Patient Activation: Improving Health Outcomes and Reducing Costs by

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Agenda

• What is Patient Activation? How is it measured?
  – What is the Evidence that it is linked with outcomes: Behaviors; Adherence, Health outcomes; Utilization, Costs?
  – Findings from Mental health
  – Key insights from research
  – How are health care delivery systems using measurement of activation to achieve better outcomes?
What is Activation?

An activated consumer:

- Has the motivation, knowledge, skill and confidence to take on the role of managing their health and health care
- Full range of activation in any population group
- Demographics tend to account for 5% to 6% of PAM score variation
Patient Activation Measurement (PAM)

Difficulty Structure of 13 Items

Level 1:
1. Does not yet believe they have active/important role
2. Lack confidence and knowledge to take action

Level 2:
3.
4.
5.
6.
7.
8.

Level 3:
9.
10.
11.

Level 4:
12.
13.

Beginning to take action
Maintaining behavior over time
### Activation Measure Items

<table>
<thead>
<tr>
<th></th>
<th>Statement</th>
<th>Disagree Strongly</th>
<th>Disagree</th>
<th>Agree</th>
<th>Agree Strongly</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>When all is said and done, I am the person who is responsible for taking care of my health</td>
<td>Disagree Strongly</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree Strongly</td>
<td>N/A</td>
</tr>
<tr>
<td>2.</td>
<td>Taking an active role in my own health care is the most important thing that affects my health</td>
<td>Disagree Strongly</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree Strongly</td>
<td>N/A</td>
</tr>
<tr>
<td>3.</td>
<td>I know what each of my prescribed medications do</td>
<td>Disagree Strongly</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree Strongly</td>
<td>N/A</td>
</tr>
<tr>
<td>4.</td>
<td>I am confident that I can tell whether I need to go to the doctor or whether I can take care of a health problem myself.</td>
<td>Disagree Strongly</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree Strongly</td>
<td>N/A</td>
</tr>
<tr>
<td>5.</td>
<td>I am confident that I can tell a doctor concerns I have even when he or she does not ask.</td>
<td>Disagree Strongly</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree Strongly</td>
<td>N/A</td>
</tr>
<tr>
<td>6.</td>
<td>I am confident that I can follow through on medical treatments I may need to do at home</td>
<td>Disagree Strongly</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree Strongly</td>
<td>N/A</td>
</tr>
<tr>
<td>7.</td>
<td>I have been able to maintain (keep up with) lifestyle changes, like eating right or exercising</td>
<td>Disagree Strongly</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree Strongly</td>
<td>N/A</td>
</tr>
<tr>
<td>8.</td>
<td>I know how to prevent problems with my health</td>
<td>Disagree Strongly</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree Strongly</td>
<td>N/A</td>
</tr>
<tr>
<td>9.</td>
<td>I am confident I can figure out solutions when new problems arise with my health.</td>
<td>Disagree Strongly</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree Strongly</td>
<td>N/A</td>
</tr>
<tr>
<td>10.</td>
<td>I am confident that I can maintain lifestyle changes, like eating right and exercising, even during times of stress.</td>
<td>Disagree Strongly</td>
<td>Disagree</td>
<td>Agree</td>
<td>Agree Strongly</td>
<td>N/A</td>
</tr>
</tbody>
</table>
Activation is Developmental

Level 1: 
STARTING TO TAKE A ROLE

Level 2: 
BUILDING KNOWLEDGE AND CONFIDENCE

Level 3: 
TAKING ACTION

Level 4: 
MAINTAINING BEHAVIORS

Increasing Level of Activation
Why is Patient Activation Important?

• Findings from over 180 peer-reviewed studies, indicate that:
  – Higher activated individuals are more likely to engage in positive health behaviors and to have better health outcomes
  – Activation also linked with better care experiences
Activation and Behavior

Hypertension Self-Care Behavior

- Take Rx as recommended: 31%, 55%, 73%, 88%
- Know what BP should be: 13%, 17%, 27%
- Monitor BP weekly: 6%, 16%, 14%, 33%
- Keep BP diary: 0%, 9%, 8%, 21%

Source: US National sample 2004
Activation and Behavior in Medical Encounter

- Read about side-effects with New drug
- Bring a list of questions to office visit
- Persistence in asking when don't understand
- Look up doctor’s qualifications when choosing new doctor

<table>
<thead>
<tr>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
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<tbody>
<tr>
<td>80%</td>
<td>60%</td>
<td>40%</td>
<td>20%</td>
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Insights

- Many of the behaviors we are asking of people are only done by those in highest level of activation.
- When we focus on the more complex and difficult behaviors—we discourage the least activated.
- Start with behaviors more feasible for patients to take on, increases individual’s opportunity to experience success.
Activation is not Condition Specific

- Activation predicts behaviors – regardless of condition
- Findings about activation and behaviors, appear to be true within specific disease categories.
Activation and Medication Adherence

Use of Medications by Level of Activation

- **Level 1 & 2**
  - Diabetes: 57%
  - High Cholesterol: 45%
  - Heart Disease: 44%
  - Hypertension: 46%

- **Level 3**
  - Diabetes: 62%
  - High Cholesterol: 61%
  - Heart Disease: 57%
  - Hypertension: 73%

- **Level 4**
  - Diabetes: 86%
  - High Cholesterol: 73%
  - Heart Disease: 86%
  - Hypertension: 98%
Higher Activated Patients Have Better Outcomes:

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Baseline</th>
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<tbody>
<tr>
<td><strong>Prevention</strong></td>
<td></td>
<td><strong>Clinical Indicators in Normal Range</strong></td>
</tr>
<tr>
<td>Colon</td>
<td>***</td>
<td>Systolic</td>
</tr>
<tr>
<td>Mammograms</td>
<td>**</td>
<td>Diastolic</td>
</tr>
<tr>
<td>Pap Smears</td>
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<table>
<thead>
<tr>
<th><strong>Healthy Behaviors</strong></th>
<th></th>
<th>HDL</th>
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<tbody>
<tr>
<td>Not Obese</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>Not Smoking</td>
<td>***</td>
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<tr>
<th><strong>Costly Utilization</strong></th>
<th></th>
<th>Triglycerides</th>
<th>A1C</th>
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</thead>
<tbody>
<tr>
<td>Lower Hospital</td>
<td>***</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>Lower ER</td>
<td>***</td>
<td>***</td>
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</table>

* p<.05  ** p<.01  *** p<.001. Controlling for age, income, gender, and chronic diseases

Greene, Hibbard, Overton, JGIM 2012
PAM in 2010 Predicts Outcomes 2 Years Later: Odds Ratios

Models included controls for age, sex, number of chronic conditions, income, and percent of care that was received in-network. * Significantly different from PAM Level 1 at p<0.05
Change in PAM and Change in Costly Utilization Relative to Staying in PAM Levels 1 or 2: odds ratios

Model included controls for age, sex, number of chronic conditions, and natural logarithm of income. Results were additionally adjusted for clustering by provider.

*p<0.05
Predicted Average Per-Capita Costs 2 Years Later by Change in PAM Level

Predicted costs are based upon regression models with log transformed costs that control for age, sex, chronic conditions, natural logarithm of income and percent of care that was received in-network. Costs were retransformed from log dollars using the Duan smear factor.
Less Activated Patients have Higher Total Healthcare Costs

• After controlling for demographics and health status, $1987 per patient annual cost differential between those patients who stay high in activation and those who stay low in activation over time. That represents a 31% difference.
Patient Role & Outcomes

- Study Findings indicate the importance of the patient role in outcomes and cost
- As payments become more closely linked with patient outcomes, understanding how to increase patient activation will become a priority
Mental Health and Activation

Depression
Schizophrenia
Odds of Depression Remission in 2012 by PAM Level in 2011

Models adjusted for 2011 PHQ-9, sex, age, natural logarithm of income, Ingenix retrospective risk score, and clustering by provider.
Schizophrenia and Activation
Patient narratives about their illness

• High activated vs low activated:
  – Beliefs about control and coping
  – Things that help me
  – Treatment experiences
  – How I see myself
Beliefs about Coping: Patient Quotes

<table>
<thead>
<tr>
<th>High Activated</th>
<th>Low Activated</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have the ability to work on keeping it under control</td>
<td>It’s not something I can control</td>
</tr>
</tbody>
</table>
## Things that help me

<table>
<thead>
<tr>
<th>High Activated</th>
<th>Low Activated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medications and treatment groups Diet, exercise, journaling, mindfulness, breathing exercises, social support,</td>
<td>Medications and treatment groups</td>
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</table>
# Treatment Experiences

<table>
<thead>
<tr>
<th>High Activated</th>
<th>Low Activated</th>
</tr>
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<tbody>
<tr>
<td>An active, collaborative role with providers—</td>
<td>Did not describe collaborative relationships</td>
</tr>
<tr>
<td>including advocating on their own behalf, or</td>
<td></td>
</tr>
<tr>
<td>called out med errors.</td>
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</table>
How I See Myself

<table>
<thead>
<tr>
<th>High Activated</th>
<th>Low Activated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talked about the process they went through in accepting their diagnosis</td>
<td>may not acknowledge their diagnosis.— people tell me I have...</td>
</tr>
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</table>
Activation and Conditions

• It isn’t about mental or physical health. Those same themes emerged in research looking at people with chronic physical conditions
• Findings show that it is all about the individual’s orientation, their beliefs, confidence, knowledge, and skills.
Increases in Activation are Possible

• If we want patients to take ownership we have to make them part of the process.
  • Listen, problem-solve, and collaborate
  • Help them gain the skills and confidence they need

• This represents a major paradigm shift
  – Moving away from simply “telling patients what to do.”
  – There is a focus on developing confidence and skills, and not just the transfer of information.
Supporting Patient Self-Management
Current vs New Model

• Current model: Fill the pail
  – Fill people up with all the info they need

• New Model: light the fire
  – Meet individual where they are
  – Build skills and confidence
  – Support Individual’s to take ownership of health
Tailoring Support to the Patient’s Activation Level

- Identify appropriate starting points
- Address realistic and achievable behavior goals
- Customize action steps, mediums, and frequency

Level 1
Build Knowledge Base, Self-Awareness & Initial Confidence

Level 2
Increase in Knowledge, Initial Skills Development, Grow Confidence

Level 3
Skills Development, Pursue Guideline Behaviors

Level 4
Achieve/Exceed Lifestyle Behavior Guidelines, Develop Techniques to Prevent Relapse

Increase self-management ability

Reduce in unwarranted utilization of service

Improve health
Summary of Key Insights from Research

• Demographics only weakly related
• More difficult behaviors only done by more activated
• Activation is not condition specific (e.g. adherence)
• When activation changes multiple behaviors change in the same direction
• Least activated gain the most when appropriately supported
Key Insights Continued

• It is the higher activated that show up when self-management resources are offered
• Some clinicians are better at supporting self-management than others.
Innovative Delivery Systems

- PAM score is a Vital Sign
- Tailored coaching/support
- Using both a behavioral lens and a clinical lens to manage patient populations
- More efficient use of resources: target those who need more help
- Used as an intermediate outcome of care measure
- Used as a way to assess provider performance
# Segmenting the Population

<table>
<thead>
<tr>
<th>PAM Level</th>
<th>Disease Burden</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong></td>
<td>Low</td>
<td>ELECTRONIC RESOURCES Usual team members Focus on prevention</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>PEER SUPPORT ELECTRONIC RESOURCES Usual care team Focus on managing illness</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>Low</td>
<td>HIGH SKILLED TEAM MEMBERS Focus on prevention</td>
</tr>
<tr>
<td></td>
<td>High</td>
<td>HIGH SKILLED TEAM MEMBERS More outreach Focus on developing skills to manage illness</td>
</tr>
</tbody>
</table>
Adding a Behavioral Lens to the Current Clinical Lens for Managing Patient Populations

• Behavior or the skills to self-manage are too important to outcomes to leave out of the equation
  – Risk stratification
  – Resource allocation
  – Differential interventions
  – Tailored care pathways
Meeting Patients Where they are:

- Improve patient experience
- Increase the likelihood the patient will adhere to regimens
- Improve efficiencies—more targeted use of resources
- Improve outcomes and reduce costs