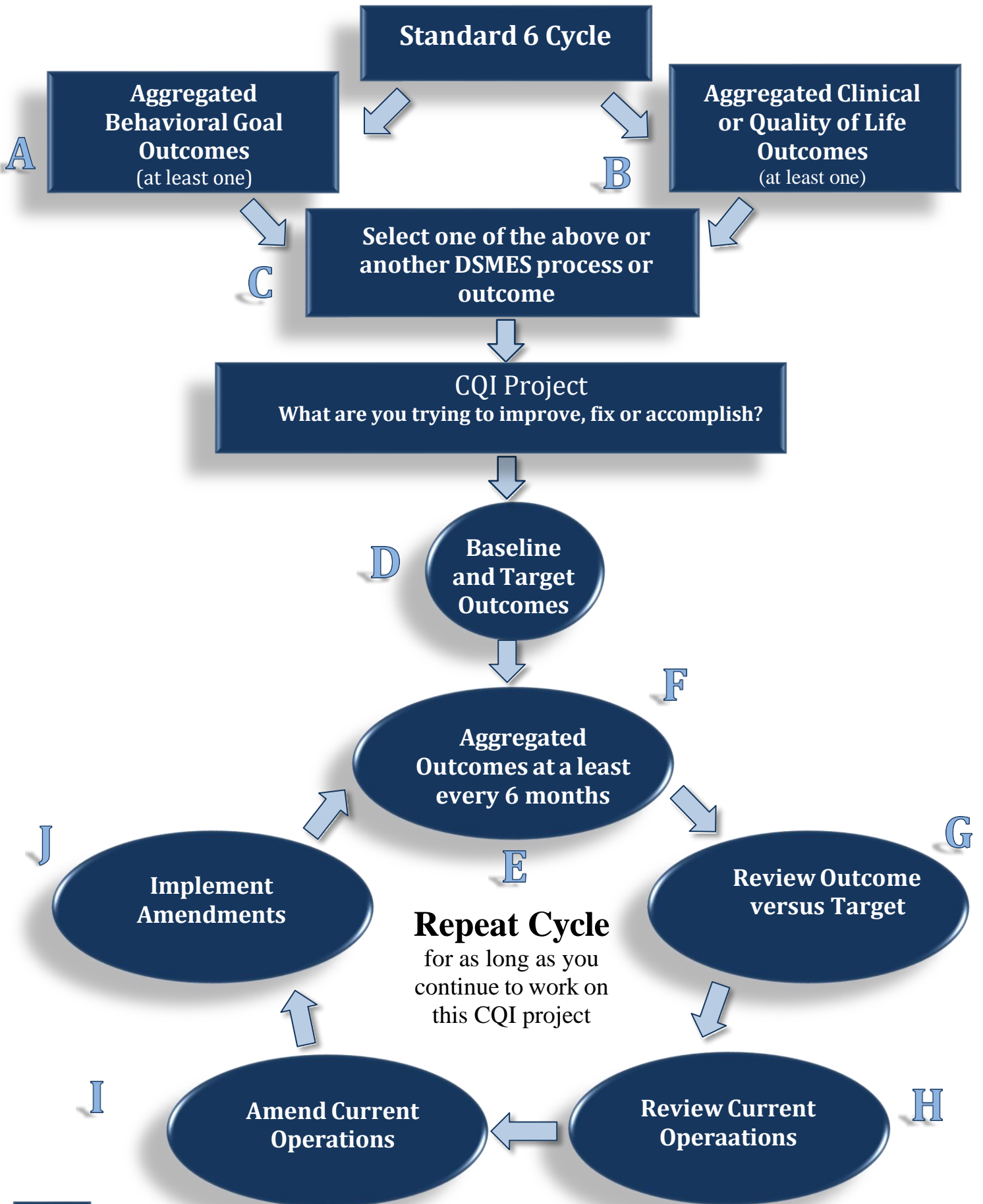# Standard 6
# Aggregated Outcomes and CQI Toolkit

In this toolkit you will find an explanation of what is required by ADA Recognized DSMES services to meet the 2022 National Standards for Diabetes Self-Management and Support Standard 6's criteria. You will also find a user-friendly sample worksheets, templates, and examples.

**Contents:**

**Standard 6 Cycle**

**A** — **Aggregated Behavioral Goal Outcomes** (at least one)

**B** — **Aggregated Clinical or Quality of Life Outcomes** (at least one)

**C** — **Select one of the above or another DSMES process or outcome**

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

**D** — **Baseline and Target Outcomes**

**F** — **Aggregated Outcomes at a least every 6 months**

**J** — **Implement Amendments**

**E** — **Repeat Cycle** for as long as you continue to work on this CQI project

**G** — **Review Outcome versus Target**

**I** — **Amend Current Operations**

**H** — **Review Current Operaations**

**Top**

**Standard 6: CQI Project and Aggregated Outcomes Worksheet**

A. DSMES service's one or more aggregate participant elected behavioral goal outcomes
   - Behavioral Goal Category and Aggregated Outcome:
   - Add more lines if needed
B. DSMES service's one or more aggregated participants' clinical or quality of life outcomes
   - Other Participant Outcome Monitored and Aggregated Outcome:
   - Add more lines if needed.
C. CQI Project
   - Select 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
     - _____
   - What your CQI project will be trying to improve fix or accomplish?
     - _____

D. What is the CQI project outcome baseline (the initial project achievement and target (the % outcomes the DSMES service is trying to achieve)?
   - Baseline measurement: _____ % or #    and    Target Outcome: _____ % or #
E. Determine the CQI project outcomes reporting and review cycle: At a minimum this must be every 6 months or more frequently.
   a. Outcome Report and review cycle will be every _____ months.

## CQI Cycle

F. Outcomes aggregated at least every 6 months
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.

| E) Reporting Review Date | Enter Date to Report/Review | Enter Date to Report/Review | Enter Date to Report/Review | Enter Date to Report/Review |
|---|---|---|---|---|
| D) CQI Target | Baseline =        Target= | | | |
| F) CQI Outcome | | | | |
| G) Review | | | | |
| H) Review current operations and consider amendments | | | | |
| I)List amendments to current operations | | | | |
| J) Date change Implemented | | | | |

## Sample Standard 6 with CQI Project of A1C

A. DSMES service's one or more aggregate participant elected behavioral goal outcomes
  - Behavioral Goal Category and Aggregated Outcome: **Healthy Eating 83%**
B. DSMES service's one or more aggregated participants' clinical or quality of life outcomes
  - Other Participant Outcome Monitored and Aggregated Outcome: **A1C reduction after DSMES 57%**
C. CQI Project
  - Select 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
    - **A1C**
  - What your CQI project will be trying to improve fix or accomplish?
    - **Increase the number of DSMES participants who have an A1C reduction after one or more DSMES encounters**.

D. What is the CQI project outcome baseline (the initial project achievement and target (the % outcomes the DSMES service is trying to achieve)?
  - Baseline measurement: **43%** and Target Outcome: **85%**
E. Determine the CQI project outcomes reporting and review cycle: At a minimum this must be every 6 months or more frequently.
  a. Outcome Report and review cycle will be every **6** months.

## CQI Cycle

  F. Outcomes aggregated at least every 6 months
  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.

| E) Reporting Review Date | **06/01/2022** *Enter Date to Report/Review* | **12/01/2022** *Enter Date to Report/Review* | *06/01/2023* | *12/01/2023* |
|---|---|---|---|---|
| D) CQI Target | Baseline =43% Target= 85% | Baseline =43% Target= 85% | Baseline =43% Target= 85% | Baseline =43% Target= 85% |
| F) CQI Outcome | 57% | 68% | | |
| G) Review Outcomes | Post DSMES A1C reduction is 28% below target | Outcomes improved by 11% but still 17% below target. | | |
| H) Review current operations and consider amendments | Currently A1C targets are presented to DSMES participants but no information is provided that correlates A1C value and reduction to DM complications | Participants are still having a hard time correlating A1C to CGM data points and fingersticks. | | |
| I) List amendments to current operations | Add to the back of the current A1C handout the % DM complications are reduced with each % A1C reduction. | Add to handout average bg and pre and post prandial bgs for A1C levels from 6.5% to 15% in 0.5% increments. Add GMI review to CGM training. | | |
| J) Date change Implemented | 7/10/2022 | 12/09/2022 | | |

O

## Sample Standard 6 with CQI Project of Physical Activity

F.   DSMES service's one or more aggregate participant elected behavioral goal outcomes
- Behavioral Goal Category and Aggregated Outcome: **Physical Activity (PA) 51%**

G.   DSMES service's one or more aggregated participants' clinical or quality of life outcomes
- Other Participant Outcome Monitored and Aggregated Outcome: **14-day CGM GMI less than 7% = 57%**

H.   CQI Project
- Select 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**
- What your CQI project will be trying to improve fix or accomplish?
  - **Explore barriers to PA and assist participants in meeting their PA goals.** .

I.   What is the CQI project outcome baseline (the initial project achievement and target (the % outcomes the DSMES service is trying to achieve)?
-    Baseline measurement: **51%**    and    Target Outcome**: 100%**

J.   Determine the CQI project outcomes reporting and review cycle: At a minimum this must be every 6 months or more frequently.
   a.   Outcome Report and review cycle will be every **6** months.

## CQI Cycle

F.   Outcomes aggregated at least every 6 months
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.

| E) Reporting Review Date | 06/01/2022 *Enter Date to Report/Review* | 12/01/2022 *Enter Date to Report/Review* | *06/01/2023* | *12/01/2023* |
|---|---|---|---|---|
| D) CQI Target | Baseline =51% Target= 100% | Baseline =51% Target= 100% | Baseline =51% Target= 100% | Baseline =51% Target= 100% |
| F) CQI Outcome | 51% | 72% | | |
| G) Review Outcomes | Post DSMES PA outcomes are 49% below target | Outcomes improved by 21% but still 28% below target. | | |
| H) Review current operations and consider amendments | PA materials reviewed and it was found that PA impact on post prandial bgs and especially people with T2DM it can help them be more sensitive and use insulin especially after meals was not addressed. | Participants liked the idea of setting PA goal to move for 10 to 15 minutes after meals. Participants with CGMS were able to see the impact of the PA immediately and had the best PA outcomes. | | |
| I)List amendments to current operations | Add to materials how PA helps with insulin resistance and that 10 to 15 minutes of PA after meals can help body use the insulin it has made, or you have injected for that meal more effectively. | Discussed with referring providers to order CDCES to place a CGM pro on all participants who do not have personal CGM so they can also see the impact of PA on sensor glucose readings. | | |
| J) Date change Implemented | 6/15/2022 | 12/09/2021 | | |

## Sample Standard 6 with CQI Project of DSMES Referrals

K. DSMES service's one or more aggregate participant elected behavioral goal outcomes
- Behavioral Goal Category and Aggregated Outcome: **Physical Activity (PA) 51%**

L. DSMES service's one or more aggregated participants' clinical or quality of life outcomes
- Other Participant Outcome Monitored and Aggregated Outcome: **14-day CGM GMI less than 7% = 57%**

M. CQI Project
- Select 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
  - **DSMES referrals**
- What your CQI project will be trying to improve fix or accomplish?
  - **Increase DSMES referrals. The healthcare system the DSMES service is associated with annual report indicated that 15,654 of their patients have DM, 2,630 newly diagnosed cases of DM, insulin was initiated with 1,862, and that only 43% of the PWD were meeting their A1C target. The DSMES service only received 1,362 referral last year.**

N. What is the CQI project outcome baseline (the initial project achievement and target (the % outcomes the DSMES service is trying to achieve)?
- Baseline measurement: __1, 362 referrals__ and Target Outcome**: 4,000 referrals annually or 1,000 per quarter.**

O. Determine the CQI project outcomes reporting and review cycle: At a minimum this must be every 6 months or more frequently.
- a. Outcome Report and review cycle will be every **3** months.

## CQI Cycle

F. Outcomes aggregated at least every 6 months
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.

| E) Reporting Review Date | 12/1/2022 *Enter Date to Report/Review* | 3/31/2023 *Enter Date to Report/Review* | 6/30/2023 *Report/Review* | 9/30/2023 |
|---|---|---|---|---|
| D) CQI Target | Baseline =1,362 Target= 1,000 | Baseline=1,362 Target=1,000 | Baseline=1,362 Target=1,000 100% | Baseline=1,362% Target=1,000 |
| F) CQI Outcome | 1,362 for 2021 | | | |
| G) Review Outcomes | Reviewing the DSMES referrals and organization annual report identified a large gap in DSMES utilization. | | | |
| H) Review current operations and consider amendments | The large gap in DSMES utilization was reviewed with leadership along with the DSMES outcomes. The QC proposed and leadership agreed to modify the charting platform so that when a new diagnoses of DM, A1C 1% of > above target or insulin is initiated a popup DSMES referral appears. The provider can select one button to make the referral or if they can modify the referral. | | | |
| I)List amendments to current operations | The DSMES popup referral was built into the charting platform and all providers were informed of the new referral process. | | | |
| J) Date change Implemented | 12/09/2022 | | | |

# Other CQI Plans

**CQI Process Examples:**
**Ask**—What are you trying to improve, fix or accomplish and 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:** To ensure all DSMES participants on multiple daily injections (MDI) or insulin pumps (CSII) are aware of the new glucagon options and the importance of always having unexpired glucagon available.

**Do:** Many of the DSMES participants on MDI or CSII do not have glucagon, or it may be expired. The plan is to implement revisions to the participant glucagon education to include the newer glucagon options and communicate to referring providers the need for glucagon to be ordered.

**Check:** we will be monitoring the number of participants on MDI or CSII who do not have unexpired glucagon.

|  | Dates | # Of Participants (Pts) on MDI or CSII | # Of Pts without Glucagon | # MDI or CSII Pts with Unexpired Glucagon Goal | Quarter Outcome |
|---|---|---|---|---|---|
| **Baseline** | July – Sept. 2022 | 463 | 143 | 100% | *143/463* = 31% |
| **Quarter 1** | Oct- Dec. 2022 | 528 | 204 | 100% | *204/528* = 38% |
| **Quarter 2** | Jan – March 2023 |  |  | 100% |  |
| **Quarter 3** | April – June 2023 |  |  | 100% |  |
| **Quarter 4** | July – Sept. 2023 |  |  | 100% |  |

**Analysis of data:**

The first quarter outcome indicates a small increase in the number of pts getting glucagon ordered and picking it up. Pts. That did not pick up the glucagon indicated that their providers ordered it but the copay when they went to the pharmacy to pick it up was over $100 so they chose to forego getting the glucagon.

**Act:**

The DSMES team reviewed and discussed the outcomes and the pts feedback. They decided to implement the following steps.

1. Contact the glucagon reps and ask about a list of commercial and government insurance plans coverage of their product. Based on the coverage advise inform he pts of this and communicate to the referring provider which glucagon to order.

2. Ask the glucagon reps about glucagon discount or assistance programs and inform the pts about these.