Patient Activation: Health Outcomes and Cost

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Agenda

– What is Patient Activation? How is it measured?
– What is the Evidence that it is linked with outcomes
– Key insights from research
– How health care delivery systems are using measurement of Patient Activation to achieve better outcomes?
What is Activation?

An activated consumer:

• Has the 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: Does not yet believe they have active/important role
- Level 2: Lack confidence and knowledge to take action
- Level 3: Beginning to take action
- Level 4: Maintaining behavior over time
# Activation Measure Items

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

Source: J. Hibbard, University of Oregon
Why is Patient Activation Important?

- Reviewed findings from over 100 studies that quantified patient activation.
- Higher activated individuals are more likely to engage in positive health behaviors and to have better health outcomes.
Activation and Behavior

Hypertension Self-Care Behavior

- **Take Rx as recommended**: 88% at Level 1, 55% at Level 2, 73% at Level 3, 31% at Level 4.
- **Know what BP should be**: 58% at Level 1, 27% at Level 2, 17% at Level 3, 6% at Level 4.
- **Monitor BP weekly**: 33% at Level 1, 14% at Level 2, 16% at Level 3, 21% at Level 4.
- **Keep BP diary**: 9% at Level 1, 8% at Level 2, 0% at Level 3, 21% at Level 4.

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

[Bar charts showing levels of activation and behavior across different tasks]
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 Can Predict Utilization and Health Outcomes Two Years Into the Future for Diabetics

<table>
<thead>
<tr>
<th></th>
<th>% change for a 1 point change in PAM Score</th>
<th>10 Point Gain in PAM Score 54 (L2) vs. 64(L3)</th>
<th>( P )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospitalization</td>
<td>1.7% decline</td>
<td>17% decreased likelihood of hospitalization</td>
<td>.03</td>
</tr>
<tr>
<td>Good A1c control (HgA1c &lt; 8%)</td>
<td>1.8% gain</td>
<td>18% greater likelihood of good glycemic control</td>
<td>.01</td>
</tr>
<tr>
<td>A1c testing</td>
<td>3.4% gain</td>
<td>34% greater likelihood of testing</td>
<td>.01</td>
</tr>
<tr>
<td>LDL-c testing</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

Carol Remmers. *The Relationship Between the Patient Activation Measure, Future Health Outcomes, and Health Care Utilization Among Patients with Diabetes*. Kaiser Care Management Institute, PhD Dissertation. Multivariate analysis which controlled for age group, gender, race, comorbidities and number of diabetes-related prescriptions.
Higher Activated Patients Have Better Outcomes: Cross-sectional and Longitudinal Results

<table>
<thead>
<tr>
<th>Prevention</th>
<th>Baseline</th>
<th>Two Years Later</th>
<th>Clinical Indicators in Normal Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colon</td>
<td>***</td>
<td>**</td>
<td>Systolic</td>
</tr>
<tr>
<td>Mammograms</td>
<td>***</td>
<td>***</td>
<td>Diastolic</td>
</tr>
<tr>
<td>Pap Smears</td>
<td>**</td>
<td>***</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Healthy Behaviors</th>
<th>Baseline</th>
<th>Two Years Later</th>
<th>Clinical Indicators in Normal Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Obese</td>
<td>***</td>
<td>***</td>
<td>HDL</td>
</tr>
<tr>
<td>Not Smoking</td>
<td>***</td>
<td>***</td>
<td>Triglycerides</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Costly Utilization</th>
<th>Baseline</th>
<th>Two Years Later</th>
<th>Clinical Indicators in Normal Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower Hospital</td>
<td>***</td>
<td>***</td>
<td>Not evaluated</td>
</tr>
<tr>
<td>Lower ER</td>
<td>***</td>
<td>***</td>
<td></td>
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</tbody>
</table>

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

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Less Activated Patients Have Higher Healthcare Costs

• After controlling for demographics and severity, less activated patients have 8% higher costs in the base year and 21% higher costs in the following year than more activated patients.

• Similar differences when looking within disease categories.
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
When We Offer New Patient Programs and Services, Who Shows Up?

- Stanford Chronic Disease Self-Management Program—higher activated more likely to enroll
- Patient Portal use (higher activated twice as likely to use portal than lower activated)
  - When we don’t measure, we never know who we are reaching
The More Activated You Are in Your Own Health Care, the Better Care You Get...

**MORE ACTIVATED** | **LESS ACTIVATED**
---|---
Readmitted to the hospital within 30 days of discharge | 12.8% | 28%
Experienced a medical error | 19.2% | 35.8%
Have poor care coordination between healthcare providers | 12.6% | 41.8%
Suffer a health consequence because of poor communication among providers | 13.2% | 48.6%
Lose confidence in the health care system | 15.1% | 59.8%

Source: Adapted from AARP & You, “Beyond 50.09” Patient Survey. Published in AARP Magazine. Study population age 50+ with at least one chronic condition. More Involved=Levels 3&4, Less Involved=Levels 1&2
Activation/Engagement is important in any situation where the patient has a significant role to play

- If people don’t understand their role, they aren’t going to take action, they aren’t going to look for or take in new information
- If people don’t feel confident, they are less likely to be pro-active
- This appears to be true regardless of condition
Activation and Medication Adherence

Use of Medications by Level of Activation

<table>
<thead>
<tr>
<th>Disease</th>
<th>Level 1&amp;2</th>
<th>Level 3</th>
<th>Level 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td>57%</td>
<td>62%</td>
<td>86%</td>
</tr>
<tr>
<td>High Cholesterol</td>
<td>45%</td>
<td>61%</td>
<td>73%</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>44%</td>
<td>57%</td>
<td>86%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>46%</td>
<td>73%</td>
<td>98%</td>
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Patient Activation and Patient Experience

• More activated patients report better patient experiences—even among patients seeing the same doctor

• Implications: we need to help patients gain the skills to get what they need from their providers
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.” Different than “compliance”--
  – There is a focus on developing confidence and skills, and not just the transfer of information.
Studies Show That Targeted Interventions Can Increase Patient Activation

Effective interventions use:

– Tailored support to the individual’s level of activation

Least activated patients make the most gains—when appropriately supported.
Tailoring Support to the Patient’s Activation Level

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

Initial Skills Development, Grow Confidence
Skills Development, Pursue Guideline Behaviors
Develop Techniques to Prevent Relapse

Improve health

Reductions in unwarranted utilization of service

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Preventing Hospital Re-admissions

Less Activated Patients nearly twice as likely to be re-admitted within 30 days
Hospitals Using the Measurement of Patient Activation to Reduce Re-admissions

• Tailoring amount and type of support to patient’s level of activation
  – Helping lower activated patients prioritize
  – Breaking down task into smaller steps

• Using different team members with different skill sets
  – Not “doing for them” but helping them gain the skills
Innovative Delivery Systems

- PAM score is a Vital Sign
- 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
## Segmenting the Population

<table>
<thead>
<tr>
<th>PAM Level</th>
<th>Disease Burden</th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>
| High      | ELECTRONIC RESOURCES  
Usual team members  
Focus on prevention | PEER SUPPORT  
ELECTRONIC RESOURCES  
Usual care team  
Focus on managing illness |         |
| Low       | HIGH SKILLED TEAM MEMBERS  
Focus on prevention | HIGH SKILLED TEAM MEMBERS  
More outreach  
Focus on developing skills to manage illness |         |
Using Activation Measure to Inform Care Protocols

- Rooming process
- Low back pain
- Mammograms
- Patient Portal
Meeting Patients Where They Are Can:

- Improve efficiencies—more targeted use of resources through segmentation
- Meet the needs of patients, Tailored: coaching, communications
  - Reduce re-admissions
  - Improve patient experience
  - Improve outcomes and lower costs