Using Shared Decision-Making to Empower Underserved Populations with Diabetes

National Diabetes Education Program Webinar Series
Thursday, March 12, 2015
2-3 PM ET
Webinar Logistics

• All lines are muted

• Two ways to ask questions during Q&A period:
  1. Type your question into the question section and we will read your question aloud.
  2. Click the “raise hand” icon and we will call your name and unmute your line allowing you to ask your question.
Presenters

Monica Peek, MD, MPH, FACP
University of Chicago,
Division of General Internal Medicine

Linda M. Siminerio, RN, PhD, CDE
University of Pittsburgh,
Division of Endocrinology and Metabolism
Using Shared Decision-Making to Empower Underserved Populations with Diabetes

Linda M. Siminerio, RN, PhD, CDE
University of Pittsburgh,
Division of Endocrinology and Metabolism
Learning Objectives

• Describe the importance of enhanced communications for patients with diabetes
• Understand social and cultural barriers to shared decision making for vulnerable populations with diabetes
• Enhance shared decision making skills with vulnerable populations
• Learn skills and identify resources to support successful patient-provider interactions
What we hear in clinical practice – sound familiar?

• My patients are non-compliant
• Our patient population is different/unique
• Standardized approaches inhibit critical thinking and individualized care
• I know what is best for my patients based on my experience
What we know about patient-provider communication

• Directive approach is not effective
• Improving knowledge does not translate to improved behavior
• Health literacy is a problem
• Health care providers do not always communicate with each other
Traditional Decision-Making Model: Paternalism at Its Peak

"When we want your opinion, we’ll give it to you"
A lot of patients I meet have problems with grazing.

Does she think I eat or look like a cow?

Do they understand us?
Traditional Healthcare Decision-Making: Unequal Partnership
What do studies tell us about patient/provider communication?
Are we empathetic?

- Study aimed to describe relationship between patient BMI and physician communication behaviors.
- PCPs demonstrated less emotional rapport with overweight and obese patients than for normal weight patients.
- Findings raise concern that low levels of emotional rapport may weaken relationship, diminish adherence and effectiveness of counseling.

Empathy and diabetes

Patients of physicians with high empathy scores as compared to those with low empathy were:

• more likely to have good control of A1c ($p < 0.001$).
• proportion of patients with good LDL control ($p < 0.001$).
• lower rate of acute complications
• physicians’ understanding of their patients’ beliefs associated with better self-care among patients (e.g., improved diet, SMBG).

Patient Satisfaction

- 52% in ratings of care satisfaction was accounted for by physicians’ levels of warmth and respect.
- Dietitians’ empathic engagement predictive of patient satisfaction and successful consultations.
- Empathy was the most important quality for being considered a “good physician”.
- Patients who don’t have decision support more often blame their practitioner for bad outcomes.

Institute of Medicine

Communicating with patients on health care evidence. Discussion Paper, Institute of Medicine, Washington, DC.

http://www.iom.edu/evidence
Gap between what people want and what they get regarding engagement in health care:

- 8 in 10 people want their health care provider to listen to them, but just 6 in 10 say it actually happens.
- Less than half of people say their provider asks about their goals and concerns for their health.
- 9 in 10 people want their providers to work together as a team, but just 4 in 10 say it actually happens.

What can we do?
Shared decision-making (SDM)

Collaborative process that allows patients and their providers to make health care decisions together, taking into account the best scientific evidence available, as well as the patient’s values and preferences.
Cochrane review of 86 clinical trials found that patient use of decision aids led to:

- improved knowledge of options
- more accurate expectations of possible benefits and harms
- greater participation in decision making
- higher satisfaction
- choices resulting in lower costs and better health outcomes

Using Shared Decision-Making to Empower Underserved Populations with Diabetes

Monica E. Peek, MD, MPH
The University of Chicago
Chicago Center for Diabetes Translation Research
Background: Patient Empowerment

- **Self-management** at home
- **Shared decision-making (SDM)** with providers
- Diabetes self-management interventions effective in **minority populations**
- **No prior work:** SDM + culturally-tailored pt educ
- SDM $\rightarrow$ improved **health outcomes**
SDM Domains

Information Sharing → Deliberation → Decision Making/Implementation
Background: SDM and Diabetes

- SDM is central to the **chronic care model**
- SDM correlates with **positive health indicators**
  - Better diagnostic accuracy, informed consent
  - Improved glucose control, lowered BP, shorter hospitalizations
  - More efficient visits, fewer malpractice claims, less doctor-swapping
- **Implications for the Patient Centered Medical Home**
  - Average physician has 160,000 patient interviews
**Decision Making Approach**

American College of Physicians Endorses Shared Decision-Making for Prostate Cancer Screening

In a guidance statement published Tuesday in the Annals of Internal Medicine, the American College of Physicians (ACP) joined the heated discussion on PSA testing by endorsing a shared decision making approach for prostate cancer screening. The ACP Clinical Guidelines Committee developed this guidance statement after reviewing current guidelines on prostate cancer screening in the U.S.

“"The new ACP guidance statement on PSA screening acknowledges the limited potential benefits and significant harms of screening for prostate cancer," says Michael J. Barry, president of the Informed Medical Decisions Foundation. “The recommendation emphasizes the importance of considering the preferences of informed patients in deciding about screening, and that clinicians should not screen for prostate cancer in patients who do not want it."

For more information visit iom.edu/partneringwithpatients

**Partnering with Patients to Drive Shared Decisions, Better Value, and Care Improvement**
Background: Patient Empowerment

- **Self-management** at home
- **Shared decision-making** with providers
- Diabetes self-management interventions effective in **minority populations**
- **No prior work**: SDM + culturally-tailored pt educ
- SDM → improved **health outcomes**
- **Minorities** experience less SDM
Historical, policy, and economic contexts

- Great Migration
- Segregation/Jim Crow
- Persistent, pervasive structural inequities
  - Organizational ↔ Interpersonal
- Intergenerational survival strategies
- Deference
- “Code switching”
  - Race as a social construct
SDM Barriers

- Power imbalance
- Limited health literacy
- Self-efficacy
- Trust
- Fear/denial
- Normative beliefs
SDM Facilitators

- Patient engagement/invitation
- Interpersonal relationships
- Validating health concerns
- Accessibility/availability
SDM Domains

Information Sharing → Deliberation → Decision Making/Implementation
SDM Definitions Among AA

**Information Sharing**
- Physician:
  - Gives information
  - Explains Rx options
  - Uses layman’s terms
  - Answer questions
- Patient:
  - Report symptoms/answer questions
  - Tells “their story”
  - Asks clarifying question
  - Challenges physician
  - “Has a say”

**Deliberation**
- Single Option
  - Makes their own choice
  - Agrees/disagrees in office
  - Adheres/non-adheres
- Multiple Options w/ MD recommendation
  - Follows advice regardless
  - Agrees/disagrees in office
  - Adheres/non-adheres

**Decision Making/Implementation**
- Follows advice regardless
- Agrees/disagrees in office
- Adheres/non-adheres
SDM and Treatment Non-adherence

• “[The doctor] told me I need to go to the dermatologist ... Now the lady up there at the check out desk- I told her that I didn’t want to go. That if this [skin growth] goes down, then I don’t see a reason to [operate]. So, I’ll have think about that...Well I didn’t tell [my doctor] about my preference for not messing with it ... I just told her that I would go through with it.”

• “Some [African-Americans] still don’t believe in everything the doctors say...I have a neighbor and she goes to the doctor, and when she gets medication she throws it in the garbage can.”
Conceptual Model

The Chronic Care Model

Community Partnerships

Quality Improvement

Patient Activation

Provider Training

Community

Health Systems

Patient

Practice Team

Productive Interactions
Diabetes Empowerment Program

• 10 week program
• Culturally tailored diabetes education
• Shared decision-making
Diabetes Empowerment Program

• 10 week program
• Culturally tailored diabetes education
  – BASICS curriculum
  – Adult learning, health literacy
Diabetes Empowerment Program

• 10 week program
• Culturally tailored diabetes education
  – BASICS curriculum
  – Adult learning, health literacy
• **Shared decision-making**
  – Asking more questions
  – Giving more information
  – Clarifying physician information
  – Communicating healthcare preferences
SDM Domains: The 3 Ds

DISCUSS
Information Sharing

DEBATE
Deliberation

DECIDE
Decision Making/Implementation
Diabetes Empowerment Program

- 10 week program
- Culturally tailored diabetes education
  - BASICS curriculum
  - Adult learning, health literacy
- Shared decision-making
  - Asking more questions
  - Giving more information
  - Clarifying physician information
  - Communicating healthcare preferences
- Support groups
Cultural Tailoring in the DEP

- **Storytelling** and testifying
- **Group** goal setting
- **Family/social network** included
- **Modify** traditional diets
- **Community** resources
- “Who Wants to Have a Say in Their Health Care?” **game**
- **Shared Decision-Making** **video**
Grandma Visits the Doctor
SDM: Role of Narrative

“It changed how I interact with the doctor… by me seeing the video, I did have the presence of mind to at least ask, ‘What is this [medication] for? How often should I take it?’” [Film]

“They kind of built me up… we’d be like we’re at a doctor’s session … and then she would say things that she know is not right either, but then she wants to know are we going to catch on to it and just let it go or will we just speak up? … sometimes you don’t be wanting to question your doctor and it be kind of hard, especially if you really like them and stuff. So, she was just like building us up so that you’ve got to be able whether you like the doctor or not.” [Role play]
## Patient Demographics

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Category</th>
<th>N (total n=133)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age, mean(SD)</strong></td>
<td></td>
<td>57.1 (9.9)</td>
<td></td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
<td>18-44</td>
<td>14</td>
<td>10.5</td>
</tr>
<tr>
<td></td>
<td>45-64</td>
<td>92</td>
<td>69.2</td>
</tr>
<tr>
<td></td>
<td>65+</td>
<td>27</td>
<td>20.3</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td></td>
<td>108</td>
<td>81.2</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>College Degree or Higher</td>
<td>18</td>
<td>13.5</td>
</tr>
<tr>
<td></td>
<td>HS Graduate, Some College</td>
<td>74</td>
<td>55.6</td>
</tr>
<tr>
<td></td>
<td>&lt;HS</td>
<td>28</td>
<td>21.1</td>
</tr>
<tr>
<td><strong>DM History, mean(SD)</strong></td>
<td></td>
<td>9.3 (8.8)</td>
<td></td>
</tr>
<tr>
<td><strong>Self-Reported Health Status</strong></td>
<td>Excellent, Very Good</td>
<td>25</td>
<td>18.8</td>
</tr>
<tr>
<td></td>
<td>Good, Fair</td>
<td>97</td>
<td>72.9</td>
</tr>
<tr>
<td></td>
<td>Poor</td>
<td>11</td>
<td>8.3</td>
</tr>
<tr>
<td><strong>Insurance</strong></td>
<td>Private</td>
<td>25</td>
<td>18.8</td>
</tr>
<tr>
<td></td>
<td>Medicare, Medicaid</td>
<td>95</td>
<td>71.5</td>
</tr>
<tr>
<td></td>
<td>Uninsured</td>
<td>13</td>
<td>9.8</td>
</tr>
<tr>
<td><strong>Co-Morbidities</strong></td>
<td>Stroke</td>
<td>19</td>
<td>14.3</td>
</tr>
<tr>
<td></td>
<td>CAD/CHF</td>
<td>41</td>
<td>30.9</td>
</tr>
<tr>
<td></td>
<td>High Cholesterol</td>
<td>77</td>
<td>57.9</td>
</tr>
<tr>
<td></td>
<td>Hypertension</td>
<td>107</td>
<td>80.5</td>
</tr>
</tbody>
</table>
Results: Diabetes Self-Management

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Time Point</th>
<th>Adjusted Mean</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes Self-Efficacy (0-100 scale)</td>
<td>Baseline</td>
<td>68.8</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>10-week Follow-Up</td>
<td>80.4</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>3-month Follow-Up</td>
<td>78.4</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>6-month Follow Up</td>
<td>80.1</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Follows an Eating Plan (0-7 days)</td>
<td>Baseline</td>
<td>4.1</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>10-week Follow-Up</td>
<td>4.6</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>3-month Follow-Up</td>
<td>4.6</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>6-month Follow Up</td>
<td>4.3</td>
<td>0.28</td>
</tr>
<tr>
<td>Exercise (0-7 days)</td>
<td>Baseline</td>
<td>3.3</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>10-week Follow-Up</td>
<td>3.7</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>3-month Follow-Up</td>
<td>3.1</td>
<td>0.45</td>
</tr>
<tr>
<td></td>
<td>6-month Follow Up</td>
<td>3.6</td>
<td>0.14</td>
</tr>
<tr>
<td>Blood Sugar Testing (0-7 days)</td>
<td>Baseline</td>
<td>4.5</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>10-week Follow-Up</td>
<td>5.4</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>3-month Follow-Up</td>
<td>5.1</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>6-month Follow Up</td>
<td>4.8</td>
<td>0.24</td>
</tr>
<tr>
<td>Self Foot Care (0-7 days)</td>
<td>Baseline</td>
<td>4.5</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>10-week Follow-Up</td>
<td>5.2</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>3-month Follow-Up</td>
<td>5.5</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>6-month Follow Up</td>
<td>5.8</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>
## Results: Shared Decision-Making

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Time Point</th>
<th>Adjusted Mean</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Decision-Making Confidence (0-100 scale)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>85</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>10-week Follow-Up</td>
<td>94.3</td>
<td>&lt;.0001</td>
<td></td>
</tr>
<tr>
<td>3-month Follow-Up</td>
<td>94.2</td>
<td>&lt;.0001</td>
<td></td>
</tr>
<tr>
<td>6-month Follow Up</td>
<td>92.4</td>
<td>&lt;.0001</td>
<td></td>
</tr>
<tr>
<td><strong>Physician SDM (0-100 scale)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>74.6</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>10-week Follow-Up</td>
<td>77.6</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>3-month Follow-Up</td>
<td>75.4</td>
<td>0.72</td>
<td></td>
</tr>
<tr>
<td>6-month Follow Up</td>
<td>80.2</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td><strong>Patient SDM: Information Sharing (0-100 scale)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>76.6</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>10-week Follow-Up</td>
<td>80.6</td>
<td>0.17</td>
<td></td>
</tr>
<tr>
<td>3-month Follow-Up</td>
<td>78.8</td>
<td>0.46</td>
<td></td>
</tr>
<tr>
<td>6-month Follow Up</td>
<td>86.5</td>
<td>&lt;.0001</td>
<td></td>
</tr>
<tr>
<td><em><em>Patient SDM: Decision Making</em> (0-100 scale)</em>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baseline</td>
<td>34.4</td>
<td></td>
<td>-</td>
</tr>
<tr>
<td>10-week Follow-Up</td>
<td>42.6</td>
<td>0.02</td>
<td></td>
</tr>
<tr>
<td>3-month Follow-Up</td>
<td>44.5</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>6-month Follow Up</td>
<td>41.9</td>
<td>0.048</td>
<td></td>
</tr>
</tbody>
</table>

*Patients' Perceived Involvement in Care, Scale 1
* Patients' Perceived Involvement in Care, Scale 2
## Results: Health Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Time Point</th>
<th>Adjusted Mean</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HbA1c</strong></td>
<td>Baseline</td>
<td>8.8</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>10-week Follow-Up</td>
<td>8.4</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>3-month Follow-Up</td>
<td>8.3</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td></td>
<td>6-month Follow Up</td>
<td>8.6</td>
<td>0.32</td>
</tr>
<tr>
<td><strong>HDL</strong></td>
<td>Baseline</td>
<td>52.2</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>10-week Follow-Up</td>
<td>52</td>
<td>0.71</td>
</tr>
<tr>
<td></td>
<td>3-month Follow-Up</td>
<td>52.9</td>
<td>0.40</td>
</tr>
<tr>
<td></td>
<td>6-month Follow Up</td>
<td>54.1</td>
<td>0.02</td>
</tr>
<tr>
<td><strong>Self-Reported Physical Health</strong></td>
<td>Baseline</td>
<td>38.9</td>
<td></td>
</tr>
<tr>
<td>(0-100 scale)</td>
<td>10-week Follow-Up</td>
<td>40</td>
<td>0.16</td>
</tr>
<tr>
<td></td>
<td>3-month Follow-Up</td>
<td>40.7</td>
<td>0.04</td>
</tr>
<tr>
<td></td>
<td>6-month Follow Up</td>
<td>39</td>
<td>0.92</td>
</tr>
<tr>
<td><strong>Self-Reported Mental Health</strong></td>
<td>Baseline</td>
<td>46.1</td>
<td></td>
</tr>
<tr>
<td>(0-100 scale)</td>
<td>10-week Follow-Up</td>
<td>48.6</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>3-month Follow-Up</td>
<td>48.1</td>
<td>0.048</td>
</tr>
<tr>
<td></td>
<td>6-month Follow Up</td>
<td>48.8</td>
<td>0.01</td>
</tr>
<tr>
<td><strong>SBP</strong></td>
<td>Baseline</td>
<td>135</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>10-week Follow-Up</td>
<td>133.6</td>
<td>0.45</td>
</tr>
<tr>
<td></td>
<td>3-month Follow-Up</td>
<td>137.6</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>6-month Follow Up</td>
<td>134</td>
<td>0.71</td>
</tr>
</tbody>
</table>
Conclusions

• Combining culturally-tailored diabetes education with SDM training can improve
  – diabetes self-management empowerment/behaviors
  – shared decision-making empowerment/behaviors
  – diabetes-related health outcomes

• Such strategies may serve to reduce diabetes disparities among African-Americans
KLEO Food Pantry: SDM Video
Building an SDM Foundation

- Empower patients (Pt/MD relationship)
  - Let them know you value their opinion (and why)
  - Tell them about the “3Ds” (Discuss, Debate, Decide)
  - Increase their expectations about involvement in care (partners)
  - Chronic SDM: multiple micro-decisions to revisit over time

- Address uncomfortable barriers
  - Trust
  - Perceived discrimination
  - Cultural differences

- Involve support staff (organizational culture)
  - Staff meetings
  - Resources in waiting room (SDM video, posters/flyers)
  - Pre-visit coaching by LPN, MA (goals for discussion, 2 key questions)
  - Diabetes/health educator; incorporate SDM messages/skills
Our Project Team

- Marshall Chin
- Monica Peek
- Tonya Roberson
- Anna Goddu
- Molly Ferguson
- Nora Geary
- Deb Maltby
- Yolanda O’Neal
- Kristine Bordenave
- Michael Quinn
- Doriane Miller
- Lisa Vinci
- Andrew Davis
- Elbert Huang
- Nyahne Bergeron
- Jonathan Dick
- Shantanu Nundy
- Seo Young Park
- Neha Setha
- Emily Lu
- Robert Sanchez

- Deborah Burnet
- Karen Kim
- Dawnavan Davis
- Sheila Harmon
- Daniel Rowell
- Yue Gao
- Sang Mee Lee
- Julie Whyte
- Chef Brian Alston
- Shelley Scott
- Mickey Eder
- Peggy Hasenauer
- Louis Philipson
- Marla Soloman
- Hui Tang
- Robert Nocon
- Katie Raffel
- Ndang Azang-Njaah
- Gwen Burrows
- Braunda Anderson
- Melishia Bansa
Funders

- Merck Foundation
- NIDDK R18 DK083946
- NIDDK P30 DK092949
- NIDDK K23 DK075006
- NIDDK K24 DK071933
- University of Chicago CTSA Pilot and Collaborative Translational and Clinical Studies Award
Related Resources from the National Diabetes Education Program

Joanne Gallivan, M.S., R.D.
Director, National Diabetes Education Program
National Institute of Diabetes and Digestive and Kidney Diseases
National Institutes of Health
Diabetes HealthSense

www.YourDiabetesInfo.org/HealthSense
Webinar Recording and Evaluation

- Webinar Recording and Presentation Slides
  - www.YourDiabetesInfo.org/Webinars
- Webinar Evaluation
  - Email with link to survey
- Certificate of Completion
  - ndep@hagersharpm.com
Question & Answer Session

NDEP National Diabetes Education Program
A program of the National Institutes of Health and the Centers for Disease Control and Prevention

www.YourDiabetesInfo.org

1-888-693-NDEP (1-888-693-6337)

TTY: 1-866-569-1162