undesirable effects of the option small?	<table><tr><th>Outcome</th><th>Results</th><th>GRADE</th></tr><tr><td>Any adverse event</td><td>Inconclusive compared to placebo</td><td>⊕⊕⊖⊖ LOW</td></tr><tr><td colspan="3">These data come from a HTA document published in 2011 and a SR published in 2010. The documents include RCTs affected by several methodological flaws that led their quality of evidence to be judged, using GRADE criteria, as LOW. That's why it is uncertain if the undesirable effects are small. These data are related to all of the populations considered in evaluating the estimate of beneficial effects</td></tr></table>	Outcome	Results	GRADE	Any adverse event	Inconclusive compared to placebo	⊕⊕⊖⊖ LOW	These data come from a HTA document published in 2011 and a SR published in 2010. The documents include RCTs affected by several methodological flaws that led their quality of evidence to be judged, using GRADE criteria, as LOW. That's why it is uncertain if the undesirable effects are small. These data are related to all of the populations considered in evaluating the estimate of beneficial effects			<table><tr><td>Yes</td><td>Uncertain</td><td>No</td></tr><tr><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td><td><input type="checkbox"/></td></tr></table>	Yes	Uncertain	No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>																																																															
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<b>Resource use (costs)</b> Are the costs low/affordable?	<table><tr><th colspan="4">Average costs in children without CLD (£)</th></tr><tr><td></td><td>Palivizumab</td><td>No prophylaxis</td><td>Difference</td></tr><tr><td>Palivizumab</td><td>3437</td><td></td><td></td></tr><tr><td>Drug administration</td><td>60</td><td></td><td></td></tr><tr><td>Hospital</td><td>67</td><td>301</td><td></td></tr><tr><td>Total cost (NHS)</td><td>3564</td><td>301</td><td>3263</td></tr><tr><th colspan="4">Average costs in children with CLD (£)</th></tr><tr><td></td><td>Palivizumab</td><td>No prophylaxis</td><td>Difference</td></tr><tr><td>Palivizumab</td><td>3437</td><td></td><td></td></tr><tr><td>Drug administration</td><td>60</td><td></td><td></td></tr><tr><td>Hospital</td><td>293</td><td>475</td><td></td></tr><tr><td>Total cost (NHS)</td><td>3790</td><td>475</td><td>3315</td></tr><tr><th colspan="4">Average costs in children with acyanotic CHD (£)</th></tr><tr><td></td><td>Palivizumab</td><td>No prophylaxis</td><td>Difference</td></tr><tr><td>Palivizumab</td><td>3714</td><td></td><td></td></tr><tr><td>Drug administration</td><td></td><td></td><td></td></tr><tr><td>Hospital</td><td></td><td></td><td></td></tr><tr><td>Total cost (NHS)</td><td></td><td></td><td></td></tr></table>	Average costs in children without CLD (£)					Palivizumab	No prophylaxis	Difference	Palivizumab	3437			Drug administration	60			Hospital	67	301		Total cost (NHS)	3564	301	3263	Average costs in children with CLD (£)					Palivizumab	No prophylaxis	Difference	Palivizumab	3437			Drug administration	60			Hospital	293	475		Total cost (NHS)	3790	475	3315	Average costs in children with acyanotic CHD (£)					Palivizumab	No prophylaxis	Difference	Palivizumab	3714			Drug administration				Hospital				Total cost (NHS)				<table><tr><td>Yes</td><td>Uncertain</td><td>No</td></tr><tr><td><input type="checkbox"/></td><td><input type="checkbox"/></td><td><input checked="" type="checkbox"/></td></tr></table>	Yes	Uncertain	No	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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## Evidence to decision frameworks (WP2)

- How serious
- Quality of evidence
- Benefits
- Adverse events
- Costs and cost effectiveness
- Feasibility
- Equity

## WP2: Policymakers

How to make evidence-informed policy decisions about coverage decisions? (ie. should we provide treatment X in our region?)

Key output to date: a framework for going from evidence to a coverage decision

## But.. many grading systems

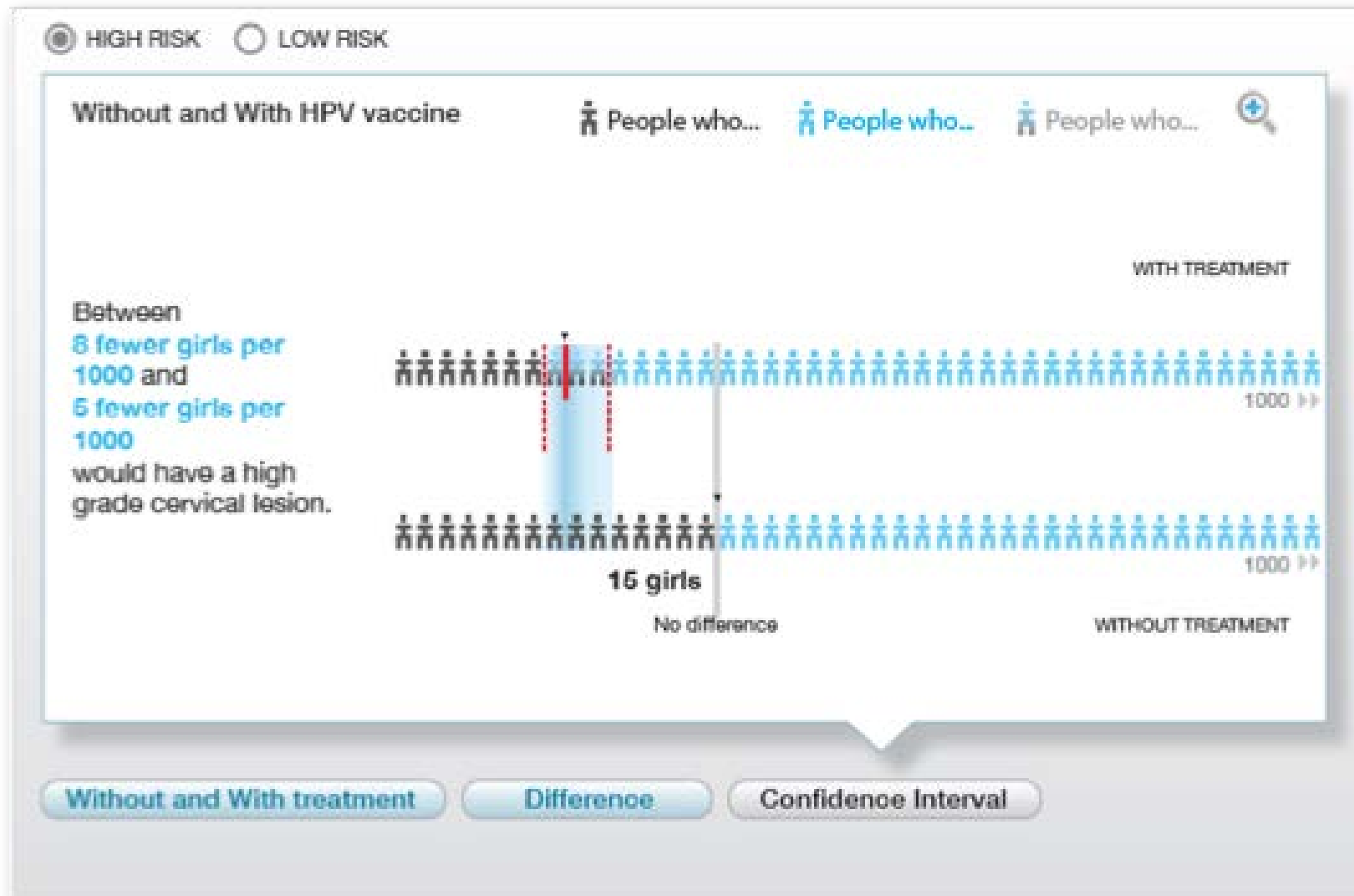
Evidence	Recommendation	Organisation
A to C	Class 1 to Class 3	American Heart Association
1++ to 4	?	NICE
A to C	1A to 2C	American College of Chest Physicians
1++ to 4	A to D	SIGN

## Terminology: explaining common terms

For example..

S0: As far as .. this issue of uncertainty, we spent a lot of time talking about that, what do we think about that? S10: Don't duck it. If it is uncertain, say so ...

*(From a focus group with health journalists for WP3)*





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	CRITERIA	JUDGEMENT	EVIDENCE	C
PROBLEM	<u>Is the problem a priority?</u>	<i>No</i> <input type="checkbox"/> <i>Probably not</i> <input type="checkbox"/> <i>Uncertain</i> <input type="checkbox"/> <i>Probably</i> <input type="checkbox"/> <i>Yes</i> <input checked="" type="checkbox"/>	Acute stroke patients cared for in general medical wards have a high risk of death (27%) and dependency (24%). 15% require institutional care following discharge. [1]	
	<u>Are a large number of people affected?</u>	<i>No</i> <input type="checkbox"/> <i>Probably not</i> <input type="checkbox"/> <i>Uncertain</i> <input type="checkbox"/> <i>Probably</i> <input type="checkbox"/> <i>Yes</i> <input checked="" type="checkbox"/>	15,000 strokes per year in Norway. 3rd most common cause of death. Most common cause of serious disability. [2]	