Section 3.5.6

Patient Mediated Interventions

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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

Data from France Legare, U Laval
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<tr>
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<tr>
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<td>36%</td>
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<td>Pain</td>
<td>59%</td>
<td>14%</td>
<td>10%</td>
<td>31%</td>
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<tr>
<td>Depression</td>
<td>58%</td>
<td>15%</td>
<td>5%</td>
<td>30%</td>
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<td>Hypertension</td>
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<td>17%</td>
<td>5%</td>
<td>40%</td>
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<td>5%</td>
<td>30%</td>
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<td>18%</td>
<td>27%</td>
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3. Exemplars
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
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.

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

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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

O'Connor et al., Cochrane Library, 2009
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
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

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 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
BIG Challenge #2

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

Community
- Resources and Policies
- Self-Management Support

Health System
- Health Care Organization
- Delivery System Design
- HHR Utilization
- Clinical Information Systems

Informed, Activated Patient

Productive Interactions

Prepared, Proactive Practice Team

Improved Outcome

Health System Resources and Policies

Community

Self-Management Support

Health Care Organization

Delivery System Design

HHR Utilization

Clinical Information Systems

Informed, Activated Patient

Productive Interactions

Prepared, Proactive Practice Team

Improved Outcome
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
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.
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:

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

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
Summary Report for Surgeons

Stacey, D. et al. BMJ 2008;0:bmj.39520.701748.94v2-bmj.39520.701748.94
# Online Quality Reports

## Shared Decision Making

We want all of our patients to feel good about their healthcare choices and the care they receive. We invite our patients to visit the Center for Shared Decision Making. It is a service designed to help make a healthcare decision by providing the necessary information in the form of videos, audiotapes, brochures, 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.)

### Decision Aid Video

<table>
<thead>
<tr>
<th>Patients who found the video clear: Percent of patients who reported that the information on the video was clear</th>
<th>99%</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients who said the information was unbiased: Percent of patients who said the information about treatment options was balanced</td>
<td>98%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Patients who would recommend the video: Percent of patients who reported that they would recommend the video to others in the same situation</td>
<td>99%</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

## Making a Decision About Knee Replacement Surgery

<table>
<thead>
<tr>
<th>Patients who know the available choices: Percent of patients who watched the decision aid video and reported that they knew what choices are available to them</th>
<th>98%</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patients who know the risks of each choice: Percent of patients who watched the decision aid video and reported that they knew the risks of each choice</td>
<td>97%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Patients who know the benefits of each choice: Percent of patients who watched the decision aid video and reported that they knew the benefits of each choice</td>
<td>97%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Patients who know which risks and benefits matter most to them: Percent of patients who watched the decision aid video and reported that they knew which risks and benefits mattered most to them</td>
<td>95%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Patients who change their treatment choice: 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)</td>
<td>13%</td>
<td>-</td>
<td>-</td>
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</tbody>
</table>

## Preventing Surgical Infections

<table>
<thead>
<tr>
<th>Use of appropriate preventive antibiotics: Percent of knee replacement patients getting the recommended preventive antibiotics before surgery</th>
<th>100%</th>
<th>-</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timing of preventive antibiotics before surgery: Percent of knee replacement patients getting preventive antibiotics within one hour of the start of surgery</td>
<td>99%</td>
<td>98%</td>
<td>85%</td>
</tr>
<tr>
<td>Stopping preventive antibiotics after surgery: Percent of knee replacement patients whose preventive antibiotics are stopped within 24 hours after surgery is completed</td>
<td>92%</td>
<td>99%</td>
<td>73%</td>
</tr>
</tbody>
</table>

## Complications in the Hospital

<table>
<thead>
<tr>
<th>Blood clots after single knee replacement: Percent of patients who got a blood clot after having single knee replacement</th>
<th>1.1%</th>
<th>-</th>
<th>1.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood clots after bilateral knee replacement: Percent of patients who got a blood clot after having bilateral knee replacement</td>
<td>1.1%</td>
<td>-</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

## Mortality

| In-hospital mortality: Percent of patients who died in the hospital after primary knee replacement surgery | 0% | - | 0.1% |

## Complications After Discharge

| Readmission to the hospital: Percent of patients who had a knee replacement and were readmitted to the hospital within 90 days | 3.9% | - | - |

## After Surgery

| Average length of hospital stay after single knee replacement: The average number of days patients stay in the hospital after single knee replacement | 3 Days | - | - |

## Canada
Key Messages: Patient-Mediated Interventions

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