An Example of Risk Stratification for Case Management in Primary Care

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Why Stratify Risk for Your Patients?

**NCQA’s Patient-Centered Medical Home (PCMH) 2011**

PCMH Standard 3: Plan and Manage Care 17 points

The practice systematically identifies individual patients and plans, manages and coordinates their care, based on their condition and needs and on evidence-based guidelines.
Element B: Identify High-Risk Patients

- To identify high-risk or complex patients, the practice: Establishes criteria and a systematic process to identify high-risk or complex patients
- Factor 1: The practice has specific criteria and has a process based on these criteria to identify patients with complex or high-risk medical conditions for whole-person care planning and management.
  - The criteria for identifying complex or high-risk patients should come from a profile of resource use and risk in the practice’s population and may include the following, or a combination of the following:
- High level of resource use (e.g., visits, medication, treatment or other measures of cost)
- Frequent visits for urgent or emergent care (e.g., two or more visits in the last six months)
- Frequent hospitalizations (i.e., two or more in last year)
- Multiple co-morbidities, including mental health
- Noncompliance with prescribed treatment/medications
- Terminal illness
- Psychosocial status, lack of social or financial support that impedes ability for care
- Advanced age, with frailty
- Multiple risk factors
How Can We Stratify Risk?


Give credit where credit is due: This is all obtained from the American Academy of Family Physicians website and documents.
Risk-stratified Care Management

What is risk-stratified care management?
Risk-stratified care management begins with a periodic and systematic assessment of each patient's health risk status, using criteria from multiple sources to develop a personalized care plan. A patient's health status may be reflected by a score or placement in a specific category, based on the most current information available.

This assessment will assist the physician and care team in predicting health care needs and recommending appropriate preventive and chronic care services. Based on the outcome of the risk assessment, a personalized care plan can then be developed in collaboration with the patient and/or family. The care plan or category of health risk may fluctuate due to expenditures or significant changes in the patient's health.

Why is risk-stratified care management important?
The identification of a patient's health risk category is the first step towards planning, developing and implementing a personalized patient care plan by the care team, in collaboration with the patient. For some, the plan may address a need for more robust care coordination with other providers, intensive care management, or collaboration with community resources.

The goals are to help the patient achieve the best health and quality of life possible by preventing chronic disease, stabilizing current chronic conditions, and preventing acceleration to a higher risk category with higher costs.

In a practice panel of 1,000 patients, there will likely be close to 200 patients (20%) who could benefit from an increased level of support. This top 20% of the population accounts for 80% of the total health care spending in the United States, with the very highest medical costs concentrated in the top 1% (via the Commonwealth Fund Issue Brief, May 2011).

Lower risk patients may warrant incrementally increased support and management as they move from a healthier category to one of higher risk.
### Table 1: Examples of Potentially Significant Risk Factors

<table>
<thead>
<tr>
<th>Clinical Diagnoses, Behavioral Health, Special Needs</th>
<th>Potential Physical Limitations</th>
<th>Social Determinants</th>
<th>Utilization/Claims Data</th>
<th>Clinician Input (Personal Knowledge)</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Any chronic disease, particularly one that is not in control or at desired goal</td>
<td>- Non-ambulatory</td>
<td>- Lack of financial or family support that impacts care</td>
<td>- Frequent hospitalizations (particularly heart failure, GI disorders, and pneumonia)</td>
<td>- Polypharmacy - Patient is taking several medications that may not all be needed and/or could have potential for interactions</td>
</tr>
<tr>
<td>- Chronic pain</td>
<td>- Needs Assistance with Activities of Daily Living (ADLs)</td>
<td>- Unemployed</td>
<td>- Frequent office, ER, or urgent care visits</td>
<td>- High-risk medications</td>
</tr>
<tr>
<td>- Substance abuse (alcohol/drug/tobacco)</td>
<td>- Severely diminished functional status</td>
<td>- No health insurance</td>
<td>- Multiple providers</td>
<td>- Non-compliant with treatment plan</td>
</tr>
<tr>
<td>- Terminal illness</td>
<td>- Declining eyesight</td>
<td>- Low health literacy</td>
<td>- Hospital readmission within 30 days</td>
<td>- Confusion with medications or following the treatment plan</td>
</tr>
<tr>
<td>- Advanced age with frailty</td>
<td>- Extreme weakness or fatigue</td>
<td>- Unsafe home environment</td>
<td>- Major procedure in last year</td>
<td>- Recent move to long-term facility or other transition of care</td>
</tr>
<tr>
<td>- Multiple co-morbidities</td>
<td>- At risk for falls</td>
<td>- Homeless</td>
<td>- Chronic kidney disease</td>
<td>- Spouse (who was the care giver) recently deceased</td>
</tr>
<tr>
<td>- Pre-term delivery of newborn</td>
<td></td>
<td>- Lives alone and needs assistance with ADLs</td>
<td>- Brain trauma</td>
<td>- Lack of engagement in care plan</td>
</tr>
<tr>
<td>- Child, youth, or adult with special needs</td>
<td></td>
<td>- Transportation for health care appointments is difficult</td>
<td>- Expensive medications</td>
<td>- Low confidence or ability for self-management</td>
</tr>
<tr>
<td>- Anxiety, schizophrenia, bipolar, depression, or other behavior affecting health</td>
<td></td>
<td>- Language barriers</td>
<td></td>
<td>- Answer to the question: Is this patient at higher risk for dying within the next year?</td>
</tr>
<tr>
<td>- Dental health</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Dementia/Alzheimer’s disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 2: Risk Categories and Levels using Diabetes Example Case

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>PRIMARY PREVENTION (Low Resource Use)</th>
<th>SECONDARY PREVENTION (Moderate Resource Use)</th>
<th>TERTIARY (High Resource Use)</th>
<th>CATASTROPHIC/COMPLEX (Extremely High Resource Use)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GOAL: To prevent onset of disease</td>
<td>GOAL: To treat a disease and avoid serious complications</td>
<td>GOAL: To treat the late or final stages of a disease and minimize disability</td>
<td>GOAL: May range from restoring health to only providing comfort care</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>No known diagnoses or complex treatments</td>
<td>No known diagnoses but demonstrates warning signs or potentially significant risk factors</td>
<td>Has diagnosis, but stabilized or in control</td>
<td>Has diagnosis and/or complex treatment, and at higher risk for complications</td>
<td>Has diagnosis, complex treatment, and complications or potentially significant risk factors - goal is to prevent further complications</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Example of using uncontrolled progression of diabetes**
- Healthy
- Blood glucose and lipids rising, but still within desired parameters
- BMI elevated
- Smoker

**Example of Caro Plan Considerations for patient with uncontrolled progression of diabetes**
- Preventive screenings and immunizations
- Patient education and engagement
- Appropriate monitoring
- Health risk assessment (annual)
- Care plan with smoking cessation counseling and program offered
- Team/planned care
- Group visits
- Health coach
- Referrals as appropriate, such as social services
- Community resources
- Home self-monitoring

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**Identifying Disease Burden and Determining Health Risk Status**
ISHC’s Procedures

The assessment will assist the physician and care team in predicting health care needs and recommending appropriate preventive and chronic care services. Based on the outcome of the risk assessment, a personalized care plan can then be developed in collaboration with the patient and/or family. The care plan and category of health risk may fluctuate due to significant changes in the patient’s health. The patient’s provider/care team will identify the patient’s health risk category using the following information:

- Health Risk Appraisal form or other questionnaire
- Clinical Diagnoses
- Utilization data from insurer or other source
- Clinician’s personal knowledge related total patient’s social, financial, mental, or physical condition
Health Risk Categories

Level 1: Primary Prevention
Level 2: Secondary Prevention
Level 3: Tertiary Prevention/ Terminal Care
Primary Prevention: Level 1 (Healthy)

- Patients who are healthy and have no known chronic diseases could be assigned to a low risk category, or level 1. Patients who are healthy but showing warning signs of potential health risks may also be assigned to this level. Patients in the primary prevention category tend to be lower in their health care resource expenditures.
Secondary Prevention: Level 2
(Disease is present)

- A patient who has a chronic disease, is managing it well, and meeting their desired goals, may be assigned to the secondary prevention level 2 category. Those who are not in control of his/her disease but have not developed complications may be assigned to this level also. Patients in the secondary prevention category tend to be moderate user of health care resources. Patients that have issues with frequent emergency department utilization or frequent inpatient admissions to the hospital could be assigned this category.
Tertiary Prevention: Level 3
(Disease with complications and/or complex care)

- If a patient’s chronic disease has progressed, become unstable, or new conditions and/or significant complications have developed, they may progress to the tertiary category. Patients in the tertiary prevention category usually rank high in health care resource expenditures. Patients that have issues with frequent emergency department utilization and frequent hospital admissions could be assigned this category, especially if significant decline in health status is evident.

- In addition, a patient with extreme or catastrophic situations, such as highly complex treatment with extremely high health care resource expenditures and may be under the care of several sub-specialists, would be a level 3 risk and require intensive care management.
Determining Health Risk Status

- Is the patient healthy, with no chronic disease or significant risk factors?  
  Yes  or  No

If yes, patient is at a **Level 1 Primary Prevention** Plan of care includes preventive screenings and immunizations; patient education; annual health risk assessment; appropriate monitoring for warning signs.
Determining Health Risk Status

- Is the patient healthy, but at risk for a chronic disease, or has other significant risk factors?
  
  Yes or No

If yes, patient is at a **Level 1 Primary Prevention** but with increased interventions for unhealthy lifestyle/habits; needs to be linked to community resources to enhance patient education and self-management skills.
Determining Health Risk Status

• Does the patient have one or more chronic diseases, with significant risk factors, but is stable or at desired treatment goals?

Yes or No

If yes, patient is at a **Level 2 Secondary Prevention** to treat disease and avoid serious complications.
Determining Health Risk Status

- Does the patient have one or more chronic diseases, with significant risk factors and is unstable or not at treatment goals?

  Yes  or  No

If yes, patient is at a Level 2 Secondary Prevention to treat disease and avoid serious complication but may need a health coach and referral to specialty services.
Determining Health Risk Status

- Does the patient have multiple chronic diseases, significant risk factors, complications, and/or complex treatments?

  Yes  or  No

If yes, patient is at a Level 3 Tertiary Prevention to treat the late or final stages of a disease and minimize disability.
Determining Health Risk Status

- Does the patient have a catastrophic or complex condition in which his/her health may or may not be able to be restored?
  
  Yes  or  No

If yes, patient is at a **Level 3 Tertiary Prevention** which may range from restoring health to only providing comfort care.
• Patient’s primary care provider will select risk level at Annual visits or with changes in patient status that requires an increase in care management resources.

• Level 1 Primary Prevention: Low resource use with goal to prevent onset of disease

• Level 2 Secondary Prevention: Moderate resource use with goal to treat disease and avoid serious complications.

• Level 3 Tertiary/Catastrophic: High to extremely high resource use with goal ranging from restoring health to only providing comfort care
• Plans of care will be developed addressing patient/family needs according to their risk level.

• Level 1 self-management plans will be implemented by provider support staff and reviewed with patient to identify self-management goals and interventions.

• Level 2 self-management plans may be implemented by provider support staff or referred to care management if patient requires linkages to specialists, CDSM classes etc.

• Level 3 self-management plans will be implemented by care management staff with input from patient’s care team, patient and family.
## Sample Self-Management Plan

### Self-Management Secondary Prevention for DIABETES Care Plan

<table>
<thead>
<tr>
<th>Date: &lt;Current Date&gt;</th>
<th>Patient: &lt;Patient full name&gt;</th>
<th>PT #: &lt;patient number&gt;</th>
<th>PCP: &lt;doctor of record&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Category: 2</td>
<td>Family Participation: [ ] yes [ ] no Who?:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Diagnoses and/or Risk Factors for Disease:

<text box>

### Patient/Family identified Areas of Concern:

<text box>

<table>
<thead>
<tr>
<th>Prioritized Goals for Care</th>
<th>Patient Actions Identified and Frequency</th>
<th>Level of Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition/Dietary Plan/BMI</td>
<td>I will take the following actions:</td>
<td>1=Very Committed, 2= Not sure, 3=Not Committed</td>
</tr>
<tr>
<td>[ ] Exercise: Walk for ____ minutes ____ days a week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Bike for ____ minutes ____ days a week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Swimming for ____ minutes ____ days a week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Other activity:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Self-Management Secondary Prevention for HYPERTENSION Care Plan

Date: <Current Date>  Patient: <Patient full name>  PT #: <patient number>  PCP: <doctor of record>

**Risk Category:** 2  **Family Participation:** [ ] yes [ ] no  **Who?:**

<table>
<thead>
<tr>
<th>Diagnoses and/or Risk Factors for Disease:</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;text box&gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient/Family identified Areas of Concern:</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;text box&gt;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Prioritized Goals for Care</strong></th>
<th><strong>Patient Actions Identified and Frequency</strong></th>
<th><strong>Level of Commitment</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>To Prevent Complications of Disease</td>
<td><strong>Nutrition/Dietary Plan/BMI</strong></td>
<td>1=Very Committed, 2= Not sure, 3=Not Committed</td>
</tr>
<tr>
<td>I will take the following actions:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Exercise: Walk for ____ minutes ____ days a week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Bike for ____ minutes ____ days a week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Swimming for ____ minutes ____ days a week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[ ] Other activity:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Patient Primary Prevention Care Plan**

Date: <Current Date>  
Patient: <Patient full name>  
PT #: <patient number>  
PCP: <doctor of record>

Risk Category: 1  
Family Participation: [ ] yes [ ] no  
Who?:

Advanced Directives: [ ] Yes [ ] No [ ] Copy for records?  
Medication Reconciliation: [ ] Yes [ ] No [ ] N/A

Patient Diagnoses/Problems/Areas of Concern:

<text box>

Personal Safety Plan (child proof/home safety/fall prevention): [ ] Yes [ ] No  
If yes, please give summary:

<text box>

<table>
<thead>
<tr>
<th>Prioritized Goals for Care</th>
<th>Actions</th>
<th>Resources Required/Barriers Identified</th>
<th>Outcome/Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevent Onset of Disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nutrition/Dietary Plan/BMI</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preventive Screenings</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immunizations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Depression Screening</td>
<td></td>
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</tbody>
</table>
Questions????

How I feel at least 50% of the time! How about you?