In this toolkit you will find an explanation of what is required by ADA to meet Standard 10’s criteria of the National Standards for Diabetes Self-Management and Support. You will also find a user friendly sample worksheets, templates, and examples.

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I. Standard 10
II. CQI and Standard 10 Cycle
III. CQI Worksheet
IV. CQI Example – A1C
V. CQI Example – Exercise
VI. CQI Example – LDL
VII. CQI – Other Sample Plans
### Standard #10: Quality improvement

The provider(s) of DSME will measure the effectiveness of the education and support and look for ways to improve any identified gaps in services or service quality using a systematic review of process and outcome data.

<table>
<thead>
<tr>
<th>Review Criteria</th>
<th>Indicators</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A.</strong> The DSME program has a quality improvement process and plan in place for evaluating the education process and program outcomes.</td>
<td>1. There is evidence of aggregation of at least one participant behavioral goal and one other participant outcome.</td>
<td>[ ]</td>
<td>[ ]</td>
<td>[ ]</td>
</tr>
<tr>
<td></td>
<td>2. There is documentation of a CQI plan/process (e.g. written policy, annual program plan, CQI meeting minutes) based on at least one behavioral goal or other participant outcome.</td>
<td>[ ]</td>
<td>[ ]</td>
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</tr>
<tr>
<td><strong>B.</strong> Quality improvement is based on regular aggregation of program outcomes data and application of results to enhance quality of the DSME and address gaps in service.</td>
<td>1. There is evidence of aggregate data and summary for use or application for improvement of DSME/S (e.g. description of project, summary of aggregate data, written plan for improvement, using data).</td>
<td>[ ]</td>
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<td>[ ]</td>
</tr>
</tbody>
</table>

**Standard Met?**

- Yes [ ]
- No [ ]
CQI Toolkit

Standard 10 Cycle

Aggregated Behavioral Goal (at least one)

Aggregated Other Participant Outcome (at least one)

Select at least one of the above for..

CQI Project
What are you trying to improve, fix or accomplish?

Target Outcome

Aggregated Outcome

Implement Amendments

Review Outcome versus Target

Report Cycle
as long as you continue to work on this CQI project

Amend Current Operations

Review Current Operations

Top
CQI Toolkit

CQI Project Worksheet

A. Program’s one or more aggregate patient selected behavioral goal outcome
   • Behavioral Goal Category:
   • Add more lines if needed

B. Program’s one or more aggregated other participant outcome
   • Other Participant Outcome:
   • Add more lines if needed.

C. CQI Project
   • Enter in line below the one aggregated outcome from A or B above to create your CQI project to address
     ● ________________________________________
   • List below what your CQI project will be trying to improve fix or accomplish?
     ● ________________________________________
     ● ________________________________________

D. What is the CQI project target % outcome you are trying to achieve?
   • ________%

E. Determine the CQI project outcomes reporting and review cycle: monthly, quarterly, bi-annually.
   a. Reporting and outcome review cycle will be ____________________________________

CQI Cycle

F. Aggregate outcomes
G. Review outcomes versus target
H. Review current operations as they relate to the CQI project
I. Amend current operations to improve CQI outcomes
J. Implement improvements

Repeat cycle starting with F.

<table>
<thead>
<tr>
<th>E) Reporting Review Date</th>
<th>Enter Date to Report/Review</th>
<th>Enter Date to Report/Review</th>
<th>Enter Date to Report/Review</th>
<th>Enter Date to Report/Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>D) CQI Target</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>F) CQI Outcome</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>G) Review Outcomes</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>H) Review current operations and consider amendments</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>I) List amendments to current operations</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>J) Date change Implemented</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
</tbody>
</table>
Sample CQI Project Worksheet – A1C

A. Program’s one or more aggregate patient selected behavioral goal outcome
   - Behavioral Goal Category: Physical Activity

B. Program’s one or more aggregated other participant outcome
   - Other Participant Outcome: A1C

C. CQI Project
   - Enter in line below the one aggregated outcome from A or B above to create your CQI project to address
     - A1C
     - List below what your CQI project will be trying to improve fix or accomplish?
       - Increase the number of participants with an A1C less than 7%

D. What is the CQI project target % outcome you are trying to achieve?
   - 85%

E. Determine the CQI project outcomes reporting and review cycle: monthly, quarterly, bi-annually.
   - Reporting and outcome review cycle will be bi-annually.

CQI Cycle

F. Aggregate outcomes
G. Review outcomes versus target
H. Review current operations as they relate to the CQI project
I. Amend current operations to improve CQI outcomes
J. Implement improvements

Repeat cycle starting with F.

<table>
<thead>
<tr>
<th>E) Reporting Review Date</th>
<th>June 20___ Enter Date to Report/Review</th>
<th>December 20___ Enter Date to Report/Review</th>
<th>June 20___ Enter Date to Report/Review</th>
<th>December 20___ Enter Date to Report/Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>D) CQI Target</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>F) CQI Outcome</td>
<td>57 %</td>
<td>64%</td>
<td>79%</td>
<td>%</td>
</tr>
<tr>
<td>G) Review Outcomes</td>
<td>93 of the 163 participants had a post DSME A1C less than 7%</td>
<td>119 of the 186 participants had a post DSME A1C less than 7%</td>
<td>219 of the 277 participants had a post DSME A1C less than 7%</td>
<td></td>
</tr>
<tr>
<td>H) Review current operations and consider amendments</td>
<td>How often you should have your A1C tested is reviewed during class 4 of the 5 class series.</td>
<td>Participants liked understanding how the blood sugar level is related to A1C</td>
<td>Participants communicated that they felt empowered with the ability to prevent DM complications once they learned that A1C reduction is directly related to complication reduction.</td>
<td></td>
</tr>
<tr>
<td>I) List amendments to current operations</td>
<td>Add to the content of the slide deck discussion about what A1C is and average blood sugar level related to the various %.</td>
<td>Add content to class 4 discussing the % reduction in DM complications with each % reduction of A1C</td>
<td>Create A1C patient tracker scale with BG average. Patient will be able to track their bg as well how it relates to their daily readings</td>
<td></td>
</tr>
<tr>
<td>J) Change date</td>
<td>June 4 15, 20___</td>
<td>December 2, 20___</td>
<td>Jun 12, 20___</td>
<td></td>
</tr>
</tbody>
</table>
Sample CQI Project Worksheet – Physical Activity

A. Program’s one or more aggregate patient selected behavioral goal outcome
   a. Behavioral Goal Category: Physical Activity

B. Program’s one or more aggregated other participant outcome
   • Other Participant Outcome: Hospital Admissions due to diabetes

C. CQI Project
   • Enter in line below the one aggregated outcome from A or B above to create your CQI project to address
     ▪ Physical Activity
   • List below what your CQI project will be trying to improve fix or accomplish?
     ▪ Increase the goal achievement rate of the DSME participant’s that select a physical activity goal

D. What is the CQI project target % outcome you are trying to achieve?
   ▪ 85%

E. Determine the CQI project outcomes reporting and review cycle: monthly, quarterly, bi-annually.
   a. Reporting and outcome review cycle will be quarterly.

CQI Cycle

F. Aggregate outcomes

G. Review outcomes versus target

H. Review current operations as they relate to the CQI project

I. Amend current operations to improve CQI outcomes

J. Implement improvements

Repeat cycle starting with F.

<table>
<thead>
<tr>
<th>E) Reporting Review Date</th>
<th>March 20___</th>
<th>June 20___</th>
<th>September 20___</th>
<th>December 20___</th>
</tr>
</thead>
<tbody>
<tr>
<td>D) CQI Target</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>F) CQI Outcome</td>
<td>40%</td>
<td>48%</td>
<td>75%</td>
<td>%</td>
</tr>
<tr>
<td>G) Review Outcomes</td>
<td>8 of the 20 participants that selected a physical activity goal met their goal.</td>
<td>25 of the 52 participants that selected a physical activity goal met their goal.</td>
<td>36 of the 48 participants that selected a PT goal met their goal.</td>
<td></td>
</tr>
<tr>
<td>H) Review current operations and consider amendments</td>
<td>Currently the benefits of physical activity is discussed during class 2 of the 4 class series</td>
<td>Amendments noted in March have resulted in improved outcomes but more improvements needed</td>
<td>Participants like June amendments and stated this during class. PT goal outcome data reflected many said they were doing the activities discussed in class during 10 min. after meals or during commercials</td>
<td></td>
</tr>
<tr>
<td>I) List amendments to current operations</td>
<td>Add physical activity handouts to class 2 that recommend various activities and how many calories a 150#, 200# and 250# woman or man burn per 60 minutes of the activity</td>
<td>During the 2nd class show participants how to do one standing in place and one chair exercise for 5 minutes. Ask them if they could do this during commercials or after each meal for 10 mins.</td>
<td>Incorporate 5 minutes of a new chair or new standing in place activity during each of the 4 classes and continue to encourage participants do them during commercials or after meals.</td>
<td></td>
</tr>
<tr>
<td>J) Change date</td>
<td>March 15, 20___</td>
<td>June 20, 20___</td>
<td>September 12, 20___</td>
<td></td>
</tr>
</tbody>
</table>
## Sample CQI Project Worksheet – LDL

### A. Program’s one or more aggregate patient selected behavioral goal outcome
- Behavioral Goal Category: Physical Activity

### B. Program’s one or more aggregated other participant outcome
- Other Participant Outcome: LDL

### C. CQI Project
- Enter in line below the one aggregated outcome from A or B above to create your CQI project to address
  - LDL
- List below what your CQI project will be trying to improve fix or accomplish?
  - Increase the number of participants with an LDL value less than 100mg/dl

### D. What is the CQI project target % outcome you are trying to achieve?
- 95%

### E. Determine the CQI project outcomes reporting and review cycle: monthly, quarterly, bi-annually.
  - Reporting and outcome review cycle will be quarterly

### CQI Cycle

#### F. Aggregate outcomes

#### G. Review outcomes versus target

#### H. Review current operations as they relate to the CQI project

#### I. Amend current operations to improve CQI outcomes

#### J. Implement improvements

### Repeat cycle starting with F.

<table>
<thead>
<tr>
<th>E) Reporting Review Date</th>
<th>March 20 Enter Date to Report/Review</th>
<th>June 20 Enter Date to Report/Review</th>
<th>September 20 Enter Date to Report/Review</th>
<th>December 20 Enter Date to Report/Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>D) CQI Target</td>
<td>95%</td>
<td>95%</td>
<td>95%</td>
<td>95%</td>
</tr>
<tr>
<td>F) CQI Outcome</td>
<td>57%</td>
<td>64%</td>
<td>79%</td>
<td>%</td>
</tr>
<tr>
<td>G) Review Outcomes</td>
<td>93 of the 163 participants had a post DSME LDL less than 100</td>
<td>119 of the 186 participants had a post DSME LDL less than 100</td>
<td>219 of the 277 participants had a post DSME LDL less than 100</td>
<td>%</td>
</tr>
<tr>
<td>H) Review current operations and consider amendments</td>
<td>LDL target is discussed during the preventing Chronic Complications section of the curriculum.</td>
<td>The video spiked DSME participant’s interest and they are asking more resources on which foods help lower LDL.</td>
<td>Participants are asking about plant sterol effects on LDL and food sources</td>
<td>%</td>
</tr>
<tr>
<td>I) List amendments to current operations</td>
<td>Add video to class discussing LDL to show how it deposits in the vessels.</td>
<td>Create and distribute list of foods high in soluble fiber that can assist with LDL cholesterol reduction.</td>
<td>Create a plant stanol and sterol list for program and each class encourage participant to include either/and a plant sterol food or high soluble fiber food each day</td>
<td>%</td>
</tr>
<tr>
<td>J) Change date</td>
<td>March 3, 20__</td>
<td>June 5, 20__</td>
<td>September 12, 20__</td>
<td>%</td>
</tr>
</tbody>
</table>
Continuous Quality Improvement (CQI) is a formal process/plan that is a cyclic series of steps designed to enhance DSME processes and education leading to improved participant outcomes. In order to meet Standard 10 criteria, a program must aggregate at least one behavioral goal outcome and at least one other participant outcome. The CQI project must be based on at least one of these outcomes. Steps include identifying opportunities for improvement, collecting data, analyzing data, choosing a new approach based on data analysis, developing concepts and processes for change, implementing processes, data collection, data analysis and evaluation of new processes. There are many formal processes available, or you can use your own, as long as the above essential elements are included.

CQI Process Examples:
Ask—What are you trying to improve, fix or accomplish? Will the change improve what we do and how will we know?

Plan Do Check Act
PLAN
• The who, what, where, when and how of the needed improvement
• Develop the plan.

Do
• Test the plan—small scale
• Document issues/problems
• Collect and analyze data—note deviations from the plan

CHECK
• Completion of data analysis
• Compare to expected/predicted results
• Is the process improved or the problem solved?

ACT
• ID any modifications needed for the plan
• Decide on the next cycle

FOCUS - PDCA
F - Find a process to improve
O - Organize to improve a process
C - Clarify what is known
U - Understand variation
S - Select a process improvement plan
P - Plan
D - Do
C - Check
A - Act

DMAIC Cycle
D – Define
M – Measure
A – Analyze
I – Improve
C - Control
Example CQI Project

Plan: Many of our patients have Low HDL and High LDL. We plan to implement program changes to improve pt lipid values.

Do: In attempt to increase HDL and decrease LDL levels we reviewed and provided our patients with education material addressing foods to avoid that are high in saturated fat and cholesterol and food to incorporate in their meal planning that are rich sources of soluble fiber, omega 3 fatty acids and plant stanols/sterols. Each patient completed the “Eat My Way to a Healthy Heart” activity sheet that included selecting at least 2 meal planning changes to help move their cholesterol values toward their target. A cholesterol tutorial was also shown on the waiting room television.

Check: we will be monitoring the HDL and LDL levels on a quarterly basis

<table>
<thead>
<tr>
<th></th>
<th># of patients</th>
<th># Pts at HDL Goal of &gt;50</th>
<th>% Pts meeting HDL Goal of &gt;50</th>
<th># Pts at LDL Goal of &lt;100</th>
<th>% Pts meeting LDL Goal of &lt;100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>62</td>
<td>42</td>
<td>68%</td>
<td>2</td>
<td>35%</td>
</tr>
<tr>
<td>Quarter 1</td>
<td>53</td>
<td>37</td>
<td>70%</td>
<td>2</td>
<td>43%</td>
</tr>
<tr>
<td>Quarter 2</td>
<td>48</td>
<td>39</td>
<td>81%</td>
<td>2</td>
<td>44%</td>
</tr>
<tr>
<td>Quarter 3</td>
<td>65</td>
<td>56</td>
<td>86%</td>
<td>3</td>
<td>55% Reported on App. As Lipids</td>
</tr>
</tbody>
</table>

+ = positive change - = negative change

Analysis of data:
Application shows reporting period was 3 months = Quarter 3.
HDL Normal Value >50 Program goal = 75%. Pts at goal for 3rd quarter = 86%
LDL Normal Value <100 Program goal = 75% Pts at goal for 3rd quarter 55%
The program outcomes for both LDL and HDL are both moving in the right direction as you would want a QI project and outcome data to do, however the LDL outcome is still not meeting program target.

Act: Based on the results, we are going to implement other changes to assist our patients at meeting their cholesterol goals
A. Add to Medication portion of the curriculum and interactive activity that addresses if the participants have a statin ordered, if they are taking their statin and if not why. Pts may have be worried about statin side effects, cost etc. Be ready to address each of these issues and others.
B. Adapt motivational interviewing method so patients can make their own goals.