Shared Decision-Making for Colorectal Cancer Screening

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What is Shared Decision-Making?

Shared decision-making (SDM) is a collaborative process that allows patients and their providers to make healthcare decisions jointly, taking into account the best available scientific evidence, as well as patient values and preferences.

_Informed Medical Decisions Foundation_
# Models of Medical Decision Making

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Paternalistic</th>
<th>Shared</th>
<th>Informed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Exchange</td>
<td>HCP → Pt</td>
<td>HCP ↔ Pt</td>
<td>HCP → Pt</td>
</tr>
<tr>
<td>Deliberation (Value Clarification)</td>
<td>HCP</td>
<td>HCP + Pt</td>
<td>Pt</td>
</tr>
<tr>
<td>Decision-Making</td>
<td>HCP</td>
<td>HCP + Pt</td>
<td>Pt</td>
</tr>
</tbody>
</table>

HCP, health care provider

Key Elements of Informed/Shared Decision-Making (USPSTF)

The patient must:

1. Understand the risk or seriousness of the disease or condition;
2. Understand the preventive service, including the risks, benefits, alternatives and uncertainties;
3. Weigh his/her values regarding the potential harms and benefits associated with the service;
4. Engage in decision-making at a level he or she desires.

CRC Screening and SDM
Rationale

- Multiple screening options
- Lack of consensus regarding a best screening option
- Patient and provider preferences vary
- Ineffectiveness of paternalistic approach
SDM and CRC Screening
Key Decisions

- To screen or not to screen
- How \( \sqrt{\text{USPSTF \text{“A” recommendation}}} \)
SDM and CRC Screening
Clinical Challenges

- Patient
  - Lack of knowledge

- Provider
  - Lack of time
  - Lack of expertise
  - Lack of reimbursement
Decision Aids and CRC Screening

- Patient-oriented tools;
- Promote informed decision-making by enabling patients to make specific and deliberative choices about CRC screening often outside of the patient-provider encounter.
- Impact of decision aids on SDM for CRC screening unknown.
Interactive, DVD-based

Used videotaped narratives, animation, and graphic design to:

- **Educate** users about pros/cons of 5 recommended screening options
- **Enable** users to identify a preferred option
- **Empower** users to participate in decision-making

CRC Screening Decision Aid
“Your Disease Risk (YDR)” Tool

- Provides personalized 10-year risk estimates for developing CRC

[Image of Cancer Risk Questions and Results]

http://www.yourdiseaserisk.wustl.edu
Decision Aids and SDM for CRC Screening

**Patient-related Outcomes**
- Enabled patients to identify value-concordant test preference
- Increased knowledge
- Increased satisfaction with the decision-making process (SDMP)
- Enhanced intentions
- Enhanced patient “activation”

**PCP-related Outcomes:**
- Saved time
- Improved quality of screening discussion

Concordance Between Patient Preference and Test Ordered/Completed (Intervention Groups Only)

<table>
<thead>
<tr>
<th></th>
<th>Same</th>
<th>Different</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Test Ordered</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>61%</td>
<td>17%</td>
<td>21%</td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>80% *</td>
<td>4%</td>
<td>15% *</td>
</tr>
<tr>
<td>Other</td>
<td>31%</td>
<td>38%</td>
<td>31%</td>
</tr>
<tr>
<td><strong>Test Completed</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall</td>
<td>51%</td>
<td>58%</td>
<td>---</td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>53%</td>
<td>50%</td>
<td>---</td>
</tr>
<tr>
<td>Other</td>
<td>40%</td>
<td>60%</td>
<td>---</td>
</tr>
</tbody>
</table>

Colonoscopy vs. Other, $P<0.001$

Mediators of Intervention Effect on Test Completion (12 months)

Mediators
- Patient Activation
  (aOR, 3.24; 95% CI, 1.73, 6.05)
  Sobel test, P=0.03
- Intentions
  (aOR, 1.69; 95% CI, 1.25, 2.28)
  Sobel test, P=0.04

Candidate Mediators
- Patient activation
- Knowledge
- SDMP
- Intentions
- Patient Preferences
- Concordance

Intervention
- Decision aid alone

Outcome
- Test Completion

Conclusions

- Decision aids (DA) can facilitate effective SDM.
- DA-assisted SDM increases screening test uptake but the overall impact is relatively modest.
- PCPs often fail to comply with patient preferences for tests other than colonoscopy (McQueen et al. JGIM 2009;241228-35; Hawley et al. Cancer 2011;118:2726-34.)
- Failure to comply with patient preferences may negatively impact on patient acceptance and intentions.
- Incorporation of personalized risk estimates may negatively impact on uptake without appropriate framing.

CRC Screening Paradigm

Pre-visit → PCP Visit → Test ordered → Test scheduled → Test Completed

- Decision Aid
- Patient Navigation
- Tracking system
- PCP Reminder
- SDM
- Risk Stratification
CRC Screening Paradigm

Patient Navigation

IDM/SDM

Decision Aid

Pre-visit

PCP Visit

Test ordered

Test scheduled

Test Completed

Tracking system

PCP Reminder