CQI Toolkit

In this toolkit you will find an explanation of what is required by ADA Recognized DSMES services to meet the National Standards for Diabetes Self-Management and Support Standard 10’s criteria. 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**
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VII. **CQI – Other Sample Plans**
### Standard #10: Quality Improvement

The DSMES services quality coordinator will measure the impact and effectiveness of the DSMES services and identify areas for improvement by conducting a systematic evaluation 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. The DSMES service provider has a quality improvement process and plan in place for evaluating the education process and service outcomes.</strong></td>
<td></td>
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</tr>
<tr>
<td>1. There is evidence of aggregation of the following participant outcomes:</td>
<td></td>
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</tr>
<tr>
<td>a. At least one participant behavioral goal outcome</td>
<td></td>
<td>✗</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>b. At least one other participant outcome.</td>
<td></td>
<td>✗</td>
<td>✓</td>
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</tr>
<tr>
<td><strong>2. There is documentation of a Continuous Quality Improvement (CQI) project which will include:</strong></td>
<td></td>
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</tr>
<tr>
<td>a. Opportunity for DSMES service improvement or change (what are you trying to improve, fix, or accomplish)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>b. Baseline project achievement (new providers may not have a baseline measure at the time of application)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Project target outcome</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Outcome assessment and evaluation schedule.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>e. New DSMES services must have documentation reflecting measurement and evaluation of CQI outcomes at no later than 6 months from the first day of the original application reporting period and continue to measure outcomes at least every 6 months.</td>
<td></td>
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<tr>
<td><strong>B. Quality improvement is based on regular aggregation of DSMES outcomes data and application of results to enhance quality of the DSMES and address gaps in service.</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1. DSMES service providers will have documentation reflecting an ongoing quality improvement project and implementation of new project when applicable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Existing DSMES service providers will have documented quality improvement project outcomes.</td>
<td></td>
<td>a</td>
<td>a</td>
<td>a</td>
</tr>
<tr>
<td>b. Quality improvement outcomes must be documented and evaluated every 6 months at a minimum.</td>
<td></td>
<td>b</td>
<td>b</td>
<td>b</td>
</tr>
<tr>
<td>c. Existing DSMES service providers will have documented plans and actions based on project outcome.</td>
<td></td>
<td>c</td>
<td>c</td>
<td>c</td>
</tr>
</tbody>
</table>

**Standard Met?**

Circle: **Yes** or **No**

Findings / Notes:
Standard 10 Cycle

Aggregated Behavioral Goal (at least one)

Aggregated Other Participant Outcome (at least one)

Select one of the above or another DSMES process or outcome

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

Baseline and Target Outcomes

Aggregated Outcome at a least every 6 months

Review Outcome versus Target
Repeat Cycle
as long as you continue to work on this CQI project

Implement Amendments

Amend Current Operations

Review Current Operations

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CQI Project Worksheet

A. DSMES service’s one or more aggregate participant selected behavioral goal outcome
   • Behavioral Goal Category and Aggregated Outcome:
   • Add more lines if needed.

B. DSMES service’s or more aggregated other participant outcome
   • Other Participant Outcome and Aggregated Outcome:
   • Add more lines if needed.

C. CQI Project
   • Enter in line below either one of the above aggregated outcomes from A or B above or select another DSMES process or outcome that the CQI project will address.
   • List below what your CQI project will be trying to improve, fix or accomplish?

D. What is the CQI project baseline and target outcomes? The % outcome the DSMES service is trying to achieve?
   • Baseline: _____%   Target: ____________%

E. Determine the CQI project outcome reporting and review cycle. At a minimum this must be every 6 months or more frequently. Note new DSMES services CQI project/s must be assessed with outcome measures within 6 months of the first day of the original application reporting period.
   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 Baseline</td>
<td>% Target</td>
<td>%</td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td>F) CQI Outcome Baseline</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>
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<td></td>
</tr>
<tr>
<td>J) Date change Implemented</td>
<td></td>
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</tbody>
</table>
Sample CQI Project Worksheet – A1C

A. DSMES service’s one or more aggregate participant selected behavioral goal outcome
   • Behavioral Goal Category and Aggregated Outcome: Physical Activity 75%

B. DSMES service’s one or more aggregated other participant outcome
   • Other Participant Outcome and Aggregated Outcome: A1C 57%

C. CQI Project
   • Enter in line below either one of the above aggregated outcomes from A or B above or select another
     DSMES service process or outcome that the CQI project will address.
     • A1C
     • List below what your CQI project will be trying to improve, fix or accomplish?
       • Increase the number of participants who enter the DSMES service with an A1C above 8 with an A1C
         less than 7%

D. What is the CQI project baseline and target outcomes? The % outcome the DSMES service is trying to achieve?
   • Baseline 40%   Target: 85%

E. Determine the CQI project outcome reporting and review cycle. At a minimum this must be every 6 months or
   more frequently. Note new DSMES services CQI project/s must be assessed with outcome measures within 6 months of
   the first day of the original application reporting period.
   a. Reporting and outcome review cycle will be every 6 months.

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>Reporting Review Date</th>
<th>June 20 <em><strong>Enter Date to Report/Review</strong></em></th>
<th>December 20 <em><strong>Enter Date to Report/Review</strong></em></th>
<th>June 20 <em><strong>Enter Date to Report/Review</strong></em></th>
<th>December 20 <em><strong>Enter Date to Report/Review</strong></em></th>
</tr>
</thead>
<tbody>
<tr>
<td>D) CQI Target</td>
<td>Baseline: 40%   Target: 85%</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>F) 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 DSMES A1C less than 7%.</td>
<td>119 of the 186 participants had a post DSMES A1C less than 7%.</td>
<td>219 of the 277 participants had a post DSMES A1C less than 7%.</td>
<td>%</td>
</tr>
<tr>
<td>H) Review current operations and consider amendments</td>
<td>Currently how often you should have your A1C tested is reviewed during class 4 of the 5 class series.</td>
<td>The participants reported feeling empowered when they learned of different changes that can be made that can impact A1C including medication and behavior/lifestyle changes.</td>
<td>Participants reported feeling hopeful after learning that reducing A1C levels can reduce chances of getting DM complications. Participants ask what BG levels are associated with A1C levels.</td>
<td>%</td>
</tr>
<tr>
<td>I) List amendments to current operations</td>
<td>Add activity to class 1 to help the participants start considering different changes they can make that will positively impact the level of their A1C.</td>
<td>Add content to class 2 discussing the positive impact with each % reduction in A1C level.</td>
<td>Create scale with BG average and A1C scale handout. Participants will be able to track their BG and how it relates to A1C levels.</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. Service’s one or more aggregate participant selected behavioral goal outcome
   - Behavioral Goal Category and Aggregated Outcome: Physical Activity – 40%

B. Service’s one or more aggregated other participant outcome
   - Other Participant Outcome and Aggregated Outcome: Hospital Admissions due to diabetes – 3%

C. CQI Project
   - Enter in line below either one of the above aggregated outcomes from A or B above or select another DSMES process or outcome that the CQI project will address.
     - Physical Activity
   - List below what your CQI project will be trying to improve fix or accomplish?
     - Increase the % of DSMES participant’s who are achieving their physical activity goal.

D. What is the CQI project baseline and target outcomes? The % outcome the DSMES service is trying to achieve?
   - Baseline 35%   Target: 85%

E. Determine the CQI project outcome reporting and review cycle. At a minimum this must be every 6 months or more frequently. Note new DSMES services CQI project/s must be assessed with outcome measures withing 6 months of the first day of the original application reporting period.
   - 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>Baseline: 35% Target:</td>
<td>85%</td>
<td>85%</td>
<td>85%</td>
</tr>
<tr>
<td>F) 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>Additions noted in March have resulted in improved outcomes but more improvements needed</td>
<td>Participants like June additions 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 – DSMES Referrals

A. Service’s one or more aggregate participant selected behavioral goal outcome
   • Behavioral Goal Category and Aggregated Outcome: Physical Activity – 73%

B. Service’s one or more aggregated other participant outcome
   • Other Participant Outcome and Aggregated Outcome: LDL – 57%

C. CQI Project
   • Enter in line below either one of the above aggregated outcomes from A or B above or select another DSMES process or outcome that the CQI project will address.
     ▪ Increase the number of DSMES referrals
   • List below what your CQI project will be trying to improve fix or accomplish?
     ▪ Increase the number of DSMES referrals from the current average of 50 per month to 100 per month.

D. What is the CQI project baseline and target outcomes? The % outcome the DSMES service is trying to achieve?
   ▪ Program is not using a % but a number: Baseline: 0 referrals Target: 100 referrals

E. Determine the CQI project outcome reporting and review cycle. At a minimum this must be every 6 months or more frequently. Note new DSMES services CQI project/s must be assessed with outcome measures within 6 months of the first day of the original application reporting period.
   • Reporting and outcome review cycle will be monthly

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>April 20 Enter Date to Report/Review</th>
<th>May 20 Enter Date to Report/Review</th>
<th>June 20</th>
</tr>
</thead>
<tbody>
<tr>
<td>D) CQI Target</td>
<td>Baseline: 0 Target 100</td>
<td>100 referrals</td>
<td>100 referrals</td>
<td>100 referrals</td>
</tr>
<tr>
<td>F) Outcome</td>
<td>50 referrals</td>
<td>52 referrals</td>
<td>71 referrals</td>
<td>referrals</td>
</tr>
<tr>
<td>G) Review Outcomes</td>
<td>The DSMES service has been notified that the number of people served monthly needs to increase or staff will be laid off.</td>
<td>The flyers did not have a significant impact of the # of DSMES referrals.</td>
<td>The 5 providers visited in the second week of last month referred more DSMES clients after the visit and provided feedback of how the DSMES services could help them with their clients with DM.</td>
<td></td>
</tr>
<tr>
<td>H) Review current operations and consider amendments</td>
<td>The DSMES service does not advertise to current or potential referring providers</td>
<td>The DSMES services team needs guidance on how to best promote and advertise their services.</td>
<td>The DSMES service implemented some suggestions rendered from the PC visits last month and have added the additions to their flyers.</td>
<td></td>
</tr>
<tr>
<td>J) List amendments to current operations</td>
<td>A DSMES offering and benefit flyers was created and mailed to local PC offices</td>
<td>A DSMES representative met with the marketing department and decide to have a representative visit the top 5 referring providers this month.</td>
<td>The DSMES representative will visit 5 different PCP offices this month to advertise the services.</td>
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</table>

J) Change date March 3, 20____ June 5, 20____ September 12, 20____
DSMES Service Outcome Aggregation and Sample CQI Plans

Continuous Quality Improvement (CQI) is a formal process/plan that is a cyclic series of steps designed to enhance DSMES processes and education leading to improved participant outcomes. In order to meet Standard 10 criteria, a DSMES service must aggregate at least one behavioral goal outcome and at least one other participant outcome. The CQI project must be based on either one of these outcomes or another processes or service’s outcome. 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 of a CQI Project

Example CQI Project
QI Model:
PDCA
(Plan, Do, Check, Act)

Plan: Many of our DSMES participants have Low HDL and High LDL. We plan to implement revisions to improve DSMES participants’ lipid values.

Do: In attempt to increase HDL and decrease LDL levels the team reviewed current service’s resources and added a DSMES that addresses foods to avoid that have trans fats or are high in saturated fat and cholesterol and foods to incorporate in their meal planning that are rich sources of soluble fiber, omega 3 fatty acids and plant stanols/sterols. Each participant 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 Participants (Pts.)</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% Reported on App. As Lipids</td>
<td>3</td>
<td>55% Reported on App As Other/LDL</td>
</tr>
</tbody>
</table>

+ = positive change - = negative change

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

Act: Based on the results, the team plans to implement other revisions to assist our participants with meeting their cholesterol goals.
A. Add to Medication portion of the curriculum and interactive activity that addresses participants consistently taking their statin as prescribed. This will address statin misconceptions, forgetting to take, cost etc. Be ready to address each of these issues and others.
B. Adapt motivational interviewing method so participants can make their own goals.