

## ***Section 3.5.6***

# **Patient Mediated Interventions**

**A O'Connor, RN, PhD, FCAHS**

Professor, University of Ottawa

Senior Scientist, Ottawa Health Research Institute

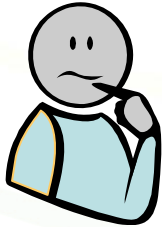


# Key Messages: Patient-Mediated Interventions

- Aim to actively engage patients to improve their knowledge, experience, service use, health behaviour, and health status
- Patient education and information improve knowledge; other outcomes improve with more specific and personalized information, and added professional and other support
- Research gaps: underlying frameworks, essential elements & duration, cost-effectiveness, best implementation strategies



# Topics



1. Case Study



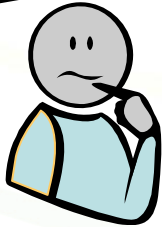
2. Effective Interventions



3. Exemplars



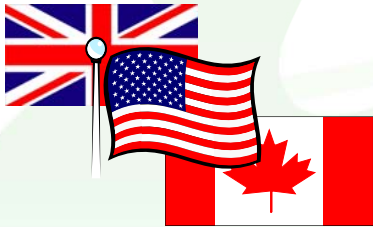
# Topics



1. Case Study



2. Effective Interventions

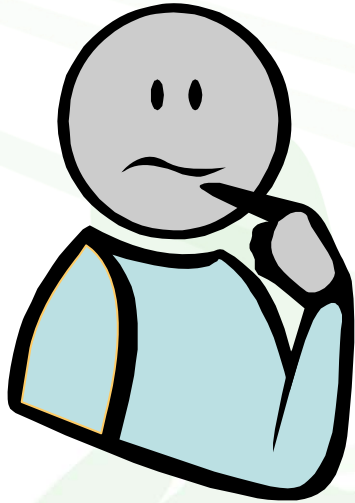


3. Exemplars



## Mrs. C

*“I’ve had a sleepless night...”*



Knee pain affects sleep →  
not sure re surgery that was  
offered

Husband feverish →  
not sure re going to ER

Forgot to fill new script →  
not sure how important it is



# Mrs. C Is Not Alone...

- 924 patients were questioned
- From 5 family practices in Quebec
- after making a decision with MD

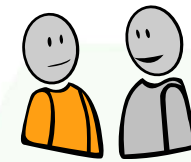




	<b>Unsure</b>
<b>TOTAL</b>	<b>55%</b>
<b>Vaccination</b>	71%
<b>Diabetes</b>	60 %
<b>Pain</b>	59 %
<b>Depression</b>	58 %
<b>Hypertension</b>	57 %
<b>Lifestyle</b>	58 %
<b>Cholesterol</b>	55 %

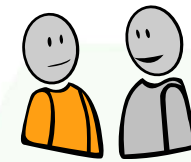






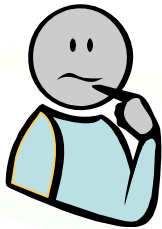
	<b>Unsure</b>	<b>Uninformed</b>	<b>Unclear Values</b>	<b>Unsupported</b>
<b>TOTAL</b>	<b>55%</b>			
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<b>Lifestyle</b>	<b>58 %</b>			
<b>Cholesterol</b>	<b>55 %</b>			





	<b>Unsure</b>	<b>Uninformed</b>	<b>Unclear Values</b>	<b>Unsupported</b>
<b>TOTAL</b>	<b>55%</b>	<b>15%</b>	<b>7%</b>	<b>38%</b>
<b>Vaccination</b>	71%	29%	36%	36%
<b>Diabetes</b>	60 %	20%	0%	27%
<b>Pain</b>	59 %	14%	10%	31%
<b>Depression</b>	58 %	15%	5%	30%
<b>Hypertension</b>	57 %	17%	5%	40%
<b>Lifestyle</b>	58 %	15%	5%	30%
<b>Cholesterol</b>	55 %	18%	18%	27%

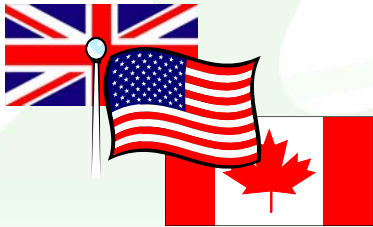
# Topics



1. Case Study



2. Effective Interventions



3. Exemplars





Knowledge  
to action

Des connaissances  
à la pratique

# BMJ

## Effectiveness of strategies for informing, educating, and involving patients

Angela Coulter and Jo Ellins

*BMJ* 2007;335:24-27  
doi:10.1136/bmj.39246.581169.80

**25** Reviews:  
Health  
Literacy  
Interventions

**22** Reviews:  
Clinical  
Decision  
Making  
Interventions

**67** Reviews:  
Self Care &  
Chronic Disease  
Self Management  
interventions



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# Health Literacy

## Definition

A person who is health literate is able to access, understand, evaluate and communicate information as a way to promote, maintain and improve health in a variety of settings across the life course

Expert Panel on Health Literacy. A Vision for a Health Literate Canada: Report of the Expert Panel on Health Literacy. Canadian Public Health Association, 2008.

## Interventions

- Written health information materials (e.g. brochures)
- Alternative format resources (e.g. internet)
- Targeted approaches for disadvantaged groups with low health literacy (e.g. pictograms, videotape, interactive computer)



# Clinical Decision Making

## Interventions

- Communication skills training for clinicians
- Question prompts for patients and coaching to develop skills in preparing for a consultation, deliberating about options, and implementing change
- Patient decision aids: explain options, present probabilities benefits vs. harms, clarify features of options that matter most, and provide structured guidance in deliberation and communication



# Self Care & Self Management Interventions

- Aim to improve people's practices in maintaining and managing their disease
- Self management education to help people cope with their disease and manage daily problems
- Self monitoring and self-administered treatment
- Self help groups and peer support
- Patient access to personal health information
- Patient-Centered tele-care





# BMJ

## Effectiveness of strategies for informing, educating, and involving patients

Angela Coulter and Jo Ellins

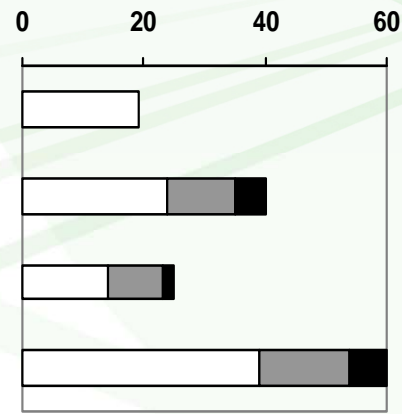
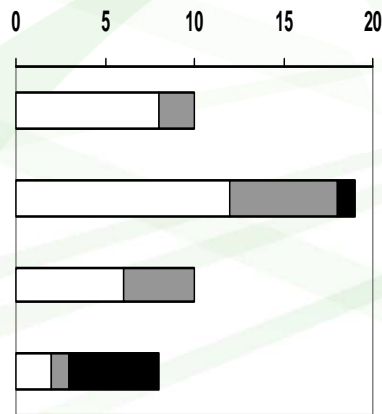
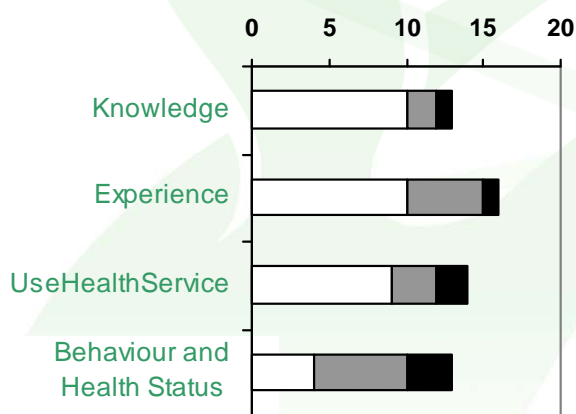
BMJ 2007;335;24-27

doi:10.1136/bmj.39246.581169.80

### 25 Reviews: Health Literacy

### 22 Reviews: Clinical Decision Making

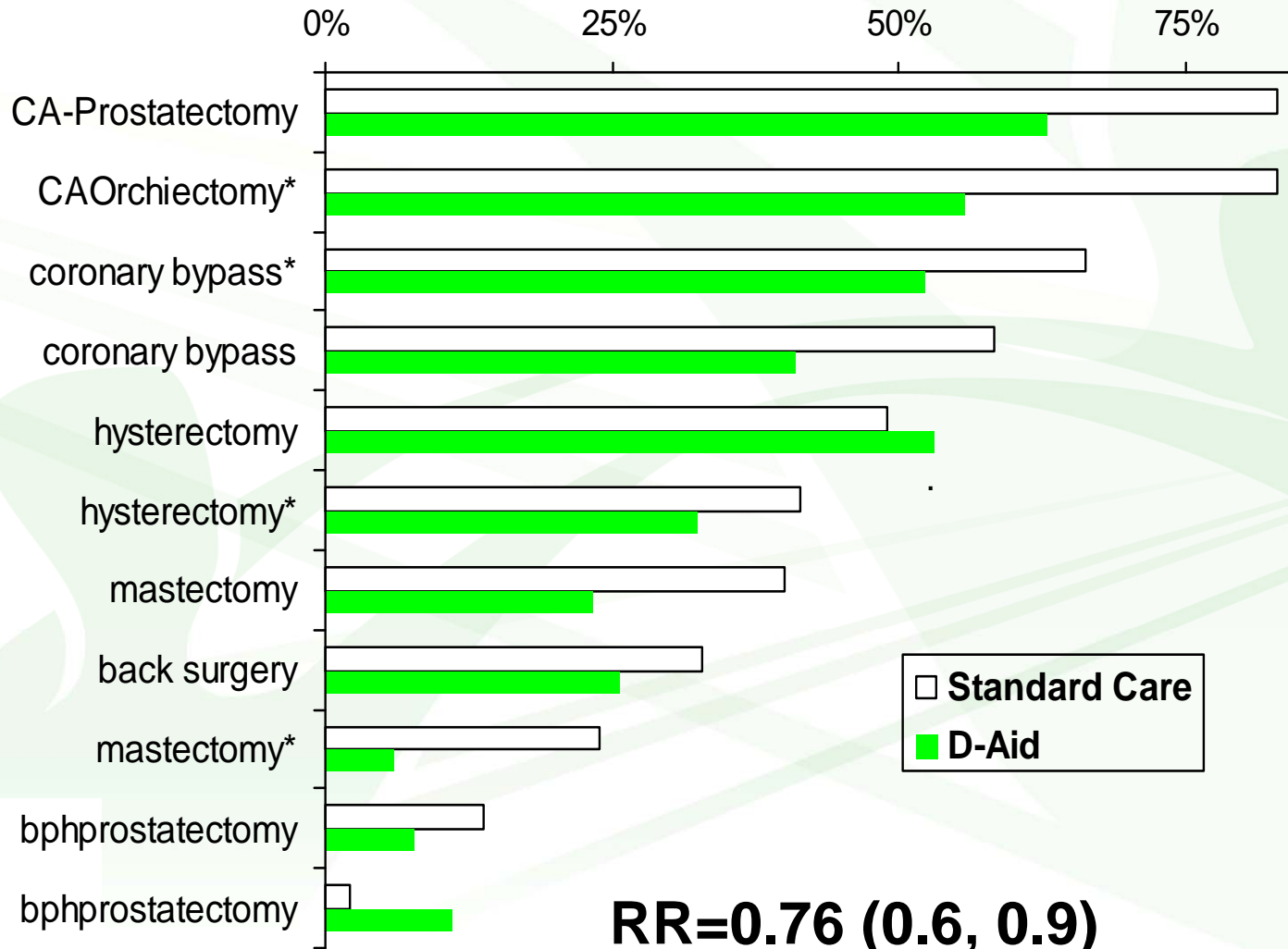
### 67 Reviews: Self Care & Chronic Disease Self Management



□ Positive  
 ■ Mixed  
 ■ No Effect



# Decision Aids Reduce Rates of Discretionary Surgery

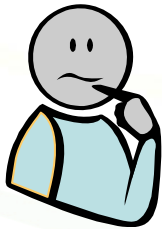


# Review Conclusions

- Patient education/ information ↑ knowledge
- To ↑ experience, service use, health outcomes, behaviour change...
  - ↑ specificity/personalization of information
  - combine interventions with professional or other social support
  - extend duration for long term behaviour change
- Research gaps: underlying frameworks, essential elements & duration, cost-effectiveness, best implementation strategies



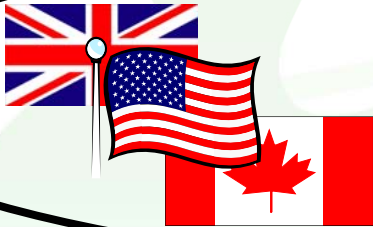
# Topics



1. Case Study



2. Effective Interventions



3. Exemplars





# SASKATCHEWAN HealthLine ONLINE

Health Information at your fingertips

Still have questions? If you live in Saskatchewan, call 1-877-800-0002 (TTY: 1-888-425-4444)



Search the Healthwise® Knowledgebase

### Search Topics

[Search Tips](#)

### List All Topics A-to-Z

Click a letter to see a list of topics beginning with that letter.

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#)  
[X](#) [Y](#) [Z](#) (0-9)

[Help](#)  
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### Health Topics

[Health Topics:](#) Illnesses, diseases, symptoms, first aid, wellness...

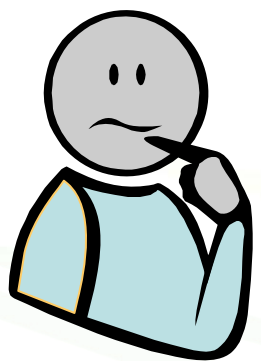
[Topics by Category:](#) Topics grouped by related health category...

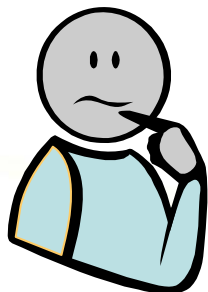
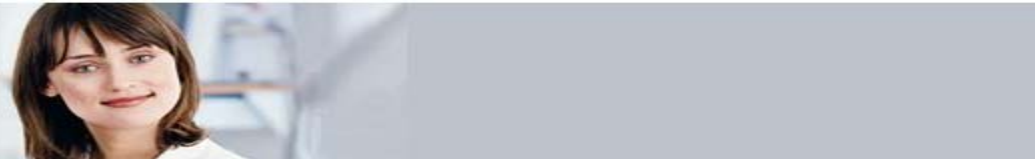
[Symptom Checker:](#) Body map to help find and learn about symptoms...

[Medical Tests:](#) Tests and exams for medical conditions...

[Medications:](#) Prescription and non-prescription drugs...

[Interactive Tools:](#) Quizzes and calculators to help manage health...





### How serious is it?

Find out when to call a doctor.



Health Symptom Checker

### High Blood Pressure (Hypertension)

Health Tools

Health tools help you make wise health decisions or take action to improve your health.



Decision Points focus on key medical care decisions that are important to many health problems.

[Should I take medicine for high blood pressure?](#)



Actionsets are designed to help people take an active role in managing a health condition.

[Monitoring your blood pressure at home](#)

[Taking your high blood pressure medications properly](#)

[Tips for following the Dietary Approaches to Stop Hypertension \(DASH\) diet](#)

### Osteoarthritis

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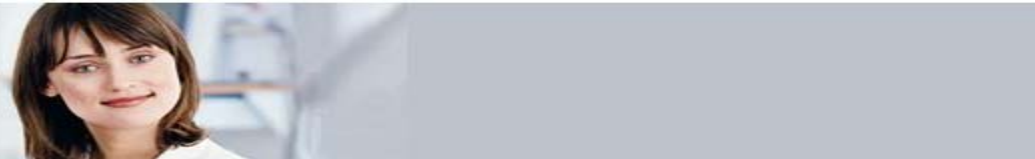
[Should I have hip replacement surgery?](#)

[Should I have knee replacement surgery?](#)



Actionsets are designed to help people take an active role in managing a health condition.

[Exercising with osteoarthritis](#)



## Challenge #1

- Need to train potential users:
  - High school students
  - Post 2ndary students
  - Health science students day 1 of training
  - New mothers
  - Health departments
  - Call centers and help-lines

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**Osteoarthritis**

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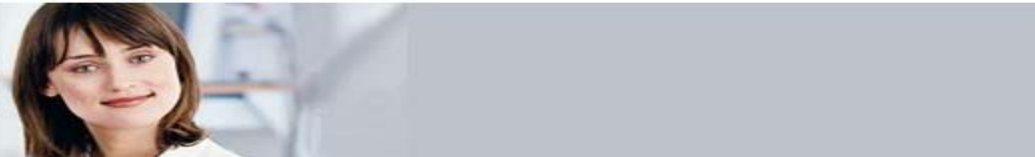
How serious is it?  
 Find out when to call a doctor.

**INTERACTIVE HEALTH**  
 The Symptom Checker

Head  
 Eyes  
 Ears  
 Heart & Blood  
 Stomach & Intestine  
 Skin, Nails & Hair  
 Chest & Breasts  
 Allergies  
 Other, Aches & Pains

**Health Symptom Checker**





**High Blood Pressure (Hypertension)**

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[Exercising with osteoarthritis](#)

How serious is it?  
*Find out when to call a doctor.*

**INTERACTIVE HEALTH**  
 (symptom checker)

Home | Search | My Account

Home  
 Care  
 Health & Health  
 Health & Support  
 Care, Decisions & Health  
 Clinical & Research  
 Resources  
 About Us & Contact

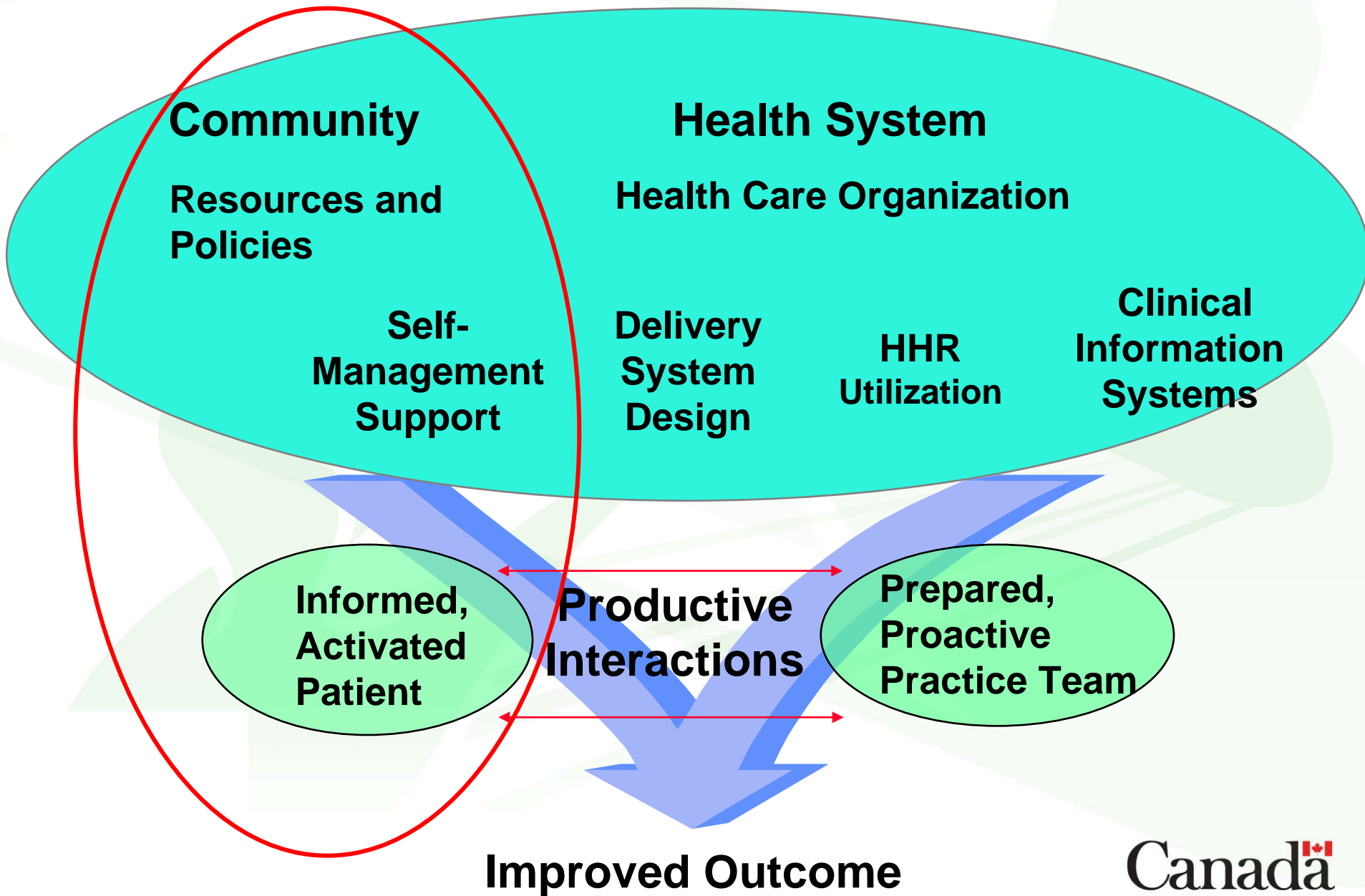
**Health Symptom Checker**

## BIG Challenge #2

- Embed ‘just in time’ information for an individual as part of the process of care

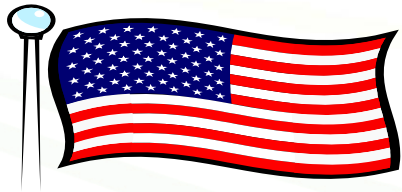


# Wagner Chronic Care Model





# Implementation: Clinical Care



- Dartmouth HMC, VA, Mass Gen. & FIMDM Network



- Group Health Cooperative



- NHS Urology & Orthopedics

- Ottawa Pilot: Orthopedic Intake Clinic; Breast/Prostate Ca Center



# Delivery Model

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## Center for Shared Decision Making

About Shared Decision Making

How We Help

Decision Aid Library

Healthcare Decision Guide

Resources

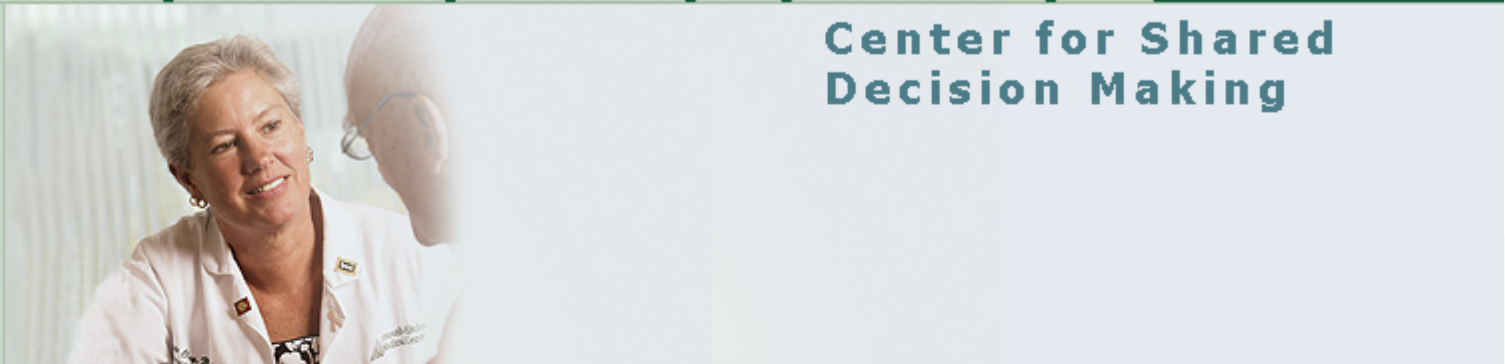
Shared Decision Making Team

More Appointment Information

### Go back to...

Departments & Services

DHMC Home



## Center for Shared Decision Making

[Printable Version](#)

The Center for Shared Decision Making helps when you need to make a difficult healthcare decision. At times it can be hard to decide whether to have surgery, to have a test, or to continue with treatment.

### Our services include:

- One-on-one counseling sessions for any medical condition
- A [Decision Aid Library](#) of helpful videotapes, audiotapes, booklets, CD-ROMs, and websites
- A [Healthcare Decision Guide](#) worksheet to help you work through a decision on your own

[To make an appointment](#), stop by our offices, call (603) 650-5578, or email us at [shared-decision-making@blitz.hitchcock.org](mailto:shared-decision-making@blitz.hitchcock.org).

### Make an Appointment

(603) 650-5578

[More Appointment Information](#)

### Tools

[A Woman's Introduction to Breast Cancer Care DHMC Video](#)

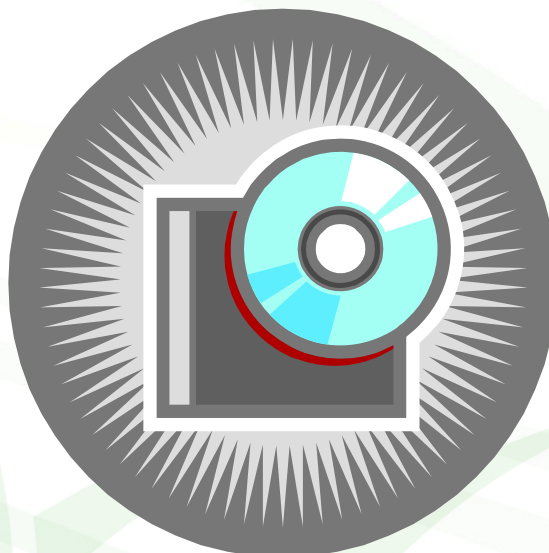
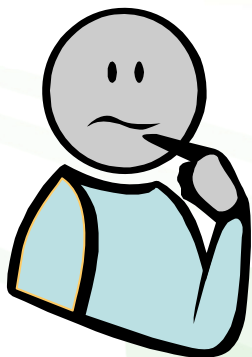
[Decision Support Tool](#)

[Ottawa Health Research Institute: Ottawa Decision Aids](#)

Knowledge to action  
Des connaissances à la pratique

## Decision Aid

## Personal Decision Form






### ***KNEE OSTEOARTHRITIS:***

#### **Personal Decision Form**

There are several different ways to treat knee osteoarthritis. Each has possible benefits and risks. This form and video, together with your healthcare team, will help you make the decision that is best for you.

Please return this form with the video.

Your answers will tell us three important things:

	<b>Knowledge</b> How well we are doing our job of giving you information?
	<b>Values</b> What matters most to you?
	<b>Making Choices</b> How far along you are in decision making and what else you may need?

#### **BEFORE WATCHING THE VIDEO, PLEASE ANSWER QUESTION 1 - 2**

1. Have you talked with a healthcare provider about this decision?  
 Yes  
 No
2. At this time, which treatment option are you leaning toward?  
 Non-surgical treatment  
 Surgery  
 Unsure

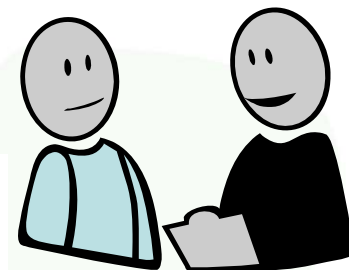
**NOW, PLEASE WATCH THE VIDEO**



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# Summary Report for Surgeons



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

Name \_\_\_\_\_ Date of clinic visit \_\_\_\_\_

**Clinical Priority**  
 Worst Joint  Left Knee  Right Knee  Left Hip  Right Hip  
 Symptoms Self-report WOMAC

**Total Score (%)**  
 100%  
 75%  
 50%  
 25%  
 0%  
 68%

Pain 65%  
 Limited Function 65%  
 Stiffness 100%

If current pain remained as it is for the remainder of life, would feel:  
**Unhappy**

**Surgical Priority (HKPT)**

	Level 1	Level 2	Level 3	Level 4
Pain on motion/bending	None	Mild	Moderate	Severe
Pain at rest/sleep	None	Mild	Moderate	Severe
Ability to walk	>5 blocks	1-5 blocks	<1 block	House only
Other functional limits	None	Mild	Moderate	Severe
Role/independence threat	Not		Not Immed	Immediate
Physical exam abnormalities	None	Mild	Moderate	Severe
X-Ray abnormalities	None		Abnormal	

**Total Score (%)**  
 100%  
 75%  
 50%  
 25%  
 0%  
 56%

**Patient's Preference & Decisional Needs**

Certainty **Prefers: Knee replacement surgery**  
 ✓ Feels sure about best choice

Knowledge 75% correct answers  
 ✓ Feels knows enough

Values 97% values predict surgical preference  
 ✓ Feels clear about values

**Reasons for Surgery**

	1	2	3	4	5	6	7	8	9	10
Get pain relief										10
Return to normal activities										10
Avoid side effects of pain meds					5					

**Reasons Against Surgery**

	1	2	3	4	5	6	7	8	9	10
Avoid surgery			3							
Avoid time off for recovery		2								
Avoid side effects of surgery					5					

Support ✓ Feels has enough support and advice to make a choice

Patient's Questions and Comments

Self reported symptoms

GP's or physiotherapist's assessment results

Patient's preference with their level of (un)certainty

Knowledge test results (✓=correct; × = wrong)

Strong values favouring outcomes of choosing surgery

Support needs indicate that feeling is supported

BMJ



# Online Quality Reports

## SHARED DECISION MAKING

We want all of our patients to feel good about the healthcare choices that they make. We invite our patients to visit the Center for Shared Decision Making. It is a free service for our patients who need help making a healthcare decision. The center offers one-on-one counseling, as well as take-home decision aids in the form of videos, audiotapes, booklets, CD-ROMs, and websites. If you are facing a healthcare decision, we encourage you to visit the Center for Shared Decision Making at DHMC. Call (603) 650-5578 for more information. (For more detail, click on each underlined measure below. A dash " - " means that there is no available comparison.)

	DHMC 2006	Top 10%	Average
<b>DECISION AID VIDEO</b> <a href="#">Back to Top</a>			
<a href="#">Patients who found the video clear:</a> Percent of patients who reported that the information on the video was clear.	99%	-	-
<a href="#">Patients who said the information was unbiased:</a> Percent of patients who said the information about treatment options was balanced.	98%	-	-
<a href="#">Patients who would recommend the video:</a> Percent of patients who reported that they would recommend the video to others in the same situation.	99%	-	-
<b>MAKING A DECISION ABOUT KNEE REPLACEMENT SURGERY</b> <a href="#">Back to Top</a>			
<a href="#">Patients who know the available choices:</a> Percent of patients who watched the decision aid video and reported that they know what choices are available to them.	98%	-	-
<a href="#">Patients who know the risks of each choice:</a> Percent of patients who watched the decision aid video and reported that they know the risks of each choice.	97%	-	-
<a href="#">Patients who know the benefits of each choice:</a> Percent of patients who watched the decision aid video and reported that they know the benefits of each choice.	97%	-	-
<a href="#">Patients who know which risks and benefits matter most to them:</a> Percent of patients who watched the decision aid video and reported that they know which risks and benefits mattered most to them.	95%	-	-
<a href="#">Patients who change their treatment choice:</a> Percent of patients who change their treatment choice after watching the video (this includes those who were unsure about their treatment choice before the video).	13%	-	-

## SAFE AND EFFECTIVE CARE

Monitoring our care helps us evaluate and improve the way we deliver care. We emphasize areas where experts agree on the best treatment for a certain condition. (For more detail, click on each underlined measure below. A dash " - " means that there is no available comparison.)

	DHMC 2006	Top 10%	Average
<b>PREVENTING SURGICAL INFECTIONS</b> <a href="#">Back to Top</a>			
<a href="#">Use of appropriate preventive antibiotics:</a> Percent of knee replacement patients getting the recommended preventive antibiotics before surgery.	100%	-	-
<a href="#">Timing of preventive antibiotics before surgery:</a> Percent of knee replacement patients getting preventive antibiotics within one hour of the start of surgery.	99%	98%	85%
<a href="#">Stopping preventive antibiotics after surgery:</a> Percent of knee replacement patients whose preventive antibiotics are stopped within 24 hours after surgery is completed.	82%	98%	73%
<b>COMPLICATIONS IN THE HOSPITAL</b> <a href="#">Back to Top</a>			
<a href="#">Blood clots after single knee replacement:</a> Percent of patients who got a blood clot after having single knee replacement.	1.1%	-	1.5%
<a href="#">Blood clots after bilateral knee replacement:</a> Percent of patients who got a blood clot after having bilateral knee replacement.	1.1%	-	2.3%
<b>MORTALITY</b> <a href="#">Back to Top</a>			
<a href="#">In-hospital mortality:</a> Percent of patients who died in the hospital after primary knee replacement surgery.	0%	-	0.1%
<b>COMPLICATIONS AFTER DISCHARGE</b> <a href="#">Back to Top</a>			
<a href="#">Readmission to the hospital:</a> Percent of patients who have had a knee replacement and are readmitted to the hospital within 90 days.	3.9%	-	-
<b>AFTER SURGERY</b>			
The care of our patients doesn't end after surgery. We work with patients and their families to make sure their needs are met when they leave the hospital. (For more detail, click on each underlined measure below. A dash " - " means that there is no available comparison.)	DHMC 2006	Top 10%	Average
<b>SINGLE KNEE REPLACEMENT</b> <a href="#">Back to Top</a>			
<a href="#">Average length of hospital stay after single knee replacement:</a> The average number of days patients stay in the hospital after single knee replacement.	3 Days	-	-



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