

Patient Decision Aids based on ODSF: A synthesis of findings from 24 RCT's

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O'Connor et al., *Cochrane Library*, 2009 plus update in 2010

Topics

1. Definition
2. Evidence
3. Use & Related Tools
4. Discussion: SWG

Patient Decision Aids adjuncts to counseling



Inform

- Provide facts
 - Condition, options, benefits, harms
- Communicate probabilities



Clarify values

- Patient experiences
- Ask which benefits/harms matters most
- Facilitate communication



Support

- Guide in steps in deliberation/communication
- Worksheets, list of questions

What can you do to prevent influenza?

OIDA
Ottawa Hospital Decision Aid

A decision aid for those working in a healthcare setting

What is influenza?

- Influenza (the flu) is a common respiratory illness caused by a virus.
- The flu is spread easily from person to person.
- It starts rapidly. People don't feel well and get a fever and cough. They may also have a headache, runny nose, muscle aches and fatigue.
- Most people recover in 7 to 10 days, but some have complications such as pneumonia and death.
- If the elderly are in contact with people who have not had the flu shot, they are more likely to get the flu and die from complications.

What are your options to decrease your risk of getting or spreading the flu?

- **Take the influenza vaccine (flu shot) before flu season.** Your employer arranges for you to have a flu shot in your arm in the fall. The government pays for the flu shot.
- **Wait until there is an outbreak of the flu.** You want to see if your employer declares a flu outbreak. Then you have a flu shot. It takes 14 days to protect you from the flu. During those 14 days, you need to take antiviral pills (Tamiflu) every day.
- **Decline both the flu shot and antiviral pills.** In a flu outbreak, workers declining the flu shot and antiviral pills because of medical reasons would be reassigned if possible. Workers who decline without a valid medical reason will be placed on unpaid leave of absence until the flu outbreak is over.

What other health factors may affect your choice?

You should **take** a flu shot if you **OR** someone you live with has a chronic condition that needs regular visits to a doctor. Check any that apply:

- Chronic heart or respiratory disease
- Diabetes
- Kidney disease
- Asthma
- Cancer
- Other
- None of these apply to me

You should **talk** to your doctor **BEFORE** taking the flu shot in some situations. Check any that apply:

- Strong allergic reaction to a previous flu shot
- Strong allergic reaction to eggs
- Allergy to other parts of the vaccine
- Other medical conditions that concern you.
- I have no medical concerns about flu shots

Working through the 4 steps of this decision aid may help you decide

An influenza prevention decision aid

Step 1: What are the benefits and side effects of each option?

What does the research show?

Blocks of 100 faces show a 'best estimate' of what happens to 100 people who choose different options during a flu season. Each face ☹ stands for one person. The shaded areas show the number of people affected. There is no way of knowing in advance if you or your patients will be the ones affected.

Benefits	No flu shot or no antiviral pills	Flu shot	Antiviral pills
<p>▲ Fewer people in the community get the flu during an outbreak if they take the flu shot or antiviral pills</p> <p>☹ 15 get the flu</p> <p>☹ 4 get the flu</p> <p>☹ Same as with the flu shot</p>	<p>☹ 15 get the flu</p>	<p>☹ 4 get the flu</p>	<p>☹ Same as with the flu shot</p>
<p>* Fewer patients die from the flu if their care provider has a flu shot</p> <p>☹ 19 die from flu</p> <p>☹ 12 die from flu</p> <p>☹ Unknown</p>	<p>☹ 85 avoid flu</p> <p>☹ 19 die from flu</p>	<p>☹ 96 avoid flu</p> <p>☹ 12 die from flu</p>	<p>☹ Unknown</p>

Side Effects	Placebo	Flu shot	Antiviral pills
<p>* More people who have a flu shot report having a sore arm for 1 or 2 days</p>	<p>25 sore arms</p>	<p>52 sore arms</p>	<p>N/A</p>
<p>* More people who take antiviral pills report nausea and vomiting while taking pills</p>	<p>8 get nausea & vomiting</p>	<p>48 avoid this</p>	<p>15 get nausea & vomiting</p>
	<p>75 avoid this</p>	<p>92 avoid this</p>	<p>85 avoid this</p>

▲ Platinum or * Gold symbols mean stronger study results. * Silver or ▲ Bronze symbols mean weaker study results.

Other notes on the flu shot: Guillain-Barré syndrome is a rare nervous system disorder where the body's immune system attacks the nerves in the body. This can cause weakening and numbness of the muscles, and in severe cases, paralysis may

Rates Evidence Quality using STARS



PLATINUM

Systematic Review (meta-analysis) that is well-conducted and includes 2 or more randomised controlled trials



GOLD

Randomised controlled trial (1 or more) that tests at least 50 people with a treatment and 50 people without the treatment



SILVER

Observational studies or studies that did not assign people randomly to groups who receive or do not receive the treatment



BRONZE

Expert opinion or reports of specific cases

Assess knowledge and DC

Step 3: What else do you need to make your decision?

Find out how well this decision aid helped you learn the key facts.
Check the best answer.

- Which option has the **highest** chance of you getting the flu?
- Which option has the **lowest** chance of patients dying from flu that was spread by their care providers?
- Which option has the **highest** chance of a sore arm as a side effect?
- Which option has the **highest** chance of nausea and vomiting as side effects?

	Flu shot	Antiviral pills	Decline flu shot & pills	Don't know
1.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Correct answers at the bottom of the page.

- Knowledge:** Do you know enough about the benefits and side effects of each option?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>
- Values:** Are you clear about which benefits and side effects **matter most** to you?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>
- Support:** Do you have enough support and advice from others to make a choice?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>
- Uncertainty:** Do you feel sure about the best choice for you?

Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

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Consider which positive and negative features matter most

How important is it to you?	Not Important	Very Important	Options to consider
To avoid ALL side effects of taking flu shots and antiviral pills?	<input type="radio"/> 1	<input type="radio"/> 2	<input checked="" type="radio"/> 3
To avoid a needle and side effects unless there is an outbreak?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
To avoid the inconvenience and side effects of taking pills?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
To avoid getting the flu for the whole flu season?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
To avoid spreading the flu to family and patients?	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3
To avoid work limitations during a flu	<input type="radio"/> 1	<input type="radio"/> 2	<input type="radio"/> 3

Step 4: What are the next steps?

Check your next steps:

- I have decided to take the flu shot before the flu season.
- I have decided to wait for an outbreak and take the flu shot and antiviral pills.
- I have decided to decline both the flu shot and antiviral pills.
- I need to discuss the options with my doctor and family.
- I need to read more about my options.
- Other, please specify: _____

Answers for the key facts: 1. Decline flu shot & pills 2. Flu shot 3. Flu shot 4. Antiviral pills

This information is not intended to replace the advice of a health care provider.

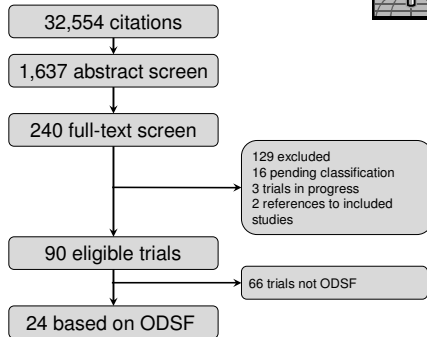
This decision aid was developed by Canadian researchers who conducted an extensive review of the available scientific literature. Content Editors: A McCarthy MD, S Sullivan MSc, J Sutherland MEd and the Ottawa Influenza Decision Aid Planning Group Funded in part by: CCHR, MOHLTC via SHRTN. All Authors have declared no conflict of interest. Format is based on the Ottawa Decision Guide © 2000, A O'Connor, D Stacey, University of Ottawa, Canada August 2008

4 For additional information please contact the Occupational Health and Safety Department for the "Facts and Numbers Behind the Ottawa Influenza Decision Aid".

Systematic Review of Patient Decision Aids based on the Ottawa Decision Support Framework Update 2009+

O'Connor AM, Bennett CL, Stacey D, Mullan S

Search Results (to week 1 Oct 2009)



Topics of patient decision aids evaluated in 24 RCTs

- Medical
 - 6 HRT (Deschamps 04; Dodin 01; Legare 03; O'Connor 98; O'Connor 99; Rostom 02)
 - 2 atrial fib anti-coag (Man-Son-Hing 99; McAlister 05)
 - 1 cardiovascular (Lalonde 06)
 - 1 osteoporosis (Oakley 06)
- Screening
 - 3 BRCA1/2 gene (Tiller 06; Wakefield 08a; Wakefield 08b)
 - 1 colon cancer (Wakefield 08)
 - 2 prenatal (Hunter 05; Nagle 08)
 - 1 mammography (Mathieu 07)
- Obstetrics
 - 1 VBAC (Shorten 05)
 - 1 Breech (Nassar 07)
 - 1 MS child bearing (Prunty 08)
- Other
 - 1 pre-op autologous blood donation (Laupacis 06)
 - 1 referral to CF transplant centre (Vandenhoeem 09)

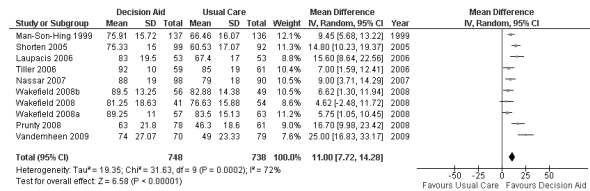
Elements in Patient Decision Aids

	ODSF (n=20)*	Cochrane Non-ODSF (n=41)
Options, outcomes, implicit values clarification	100%	100%
Clinical condition	100%	95%
Probabilities of benefits/harms	100%	83%
Explicit values clarification	100%	42%
Examples of others/ other's opinions	90%	51%
Guidance in decision making steps	95%	34%
For use before counseling	100%	61%

ODSF includes 2009 plus update (4 PtDAs needed contents verified) O'Connor et al., *Cochrane Library*, 2009



Knowledge DA versus Usual Care



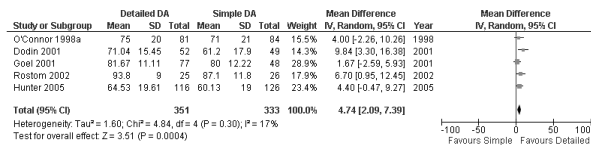
WMD 11.0 (7.7; 14.3) for 10 RCTs based on ODSF

WMD 15.2 (11.7; 18.7) for 18 RCTs in Cochrane 2009

WMD 15.7 (11.4; 19.95) for 15 RCTs in Cochrane 2009 (not ODSF)

WMD 20.6 (16.5; 24.8) for 4 RCTs in Cochrane 1999

Knowledge Detailed versus Simple

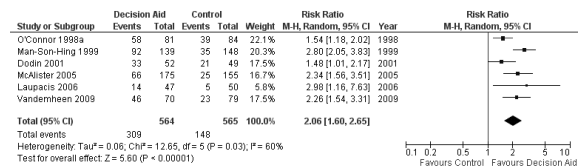


WMD 4.7 (2.1; 7.4) for 5 RCTs based on ODSF

WMD 4.6 (3.6; 6.2) for 9 RCTs in Cochrane 2009

WMD 4.6 (2.5; 6.8) for 4 RCTs in Cochrane 2009 (not ODSF)

Accurate Risk Perceptions

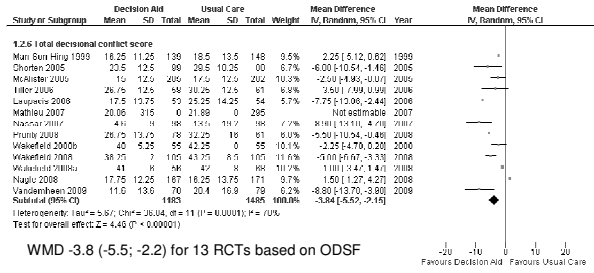


RR 2.1 (1.6; 2.7) for 6 RCTs based on ODSF

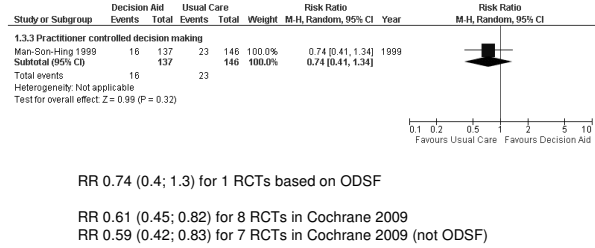
RR 1.9 (1.5; 2.5) for 10 RCTs in Cochrane 2009

RR 1.8 (1.2; 2.7) for 4 RCTs in Cochrane 2009 (not ODSF)

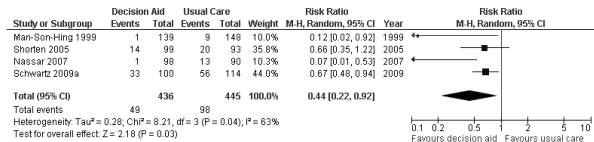
Decisional Conflict PtDA vs Usual Care



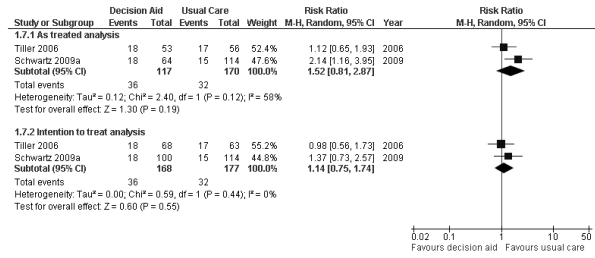
Participation in decision making



Remaining undecided

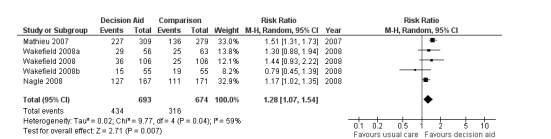
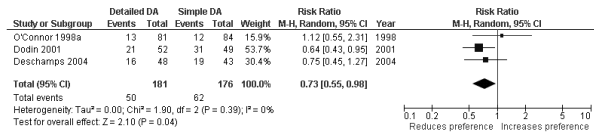


NEW Choice of cancer risk management options (prophylactic mastectomy or oophorectomy)

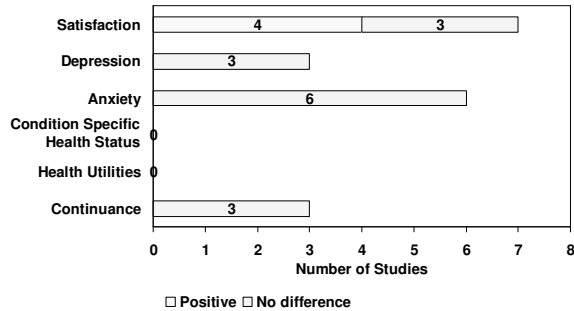


Choice: Hormone Replacement Therapy

NEW Informed values-based choice



Other Outcomes



Topics

1. Definition
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GOOGLE: 'decision aid'

OHRI IRSO Patient Decision Aids

A-Z Inventory of Decision Aids

The A-Z Inventory of Decision Aids is designed to help you find a decision aid to meet your needs. It contains up-to-date and available decision aids identified by the Cochrane Systematic Review Group that meet a formal set of criteria.

You may search for a decision aid using keywords or browse an alphabetical listing.

Note: The A to Z inventory is still under construction. Addition of other decision aids that meet the criteria is in progress.

Search all decision aids:

Decision Aid Summary

Title: What can you do to prevent HPV and cervical cancer? A decision aid for parents/guardians of girls in Grade 8 in Ontario

Health Condition: Childhood Immunization

Type of Decision Aid: Treatment

Options Included: Take the HPV vaccine now when offered at school; Take the HPV vaccine later at the doctor's office or a special clinic; Decline the HPV vaccine

Audience: Parents/guardians of girls in Grade 8 in Ontario

Developer: Ontario Health Decision Centre

Where was it developed?: OHRI/CIHR/CIHR/Canada

Year of last update or review: 2009

Format: paper, PDF

Language(s): English

How to obtain the decision aid: Download from website; Available from...

The IPDAS assessment of this decision aid indicates that it meets: 15 out of 15 of the content criteria; 8 out of 9 of the development process criteria; 8 out of 9 of the effectiveness criteria

www.ohri.ca/decisionaid

IPDAS Checklist

Content	Answer
1. The decision aid describes the condition (health or other) related to the decision.	Yes
2. The decision aid describes the decision that needs to be considered (the index decision).	Yes
3. The decision aid lists the options (health care or other).	Yes
4. The decision aid describes what happens in the natural course of the condition (health or other) if no action is taken.	Yes
5. The decision aid has information about the procedures involved (e.g. what is done before, during, and after the health care option).	Yes
6. The decision aid has information about the positive features of the options (e.g. benefits, advantages).	Yes
7. The decision aid has information about negative features of the options (e.g. harms, side effects, disadvantages).	Yes

Summary of Clinical Priority and Patient's Preference for Total Joint Replacement

Clinical Priority

Weight based: Left Knee Right Knee Left Hip Right Hip

Total Score (%)

88% (Left Knee), 85% (Right Knee), 88% (Left Hip), 90% (Right Hip)

Regional Priority (RPV)

55% (Total Score)

Patient's Preference & Decisional Needs

75% correct answers

97% value predict regional preference

Support: Feels free enough support and advice to make a choice

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Discussion

1. Take 2 minutes to jot down
 - Strengths
 - Weaknesses
 - Gaps in research
2. Discussion

Strengths, Weaknesses, Gaps

- Strengths
 - .
 - .
- Knowledge Gaps
 - .
 - .
- Weaknesses
 - .
 - .

Limitations of Cochrane Review 2009

Variability

- Populations
- Measures
- Time frames
- Usual care interventions

Implications for Research



Further evaluation

- Web-based decision aids
- Preference linked outcomes
- Persistence with chosen option, decisional regret, health utilities, resource use, costs
- Patient-practitioner communication
- Litigation rates
- Use by diverse groups of patients
- Dissemination strategies /use in clinical practice

Methods: Data Sources



- Medline (1966 to Oct 2009)
- CINAHL (1982 to Oct 2009)
- Embase (1980 to Oct 2009)
- PsychINFO (1806 to Oct 2009)
- Cochrane Central Register of Controlled Trials (October 2009)
- Personal contact with known developers and evaluators through a shared decision making list-serve up to December 2006

Methods: Study Selection



- Two independent reviewers
- Structured screening form
- Inconsistencies resolved by consensus
- Criteria for inclusion...
 - Meet definition of patient decision aid
 - RCT design
 - Participants make decision re screening or treatment for themselves, a child or incapacitated significant other (not hypothetical)

Data extraction



- 2 reviewers independently extracted data using structured forms
- RCT quality will be assessed using the risk of bias assessment criteria
- Inconsistencies were resolved by consensus