

User Manual – Decisional Conflict Scale

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Definition

The decisional conflict scale measures personal perceptions of : a) uncertainty in choosing options; b) modifiable factors contributing to uncertainty such as feeling uninformed, unclear about personal values and unsupported in decision making; and c) effective decision making such as feeling the choice is informed, values-based, likely to be implemented and expressing satisfaction with the choice.

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Conceptual Framework

The conceptual framework guiding the scale development is reported in detail elsewhere [1]. It was derived from the construct of decisional conflict developed by Janis and Mann [20] and refined as a diagnosis by the North American Nursing Diagnosis Association [21]. Decisional conflict is a state of uncertainty about a course of action. Such uncertainty is more likely when a person is confronted with decisions involving risk or uncertainty of outcomes, when high-stakes choices with significant potential gains and losses are entertained, when there is a need to make value tradeoffs in selecting a course of action, or when anticipated regret over the positive aspects of rejected options is probable. The main behavioural manifestations of decisional conflict include verbalized uncertainty about choices, verbalization of the undesired consequences of alternatives; vacillation between choices, and delayed decision making. Minor manifestations include verbalized distress while attempting decision making, self-focusing, physical signs of distress or tension, and questioning personal values and beliefs while attempting to make a decision.

Although decisional conflict occurs as a consequence of the difficulty inherent in the type of decision being made, several modifiable cognitive, affective and social factors can exacerbate the perceived uncertainty. Uncertainty is greater when a person: 1) feels uninformed about the alternatives, benefits and risks; 2) is unclear about personal values; 3) feels unsupported in making a choice or pressured to choose on course of action.

Decisional conflict can be lowered with decision supporting interventions. Information about options, benefits, risks, and side effects can make people feel more informed. Values can be clarified using strategies such as: describing outcomes in sufficient detail (including physical, emotional, and social impacts) to better judge their value; and asking patients to rate the personal importance of outcomes. People may feel more supported in decision making if they are guided or coached in the steps of deliberation and shared decision making. As a consequence, their uncertainty stemming from these modifiable factors may decline, and they may feel they have made a better decision. By better decision, they may feel that they have made a more informed value-based decision, are more likely to stick with their choice, and are more satisfied with the decision.

There is considerable empirical data to support the effects of decision supporting interventions on decisional conflict and its related modifiable constructs [1,3].

Sample Tools

There are 3 research versions. The table on next page compares the versions. Individual samples are provided later in the document.

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A. STATEMENT FORMAT 16 items 5 response categories statements <ul style="list-style-type: none"> Used in most studies to date Many respondents like this version because it is personal Those with limited response skills find it harder to respond to 	B. QUESTION FORMAT 16 items 5 response categories questions <ul style="list-style-type: none"> Want easier response format Want more precision than 3 item response format Least tested: now being tested with hundreds of patients 	C. LOW LITERACY 10 items 3 response categories questions <ul style="list-style-type: none"> Want response format most useful for people with limited reading or response skills Willing to forgo precision Second most tested version
RESPONSE FORMATS		
strongly agree, agree, neither agree or disagree, disagree, strongly disagree	yes, probably yes, unsure, probably no, no	yes, no, unsure
INFORMED SUBSCALE		
I know which options are available to me.	Do you know which options are available to you?	Do you know which options are available to you?
I know the benefits of each option.	Do you know the benefits of each option?	Do you know the benefits of each option?
I know the risks and side effects of each option.	Do you know the risks and side effects of each option?	Do you know the risks and side effects of each option?
VALUES CLARITY SUBSCALE		
I am clear about which benefits matter most to me.	Are you clear about which benefits matter most to you?	Are you clear about which benefits matter most to you?
I am clear about which risks and side effects matter most.	Are you clear about which risks and side effects matter most to you?	Are you clear about which risks and side effects matter most to you?
I am clear about which is more important to me (the benefits or the risks and side effects).	Are you clear about which is more important to you (the benefits or the risks and side effects)?	
SUPPORT SUBSCALE		
I have enough support from others to make a choice.	Do you have enough support from others to make a choice?	Do you have enough support from others to make a choice?
I am choosing without pressure from others.	Are you choosing without pressure from others?	Are you choosing without pressure from others?
I have enough advice to make a choice.	Do you have enough advice to make a choice?	Do you have enough advice to make a choice?
UNCERTAINTY SUBSCALE		
I am clear about the best choice from me.	Are you clear about the best choice for you?	Are you clear about the best choice for you?
I feel sure about what to choose.	Do you feel sure about what to choose?	Do you feel sure about what to choose?
This decision is easy for me to make.	Is this decision easy for you to make?	
EFFECTIVE DECISION SUBSCALE		
I feel I have made an informed choice.	Do you feel you have made an informed choice?	
My decision shows what is important to me.	Does your decision show what is important to you?	
I expect to stick with my decision.	Do you expect to stick with your decision?	
I am satisfied with my decision.	Are you satisfied with your decision?	

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Comparison of Versions of the Decisional Conflict Scale (DCS)

A. Traditional Decisional Conflict Scale (DCS) - Statement Format: 16 item 5 response categories

This is our most tested version. Many people like the personal response format. However it is more difficult to respond to than questions in those with limited reading and response skills.

Note: We always precede the DCS with an option preference question, which is not included in scoring. [See item ‘A’ below].

My difficulty in making this choice

A. Which **[insert treatment/screening]** option do you prefer? Please check one.

- [Option 1]**
 [Option 2]
 [Option 3]
 Unsure

B. Considering the option you prefer, please answer the following questions:

	Strongly Agree [0]	Agree [1]	Neither Agree Or Disagree [2]	Disagree [3]	Strongly Disagree [4]
1. I know which options are available to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. I know the benefits of each option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. I know the risks and side effects of each option.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I am clear about which benefits matter most to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. I am clear about which risks and side effects matter most.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I am clear about which is more important to me (the benefits or the risks and side effects).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I have enough support from others to make a choice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. I am choosing without pressure from others.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. I have enough advice to make a choice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I am clear about the best choice for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. I feel sure about what to choose.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. This decision is easy for me to make.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. I feel I have made an informed choice.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. My decision shows what is important to me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. I expect to stick with my decision.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. I am satisfied with my decision.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Decisional Conflict Scale © AM O'Connor, 1993, revised 2005

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Scoring and Interpretation

Items are given a score value of:

0 = ‘strongly agree’; 1 = ‘agree’; 2 = ‘neither agree nor disagree’; 3 = ‘disagree’; 4 = ‘strongly disagree’.

TOTAL SCORE

16 items [items **1-16** inclusive] are: a) summed; b) divided by 16; and c) multiplied by 25.

Scores range from 0 [no decisional conflict] to 100 [extremely high decisional conflict].

UNCERTAINTY SUBSCORE

3 items [**10, 11, 12**] are: a) summed; b) divided by 3; and c) multiplied by 25.

Scores range from 0 [feels extremely certain about best choice] to 100 [feels extremely uncertain about best choice].

INFORMED SUBSCORE

3 items [**1, 2, 3**] are: a) summed; b) divided by 3; and c) multiplied by 25.

Scores range from 0 [feels extremely informed] to 100 [feels extremely uninformed].

VALUES CLARITY SUBSCORE

3 items [**4, 5, 6**] are: a) summed; b) divided by 3; and c) multiplied by 25.

Scores range from 0 [feels extremely clear about personal values for benefits & risks/side effects] to 100 [feels extremely unclear about personal values]

SUPPORT SUBSCORE

3 items [**7, 8, 9**] are: a) summed; b) divided by 3; and c) multiplied by 25.

Scores range from 0 [feels extremely supported in decision making] to 100 [feels extremely unsupported in decision making].

EFFECTIVE DECISION SUBSCORE

4 items [**13, 14, 15, 16**] are: a) summed; b) divided by 4; and c) multiplied by 25.

Scores range from 0 [good decision] to 100 [bad decision].

NOTE: The Cochrane systematic review of trials of patient decision aids [3] uses this scoring method; other papers may present scores ranging from 1 [low decisional conflict] to 5 [high decisional conflict]. If the SCORE or SUBSCORE is reported as a percentage or on a 0-100 scale no conversion is required.

If the average SCORE or SUBSCORE is reported on the 1-5 scale then to convert these scores to the equivalent 0-100 scale: a) subtract 1 from the score; b) then multiply by 25.

If the SCORE or SUBSCORE is reported as a sum of items that used the 1-5 scale then to convert these scores to the equivalent 0-100 scale: a) divide the score by the number of items summed; b) then subtract 1; c) then multiple by 25.

Psychometric Properties

Reliability:

test-retest correlations and Cronbach’s alpha coefficients exceed 0.78.

Construct Validity:

correlated to related constructs of knowledge, regret, and discontinuance.

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- discriminates between known groups: those who make and delay decisions (effect size [ES] ranges 0.4 to 0.8).

Responsive to change:

- in before/after studies of decision supporting interventions, effect size ranges from 0.4 to 1.2 for the total scale.
- discriminates between different decision supporting interventions:
 - Informed subscale consistently discriminates (ES 0.3 to 0.4).
 - Total score and other sub-scores less consistent [especially when decision supporting intervention compared to alternative intervention rather than to usual care controls
 - X total scale ES: 0.2 to 0.3
 - X uncertainty scale: 0.06 to 0.3
 - X unclear values ES: 0.3 to 0.4
 - X unsupported ES: 0.0 to 0.3
 - X quality of choice: 0.2 to 0.3

Predictive validity:

Sung [22] found that for every unit increase in the DCS, people were:

- 59 times more likely to change their mind
- 23 times more likely to delay their decision
- 5 times more likely to express decisional regret
- 3 times more likely to fail a knowledge test on options

Gattereli and Ward [23] found that for every unit increase in DCS, patients were 19% more likely to blame their doctor for bad outcomes. Decisional conflict was an independent predictor of blame, separate from other predictors such as knowledge scores and age of the patient.

Meaningful differences:

- we usually base sample sizes on detecting an effect size of 0.30 to 0.40;
- scores lower than 25 are associated with implementing decisions; scores exceeding 37.5 are associated with decision delay or feeling unsure about implementation.

Clinical Applications using this Tool

The scale has been used in more than 30 studies for numerous decisions.

Availability

This tool is available in other languages as [listed here](#). It is protected by copyright but is freely available for you to use, provided you cite the reference in any questionnaires or publications. We would appreciate receiving a copy of any documents developed using this tool.

For further information or to send us documents you develop please e-mail the Ottawa Health Decision Centre (ohdec@ohri.ca).

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B. Question Format Decisional Conflict Scale (DCS) - 16 item 5 response categories

This version is being tested by the Foundation for Informed Medical Decision Making as part of a standardized suite of decision process quality and decision quality measures using IPDAS Collaboration.

Note: We always precede the DCS with an option preference question, which is not included in scoring. [See item ‘A’ below].

My difficulty in making this choice

A. Which [insert treatment/screening] option do you prefer? Please check one.

- a. **[Option 1]**
- b. **[Option 2]**
- c. **[Option 3]**
- d. Unsure

B. Considering the option you prefer, please answer the following questions:

	Yes [0]	Probably yes [1]	Unsure [2]	Probably no [3]	No [4]
1. Do you know which options are available to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you know the benefits of each option?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Do you know the risks and side effects of each option?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are you clear about which benefits matter most to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are you clear about which risks and side effects matter most to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are you clear about which is more important to you (the benefits or the risks and side effects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Do you have enough support from others to make a choice?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are you choosing without pressure from others?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Do you have enough advice to make a choice?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are you clear about the best choice for you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Do you feel sure about what to choose?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Is this decision easy for you to make?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Do you feel you have made an informed choice?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. Does your decision show what is important to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15. Do you expect to stick with your decision?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Are you satisfied with your decision?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Scoring and Interpretation

Items are given a score value of:

0 = 'yes'; 1 = 'probably yes'; 2 = 'unsure'; 3 = 'probably no'; 4 = 'no'.

TOTAL SCORE

16 items [items **1-16** inclusive] are: a) summed; b) divided by 16; and c) multiplied by 25.
Scores range from 0 [no decisional conflict] to 100 [extremely high decisional conflict].

UNCERTAINTY SUBSCORE

3 items [**10, 11, 12**] are: a) summed; b) divided by 3; and c) multiplied by 25.
Scores range from 0 [feels extremely certain about best choice] to 100 [feels extremely uncertain about best choice].

INFORMED SUBSCORE

3 items [**1, 2, 3**] are: a) summed; b) divided by 3; and c) multiplied by 25.
Scores range from 0 [feels extremely informed] to 100 [feels extremely uninformed].

VALUES CLARITY SUBSCORE

3 items [**4, 5, 6**] are: a) summed; b) divided by 3; and c) multiplied by 25.
Scores range from 0 [feels extremely clear about personal values for benefits & risks/side effects] to 100 [feels extremely unclear about personal values]

SUPPORT SUBSCORE

3 items [**7, 8, 9**] are: a) summed; b) divided by 3; and c) multiplied by 25.
Scores range from 0 [feels extremely supported in decision making] to 100 [feels extremely unsupported in decision making].

EFFECTIVE DECISION SUBSCORE

4 items [**13, 14, 15, 16**] are: a) summed; b) divided by 4; and c) multiplied by 25.
Scores range from 0 [good decision] to 100 [bad decision].

Psychometric Properties

We will have psychometric data on the scale's performance shortly.

Clinical Applications using this Tool

The scale is currently being tested in several clinical services with large scale populations in New Hampshire [breast cancer, back surgery, hip and knee surgery, PSA testing].

Availability

This tool is available in other languages as [listed here](#). It is protected by copyright but is freely available for you to use, provided you cite the reference in any questionnaires or publications. We would appreciate receiving a copy of any documents developed using this tool.

For further information or to send us documents you develop please e-mail the Ottawa Health Decision Centre (ohdec@ohri.ca).

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C. Question Format DCS - 10 item 3 response categories

This is recommended for those with limited reading or response skills.

Note: We always precede the DCS with an option preference question, which is not included in scoring. [See item ‘A’ below].

My difficulty in making this choice

A. Which **[insert treatment/screening]** option do you prefer? Please check one.

- a. **[Option 1]**
- b. **[Option 2]**
- c. **[Option 3]**
- d. Unsure

B. Considering the option you prefer, please answer the following questions:

	Yes [0]	Unsure [2]	No [4]
1. Do you know which options are available to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you know the benefits of each option?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Do you know the risks and side effects of each option?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are you clear about which benefits matter most to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are you clear about which risks and side effects matter most to you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Do you have enough support from others to make a choice?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are you choosing without pressure from others?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Do you have enough advice to make a choice?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are you clear about the best choice for you?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Do you feel sure about what to choose?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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Scoring and Interpretation

Items are given a score value of:

0 = 'yes'; 2 = 'unsure'; 4 = 'no'.

TOTAL SCORE

10 items [items **1-10** inclusive] are: a) summed; b) divided by 10; and c) multiplied by 25.
Scores range from 0 [no decisional conflict] to 100 [extremely high decisional conflict].

UNCERTAINTY SUBSCORE

2 items [**9, 10**] are: a) summed; b) divided by 2; and c) multiplied by 25.

Scores range from 0 [feels extremely certain about best choice] to 100 [feels extremely uncertain about best choice].

INFORMED SUBSCORE

3 items [**1, 2, 3**] are: a) summed; b) divided by 3; and c) multiplied by 25.

Scores range from 0 [feels extremely informed] to 100 [feels extremely uninformed].

VALUES CLARITY SUBSCORE

2 items [**4, 5**] are: a) summed; b) divided by 2; and c) multiplied by 25.

Scores range from 0 [feels extremely clear about personal values for benefits & risks/side effects] to 100 [feels extremely unclear about personal values]

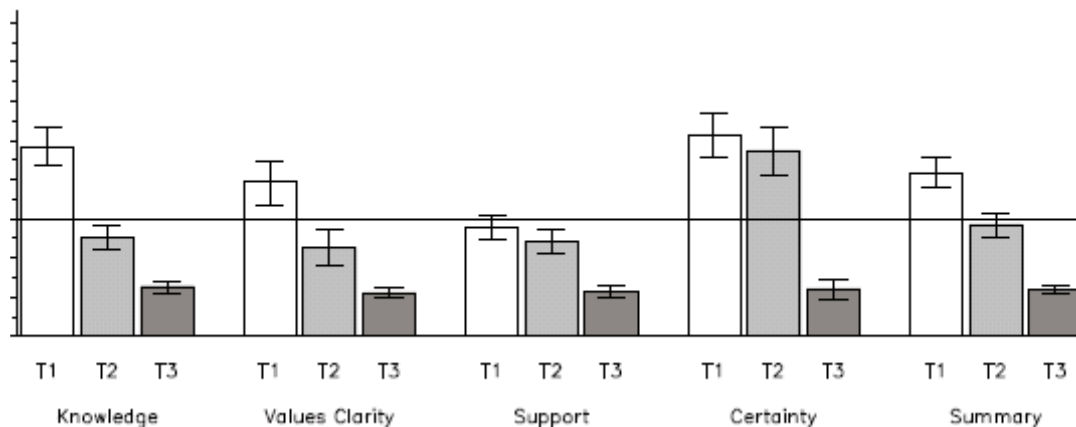
SUPPORT SUBSCORE

3 items [**6, 7, 8**] are: a) summed; b) divided by 3; and c) multiplied by 25.

Scores range from 0 [feels extremely supported in decision making] to 100 [feels extremely unsupported in decision making].

Psychometric Properties

English: The scale has been tested with 63 women considering breast cancer options. Alpha coefficient was 0.86. The scale is responsive to change from baseline (time 1) to the time following use of a video decision aid (T2) and counseling about options (T3).



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Spanish: The *low literacy version* has been tested with Spanish speaking women in disadvantaged areas in Chile. The alpha coefficient was 0.72 and the scale discriminated significantly between those who were: a) actively deliberating among options; and b) not contemplating options or had already made their choice.

Clinical Applications using this Tool

The scale has been used in low literacy populations in Canada (Ottawa), USA (New Hampshire, Washington DC, Texas) and Chile.

Availability

This tool is available in other languages as [listed here](#). It is protected by copyright but is freely available for you to use, provided you cite the reference in any questionnaires or publications. We would appreciate receiving a copy of any documents developed using this tool.

For further information or to send us documents you develop please e-mail the Ottawa Health Decision Centre (ohdec@ohri.ca).

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