TRENDS IN DIABETES QUALITY MEASUREMENT

Manage patients’ entire healthcare experience with a more comprehensive approach
Type 2 diabetes is a complex disease that requires a multifaceted treatment approach and continuous patient self-management to reduce the risk of acute and long-term complications. Consequently, diabetes care quality measures address multiple aspects of treatment and patient outcomes.

In the late 1990s, diabetes became the focus of one of the earliest national disease-specific measure sets, which included standards for A1C levels, blood pressure, and low-density lipoprotein cholesterol (LDL-C) levels. Since that time, similar diabetes care quality measures have been adopted by national, state, regional, and private organizations. More recently, the use of “composite” measures for assessment of diabetes care has come into play.

This brochure takes a look at trends in the development and use of quality measures to enhance every aspect of care for patients with diabetes and, thus, improve outcomes.

### Quality measure sets generally include 2 types of measures

<table>
<thead>
<tr>
<th>Process measures</th>
<th>Outcome measures</th>
</tr>
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<tbody>
<tr>
<td>Capture the rate of use of specific, evidence-based processes of care</td>
<td>Report a change in patient condition</td>
</tr>
<tr>
<td><em>For example, A1C screening, eye exams</em></td>
<td><em>For example, percentage of patients achieving A1C goals</em></td>
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Diabetes quality measures: setting the standard

Diabetes quality measure sets vary across organizations, but reflect evidence-based standards of care. Diabetes measures established by the National Committee for Quality Assurance (NCQA) were among the earliest and are continually updated to reflect advancing knowledge. For example, in 2008 a measure for A1C control <8% was added in response to studies suggesting that more aggressive A1C management could cause safety issues in certain patients. Likewise, the blood pressure control measures have been adjusted to reflect current study data.
Improvements in HEDIS diabetes measures over the past 5 years

<table>
<thead>
<tr>
<th>NCQA HEDIS comprehensive diabetes care measures*</th>
<th>Reported results: 2007 vs 2011*</th>
</tr>
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<tbody>
<tr>
<td>Percentage of adults (aged 18-75 years) with diabetes who had:</td>
<td></td>
</tr>
<tr>
<td>A1C testing</td>
<td>Commercial</td>
</tr>
<tr>
<td>82% vs 89%</td>
<td>85% vs 91%</td>
</tr>
<tr>
<td>A1C:</td>
<td></td>
</tr>
<tr>
<td>Poor control &gt;9%</td>
<td>57% vs 31%</td>
</tr>
<tr>
<td>Control &lt;8%†</td>
<td>55% (2009) vs 58%</td>
</tr>
<tr>
<td>Control &lt;7% (for selected population)</td>
<td>27% vs 39%</td>
</tr>
<tr>
<td>Retinal eye exam performed</td>
<td>45% vs 53%</td>
</tr>
<tr>
<td>LDL-C screening</td>
<td>78% vs 83%</td>
</tr>
<tr>
<td>LDL-C control &lt;100 mg/dL</td>
<td>27% vs 45%</td>
</tr>
<tr>
<td>Blood pressure control:</td>
<td></td>
</tr>
<tr>
<td>&lt;140/80 mm Hg</td>
<td>41% (2011)</td>
</tr>
<tr>
<td>&lt;140/90 mm Hg</td>
<td>32% vs 63%</td>
</tr>
<tr>
<td>Monitoring for nephropathy</td>
<td>72% vs 81%</td>
</tr>
</tbody>
</table>

HEDIS = Healthcare Effectiveness Data and Information Set.

*Figures represent averages of HMOs and PPOs in both commercial and Medicare plans, and represent HMOs in Medicaid plans.
†New measure in 2008.
Linking quality measures and payments

The HEDIS measures enable health insurance purchasers to compare evidence-based quality performance across plans. These and other measures also increasingly underpin pay-for-performance programs.

The Medicare Plan Star Rating program measures plan quality and performance and publishes results online to help Medicare beneficiaries choose a Medicare Advantage plan. The Affordable Care Act (ACA) introduced quality bonus payments into the Medicare Advantage program. Beginning in 2012, bonuses were paid to Medicare Advantage plans based on the number of stars they earn, with 5-star plans receiving the highest bonus payments.5

Five HEDIS diabetes measures are among the 36 measures included in the Medicare Plan Star Rating program.6

<table>
<thead>
<tr>
<th>Medicare Plan Star Rating diabetes measures⁶</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of patients with diabetes:</td>
</tr>
<tr>
<td>• Who had a retinal or dilated eye exam</td>
</tr>
<tr>
<td>• Who were monitored for kidney disease or who had received medical attention for nephropathy</td>
</tr>
<tr>
<td>• With A1C &gt;9% or who were not tested</td>
</tr>
<tr>
<td>• With LDL-C ≤100 mg/dL</td>
</tr>
<tr>
<td>• Who had an LDL-C screening test*</td>
</tr>
<tr>
<td>• Who take oral diabetes medications as directed†</td>
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<tr>
<th>The value of 5 stars</th>
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<tr>
<td><strong>Case example:</strong> In Worcester County, Massachusetts, 5-star plans receive approximately $8 per month per member more than 4.5-star plans. For one community health plan with its 28,000 members, increasing the plan rating by 0.5 star could mean additional revenue totaling $2.7 million a year. An added benefit of being rated a 5-star plan is the ability to enroll members all year, which could serve as a competitive advantage.⁸</td>
</tr>
</tbody>
</table>

*Medicare Advantage enrollees aged 18-75 years.  
†Medicare Part D plan members.
Key focus in newer models of care

The ACA also includes provisions to encourage the formation of accountable care organizations (ACOs) and other newer models of care delivery. ACOs that care for Medicare beneficiaries can share in any savings they create if they meet certain quality standards. Improving care for patients with diabetes is one focus of the initiative, with 6 diabetes-related measures included among 33 quality measures that ACOs were required to report on in 2012. Ultimately, the goal is to deliver higher-quality, more cost-effective care to patients.

### Medicare shared savings program

#### ACO diabetes measures

- With A1C <8%
- With A1C >9%
- With LDL-C <100 mg/dL
- With blood pressure <140/90 mm Hg
- Who indicated they were tobacco nonusers
- With documented daily aspirin use (patients with ischemic vascular disease)

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**The rise of composite measures**

Composite measures combine several individual measures into one overall measure that summarizes the quality of care provided. According to the Agency for Healthcare Research and Quality (AHRQ), composite measures offer several advantages:

- They make it easier for measure sponsors to rank healthcare provider (HCP) performance and for consumers to identify high-quality providers.
- They make it easier to distinguish between high-performing and low-performing providers.
- They are a good fit for pay-for-performance programs because financial rewards can be viewed as a composite measure of quality.

The Minnesota Community Measurement collaborative was one of the earliest adopters of a composite diabetes measure. In 2003, the organization began capturing quality information about diabetes care delivered by the state’s HCPs; this quality information was made public beginning in 2004 and is searchable by HCP name and/or location, enabling consumers to compare provider options. The diabetes measure, called “the D5,” comprises:

- Blood pressure <140/90 mm Hg
- LDL-C <100 mg/dL
- A1C <8%
- No tobacco use
- Daily aspirin, if appropriate

Public listings include the percentage of an HCP’s patients who achieve the D5 goals and a comparison to the state average.
Do publicly reported diabetes quality measures drive quality improvements?

The Wisconsin example

The Wisconsin Collaborative for Healthcare Quality (WCHQ) is a voluntary consortium of health systems, medical groups, hospitals, and health plans operating in the state. The group’s mission is to gather and publicly report performance measures in order to help improve the quality and affordability of health care in Wisconsin.13

Like the Minnesota Community Measurement collaborative, WCHQ has adopted all-or-none composite measures for diabetes “because of the benefits [this method] provides to both the patient and the provider.” The organization points out that it is easier for patients to use composite measures to see how their provider group is performing than to try to make sense of multiple, individual measures. For HCPs, this approach emphasizes the importance of managing patients’ entire healthcare experience.14,15

Population-level data reported by the WCHQ supports the value of this approach, as shown at right.

Progress against WCHQ composite measures

Process measure (optimal results)14
- 2 A1C tests performed during the 12-month reporting period AND
- 1 LDL-C test performed during the 12-month reporting period AND
- 1 kidney function test during the 12-month reporting period and/or diagnosis and treatment of kidney disease

Percentage of patients achieving composite process measure16
56%* 62%*

Outcome measure (optimal results)15
- Most recent A1C test result is <7% or <8% for high-risk patients, AND
- Most recent LDL-C test result is <100 mg/dL, AND
- Most recent blood pressure measurement is <130/80 mm Hg

Percentage of patients achieving composite outcome measure17
22%* 23%*

*Percentage represents an approximate amount.
Mapping the future

While the use of quality measures is improving the quality of diabetes care, the proliferation and use of different measure sets across organizations can lead to inconsistency and confusion.

To help address this situation, the National Quality Forum (NQF) created the Measure Applications Partnership (MAP), a public-private partnership, whose primary purpose is to provide input to the US Department of Health and Human Services (HHS) on performance measures for public reporting, performance-based payment programs, and other purposes.18

In an October 2012 report to the HHS, MAP presented the concept of “families of measures.” The idea is to offer healthcare organizations a prescreened group of measures that work cohesively to support specific healthcare improvement goals. MAP included diabetes among its first areas of focus in part because improved prevention and treatment of diabetes is part of the National Quality Strategy.18

Among the gaps in the diabetes family of measures identified by MAP is the need for measures addressing glycemic control for complex patients, for example, the geriatric population and patients with multiple chronic conditions. MAP plans to address this and other gaps during the next few years by catalyzing the development and implementation of new measures.18

MAP suggests that when consistently applied by both public- and private-sector healthcare organizations, families of measures will promote patient-centered care, more focused payer- and purchaser-sponsored performance incentives for HCPs, and a decreased reporting burden on HCPs.18
<table>
<thead>
<tr>
<th>Measures</th>
<th>MAP comments</th>
</tr>
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<tbody>
<tr>
<td>A1C control (&lt;8.0%)</td>
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</table>
| Lipid management measure pair:  
  A. LDL-C <130 mg/dL  
  B. LDL-C <100 mg/dL | Forthcoming National Heart, Lung, and Blood Institute (NHLBI) guidelines could change LDL-C targets. The NQF endorsement process will address adjusting measures to align with new guidelines. |

**Composites**

Optimal diabetes care:
- A1C <8.0%
- LDL-C <100 mg/dL
- Blood pressure <140/90 mm Hg
- Tobacco nonuser
- Daily aspirin use (for patients with ischemic vascular disease) unless contraindicated

Comprehensive diabetes care:
- A1C poor control (>9.0%)
- A1C <8.0%
- A1C <7.0% (for selected population)
- Eye exam (retinal) performed
- LDL-C screening
- LDL-C <100 mg/dL
- Medical attention for nephropathy
- BP <140/90 mm Hg
- Smoking status and cessation advice or treatment

Recommend that both diabetes composites consider addressing body mass index
References

Advancing Diabetes Care

Type 2 diabetes is a complex disease that calls for innovative management approaches. Diabetes quality measures are evolving to reflect this complexity and provide a more complete picture of patient care and outcomes. The benefits of better quality measures will be better care for patients with diabetes and better efficiency for healthcare organizations.

Janssen Pharmaceuticals, Inc., is dedicated to advancing diabetes care and inspiring hope for healthier living.