Medical Information

The Benchmark between the NCQA Diabetes Recognition Program (DRP) and the JCI Condition-Specific Certification for DM Type 2 at the Bangkok Hospital Medical Center

Diabetes mellitus (DM) has become a major public health problem around the world. According to statistics from the World Health Organization (WHO) Diabetes Fact Sheet, this disease currently affects 347 million people worldwide. Due to the increasing burden of diabetes patients, an excellent diabetes care center is needed to provide international standard quality care. To address this need, the Bangkok Hospital Medical Center (BMC)’s Diabetes Center applied for the Joint Commission International (JCI) Condition-Specific Certification (DCSC) Program for a DM Type 2 Pathway. The certification was awarded to the BMC in November 2011. Soon after, we achieved all the target performance indicators recommended by JCI, and we gradually added further performance indicators at our diabetes clinic. We are ready for re-certification this coming November 2014.

In an attempt to assess and identify performance measures based on management guidelines, we found that most of JCI measurements assess the care process being delivered. To better understand how to improve quality care for type 2 DM patients, we can draw on the tangible measure of the treatment’s outcomes. In other words, in addition to good standard processes of care we also focus on good treatment outcomes. These two must go hand in hand to achieve the maximum benefit for our patients. There are several disease-specific and specialty-specific professional organizations that have developed diabetes management guidelines. In consideration of the significant improvements we have seen in recent years, we examined best practices to identify the best tool to achieve even better clinical outcomes. After surveying many organizations already using diabetes performance measurements, we were impressed with the National Committee for Quality Assurance (NCQA) and its approach to address the clinical outcome even further. This paper is an introduction to NCQA and aims to compare JCI and NCQA standards in terms of measuring diabetes clinics’ performance and the clinical outcome. The purpose of using the NCQA standard as a benchmark for our expert care provision for Type 2 DM patients, we have assessed relevant clinical results and this process will continue for the next 6 months. We aim to report on the results in the next edition of the Bangkok Medical Journal.

The National Committee for Quality Assurance (NCQA)

The NCQA is a private, not-for-profit organization dedicated to improving health care quality. Since it was founded in 1990, the NCQA has been a leading institution in driving improvement throughout the health care system, helping to raise the issue of health care quality to the top of the national agenda. The NCQA accredits and certifies a wide range of health care organizations. It also recognizes clinicians and practices in key areas of performance.
The NCQA is the first DM accreditation organization to use performance measures to assess the impact of programs on care for people with DM.

The standards are organized into seven categories:
- Evidence-Based Programs
- Patient Services
- Practitioner Services
- Care Coordination
- Measurement and Quality Improvement
- Program Operations
- Performance Measurement

*For more information, please visit: http://www.ncqa.org

The NCQA Diabetes Recognition Program (DRP)

The DRP assesses the effectiveness of DM management by measuring the clinical outcome as well as the intervention process. The requisite quality indicators are shown below.

**Outcome Measures:**
- HbA1c Control > 9.0%*
- HbA1c Control < 8.0%
- HbA1c Control < 7.0%
- Blood Pressure Control ≥ 140/90 mm Hg*
- Blood Pressure Control < 130/80 mm Hg
- LDL Control ≥ 130 mg/dl*
- LDL Control < 100 mg/dl

**Process Measures:**
- Eye Examination
- Foot Examination
- Nephropathy Assessment
- Smoking Status and Cessation Advice or Treatment

Joint Commission International (JCI)

JCI stands apart as a leading advocate for patient safety and quality improvement in the global community. It was created in 1994 by The Joint Commission, and the JCI has a presence in more than 90 countries today. JCI works with health care organizations, governments, and international advocates to promote rigorous standards of care and provide solutions for achieving peak performance. JCI experts help organizations help in three ways: accreditation, education, and advisory services.

*For more information, please visit: www.jointcommission-international.org

JCI standards for Clinical Care Program Certification (CCPC)

To receive certification for any JCI DCSC program, the health care organization must meet the following 5 standards:

1. International Patient Safety
2. Program Leadership and Management (PLM)

3. Delivering or Facilitating Clinical Care (DFC)
4. Clinical Information Management (CIM)
5. Performance Measurement and Improvement (PMI)

Joint Commission International Condition-Specific Certification (JCI DCSC) Type 2 DM

There are several recommendations for DM management, such as an intensive therapy for poorly controlled diabetics, therapy for hyperlipidemia, use of angiotensin-converting enzyme inhibitor (ACEI) or an angiotensin II receptor blocker (ARB) therapy for albuminuria and self-management education and ensuring the clinical documentation is kept complete. The table below presents our current performance measurements for the JCI DM DCSC program.

Comparison of the NCQA and JCI DM DCSC

Overall, the NCQA and JCI accreditation processes are quite similar in format and general requirements. After the application is submitted, a detailed documents review takes place, and several days of surveyors conducting on-site visits are compulsory. Both organizations arrange for levels of accreditation ranging from rejected to full accreditation. They also have specific disease management certification programs. In terms of the DM management program, these two organisations are somewhat different in the choice of diabetes performance indicators. DRP gives more values to the clinical outcome indicators, while most of JCI standard measures focus on the process of providing essential treatments and care. NCQA accreditation is a comprehensive quality scorecard. Therefore, the DRP used a standardized data set for measuring plan performance and clinical outcomes. In the scoring process for accreditation, NCQA assigns a greater weight to clinical outcome measurements.

DRP Scoring of Measures

The table below list the indicators required by DRP, the grey row indicates the clinical indicators and the white row indicates the process indicators.

<table>
<thead>
<tr>
<th>Scored Measures</th>
<th>Threshold (% of patients in sample)</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>-HbA1c Control &gt;9.0 %</td>
<td>≤ 15</td>
<td>12.0</td>
</tr>
<tr>
<td>-HbA1c Control &lt;8.0 %</td>
<td>60</td>
<td>8.0</td>
</tr>
<tr>
<td>-HbA1c Control &lt;7.0%</td>
<td>40</td>
<td>5.0</td>
</tr>
<tr>
<td>-BP Control &gt;140/90 mm Hg</td>
<td>≤ 35</td>
<td>15.0</td>
</tr>
<tr>
<td>-BP Control &lt;130/80 mm Hg</td>
<td>25</td>
<td>10.0</td>
</tr>
<tr>
<td>-LDL Control &gt;130 mg/dl</td>
<td>≤ 37</td>
<td>10.0</td>
</tr>
<tr>
<td>-LDL Control &lt;100 mg/dl</td>
<td>36</td>
<td>10.0</td>
</tr>
<tr>
<td>-Eye Examination</td>
<td>60</td>
<td>10.0</td>
</tr>
<tr>
<td>-Foot Examination</td>
<td>80</td>
<td>5.0</td>
</tr>
<tr>
<td>-Nephropathy Assessment</td>
<td>80</td>
<td>5.0</td>
</tr>
<tr>
<td>-Smoking Status and Cessation Advice or Treatment</td>
<td>80</td>
<td>10.0</td>
</tr>
</tbody>
</table>

**Total Points** 100.0

**Points to Achieve Recognition = 75.0**
Table: Performance Measurement for JCI DM DCSC.

<table>
<thead>
<tr>
<th>Performance Measures</th>
<th>Type of indicator</th>
<th>Rational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive therapy for poorly controlled diabetics</td>
<td>Process indicator</td>
<td>Patient HbA1c ≥ 9 should receive intensive therapy as needed to achieve treatment goals</td>
</tr>
<tr>
<td>Therapy for hyperlipidemia</td>
<td>Process indicator</td>
<td>Patient LDL &gt; 100 should receive a statin as a first choice as needed to achieve treatment goals</td>
</tr>
<tr>
<td>Use of ACEI or ARB therapy for albuminuria</td>
<td>Process indicator</td>
<td>Patient MAU &gt; 30 should receive ACEI or ARB therapy twice as needed to achieve treatment goals</td>
</tr>
<tr>
<td>Self-Management Education</td>
<td>Process indicator</td>
<td>Patient should receive diabetes self-management education as needed to achieve treatment goals</td>
</tr>
<tr>
<td>Completeness of medical record (DM Pathway)</td>
<td>Process indicator</td>
<td>Medical records complete as needed to achieve treatment goals</td>
</tr>
<tr>
<td>DM Patient Perception</td>
<td>Outcome indicator</td>
<td>Evaluating the quality of care processes and identifying areas that may need more intense investigation or inquiry</td>
</tr>
</tbody>
</table>

Conclusion

The BMC diabetes clinic pursues a consistent drive to improve quality and clinical outcomes. We found that the DRP standard is a helpful clinical outcome measurement tool to assess the efficiency of our DM management program. Only health care organizations located in the United States are eligible to apply for DRP, which is unfortunate. Nevertheless, we plan to use the standard set by the DRP performance measurement as a benchmark this year. In addition to the quality indicators required by JCI Type 2 DM DCSC, the clinical results of the patient who consents to participate in the DM pathway are also being recorded at present. Currently, we are verifying the percentage of patients in each level of HbA1C and LDL cholesterol and the percentage of patients with selected blood pressure levels. We are eager to deliver excellent service to our patients; we expect our patients will enjoy greater benefits as a result of the clinic benchmarking selected clinical performance measures appropriate for an international health care organization.

By comparing the performance levels with DRP scoring measures, we expect that our endocrinologists will achieve better clinical outcomes for the patients. The clinician will quickly see tangible improvements by increasing the level of attention paid to treatment and monitoring. We hope that these selected clinical outcome indicators will mirror the effectiveness of our DM management pathway and most importantly will deliver higher quality care to our DM patients.

In the future, more work is planned to assess the possibility of using Type 2 DM clinical outcomes selected by NCQA as a Key Performance Indicator (KPI) to measure the proficiency of all endocrinologists who treat Type 2 DM patients at the Bangkok Medical Center.

References

1. More information on JCI Certification for Clinical Care Programs, visit: http://www.jointcommissioninternational.org/CCPC-Certification/
2. More information on the National Committee for Quality Assurance, visit: http://www.ncqa.org/AboutNCQA.aspx