

Engaging Latinos in the Diabetes Self-Management Program & *Programa de Manejo Personal de la Diabetes*

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National Council on Aging

Improving the lives of 10 million older adults by 2020

The Value of Diabetes Education to Older Latinos

- Latinos comprise the fastest growing segment of the older adult population, with over half expected to have type 2 diabetes by age 70.
- Diabetes self-management programs can effectively reduce complications from poorly controlled diabetes.

Research Goals

- Data on the Diabetes Self-Management Program and its culturally adapted version, *Programa de Manejo Personal de la Diabetes*, from the National Council on Aging's National CDSME Program Database were analyzed to identify:
 - Geographic reach to Hispanic / Latino and Spanish-speaking Latino/as and growth of these programs in these populations;
 - Completion rates by program, and demographic and health comparisons between Hispanic and non-Hispanic/Latino participants;
 - Common delivery site types (venues) preferred by Hispanic participants; *and*
 - Demographic and other predictors of program completion, including program type.

About the Diabetes Self-Management Program and *Programa de Manejo Personal de la Diabetes*

- Consist of small group workshops that aim for around 12-16 participants.
- Involve a 2.5 hour session each week for 6 weeks.
- Workshops are run by 2 trained leaders (at least 1 of these is a non-health professional with diabetes).
- Programs are conducted in community centers, with a focus on accessible locations.
- Subjects cover a wide range of topics, including techniques to deal with diabetes symptoms, healthy eating approaches and the use of diabetes medications.
- Content is reviewed and updated annually to meet American Diabetes Association standards.
- Workshops are highly participatory, empowering participants to improve their self-care and health.



About the Diabetes Self-Management Program and *Programa de Manejo Personal de la Diabetes*

▪ **Diabetes Self-Management Program**

- Linked to reduced medical costs and all-cause health care use (Turner et al., 2018).
- Improves healthy eating, hyperglycemia symptoms, depression and communication with physicians (Lorig et al., 2009).
- Benefits have been observed across multiple measures at 6 months and 1 year after intervention (Lorig et al., 2016).

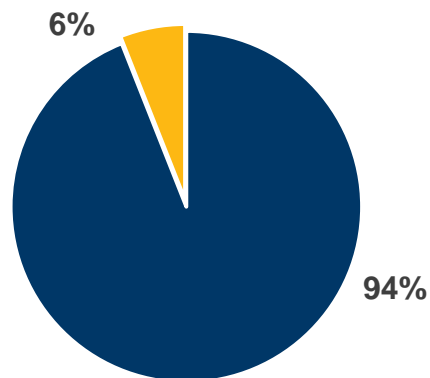
▪ ***Programa de Manejo Personal de la Diabetes***

- Workshops are given in Spanish with no translators.
- Research shows its effectiveness in improving health status and decreasing A1C scores, without the need for reinforcement (Lorig et al., 2008).

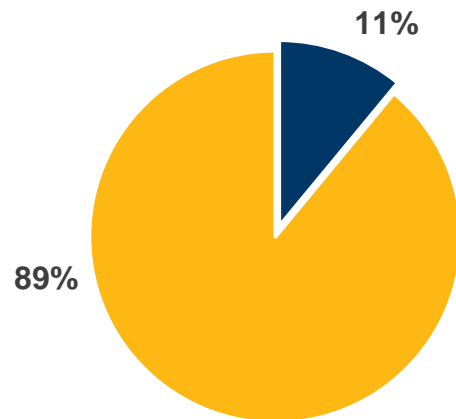
DSMP and *Programa de Manejo Personal de la Diabetes* Program Completers: Totals and By Ethnic Group

- Between 2010 and 2018, **80,436** individuals participated in DSMP or *Programa de Manejo Personal de la Diabetes*.
 - Among those, 6,777 (8.4%) participated in its Spanish-language cultural translation, *Program de Manejo Personal de la Diabetes*.
- Not all participants who participate in *Programa de Manejo Personal de la Diabetes* report being Hispanic/Latino; however, most do (94%). 11% of DSMP participants are Hispanic/Latino.

Programa de Manejo Personal de la Diabetes

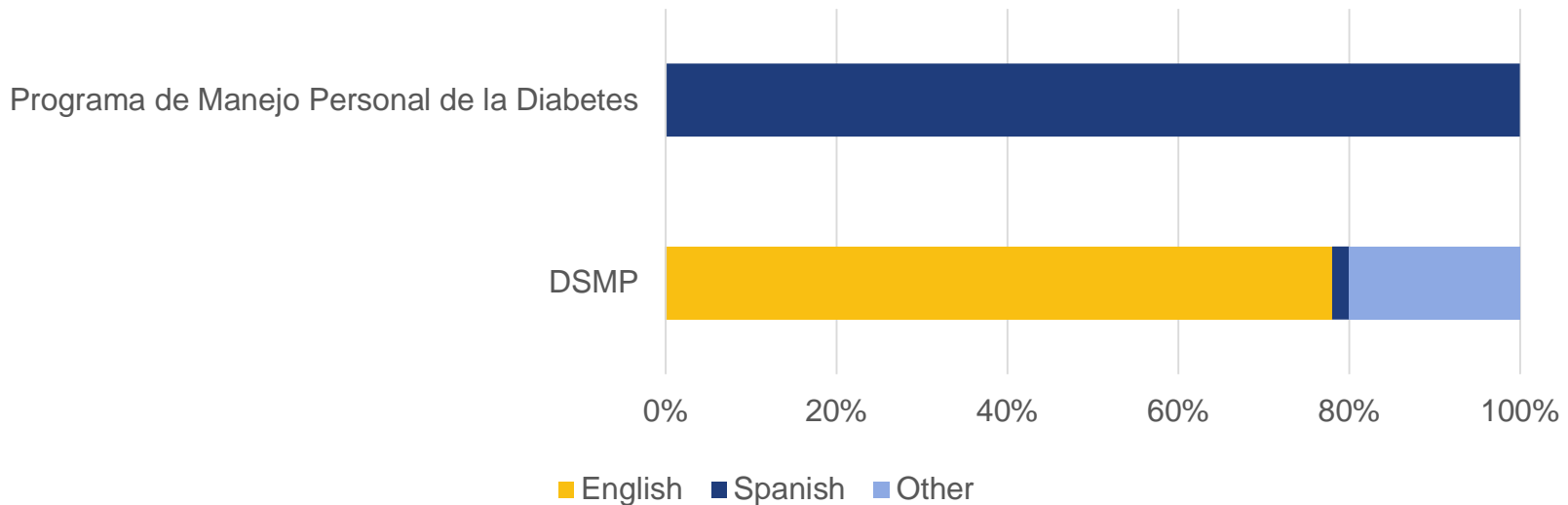


DSMP



Comparison of Workshop Type and Workshop Language

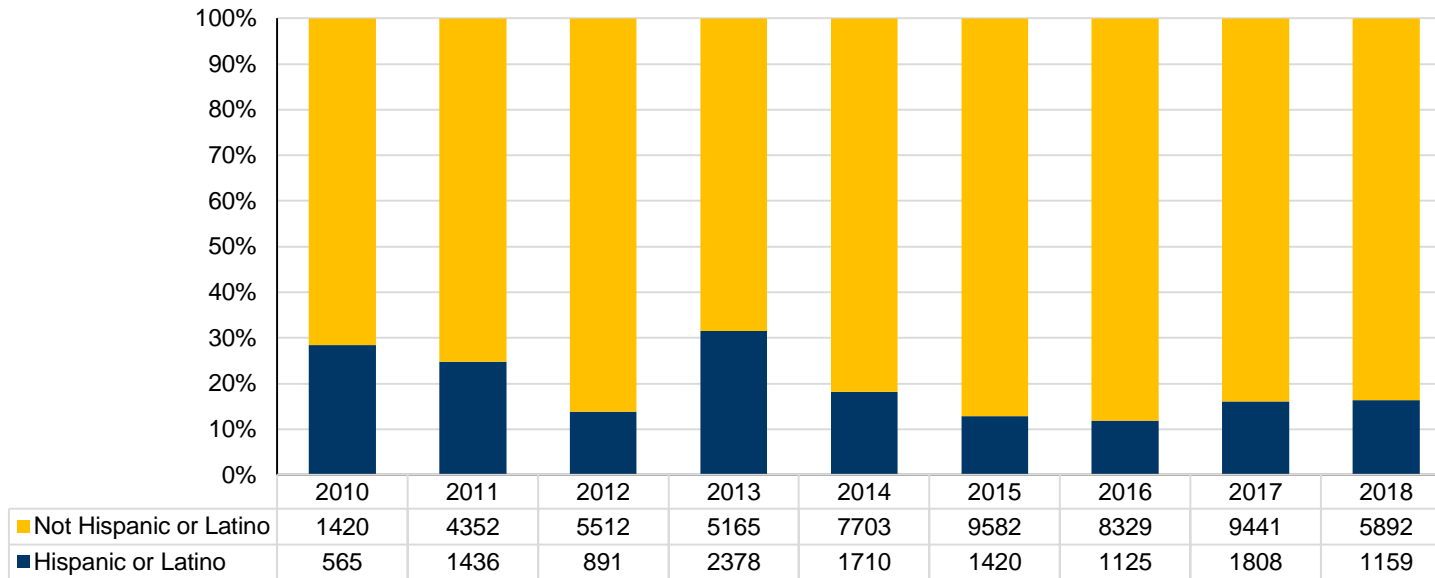
- Though the *Programa de Manejo Personal de la Diabetes* is available, the English-version (DSMP) has also been delivered in Spanish, to 1,370 (2%) of participants over the decades.
- Like many of the other English-language SMRC programs, field staff and program leaders often provide their own translations (written or verbal) of the material to make them available in other languages.





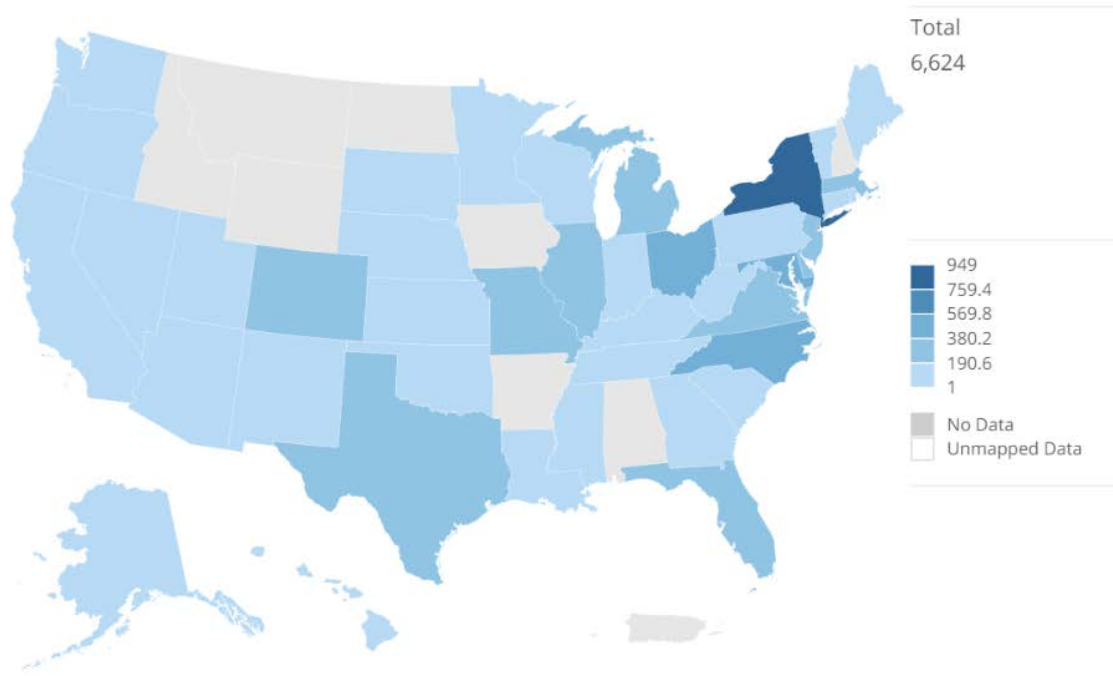
Hispanic / Latino Workshop Participation 2010-2018

- Over the past decade, participation of Hispanic ranged from 12% to 32% across both DSMP and *Programa de Manejo Personal de la Diabetes* (among participants reporting Ethnicity).
- While the % of Hispanic participant reached a peak in 2013 (on par with 2010 figures), participation has lessened over the past 5 years. However, there has been an uptick in 2017 and 2018 compared to 2015 and 2016 (from about 12% to 16%).

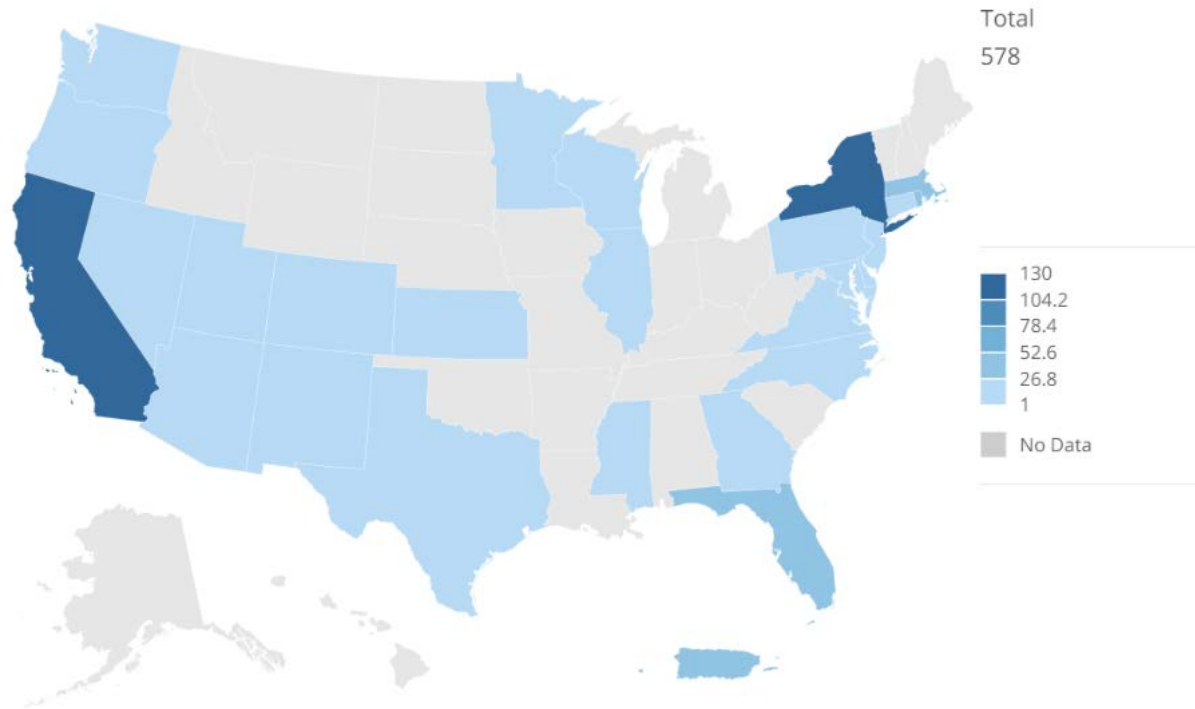




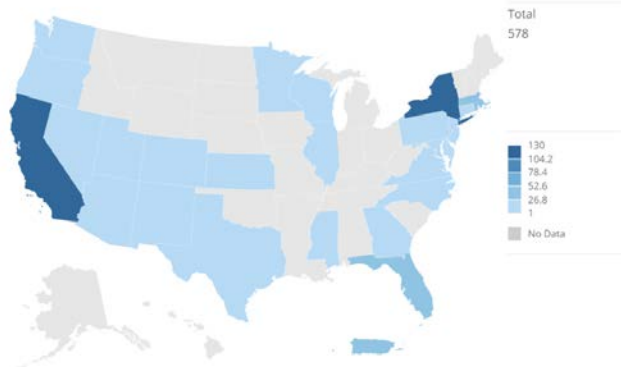
Number of Workshops Delivered for Diabetes Self-Management Program (2010 to 2018)



Number of Workshops Delivered for *Programa de Manejo Personal de la Diabetes* (2010 to 2018)

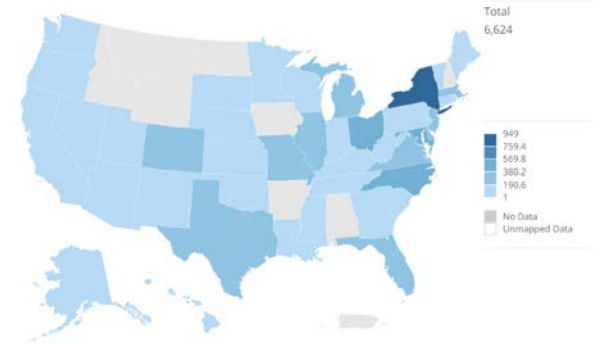
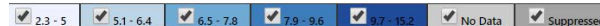
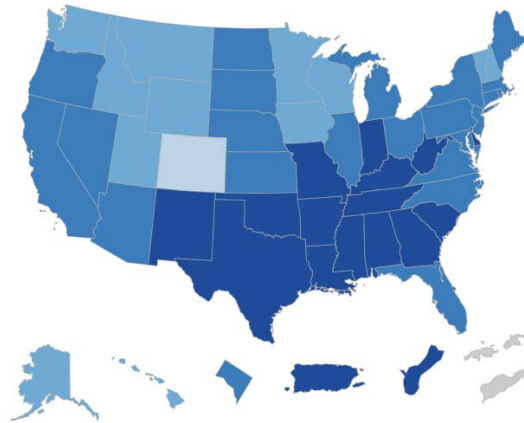


Workshops Delivered versus Diabetes Diagnoses



Programa de Manejo Personal de la Diabetes
(2010 to 2018)

Diagnosed Diabetes Age-Adjusted Percentage,
Adults with Diabetes – Total, 2015



Number of Workshops Delivered for Diabetes
Self-Management Program (2010 to 2018)

Demographic Differences Between Latino and Non-Latino Participants

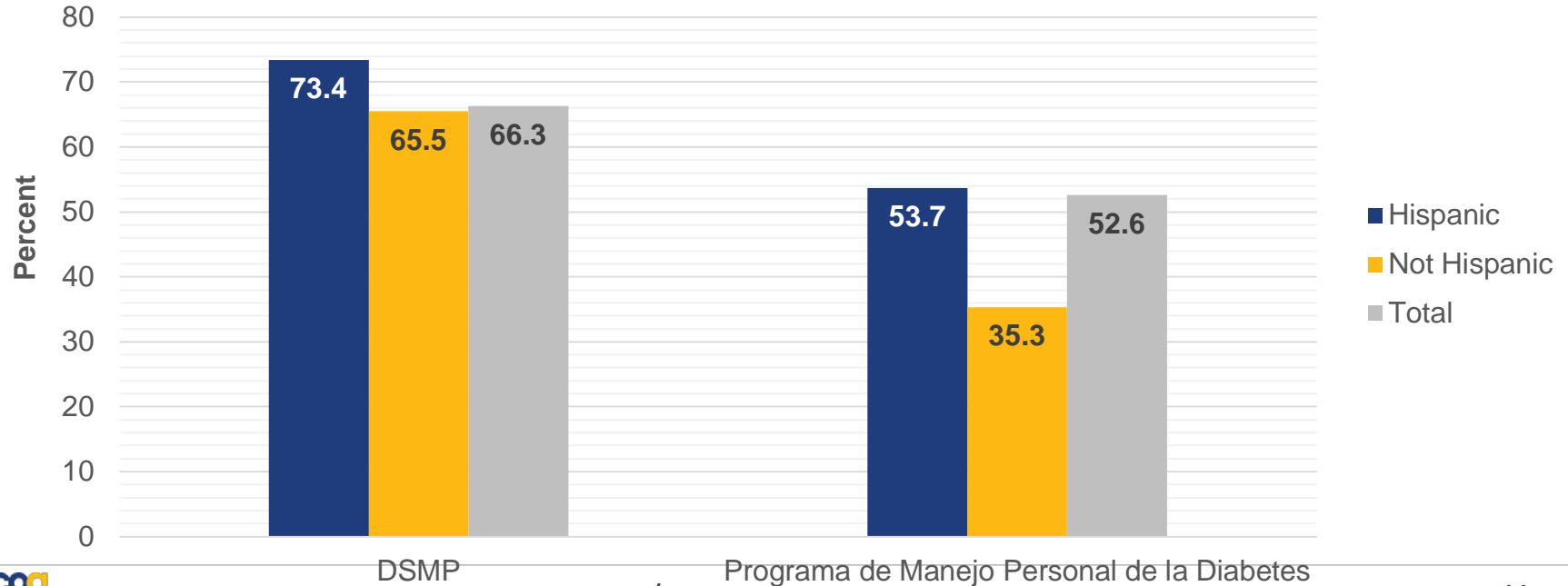
	Hispanic or Latino (n=12,492)		Not Hispanic or Latino (n=57,404)	
	n	%	n	%
Age*	64.1 (14.4)		66.6 (12.7)	
Female*	9190	73.6%	41368	72.1%
Caregiver*	1464	26.1%	8984	24.3%
Doctor/Care Provider Suggested Program*	710	30.4%	2523	17.9%
Educational Level*				
Some Elementary Middle, or High School	3992	49.3%	3526	9.7%
High School Graduate or GED	1940	16.9%	10563	35.0%
Some College or Technical School	1366	24.0%	12729	29.0%
Bachelor's Degree or Higher	800	9.9%	9568	26.3%
Has Medicaid*	178	1.4%	1003	1.7%
Lives Alone*	18036	38.1%	122580	49.0%

Health Related Differences Between Latino and Non-Latino Participants

	Hispanic or Latino (n=12,492)		Not Hispanic or Latino (n=57,404)	
	n	%	n	%
Number of Conditions*	2.14 (1.840)		2.88 (1.962)	
Confidence Managing Chronic Condition*	7.38 (2.284)		8.07 (1.874)	
Health in General*				
Excellent	104	4.2%	357	3.2%
Very Good	392	15.7%	2260	20.0%
Good	1051	42.0%	5381	47.7%
Fair	830	33.2%	2869	25.4%
Poor	124	5.0%	420	3.7%
Disability*	1478	25.3%	10076	26.1%
Diabetes	8038	64.3%	37489	65.3%

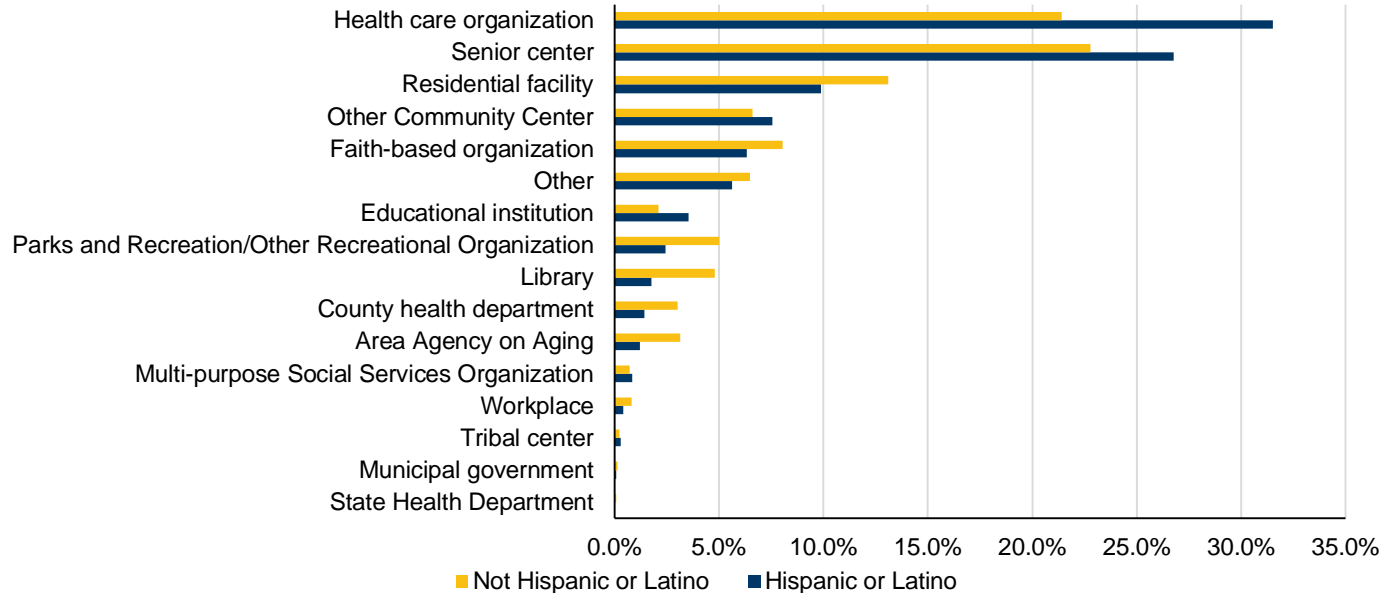
Additional Patterns and Outcomes of Analysis for Predictions of Attendance by Program Type

- Having diabetes is not required to participate in the program. A greater proportion of DSMP participants had diabetes (66%) compared to those in the *Programa de Manejo Personal de la Diabetes* participants (53%).
- Hispanic participants without diabetes appear more likely to enroll in either program than non-Hispanics. This is particularly true for *Programa de Manejo Personal de la Diabetes*. They may be enrolling at pre-diabetic stage, considering they have other co-morbidities at a younger age.



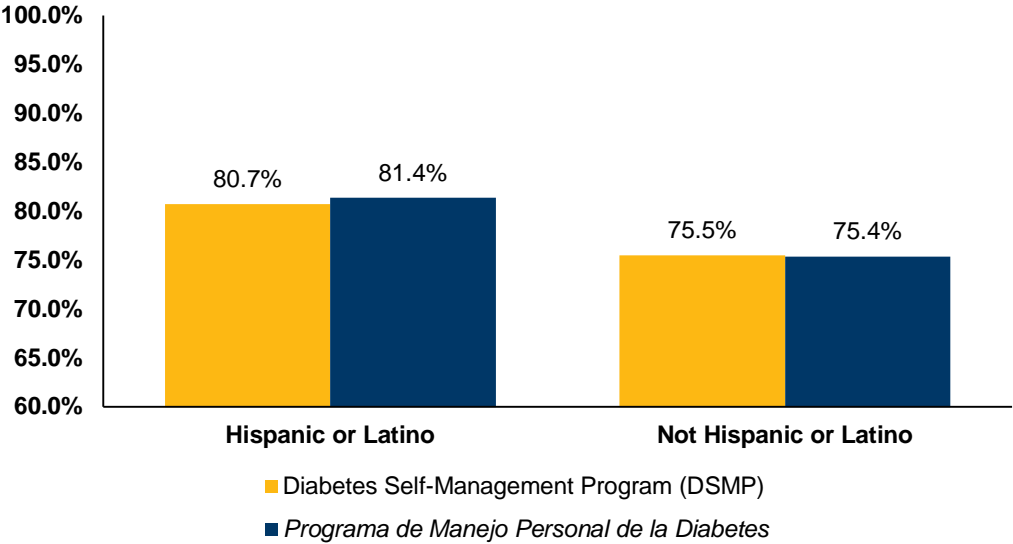
Delivery Sites Where Hispanic/Latinos are Most Likely to Attend a DSMP or Programa de Manejo Personal de la Diabetes Workshop

- In order of prevalence, the most common types of site for Hispanic/Latino participation were **health care organizations**, senior centers and residential facilities. A similar pattern was true for non-Hispanics. However, for that group, **senior centers** were the common type of site, closely followed by senior centers and then residential facilities.



Completion Rates by Ethnicity and Program Type

- Hispanic/Latinos have a completion rate of identical completion rates of **81%** for DSMP and *Programa de Manejo Personal de la Diabetes*.
- This is about 5% higher than 75-76% reported for non-Hispanics in the same programs.
- Completion rate is calculated based on the number of participants who attend at least 4 of the 6 sessions.



Statistically Significant Factors Associated With Attendance

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound
(Constant)	3.305	0.123		26.896	0.000	3.064	3.546
Age (years)	0.012	0.001	0.090	9.226	0.000	0.009	0.014
Education	0.071	0.016	0.043	4.549	0.000	0.041	0.102
DSMP (1) vs Programa de Manejo Personal de la Diabetes (2)	0.193	0.068	0.031	2.847	0.004	0.060	0.326
Chronic Pain	-0.122	0.049	-0.028	-2.480	0.013	-0.219	-0.026
High Cholesterol	0.109	0.038	0.033	2.869	0.004	0.034	0.183
Hypertension	0.127	0.038	0.039	3.386	0.001	0.054	0.201
Anxiety / Depression Disorders	-0.135	0.046	-0.034	-2.972	0.003	-0.225	-0.046

- People with a **higher chance** of attending classes:
 - Older
 - More educated
 - Those with high cholesterol
 - Those with hypertension

- People with a **lower chance** of attending classes:
 - Those with chronic pain
 - Those with anxiety/depression disorders

Factors Associated With Attendance

- Results of the linear regression shows a collective significant association between the number of sessions attended and age, program type, education level, and type of chronic health conditions ($F(17, 12445) = 13.426, p = 0.000$).
- $R^2 = .018$ (not a comprehensive model)



- Individuals who were **older** and **more educated** attended more classes.
- **Program type** was associated with greater attendance. in the *Programa de Manejo Personal de la Diabetes* attended more sessions than persons in the DSMP.
- Having conditions, such as **cholesterol** or **hypertension** was associated with greater attendance.



- Persons with **chronic pain** and **anxiety/depression** were **less likely to attend.**

Summary of Findings

- Hispanics preferentially attended *Programa de Manejo Personal de la Diabetes*, suggesting the importance of translated and culturally-tailored programs OR targeted efforts by licensed organizations.
- Overall program participation by Hispanics has ranged from 12% to 32%. **Current numbers ~16%**, slight uptick from 2016.
- Workshops have been delivered in most states, with the highest number in New York (for DSMP and *Programa de Manejo Personal de la Diabetes*) and California (for *Programa de Manejo Personal de la Diabetes*). **Workshop concentration was not well-associated with diabetes prevalence.**
- Many similar characteristics between Latino vs Non-Latino participants
 - Latino participants were more likely to be: referred by a doctor/care provider and have lower education, and less likely to live alone.
- **A higher proportion of DSMP participants had diabetes (66%)** compared to *Programa de Manejo Personal de la Diabetes* participants (53%).
- Hispanics were more likely to attend classes at health care organizations compared to non-Hispanics.
- Being older, more educated, having high cholesterol or hypertension **increased the likelihood** of program attendance (# of sessions), while anxiety/depression disorders and chronic pain **decreased the likelihood.**

Implications of findings for planning diabetes interventions to Hispanic/Latino older adults

Latinos may be referred at higher rates because of known predisposition. They may also already be exhibiting the early risk factors and symptoms (or pre-diabetes).

Strategies to increase participant retention may help offset the impact of age and education on participation.

- Hispanic participants were more likely to report an education level of “some elementary, middle, or high school” or “high school graduate or GED.” [Tip Sheet: Increasing Completion of Chronic Disease Self-Management Education Workshops](#)

Additional supports may be needed for participants with chronic pain, anxiety, or depression.

- Consider conducting basic screening for anxiety and depression. If an individual screens positive, refer them to behavioral health services or a self-management support program focused on behavioral health to address anxiety and depression prior to engaging individuals in either DSMP or Programa Manejo de la Diabetes.
- Ensure program leaders are trained to allow participants to get up and move around during the workshop as a strategy to cope with pain.

Online tools and resources

Best Practices: Resources from the Field

A centralized location, with over 200 resources from across the U.S., focused on the expansion and sustainability of evidence-based programs

<https://www.ncoa.org/center-for-healthy-aging/cdsme-best-practices-toolkit/>



Leadership and Management



Strategic Partnerships



Delivery Infrastructure and Capacity



Centralized and Coordinated Logistical Processes



Quality Assurance



Business Planning and Sustainability

Online tools and resources

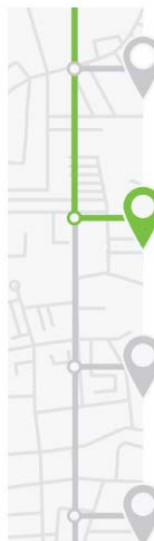
Roadmap to Community-Integrated Health Care

www.ncoa.org/roadmap



Destination: Achieving Better Health and Better Care

This roadmap is designed to help aging, public health, and disability professionals make stronger linkages with the health care sector to achieve better health through better care with Chronic Disease Self-Management Education programming. It provides an interactive journey with various routes that you can choose to get to the destination of community-integrated health care. Simply click the navigation pin for the routes that you wish to take to learn more.



Helpful tip sheets

- [National Study of the Chronic Disease Self-Management Program: A Brief Overview](#)
- [Increasing Completion of Chronic Disease Self-Management Education Workshops](#) (includes information on session zero)
- [Chronic Disease Self-Management Education and People with Disabilities](#)
- [Tip Sheet: Engaging People with Disabilities in Evidence-Based Programs](#)
- [Developing Partnerships with the Disability Community](#)
- [Engaging Veterans in Evidence-Based Programs](#)

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