Delivery methods of shared decision making in LCS: the potential for outreach

Nichole T. Tanner, MD, MSCR
Associate Professor of Medicine
Division of Pulmonary & Critical Care
Medical University of South Carolina
Ralph H. Johnson VA Hospital
Disclosures

• **Grant Support:**
  – American Cancer Society
  – VA HSR&D
Shared decision making & Counseling Visit for LC Screening

- Must occur before initial LDCT scan is ordered and performed
- **Face-to-face** encounter
- Provided by a Licensed Independent Practitioner who can then order the LDCT
  - i.e. MD, ARNP, PA-C
Essential elements of a SDM visit

• Determine patient eligibility

• Discussion about Benefits and Harms
  – False positive rate
  – Follow-up diagnostic test
  – Over-diagnosis
  – Radiation exposure

• Counseling about:
  – Smoking abstinence
  – Annual adherence; not a 1 time scan
  – Willingness to undergo diagnostic procedures and treatment

• Decision Aids used to promote decisional support.
BUT DOES SDM HAVE TO HAPPEN FACE-TO-FACE?
Ralph H. Johnson Veterans Affairs Hospital and it’s Community Based Outpatient Clinic (CBOC’s)
The association of in-person versus by telephone shared decision making for people considering lung cancer screening: an observational study

Tanner NT, Banas E, Yeager D, Dai L, Silvestri GA, Hughes Halbert C

• **Rationale:**
  – Little data on the optimal format for SDM in LCS
  – Constrained resources and logistics (e.g. distance to health care facility) may make in-person SDM difficult

• **Aim:** Determine the effectiveness of a SDM delivered by two different methods on patient decisional satisfaction and regret
**Decisional Needs**
- Decisional uncertainty
- Knowledge and Expectations
- Values
- Support and Resources

**Decision Quality**
- Informed
- Values-based

**Decision Impact**
- Satisfaction
- Regret

**Decision Action**
- Intentions
- Behavior

**Decision Support (Counseling, Decision Tools)**
- Clarify decisions and needs
- Provide facts, probabilities
- Clarify values
- Guide in deliberation and communication

**Ottawa Decision Support Framework**
Study Design and Population

• **Design**: prospective observational study (part of usual care)
  – SDM assignment was based on location of recruitment
  – Informed consent obtained
  – Survey prior to SDM and then one month following decision

• **Population**: All met USPSTF criteria for LCS
  – **In-person Cohort (n= 68)**
    • Medical University of South Carolina
    • Identified through the EMR and waiting room advertisements
  – **Telephone Cohort (n=69)**
    • Ralph H. Johnson VAMC
    • Identified through the EMR via clinical reminders for LCS
    • Referred for LCS
Survey Instruments

• **Baseline** (self administered)
  – Communication with providers (CAT)
  – Multi-dimensional Cultural Values Assessment Tool (MCVAT)
  – Perceived benefits and risk of LC screening

• **1 month post survey** (administered over phone by coordinator or fellow)
  – Satisfaction with Decision Scale
  – Decisional regret Scale
SDM visit

- **In person**
  - Paper decision aid provided prior to meeting with provider
  - Face to face SDM visit using shouldiscreen.com with provider (NP or pulmonologist)
  - Individual risk provided using PLCO_{m2012}

- **Telephone**
  - Paper decision aid mailed one week prior
  - Telephone SDM visit outlining risk and benefits
  - Individual risk provided using PLCO_{m2012}
## Results

<table>
<thead>
<tr>
<th></th>
<th>Total  $n = 137$</th>
<th>In-person  $n = 69$</th>
<th>Telephone  $n = 68$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>64.7 (sd 6.1)</td>
<td>64.1 (sd 6.0)</td>
<td>65.2 (sd 6.2)</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
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<td></td>
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<tr>
<td>Male</td>
<td>97 (70.8)</td>
<td>33 (47.8)</td>
<td>64 (94.1)</td>
</tr>
<tr>
<td>Female</td>
<td>40 (29.2)</td>
<td>36 (52.2)</td>
<td>4 (5.9)</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
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<tr>
<td>White</td>
<td>88 (64.2)</td>
<td>45 (64.2)</td>
<td>43 (63.2)</td>
</tr>
<tr>
<td>Black</td>
<td>39 (28.5)</td>
<td>20 (28.5)</td>
<td>19 (27.9)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>7 (5.1)</td>
<td>3 (5.1)</td>
<td>4 (5.9)</td>
</tr>
<tr>
<td>American Indian</td>
<td>2 (1.5)</td>
<td>0 (0.0)</td>
<td>2 (2.9)</td>
</tr>
<tr>
<td>Other</td>
<td>1 (0.7)</td>
<td>1 (1.5)</td>
<td>0 (0.0)</td>
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<tr>
<td><strong>Quintiles of Risk</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Q1</td>
<td>2 (1.5)</td>
<td>1 (1.5)</td>
<td>1 (1.5)</td>
</tr>
<tr>
<td>Q2</td>
<td>2 (1.5)</td>
<td>1 (1.5)</td>
<td>1 (1.5)</td>
</tr>
<tr>
<td>Q3</td>
<td>5 (3.7)</td>
<td>3 (4.4)</td>
<td>2 (2.9)</td>
</tr>
<tr>
<td>Q4</td>
<td>28 (20.4)</td>
<td>16 (23.2)</td>
<td>12 (17.7)</td>
</tr>
<tr>
<td>Q5</td>
<td>100 (73.0)</td>
<td>48 (69.6)</td>
<td>52 (76.5)</td>
</tr>
</tbody>
</table>
Results

• **Decision Action:** 88.3% (121/137) had LDCT
  – In person: 88.4% (61/69)
  – Telephone: 88.2% (60/68)

• **Decisional Quality**
  – Satisfaction with Decision Scale (max score 30)
    • All participants (mean, SD): 25.7 (4.5)
    • Screened (n=121): 25.9 (4.7)
    • Not screened (n=16): 24.1 (2.0)
Decisional Quality Results

- **Satisfaction with Decision Scale (max score 30)**
  - All participants: 25.7 (4.5)
  - In Person: 26.7 (2.8)
  - Telephone: 24.6 (5.6) *p<0.01

- **Decisional Conflict Scale (min score 10)**
  - All participants: 11.7 (3.4)
  - In Person: 11.3 (3.4)
  - Telephone: 12.1 (3.4) p=0.08
Conclusions

• Patients undergoing SDM within LCS were highly satisfied with their decisions and had little regret.
  – This was true regardless of decision for or against LCS
• Telephone and in person SDM had similar high satisfaction* and low regret scores
• This has implications for expanding outreach and access to high-risk patients living in areas without a comprehensive screening program
Thank you

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• Cassie Frazier, ARNP

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• Chanita Hughes-Halbert, PhD
• Charlene Pope, PhD
• Lin Dai, MS

Ralph H. Johnson VA LCS
• Shannon Magee, ARNP
<table>
<thead>
<tr>
<th><strong>I was adequately informed about the different options available about lung cancer screening.</strong></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Agree nor Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<tr>
<td><strong>The decision I made was the best decision possible for me personally.</strong></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree nor Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
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<tr>
<td>1</td>
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<tr>
<td><strong>My decision was consistent with my personal values.</strong></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree nor Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>1</td>
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<tr>
<td><strong>I expect to carry out the decision I made.</strong></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree nor Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>1</td>
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<td>4</td>
<td>5</td>
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</tr>
<tr>
<td><strong>I had as much input as I wanted in the choice about screening</strong></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree nor Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
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<tr>
<td>1</td>
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<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>I am satisfied with the decision that was made about lung cancer screening</strong></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
<td>Neither Agree nor Disagree</td>
<td>Agree</td>
<td>Strongly Agree</td>
</tr>
<tr>
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<td>4</td>
<td>5</td>
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<tr>
<td>Statement</td>
<td>Yes</td>
<td>Unsure</td>
<td>No</td>
<td></td>
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<td>---------------------------------------------------------------------------</td>
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<tr>
<td>I knew which options were available to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
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<tr>
<td>I knew the benefits of each option.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
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<tr>
<td>I knew the risks and side effects of each option.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
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<tr>
<td>I was clear about which benefits mattered most to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td></td>
<td></td>
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<tr>
<td>I was clear about which risks and side effects mattered most to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>I had enough support from others to make a choice.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>I made a choice without pressure from others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>I had enough advice to make a choice.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<tr>
<td>I was clear about the best choice for me.</td>
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<td>2</td>
<td>3</td>
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<tr>
<td>I felt sure about what to choose.</td>
<td>1</td>
<td>2</td>
<td>3</td>
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</table>