



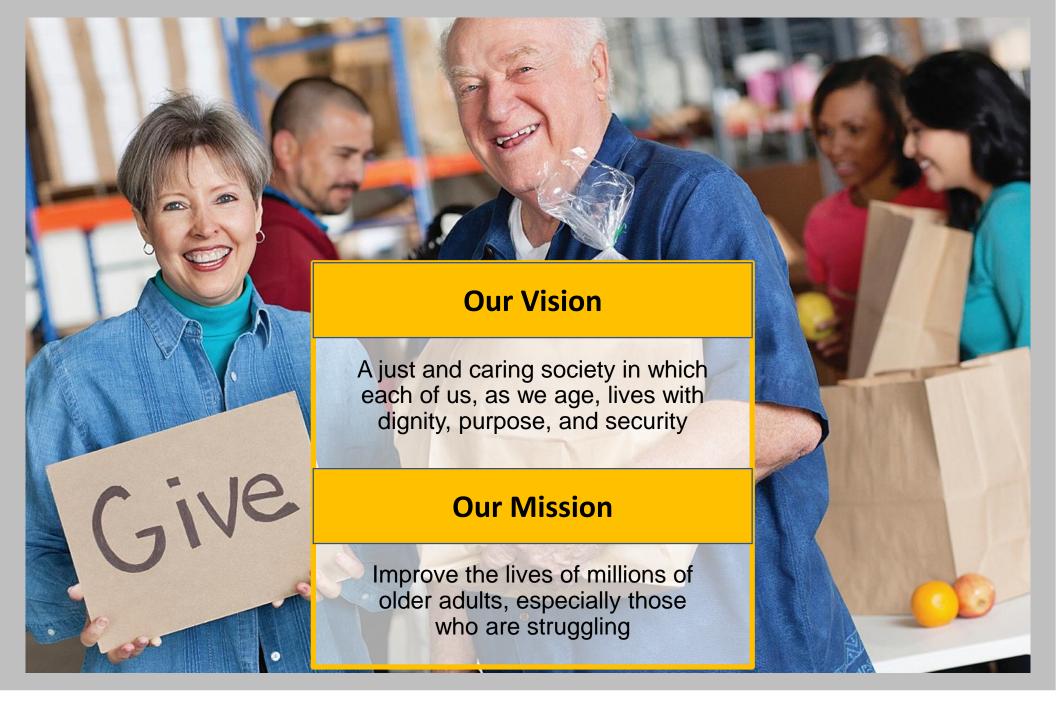
Age + Action

June 17-20, 2019 | Washington, DC

National Council on Aging

DATA TRENDS, PUBLICATIONS, AND IMPLICATIONS FROM THE NATIONAL CDSME AND FALLS PREVENTION DATABASES

Chelsea Gilchrist, Thomas Eagen, & Angelica Herrera-Venson June 17, 2019





NCOA's Center for Healthy Aging

- Goal: Increase the quality and years of healthy life for older adults and adults with disabilities
- Two national resource centers funded by the Administration for Community Living
 - Chronic Disease Self-Management Education (CDSME)
 - Falls Prevention
- Other key areas: behavioral health, physical activity, immunizations, oral health



Administration for Community Living Falls Prevention & CDSME Grantees

Funding

- CDSME: American Recovery and Reinvestment Act (2010-2011)
 and ACA Prevention and Public Health Fund (2012-Present)
- Falls Prevention: ACA Prevention and Public Health Fund (2014-Present)

Grant Goals

- Significantly increase the number of older adults and adults with disabilities at risk of falls who participate in evidence-based community programs to reduce falls and falls risks.
- Build partnerships and/or secure contracts with the health care sector and identify innovative funding arrangements that can support these evidence-based falls prevention programs while embedding the programs into an integrated, sustainable, evidencebased prevention program network.



Administration for Community Living Falls Prevention & CDSME Grantees

- Grantees must collect required program and participant data
 - Data collection forms are approved by Office of Management and Budget
 - Includes data on host and program implementation site, leaders/instructors, attendance log
- Participant self-reported data
 - Falls Prevention: Pre- and post-program surveys
 - CDSME: Pre-program survey and one postprogram question



Technical Assistance Activities



One-on-One Support

 Tailored technical assistance based on your needs



Networking & Peer Learning

- Work groups
- LearningCollaboratives
- Listservs for professionals



Online Tools and Resources

- Ongoing webinars
- Best practices from organizations across the country



National Databases

- Data collection& management
- CDSME & falls prevention

National Falls Prevention Database By the Numbers

27

733

4,048

7,315



States



Host Orgs



Impl. Sites



Workshops

92,974



Participants



Falls Prevention Programs

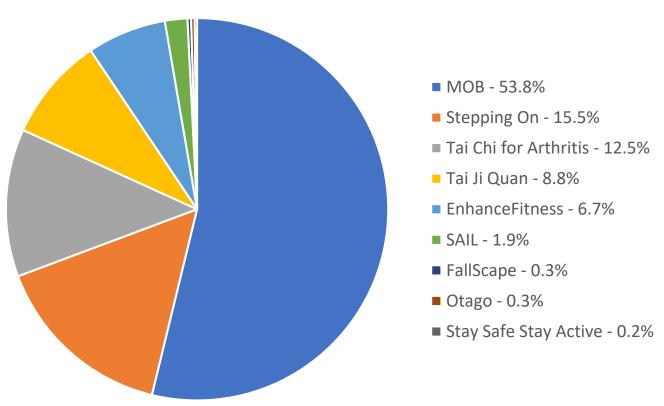


- A Matter of Balance
- CAPABLE
- EnhanceFitness
- FallScape
- Fit & Strong
- Otago Exercise Program
- Tai Chi for Arthritis
- Stepping On
- Stay Active and Independent for Life
- Stay Safe, Stay Active
- Tai Ji Quan: Moving for Better Balance
- YMCA Moving for Better Balance

Not an exhaustive list.

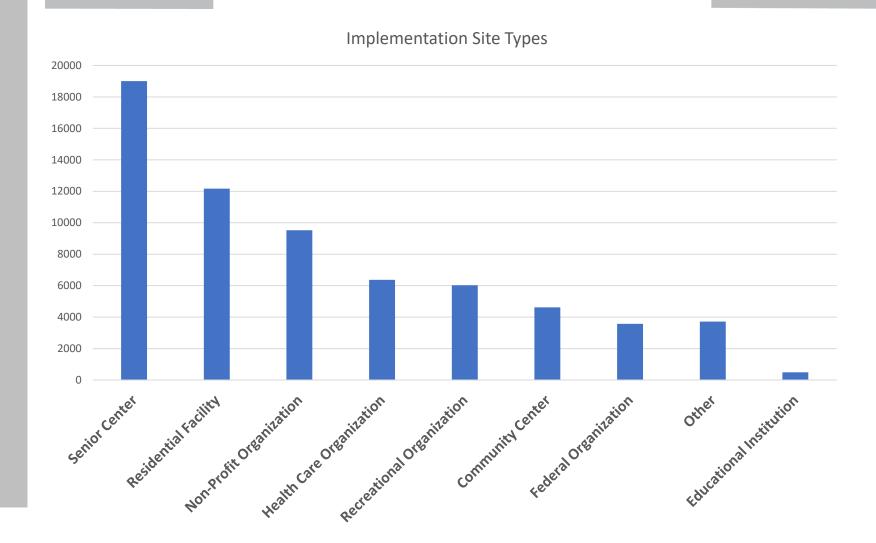
Distribution of Falls Prevention Programs in the Database

Program Distribution





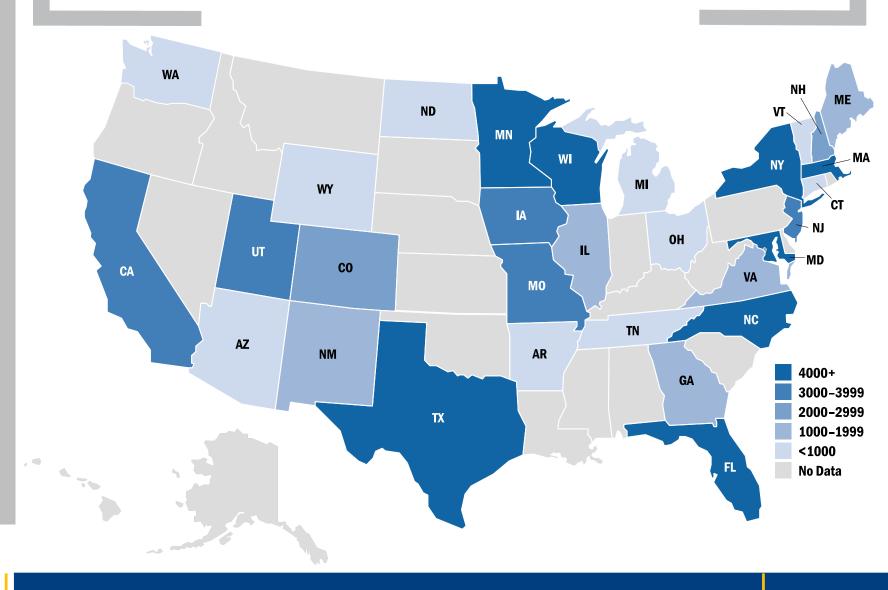
Implementation Site Types





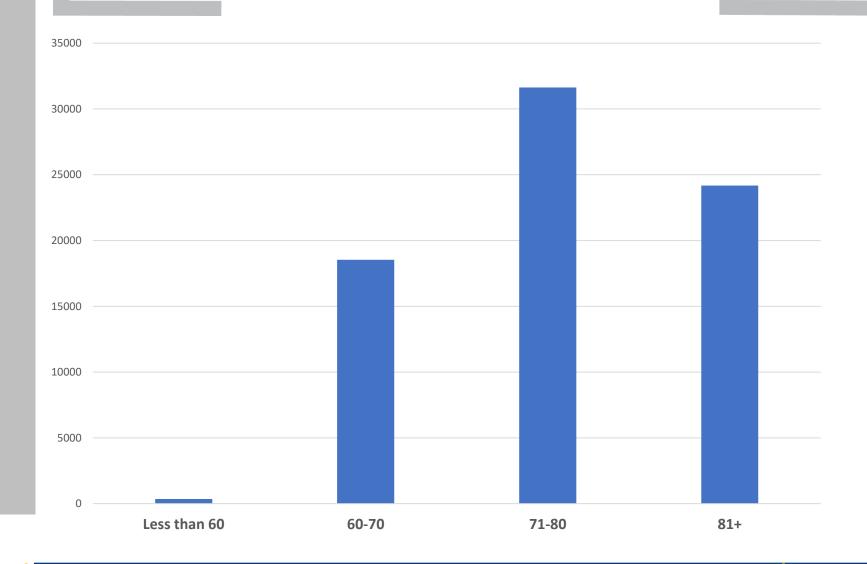


Participant Distribution by State in the Database





Participants by Age Categories





Participant Characteristics

Average Age:	76 years	Disability:	37%
Female:	81%	Two or More Falls Past 3 Months:	7,411 participants
Hispanic Ethnicity:	6%	Two or More Chronic Conditions:	30,964 participants
Race:	African-American (8%) American Indian/Alaska Native (2%) Asian (3%) White (86%) Multiracial (1%)	In Poor or Fair Health:	17%
Education:	High School or less (33%) Some College (30%) College Graduate (37%)	Fearful of Falling Before Attending Program:	50%
Lives Alone	48%	Program Reduced Fear of Falling:	89%



Health and Fall-Related Variables

- Self-reported health
- Chronic health conditions
- Limitations due to disability
- Healthcare referral
- Fear of falling
- Social engagement limitation due to concern about falling
- Falls self-efficacy
- Falls and injuries from falls, in past 3 months and following program completion
- Actions taken to reduce falls risk (post-test only)

Not an exhaustive list.



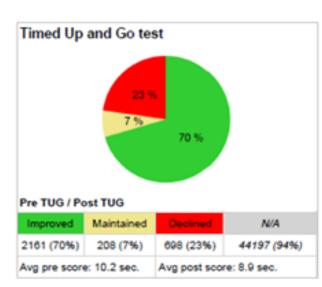
Optional and New Data Fields

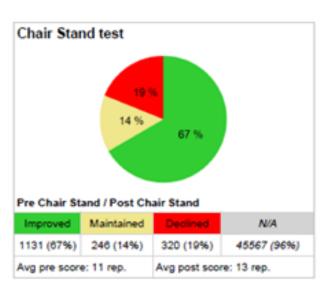
Optional Data Fields

- Income (Less than \$1,000 \$4,000 or more)
- Caregiver status
- Zip code
- Type of health insurance (E.g., Medicare, Humana)
- Referral source—Facebook ad
- Have you taken this falls prevention program before?
- Have you taken a falls prevention program before? If yes, please indicate program name.
- Timed Up and Go Test
- Chair Stand Test

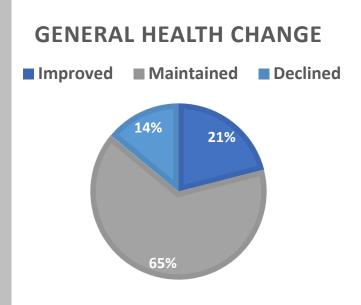
New Data Fields

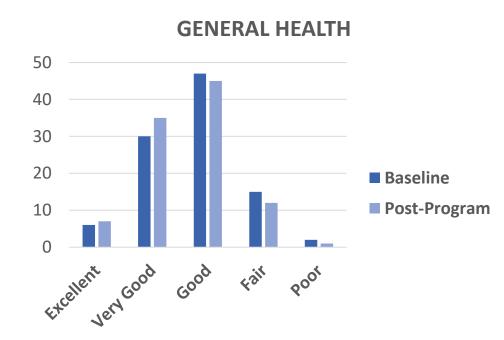
- Location of fall
- Hospitalization
- Physical activity level







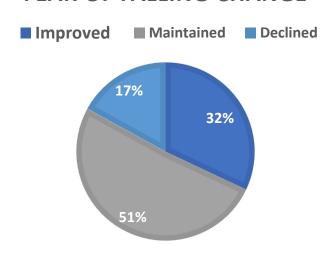




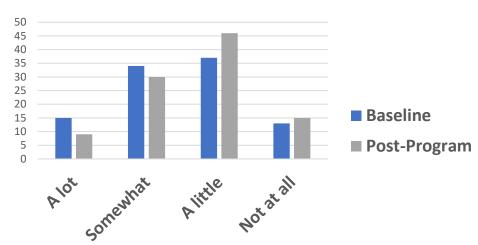
On average, there was a statistically significant (p < .001) improvement in self-reported general health following program participation.



FEAR OF FALLING CHANGE



FEAR OF FALLING CHANGE

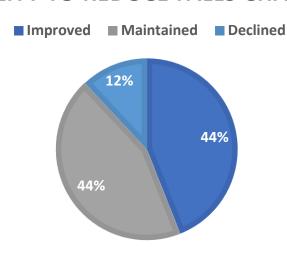


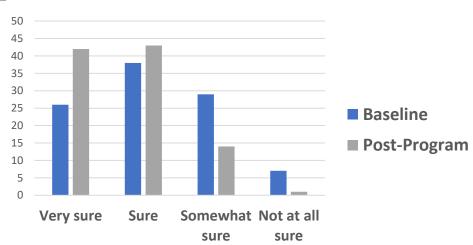
On average, there was a statistically significant (p < .001) improvement in self-reported fear of falling following program participation.



ABILITY TO REDUCE FALLS CHANGE

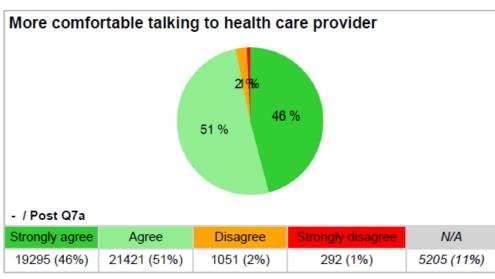
ABILITY TO REDUCE FALLS CHANGE

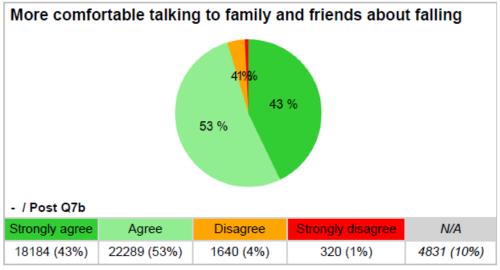


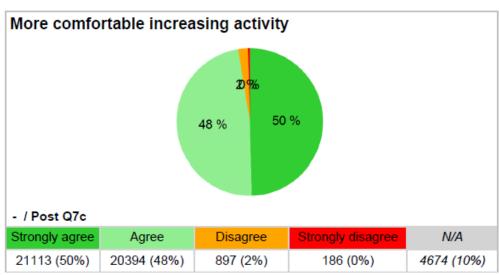


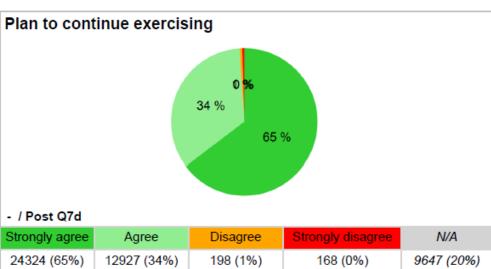
On average, there was a statistically significant (p < .001) improvement in self-reported ability to reduce falls following program participation.



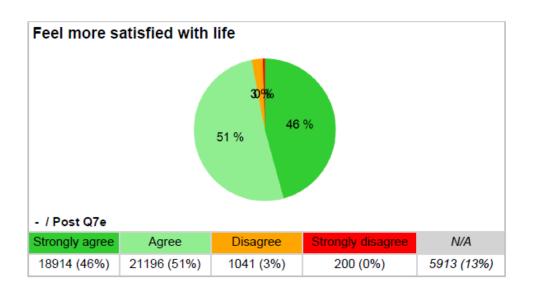


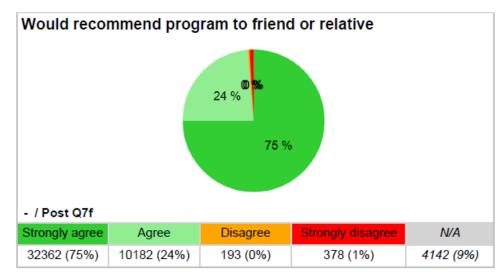














Research from the National Falls Prevention Database: Program Dissemination in Rural Areas

Smith et al. (2018) examined national program delivery in rural areas.

- 12.7% of program participants lived in a non-metro adjacent area.
- 5.5% of program participants lived in a non-metro non-adjacent area.

Primary implementation sites included:

- Senior centers (26%)
- Residential facilities (20%)
- Health care organizations (13%)
- Faith-based organizations (9%)

Workshop attendance/retention was consistent across rurality (~70%).

Reference: Smith, M.L., Towne, S.D., Herrera-Venson, A., Cameron, K., Horel, S.A., Ory, M.G., ... & Skowronski, S. (2018). Delivery of Fall Prevention Interventions for At-Risk Older Adults in Rural Areas: Findings from a National Dissemination. *International Journal of Environmental Research and Public Health*. 15, 12.



Research from the National Falls Prevention Database: Participants with Long-Term Disabilities

Eagen et al. (2019) compared participation in two falls programs in individuals with and without long-term disabilities (LTD).

- Significantly higher attendance and rates of completion among those with LTD
- Significant change in falls risk factors among both groups.
 - Greater rate of change observed in LTD group.



Reference: Eagen, T. J., Teshale, S., Herrera-Venson, A. P., Ordway, A., & Caldwell, J. (2018). Participation in Two Evidence-Based Falls Prevention Programs by Adults Aging With a Long-Term Disability: Case-Control Study of Reach and Effectiveness. *Journal of Aging and Health*.







NCOA Infographic:

Program Impact and Return on Investment

Florida

Falls Prevention Programs Save Money and Lives

Since 2014 more than 7014 older adults and adults with disabilities have participated in Falls Prevention programs.





Evidence-Based Falls
Prevention Programs
target older adults and
adults with disabilities
who are at risk.

82% over age 60

29% are disabled

46% live alone

29% have more than one chronic condition

Top three chronic conditions in **Florida** are Arthritis, Heart Disease, and Diabetes.

To learn more, visit www.ncoa.org/fallsprevention



Benefits to older adults in

FL

Health Care Dollar Savings

\$3,347,462

saved through falls prevention programs for older Floridians

14% reduction in the

number of falls

improved balance

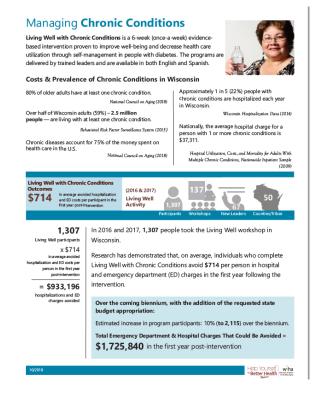
50%
improved ability to reduce falls

71%

8%
had medications
reviewed

22% made changes to home to reduce falls risk







\$287,379 in ED charges + \$3,258,849 in hospital charges

Wisconsin Institute for Healthy Aging: "Healthy Living, Healthy Aging By the Numbers"



4,384

Stepping On participants x 25%

= 1,096

would likely have fallen x 31%

= 340

falls avoided

\$261,460

ED Charges Avoided

4

\$2,962,590

Hospital charges avoided

\$3,224,050

Total Charges Avoided

In 2016 and 2017, 4,384 people took a Stepping On workshop in Wisconsin.

We know that 1 in 4 people age 65 or older fall every year so we could expect that 1,096 people would have fallen. By participating in Stepping On, 31% of those falls were avoided (340 falls). If we assume that only half (170) of those people who avoided a fall would have needed medical care and, of those, half (85) visited the emergency department (ED) while the other half (85) were hospitalized, we have avoided \$261,460 in ED charges (based on an average charge of \$3,076) and \$2,962,590 in hospital charges (based on an average charge of \$34,854).

Over the coming biennium (using the same assumptions as above), with the addition of the requested state budget appropriation:

Estimated increase in program participants: 10% (to 4,822)

Falls avoided: 374

Total Emergency Department & Hospital Charges That Could Be Avoided =

\$3,546,228 in the first year post-intervention

\$287,379 in ED charges + \$3,258,849 in hospital charges

Wisconsin Institute for Healthy Aging: "Healthy Living, Healthy Aging By the Numbers"





Rush University Medical Center: Customized Value Proposition for Health Plans



Data from OMB-Approved Fields

Behavior Change

- Home safety modifications
- Talked to a family member or friend about how I can reduce my risk of falling
- Talked to a health care provider about how I can reduce my risk of falling
- Had vision checked
- Had medications reviewed by a health care provider or pharmacist
- Participated in another fall prevention program in my community
- Location of Fall
- Social Engagement
- Physical Activity Level
- Satisfaction from Program
 - Feel more satisfied with life
 - Would recommend program to friend
- Program Effectiveness



Leverage Optional Data Fields

Target Special Populations

- Income (Less than \$1,000 \$4,000 or more)
- Caregiver status
- Zip code
- Chronic conditions

Track Participants Across Programs

- Have you taken this falls prevention program before?
- Have you taken a falls prevention program before? If yes, please indicate program name.



Chronic Disease Self-Management (CDSME) Program Database



Self-Management Resource Center (formerly Stanford) Chronic Disease Self-Management Programs

- Chronic Disease Self-Management Program
- Tomando Control de Su Salud
- Cancer: Thriving and Surviving
- Chronic Pain Self-Management
- Diabetes Self-Management
- Programa de Manejo Personal de su Salud
- Positive Self-Management Program for HIV
- Better Choices, Better Health® online
- ToolKit for Acive Living with Chronic Conditions (self-directed)
- Workplace Chronic Disease Self-Management Program



Not an exhaustive list.

Additional Programs in National CDSME Database



- Active Living Every Day
- Camine Con Gusto (in person)
- EnhanceFitness
- EnhanceWellness
- HomeMeds
- Health Coaches for Hypertension Control
- Living Well in the Community
- Screening, Brief Intervention, and Referral to Treatment (SBIRT)
- Program to Encourage Active, Rewarding Lives (PEARLS)
- Walk With Ease (in-person)
- Walk With Ease (self-directed)
- Wellness Recovery Action Plan (WRAP)

CDSME Program – By the Numbers



Figure 1. National CDSME Database Program Reach and Usage (3/1/2010 – 5/31/2019)



National Chronic Disease Self-Management Education Resource Center: Program Highlights and Charts

Explore this quarterly update of data housed in the National Chronic Disease Self-Management Education Database. It includes national data on the number of participants, workshops, trends, and stats from 2010 to present.

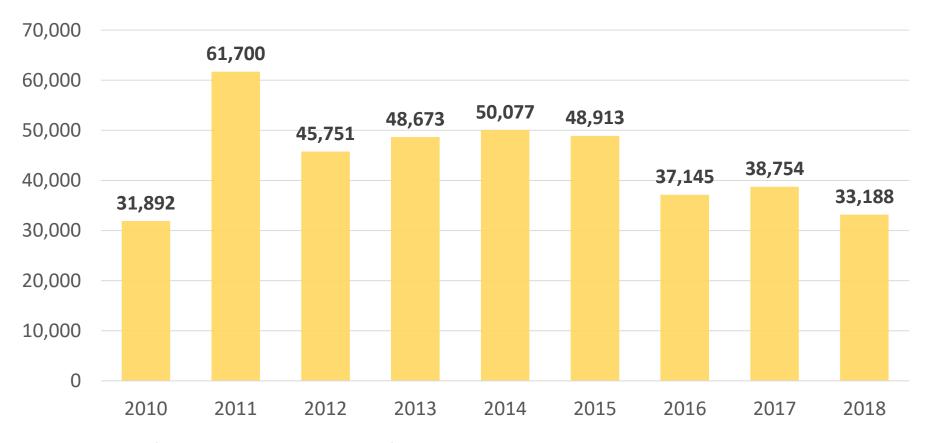
Download Document



https://d2mkcg26uvg1cz.cloudfront.net/wp-content/uploads/CDSME-Quarterly-Data-Highlights-January-2019.pdf



Number of Participants

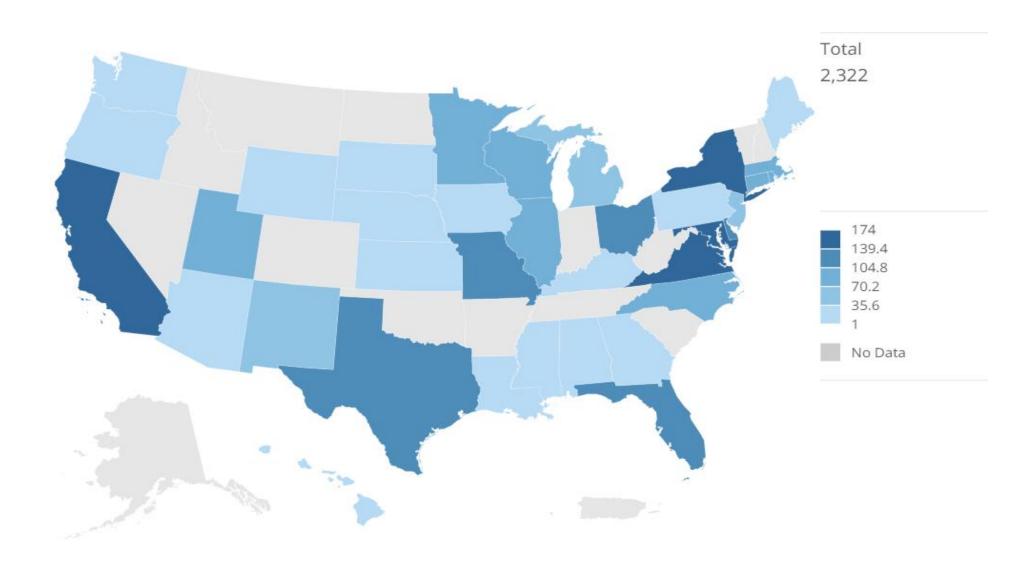


The # of grantees and grantee target goals for enrollment varies by year, which contribute to variation in yearly totals.

Figure 3. Total Number of Participants Enrolled By Calendar Year (1/1/2010 to 12/31/2018)



Workshops Delivered In Past 12 Months





Change in Programming

- Just five years ago (2013), the Chronic Disease Self-Management Program (CDSMP) accounted for <u>72%</u> of programs reported by organizations to the National CDSME Database.
- In 2018, that proportion has dropped substantially to 42%.
- Every year, more organizations are adding an array of evidence-based programs to improve physical activity, better manage depression symptoms, or manage medication to address the multiple health concerns and offer variety to older adults.

	2013	2018
CDSMP, n	33369	9917
CDSMP, %	71.5%	41.6%
Total	46683	23818

Figure 6. Change in Programming Over the Years (CDSMP vs Other Programs), between 2013 and 2018



Completion Rates

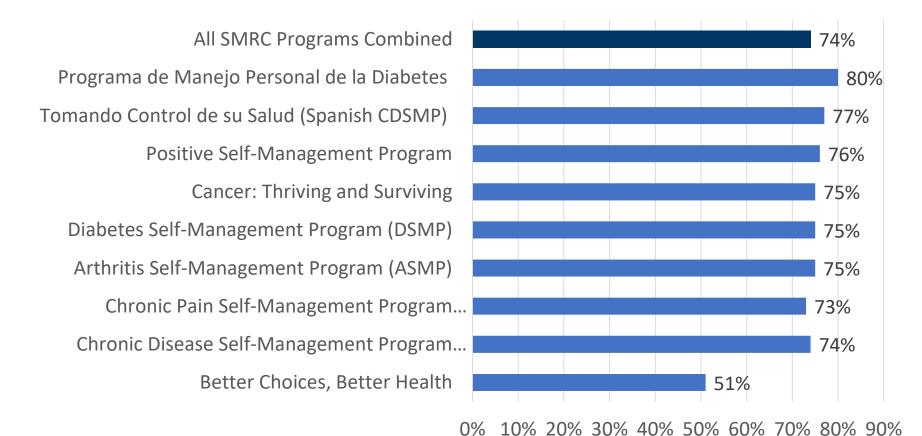


Figure 8. Completion Rates for All SMRC CDSME Program Types, 3/1/2010 to 1/29/2019; n=383,473



Program Participant Demographics

	CDSME	General Older Adult Population	
Average Age:	65 years	n/a	
Female:	76%	56%	
Race/Ethnicity:	 White (70%) African-American (24%) Hispanic (15%) Asian (4%) Native Hawaiian/Pacific Islander (.8%) 	 White (77%) African-American (9%) Hispanic (8%) Asian (4%) Native Hawaiian/Pacific Islander (.1%) 	
Education	56% have some college or higher	30%	
Caregiver	25%	19%	
In Poor or Fair Health	30%	22%	
Disability:	31% 35%		
Two or More Chronic Conditions:	59%	70%	
Top Chronic Health Conditions:	 Hypertension (41%) Hyperlipidemia (33%) Arthritis/Rheumatic disease (36%) Diabetes (36%) Heart disease (13%) Anxiety/Depression (21%) 	 Hypertension (58%) Hyperlipidemia (48%) Arthritis (31%) Ischemic heart disease (29%) Diabetes (27%) 	
Lives Alone:	40%	20%	
Referred by physician	14%	n/a	
Confidence managing chronic condition after workshop	8 of 10	n/a	

Figure 9. National CDSME Program Participant Demographics Compared to General Older Adult Population; n=383,433 (Rev. 1/3/2019)



Chronic Health Conditions

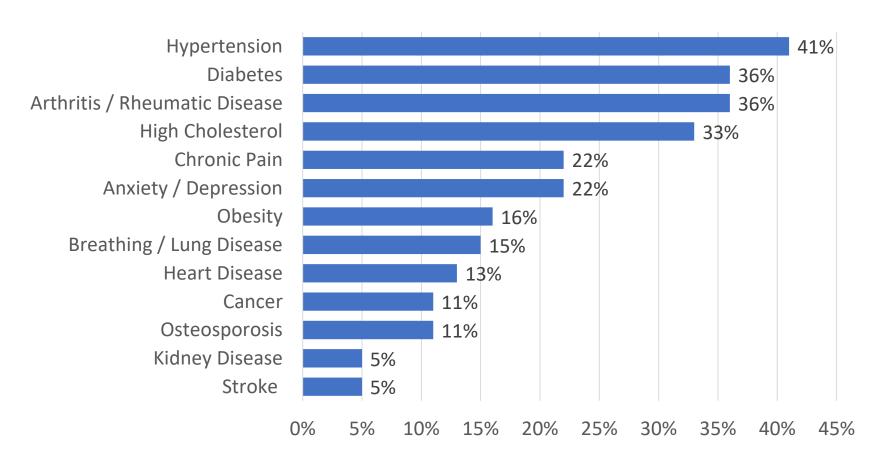


Figure 10. Most common chronic health conditions among participants enrolled in the National CDSME Database (n=383,473)



Most Common Languages

korean navajo portuguese russian somali spanish tongan vietnamese

Confidence Managing Chronic Condition (upon completion of program)

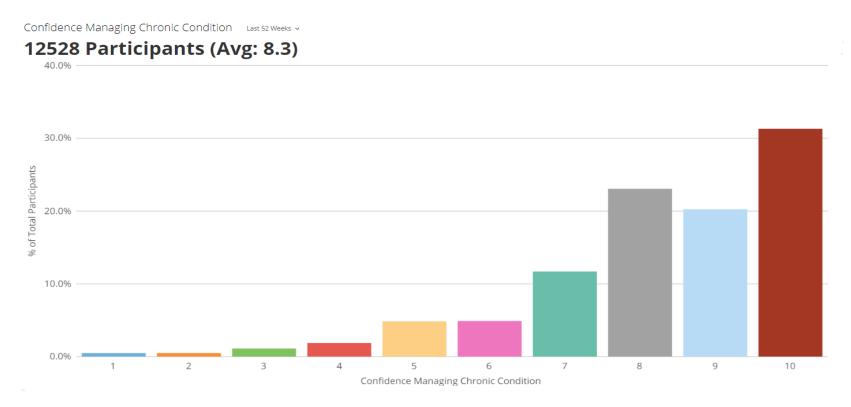


Figure 13. Percent distribution of participants' post-program completion rating on their confidence in managing their chronic health conditions (n=12,528), (1/30/2018 to 1/29/2019)



Most Common Implementation Site Types by Race/Ethnicity

	Hispanic	Black/African- American	Asian American	American Indian	White
	%	%	%	%	%
Health care organizations	31.7	16.6	20.3	22.8	23.7
Senior centers	18.3	21.9	24.1	16.9	21.7
Faith-based organizations	7.8	12.3	3.7	5.1	6.6
Residential facility	11.5	18.6	18.6	14.5	17.7
Other	10.3	11.6	7.7	16.4	10.8
Tribal center				7.1	

Figure 16. Location of most common implementation site (venue) for all workshops by race and ethnicity (n=356,427)



Program Leaders Activity Across SMRC Programs (n=28,666 workshops)

CPSMP programs have program have the highest average number of workshops per leader.

	Average # of Workshops Delivered by Program Leaders	No. of Workshops	SD	Total # of Leaders
Chronic Pain Self-Management Program (CPSMP)	9.9	889	12.4	531
Cancer: Thriving and Surviving	8.9	101	10.3	69
Diabetes Self-Management Program (DSMP)	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 (CDSMP)	6.4	20453	8.6	9508
TOTAL	6.9	28666	9.1	4560



Average # of Workshops Delivered by Program Leaders — by Employment Status

	Average # of Workshops Delivered by Program Leaders	# of Workshops
Employment Type Not Stated	6.55	18204
Staff	8.44	7390
Volunteer	5.94	3961

Figure 19. Average No. of Workshops Delivered by Program Leaders (n=29,555)

<u>Tip Sheet: Strategies to Improve Leader Retention for Chronic Disease</u> Self-Management Education

<u>https://www.ncoa.org/resources/tip-sheet-strategies-to-improve-leader-retention-for-chronic-disease-self-management-education/</u>



New Data Fields & Optional Items

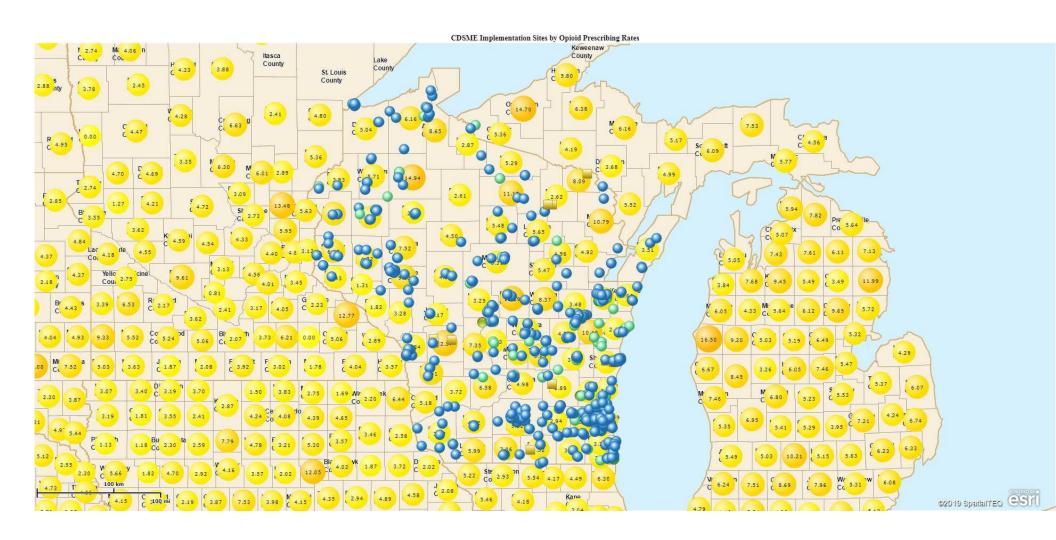
- Possible New Additions/Changes to Future CDSME Data Collection Tools
- Self-rated Health (pre & post)
- Confidence in Managing Chronic Conditions (pre & post)
- Expanded questions on disability

Optional Items

https://www.ncoa.org/resources/national-chronic-disease-self-management-education-resource-center-program-highlights-and-charts/



Opioid Prescription Rates by County with Program Delivery Sites (Ex. Wisconsin)





Research from National CDSME Database- 2018 - 2019

Rural Reach of CDSME Programs

• <u>PAPER</u>: Smith, M.L., et al (2017). Dissemination of Chronic Disease Self-Management Education (CDSME) programs in the United States: Intervention Delivery by Rurality. *International Journal of Environmental Research and Public Health*

Chronic Pain Self-Management Program

- <u>POSTER</u>: Influence of Disease Profiles on Chronic Pain Self-Management Program (CPSMP) Attendance (Smith, M.L, et al, 2018, APHA)
- <u>PAPER</u>: In Preparation

Diabetes Programs – Hispanic/Latino participation

- <u>PAPER SUBMITTED</u>: Mendez-Luck, C., Participation of Latinos in the Diabetes Self-Management Program & Programa de Manejo Personal de la Diabetes, Innovations on Aging
- <u>PRESENTATION</u>: Herrera-Venson, A.P. et al, Participation of Latinos in the Diabetes Self-Management Program & Programa de Manejo Personal de la Diabetes, GSA, 2018



Research from National CDSME Database- 2018 - 2019

Disability x Chronic Diseases

 POSTER: Influence of Disability and Disease on Chronic Disease Self-Management Education (CDSME) Program Attendance. Smith, M.L et al, 2017, APHA.

Caregiving Trends

• <u>POSTER</u>: Caregiver Participation in Chronic Disease Self-Management Education Programs: Findings from a National Study. Smith, M.L. GSA, 2018.

Health Disparities

• <u>PRESENTATION</u>: Disease diagnoses x racial / ethnic variation in chronic disease self-management programs. Herrera-Venson, et al. Healthy Aging Summit, 2018. Herrera-Venson, et al.



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 - MyMedicareMatters.org



Thank You

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- Thomas Eagen
- Angelica Herrera-Venson

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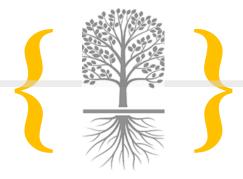
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