National Council on Aging

Guidance for Administration for Community Living Chronic Disease Self-Management Education Grant Applicants: Considerations for Estimating Participation and Completion Targets

This guidance is intended to aid applicants in applying for Administration for Community Living grants focused on chronic disease self-management education (CDSME).

This resource was developed by the National Council on Aging's National CDSME Resource Center to support organizations in:

I. Choosing the right CDSME and self-management support programs;
II. Reviewing existing infrastructure for program implementation;
III. Developing a target number of participants;
IV. Developing a target completion rate; and
V. Creating a quality assurance plan.

This guidance document draws on data analyses from the National CDSME Database. The majority of available data is specific to the Self-Management Resource Center's suite of programs. As noted in the Funding Opportunity Announcement, applicants may propose one or more pre-approved CDSME programs, as well as, on an optional basis, one pre-approved self-management support program. Applicants should consider multiple sources of information, highlighted throughout this resource, when identifying their proposed program(s) and participant/completer targets.

I. Choosing the right program(s)

Grant applicants must choose ***at least one*** CDSME program from the list of pre-approved programs provided in the Funding Opportunity Announcement. Applicants have the option of including a self-management support program, but it is not required. See Appendix B and C in the Funding Opportunity Announcement for the list and more details about the pre-approved evidence-based CDSME and self-management support programs.

In the past, some grantees have opted to implement one CDSME program, while others offer an array of CDSME and self-management support programs to support health and wellness. In addition, some applicants propose a "set" of programs to target a specific issue. For example:

- Enhance Wellness + PEARLS to address a high prevalence of depression and anxiety among older adults with chronic conditions.
- Chronic Pain Self-Management Program + Walk With Ease to address pain associated with arthritis and promote physical activity as a strategy to manage it.

Questions to consider when choosing a program:

- What are the specific chronic disease needs in your community, region, state? Specifically, are there conditions with high prevalence or impact that are not being adequately addressed by other interventions?
- Thinking of the particular populations you're aiming to reach and the settings you're planning to utilize, are there specific types of programs to consider? Are there things that have worked well or haven't worked well in the past? Does your target population prefer small group or individual interventions? Or have you had success with both formats?
- Does your organization currently implement a CDSME program? If yes, is your goal to expand that program, offer more options, or a combination of both?
- How many programs do you have the resources and capacity to offer? If you choose to implement more than one program, do you have resources to build staff support, manage volunteers, provide space, implement training, etc.?
- Is there a need to offer a self-management support program focused on physical activity, behavioral health, or medication management?
- Is it necessary to find a program translated into a specific language for one of your target populations?
- What are the sustainability goals and strategies of your organization? Do particular programs align with those goals?

Helpful resources:

- Key Components of Offering Evidence-based Programs
- Conducting Community Needs Assessments
- Best Practices Toolkit: Resources from the Field
    - Strategic Partnerships
    - Delivery Infrastructure and Capacity
- CDC National Center for Chronic Disease Prevention and Health Promotion
- Frequently Asked Questions for Administration for Community Living Grantees Implementing Better Choices, Better Health Online®

II. Reviewing existing infrastructure for program implementation

Whether your organization has been implementing evidence-based programs for a long time or just starting, it's important to consider the infrastructure in place for implementation and what is needed to support the activities proposed for the grant. (See Key Components of Offering Evidence-based Programs.) Organizations that are new to implementing evidence-based programs will need to evaluate the number of leaders/facilitators needed to carry out the proposed activities and think about current or new partners that may be leveraged to achieve this work.
It's important to think strategically about building infrastructure and best practices for retaining leaders/facilitators and partners to meet your goals over the grant period.

As you plan the grant proposal, keep in mind the end goal of creating a sustainable delivery system to reach your target number of participants and how the delivery infrastructure can be built to efficiently engage participants and partners beyond the three-year grant period.

Take the following into consideration:

- *Cost per participant*: A 2015 national study of CDSMP estimated program costs to be approximately $350 per participant. Use this cost calculator to estimate the cost per participant for your state or region.

- *Cost for training master trainers and lay leaders*: Review the scenarios below to consider different options for the number of master trainers and lay leaders needed, based on the number of trainings and workshops led. Be sure to review program training requirements carefully and support leaders in fulfilling each step. Strategies for screening, supporting, and retaining leaders can be found here.

    - **Scenario 1:**
      10 master trainers (MTs) pair off to offer 2 lay leader (LL) trainings per pair with 15 participants/training= 150 LLs (-10% of trained leaders that will not implement any workshops= 125 LLs)
      125 LLs pair off to offer 2 CDSME workshops per pair with 12 participants= **1500 CDSME participants in 125 workshops**

    - **Scenario 2:**
      4 MTs pair off to offer 3 LL trainings per pair with 15 participants= 90 LLs (-10% of trained leaders that will not implement any workshops= 80 LLs)
      80 LLs pair off to offer 4 CDSME workshops per pair with 12 participants= **1920 CDSME participants in 160 workshops**

In addition, the following data from the National CDSME Database can help inform the number and type of program leaders that need to be trained to meet your program goals.

The number of workshops delivered by a program leader can vary greatly depending on the workshop type, implementation site, grantee, whether they are a staff member or volunteer, and the language in which a program is delivered. According to the database, lay leaders conduct approximately **6 to 10 workshops**, with an **average of 7 workshops**. This excludes individuals that are trained but never deliver a workshop. Staff members implementing workshops led an average of **8 workshops** and volunteers conducted an average of **6 workshops**.

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Figure 1. Average number of workshops delivered per leader across Self-Management Resource Center program types, 2010-2018 (n= 28,666 workshops).

Program	Average Number of Workshops Delivered by Program Leaders	Number of Workshops	Standard Deviation	Total # of Leaders
Chronic Pain Self-Management Program	9.9	889	12.4	531
Cancer: Thriving and Surviving	8.9	101	10.3	69
Diabetes Self-Management Program	8.4	5677	10.5	2793
Programa de Manejo Personal de la Diabetes	7.7	479	7.6	279
Tomando Control de su Salud (Spanish CDSMP)	7.4	1956	9.4	888
Chronic Disease Self-Management Program	6.4	20453	8.6	9508
TOTAL	6.9	28666	9.1	4560

Note: Figure 1 is limited to select Self-Management Resource Center programs delivered in-person due to limitations in sample size and differences in program format.

If you have a history of program implementation, evaluate the current delivery infrastructure in your state/region by considering the following:

CDSME delivery infrastructure	Sample responses
How long has CDSMP been implemented in your state/region?	5 years
Which programs are being implemented?	CDSMP, DSMP, Cancer: Thriving & Surviving (CTS)
Program license	Our organization holds a current license
Number of active T-trainers	1 in the state
Number of active master trainers	10 CDSMP, 4 cross-trained in DSMP, 1 cross-trained in CTS
Number of active lay leaders	25 CDSMP, 10 cross-trained in DSMP, 3 cross-trained in CTS
Number of existing host organizations/ implementation sites	40 organizations that have conducted programs in the past
Number of participants in last 12 months	950 participants

If you do not have a history of program implementation, evaluate the current delivery infrastructure in your state/region by considering the following:

CDSME delivery infrastructure	Sample responses
Has CDSME been implemented by other organizations in your state or region? Do your delivery regions overlap?	Yes, the Department on Aging has supported CDSME in metropolitan areas. Programs aren't offered in our region.
Is there potential to partner with those already offering programs?	Yes, for training or license. No for program implementation.
Which programs are being implemented?	CDSMP
Program license	Department on Aging holds a license. Is it a statewide license that we can utilize?
Number of active T-trainers	1 in the state (can travel, if needed)
Number of active master trainers	3 (would they be available to conduct training in our region?)
Number of active lay leaders	0 in our region
Number of partners that are committed to serving as host organizations/ implementation sites	- 3 local health departments - 2 area agencies on aging - 1 health clinic - 4 senior centers
How many workshops have your partners committed to offering in the next 12 months?	- 3 local health departments (2 workshops each= 6) - 2 area agencies on aging (3 workshops total) - 1 health clinic (2 workshops) - 4 senior centers (3 workshops each= 12) Total= 23

Attendance by implementation site type and race/ethnicity (Table A)

Use Table A to consider whether race/ethnicity impacts the type of implementation site where programs are most frequently attended. Some key findings include:

- Hispanic participants more frequently attended programs at health care organizations. Since Hispanic participants tend to be younger, they may be less likely to attend programs at traditional aging network locations like senior centers.
- African-American, White, and Asian American participants more frequently attended programs at senior centers.
- Tribal centers uniquely served American Indian/Alaska Native participants. However, American Indian/Alaska Native participants were more likely to be reached through health care organizations, senior centers, and other locations.

Questions to consider:

- Do you need to maintain or expand the current program delivery infrastructure? Are there gaps that need to be filled? For example, leaders that speak a specific language or are cross-trained in a new program?
- If there are trained lay leaders, are there retention strategies proposed or in place?
- Are there any training opportunities available in your state or region within the first three months of the planned grant period? If not, will you need to plan a master trainer or lay leader training?
- Have you allocated time into your work plan to build the infrastructure to implement programs, like establishing partnerships or recruiting and training leaders?
- Are there plans in place to address potential staff turnover? How does this impact leader training? How will this be addressed with major partners?
- Does your grant proposal include plans to reach a new population, such as rural communities, veterans, individuals with mental illness, individuals with substance abuse/misuse issues, etc.? If yes, consider whether it will take additional time to create partnerships to reach participants in these target groups.

Helpful resources:

- Best Practices Toolkit: Resources from the Field
    - Delivery Infrastructure and Capacity
    - Strategic Partnerships
- Chronic Disease Self-Management Program Cost Calculator
- National Study of the Chronic Disease Self-Management Program: A Brief Overview
- Overview of the National CDSME Database
- Quarterly Program Highlights and Charts

III. Developing a target number of participants

Applicants are required to identify a target number of participants and completers for the CDSME and self-management support programs chosen for the proposal. Target goals should be realistic and achievable for your community—whether that means reaching 400 participants or 2,000 participants. While developing your goal, think about how many participants have been engaged in evidence-based programs in the past (and what percentage have completed the program, on average) or how many individuals you reach in your community through other programs.

If you are awarded the grant, you will be expected to reach approximately 25% of your target participants/completers by the end of Year 1, 50% of participants/completers by the end of Year 2, and 100% of participants/completers by the end of Year 3. Consider whether it is feasible to meet these benchmarks with your target participation goal.

Example 1:

Sample Grant Goal	Year 1 Target **≥25% of total goal**	Year 2 Target **≥ 50% of total goal**	Year 3 Target **100% of total goal**
400 participants	≥ 100 participants	≥ 200 participants	≥ 400 participants
74% completer rate	≥ 74 completers	≥ 148 completers	≥ 296 completers

Planning questions	Sample responses
What is your target number of completers for Year 1?	74
How many completers do you expect per workshop?	7
How many workshops do you need in Year 1 to reach the target number of completers?	74 target completers / 7 completers per workshop= 11 workshops in Year 1
When will the target number of workshops be scheduled to meet the grant goal?	Quarter 1 of Grant Year 1 (May-Jul.): 0 workshops, use this time to develop partner MOUs/contracts and train leaders Quarter 2 (Aug.-Oct.) and Quarter 3 (Nov.-Jan.): Leaders are trained, schedule, and hold 8 workshops (yielding approximately 56 completers). Ensure that you consider potential holiday season conflicts when scheduling. Quarter 4 of Grant Year 1: (Feb.-April): Hold at least 3 workshops (yielding approximately 21 completers)

Example 2:

Sample Grant Goal	Year 1 Target **≥25% of total goal**	Year 2 Target **≥ 50% of total goal**	Year 3 Target **100% of total goal**
2,000 participants	≥ 500 participants	≥ 1,000 participants	≥ 2,000 participants
74% completer rate	≥ 370 completers	≥ 740 completers	≥ 1,480 completers

Planning questions	Sample responses
What is your target number of completers for Year 1?	370
How many completers do you expect per workshop?	7
How many workshops do you need to reach the target number of completers?	370 target completers / 7 completers per workshop= 53 workshops in Year 1

When will the target number of workshops be scheduled to meet the grant goal?	Quarter 1 of Grant Year 1 (May-Jul.): 10 workshops (yielding approximately 70 completers), use this time to develop contracts and train leaders Quarter 2 (Aug.-Oct.) and Quarter 3 of Grant Year 1 (Nov.-Jan.): Leaders are trained, schedule, and hold 30 workshops (yielding approximately 210 completers). Ensure you consider potential holiday season conflicts when scheduling. Quarter 4 of Grant Year 1: (Feb.-April): Hold at least 13 workshops (yielding approximately 91 completers)

Questions to consider when developing a target participation goal:

- How many older adults and adults with disabilities live, work, or worship in your target community? What is your current reach to older adults and adults with disabilities? Will this change over the grant period?
- If you have a history of implementing programs, how many participants were reached over the last 12 months? If not, what may impact participation in the future? Do you expect to continue to enroll participants at the same rate going forward? Consider that you may saturate your current target participant population (e.g. reach all of the “low hanging fruit”) and will need to engage additional partners to maintain enrollment in CDSME and self-management support programs.
- Do you have a marketing plan and materials for recruiting older adults and adults with disabilities to programs?
- How much time will be needed to build capacity to implement programs prior to beginning workshops? For example: finalizing contracts, establishing plans with partners, training leaders, etc.
- Do you have any participant referral systems in place from partners, health care providers, etc.? How many participants do they refer on a regular basis? Will this continue during the grant period?
- What commitments do you have from partners to meet goals? Are partners able to commit to conducting a certain number of workshops each grant year?
- Does your grant proposal include plans to reach a new population, such as rural communities, veterans, individuals with mental illness, individuals with substance abuse/misuse issues, etc.? If yes, consider whether it will take additional time to create partnerships to reach participants in these target groups.

Helpful resources:

- Best Practices Toolkit: Resources from the Field
  - Delivery Infrastructure and Capacity
  - Marketing and Recruitment
- Presentation- Planning Your Grant Deliverables: Secrets of Workshop Coordination
- Dissemination of CDSME Programs in the United States: Intervention Delivery by Rurality
- Tip Sheet: Offering Chronic Disease Self-Management Education In Rural Areas
- Tip Sheet: Engaging Veterans in Evidence-Based Programs
- Resources for Engaging Adults with Disabilities in Evidence-Based Programs

IV. Developing a target completion rate

Applicants are required to identify a target completion rate for all CDSME programs chosen for the proposal. Target completion rates are not required for self-management support programs. ACL defines a completer as a participant in a group program who completes the recommended intervention dose or at least 2/3 of the total possible sessions. For example, four or more sessions in a six-session program, excluding orientation sessions (for example, Session Zero).

Similar to target participation goals, it's important to identify a target completion rate that is realistic and achievable for your community. If you have implemented programs in the past, consider the historical completion rate and whether it's likely to remain constant or decrease as you expand reach to new populations. In addition, refer to the following national statistics based on data collected through the National CDSME Database for 376,537 participants from 2010-2018.

Nationally, the average completion rate for all Self-Management Resource Center CDSME programs is **74%**. Participant completion rates can vary by several factors, including the type of program, racial/ethnic target population, implementation site, and urban/suburban/rural setting.

Figure 2. Completion rate for selected Chronic Disease Self-Management Education programs, 2010-2019 (n= 391,546)

Program Name	Enrolled	Completed	Completion Rate
Better Choices, Better Health® Online	387	199	51%
Cancer Thriving and Surviving	1481	1122	76%
Chronic Disease Self-Management Program	255,015	188, 070	74%
Chronic Pain Self-Management Program	15,711	11,363	72%
Diabetes Self-Management Program	83,235	62,471	75%
Positive Self-Management Program	188	147	78%
Tomando Control de su Salud	26,521	20,347	77%
Programa de Manejo Personal de la Diabetes	8,101	6,437	79%
TOTAL	**391,546**	**290,839**	**74%**

Consider the following variables:

Completion rates by implementation site and program type (Table B)

Use Table B to consider whether the average completion rate differs for the type of implementation sites you will be using based on select Self-Management Resource Center programs. Some key findings include:

- Area agencies on aging have high completion rates for the Chronic Pain Self-Management Program and Programa de Manejo Personal de la Diabetes compared to other delivery sites.
- The completion rate for the Chronic Pain Self-Management Program appears to be the highest in workplace settings and multi-purpose social service organizations.
- Programa de Manejo Personal de la Diabetes has an above average completion rate and appears to perform especially well when delivered in senior centers, area agencies on aging, and county health departments.
- Generally, workplace sites tend to have higher than average completion rates for CDSMP, the Chronic Pain Self-Management Program, and the Diabetes Self-Management Program.

Completion rates by program type and race/ethnicity (Table C)

Use Table C to consider whether the average completion rate differs for the type of Self-Management Resource Center programs by race/ethnicity. Some key findings include:

- Programa de Manejo Personal de la Diabetes has a high completion rate among Hispanic, African American, and White participants.

- The Diabetes Self-Management Program has the highest completion rates among Hispanic, African American, and Native Hawaiian/Pacific Islanders.
- The highest completion rate for Cancer: Thriving and Surviving is among Asian Americans.

Considerations for rural outreach (Table D)

The 2017 article *Dissemination of CDSME Programs in the United States: Intervention Delivery by Rurality* provides analysis of program participation in rural areas based on data from the National CDSME Database. The study found that while rural areas had a smaller number of participants in workshops, their completion rates were higher than those for workshops hosted in metro areas. One explanation of this finding may that community dynamics and higher social cohesion among rural communities make coming together weekly more palatable. It may also be possible that carpooling or other forms of transportation were provided to minimize the travel burdens characteristic in rural communities. See Table D for more detailed demographics for rural participants.

Considerations for serving American Indian and Alaska Native communities

- Out of 10,148 participants, most American Indian/Alaska Native participants attended CDSMP (75%), followed by the Diabetes Self-Management Program (16%). 3% of American Indian/Alaska Native participants participated in Tomando Control de su Salud.
- Across all programs, American Indian/Alaska Native participants had a 74% completion rate.
- American Indian/Alaska Native participants have a very high completion rate (95%) compared to all other racial/ethnic groups for Cancer: Thriving and Surviving.
- 3% of American Indian/Alaska Native participants attended workshops delivered by tribal organizations funded by ACL to implement CDSME programs.
- American Indian and Alaska Native participants attending workshops sponsored by organizations that were not tribal organizations had higher completion rates (75%) compared to those who attended workshops sponsored by tribal organizations (67%).

Helpful resources:

- Best Practices Toolkit: Resources from the Field
  - Delivery Infrastructure and Capacity
  - Marketing and Recruitment
- Dissemination of CDSME Programs in the United States: Intervention Delivery by Rurality
- Tip Sheet: Offering Chronic Disease Self-Management Education In Rural Areas
- Tip Sheet: Engaging American Indian/Alaska Native/Native Hawaiian Adults in Chronic Disease Self-Management Education

- Frequently Asked Questions for Administration for Community Living Grantees Implementing Better Choices, Better Health Online

V. Creating a quality assurance plan

Each of the evidence-based CDSME programs approved for this funding opportunity follow a curriculum that has been researched and proven to lead to specific health-focused outcomes. It's important to develop a quality assurance and fidelity monitoring plan to ensure programs are implemented as intended regardless of implementation site or program leader. Adhering to program fidelity ensures that participants receive researched benefits of the program and assure partners that programs meet high standards across your service area.

Find resources in our Best Practices Toolkit: Resources from the Field focused on quality assurance, including sample plans and fidelity checklists.

Table A: Attendance by implementation site type and race/ethnicity

Rate of CDSME program attendance (%) at various implementation sites by race/ethnicity, 2010-2019 (n = 362,407)

	Hispanic	Black/ African-American	Asian American	American Indian/ Alaska Native	Hawaiian/ Pacific Islander	White
Health care organizations	30.7	17.3	19.2	23.3	13.0	23.5
Senior centers	17.9	20.9	21.7	16.5	12.4	21.1
Faith-based organizations	7.4	11.7	3.5	4.7	15.5	6.3
Residential facility	11.6	18.1	20.0	14.2	10.4	16.9
Other	9.4	11.1	8.0	15.4	No Data	10.1
Tribal center	Insufficient Data	Insufficient Data	Insufficient Data	7.3	Insufficient Data	Insufficient Data

Note: Insufficient data indicates that there have been fewer than 30 participants at that specific implementation site type for that race/ethnicity category.

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Table B: Completion rates by program and implementation site type

Completion rates (%) by Self-Management Resource Center program and type of implementation site, 2010-2019 (n= 388,750)

	Cancer: Thriving & Surviving	Chronic Disease Self-Management Program	Chronic Pain Self-Management Program	Diabetes Self-Management Program	Programa de Manejo Personal de la Diabetes	Tomando Control de su Salud
Area agency on aging	Insufficient Data	73	75	71	74	75
Community center	Insufficient Data	74	74	74	82	78
Educational institution	75	74	72	73	78	72
Faith-based organization	75	75	70	73	72	75
Health care organization	68	70	68	71	73	71
Department of Public Health						
County	71	70	66	73	81	75
State	No Data	70	Insufficient Data	76	No Data	No Data
Library	Insufficient Data	71	73	72	74	77
Multi-purpose social services organization	Insufficient Data	75	75	74	75	69
Municipal government	No Data	73	Insufficient Data	75	No Data	Insufficient Data
Senior center	Insufficient Data	74	74	74	75	77
Residential facility	84	71	70	71	70	74
Parks and recreation	73	72	70	73	75	73
Tribal center	No Data	72	Insufficient Data	63	Insufficient Data	No Data
Workplace	75	78	73	77	Insufficient Data	73

Notes:

- Insufficient data indicates that there have been fewer than 50 participants in that specific program for that implementation site type.
- The Positive Self-Management Program for HIV has been primarily delivered in health care organizations or other unspecified community center types. There was insufficient data to report completion rates for other implementation site types.

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Table C: Completion rates by program type and race/ethnicity

Completion rates (%) by Self-Management Resource Center program and race/ethnicity, 2010-2019 (n= 388,750)

		Ethnicity	Race				
Program	**Overall Completion Rate***	**Hispanic**	**African-American**	**Asian**	**American Indian**	**Native Hawaiian / Pacific Islander**	**White**
Chronic Disease Self-Management Program	74	72	75	76	74	83	73
Chronic Pain Self-Management Program	71	72	73	77	72	72	72
Diabetes Self-Management Program	72	70	74	77	70	79	73
Cancer: Thriving and Surviving	71	69	71	81	Insufficient Data	Insufficient Data	73
Positive Self-Management Program	80	Insufficient Data	78	Insufficient Data	Insufficient Data	Insufficient Data	85
Tomando Control de su Salud	74	76	81	Insufficient Data	74	80	77
Programa de Manejo Personal de la Diabetes	74	75	82	Insufficient Data	76	Insufficient Data	77

Notes:

- The overall completion rate is calculated for all participants from attendance data, regardless of whether they provided a response for race and/or ethnicity. This is not an average across the rates for each race and ethnicity category.
- Among participants attending at least one session, 17.5% do not report ethnicity and 19.4% do not report race.

- The total sample size for Table C includes the number of participants reporting at least one category of race and/or one ethnic group.
- Insufficient data indicates that there have been fewer than 30 participants in that specific program type for that race/ethnicity category.

Table D: Completion rates by metro and non-metro implementation sites

Comparison in demographics, participant enrollment, and completion between metro and non-metro (and not-adjacent) implementation sites, 2010-2016 (n=300,640)

	Non-Metro (& Not-Adjacent)	Metro
Average Age	63.99	65.76
White	83.19%	66.50%
Hispanic	6.74%	18.78%
Less than High School Education	16.94%	17.12%
Median Household Income	$39,771.14	$51,257.75
Living Over Poverty Line	18.78%	18.36%
Number of Chronic Conditions	2.05	2.06
No. of Participants Enrolled	12.09	13.77
No. Participants who completed (4 of 6 sessions)	4.46	4.27

Source: *Dissemination of CDSME Programs in the United States: Intervention Delivery by Rurality*