

Report to Stakeholders: Year 2

Domain 4, Strategy 1: Increase use of diabetes self-management programs in community settings

Arizona Department of Health Services
Division of Public Health Prevention Services
Research and Development

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INTRODUCTION

The Arizona Department of Health Services (ADHS) was awarded a grant from the Centers for Disease Control and Prevention under *CDC FOA-RFA-DP13-1305: State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors, and Promote School Health* (CDC 1305-Public Health in Action). The grant is a five year project, with Year 1 beginning on June 30, 2013, and has both basic and enhanced components.

The purpose of the grant is to support state health departments in implementing targeted strategies resulting in measurable impacts addressing school health, nutrition and physical activity, obesity, diabetes, and heart disease and stroke prevention. In addition the grant supports the development of core public health activities in states including partnership engagement, workforce development, guidance and support for programmatic efforts, strategic communication, surveillance & epidemiology, and evaluation. There are twenty-one strategies under the basic and enhanced components of the grant, and ADHS is implementing all of them. Both components utilize four domains, as prescribed by the CDC: 1) Epidemiology and surveillance; 2) Environmental approaches that promote health and support and reinforce healthful behaviors; 3) Health system interventions to improve the effective delivery and use of clinical and other preventive services; and 4) Community-clinical linkages to support cardiovascular disease (CVD) and diabetes prevention and control efforts and the management of chronic diseases. Although the CDC is highly prescriptive in the strategies and interventions which will be administered within each domain; ADHS is encouraged to be innovative in the approach used to administer the intervention.

Evaluation implementation and planning are part of Domain 1. ADHS' evaluation plan for the grant has been developed according to the CDC Six Step Evaluation Framework¹, taking into account a combination of frameworks and methods to provide a uniquely appropriate set of organizing principles. The plan is sensitive to all phases of policy, system, and environmental change from output measures to short, intermediate, and long-term outcomes. The overarching goal of the evaluation is to understand how activities are being implemented and how successful they are in meeting their objectives to achieve policy, system, and environmental change. States are required to evaluate strategies in each of four categorical programs: school health, obesity, heart disease, and diabetes.

This report evaluates the collective Year 1 efforts of Domain 4 Strategy 1, which is to increase the use of diabetes self-management programs in community settings. It begins with a brief overview of diabetes activities and outlines the methodology used to evaluate them. Results from both process and outcome evaluations are presented, followed by a conclusions section, which discusses results, compares the status of process to outcomes measures, and offers recommendations for future years.

¹ A Framework for Program Evaluation. Centers for Disease Control and Prevention, Program Performance and Evaluation Office. <http://www.cdc.gov/eval/framework/>

OVERVIEW OF YEAR ONE DIABETES ACTIVITIES

The categorical area of diabetes has strategies promoting community-clinical linkages to diabetes prevention and control efforts. There were two diabetes strategies from which ADHS could choose to focus its evaluation. ADHS selected Domain 4 Strategy 1, which is to increase use of diabetes self-management programs in community settings, and is currently in the adoption/start-up phase.

The ADHS Diabetes Program identified three organizations to receive technical assistance for the accreditation of diabetes self-management education (DSME) programs by the American Association of Diabetes Educators (AADE). Organizations were selected based on location and limited AADE programs within rural areas. A consultant was hired to: provide technical assistance with the application and accreditation process, conduct training for staff on evidence-based practices, and build capacity for DSME in rural, border, and underserved communities. Additionally, data sharing agreements were explored with any newly accredited sites to help the ADHS diabetes program develop public health interventions to increase patient participation in DSME programs.

METHODOLOGY

A team approach to evaluation involving both internal and external stakeholders has assisted ADHS in understanding how activities are being implemented and how that relates to the targets set for CDC performance measures. Information was gathered from external stakeholders to get the point of view of partners who were actually implementing strategies in the field and to ensure that emergent issues were incorporated into future evaluation. Perspectives from internal stakeholders were also incorporated and discussed by a diabetes evaluation committee, who reviewed external stakeholder input and evaluated it in the context of overall grant goals and objectives.

EXTERNAL STAKEHOLDERS SURVEY

The evaluation team met with ADHS diabetes program staff to identify external stakeholders who played a role in partnering with ADHS on strategy specific activities. An invitation was extended via email to the external stakeholders to participate in an electronic survey using Survey Monkey that had both structured and open-ended questions, which was used to inform ratings in the process evaluation.

PROCESS EVALUATION TOOL

In addition to the electronic survey questions, questions directed at ADHS program staff were compiled to create an overall process evaluation tool for strategy-specific activities and work plan milestones. Questions on the tool were asked in a format where responses can be numerically coded to allow the evaluation team to quantify responses into an overall process implementation score. The process evaluation tool for this strategy has 42 possible points when all components of the process are fully implemented.

EVALUATION COMMITTEE

Each ADHS program staff member, who was selected as a member of the diabetes evaluation committee, was sent a progress report that contained relevant information from the external stakeholder survey input and any performance measure data that was available. The committee was asked to review the process evaluation tool and gave each component a preliminary rating from their experience, review of the work plan progress, and the information presented in the progress report. The committee met and agreed on a consensus rating for each component, using the following rating scheme:

Rating	Description	Use rating when . . .
3	Fully implemented	Component is accomplished in all targeted settings.
2	Substantially implemented	Component is fully accomplished in many but not all settings, or is nearly accomplished in most settings.
1	Partially implemented	Some or all partners have begun to implement, but have not yet made substantial progress.
0	Not at all implemented	Partners have not begun to implement.

RESULTS OF PROCESS EVALUATION

FEEDBACK FROM EXTERNAL STAKEHOLDERS

The ADHS diabetes program manager identified ten contacts to invite to participate in a survey for external partners. There were a total of eight respondents: four program site directors, three DSME training program staff, and one program coordinator. Respondents were asked whether or not they were an accredited provider of AADE, American Diabetes Association (ADA), or Stanford DSME.

Table 1: Are you either AADE accredited, ADA recognized or a Stanford-licensed DSME provider?	
Yes	6
No	2

Tables 2, 3, and 4 show how respondents rated components according to whether they felt the component was implemented fully, substantially, partially, or not at all.

Table 2: County programs successfully accomplished DSME program accreditation	
Fully	4
Substantially	2
Partially	0
Not at all	0

Table 3: Adequate training by consultant was provided in these areas:					
	Fully	Substantially	Partially	Not at all	Total
Tools for DSME education programs	6	0	0	0	6
Evidence-based guidelines for diabetes care	5	1	0	0	6

Table 4: Adequate training by ADHS was provided in these areas:					
	Fully	Substantially	Partially	Not at all	Total
Tools for DSME education programs	6	0	0	0	6
Evidence-based guidelines for diabetes care	5	1	0	0	6

Respondents were also asked open-ended questions regarding strengths and barriers faced as related to the DSME project. Responses are listed in Tables 5 and 6. Table 7 asks those that reported barriers and challenges whether or not they sought out assistance and how helpful, timely, and satisfied they were with the assistance received. Table 8 lists suggestions for improvements.

Table 5: In your experience working on this project, what has gone well? (verbatim)
Good cooperation and communication between sites and Jerry Meece.
I feel our best tool will be to continue to promote the program, possibly at health fairs and any community event where we can directly talk to the individuals themselves.
We are working as hard as we can towards meeting the requirements for becoming accredited, but it is hard at a small facility when you have multiple various responsibilities. We are making progress, but we are not there yet
The planning and preparation for the sessions. The interaction amongst the co-facilitators. The delivery of the sessions.
Getting referrals and getting patients to return for follow-up on goals.
The community feedback has been great, we have been able to start a diabetic support group just to secure a patient population to work with on this project and we are very well received, and they are eager to learn.
Working with internal programs to integrate this project. Having the experience staff to deliver the direct services. Reaching out to our local partners for referrals.
Community awareness of resources available to them has been successful. Physician referrals are increasing.

Table 6: What barriers have you faced while working on this project? (verbatim)

Change over of staff to implement. Other priorities such as vaccinations etc. took priority.
The main problem my team members have experienced with this project is the client recruitment portion. We need to figure out how to better promote the program so people can be aware of its availability. However, it is a new program so hopefully with time, that will improve.
Mostly just having limited staff and time to work on setting up the program.
No local resources or diabetes support groups
It's a very long process and trying to get everything accomplished can be extremely time consuming that can cause a loss of focus since it is such a cumbersome project. When this is an added extra benefit/program your trying to put into place and not your full time job. My fulltime job keeps me very busy and this has been a lot more work than anticipated.
Internal staffing issues have been problematic.
Recruiting participants through their doctor.
Capacity to deliver services

Table 7: Did you seek assistance for the problems and barriers you faced?

Yes	4
No	4
Overall, how helpful was assistance you received?	
Very helpful	1
Helpful	3
Overall, how timely was the assistance you received?	
Very timely	1
Somewhat timely	3
Overall, how satisfied were you with assistance you received?	
Very satisfied	1
Satisfied	3

Table 8: Do you have any other comments about the implementation of this project? (verbatim)

I think the foundation is laid out well. The personnel within the sites are very capable of implementing the program and doing well if they can overcome manpower and changeover barriers
I look forward to the continuation of this project. It is important to make a positive impact on the lives of the participants. Providing them with tools to manage their condition is of utmost importance.
We are still working on completing all the Standards and are doing well. It has just taken a lot longer than anticipated due to other job related responsibilities.
We are optimistic that we will be able to expand this program and hope to make this a billable service.

COMPLETED PROCESS EVALUATION TOOL FROM COMMITTEE MEETING

All data related to the strategy, including external stakeholder feedback, was analyzed by the evaluation team and presented to the diabetes evaluation committee. Together, the committee reviewed the documentation and completed a process evaluation tool. The consensus of this committee resulted in the ratings shown below in Table 9. Ratings are defined as follows: fully is scored as a 3, substantially as a 2, partially as a 1, and not at All as a 0. A total score of 33 out of 42 was assigned for a percent score of 79%.

Table 9: Process tool with Consensus ratings	
Component	Rating
1. Identified three organizations to become accredited DSME programs	3
2. Established contracts with selected organizations	3
3. Identified a consultant to offer technical assistance with the accreditation process	3
4. Identified key partners to successfully implement a DSME program	2
5. Established successful partnerships with those that have successfully implemented DSME	2
6. Collaborated with Arizona Health Disparities Center to identify ways of increasing enrolment of vulnerable populations	0
7. Establish DSME referrals with AHCCCS health plans	0
8. Partnership developed with Arizona Diabetes Coalition and other community-based programs	3
9. Three organizations successfully accomplished DSME program accreditation	2
10. Adequate training by consultant was provided in these areas:	
a. Tools for DSME education programs	3
b. Evidence-based guidelines for diabetes care	3
11. Consultant developed a work plan with the newly accredited sites	3
12. Adequate technical assistance was provided in these areas:	
a. Tools for DSME education programs	3
b. Evidence-based guidelines for diabetes care	3
Total Score:	33
Total Score / 42 Possible Points = Percent Score:	79%

The diabetes program manager informed the committee that components 1 and 2 in Table 9 above, related to establishing contracts with organizations, was completed. All contracts were facilitated by ADHS and signed by all parties involved. The committee rated both components as “Fully.” The program manager also stated that a consultant had been identified to offer technical assistance; therefore, component 3 was rated “Fully” implemented. Component 4, which identified key partners who have successfully implemented a DSME program, was rated “Substantially” because one accreditation is pending. For the same reason, component 5 was also given a rating of “Substantially.”

The committee discussed component 6, collaborate with Arizona Health Disparities Center, and that the turnover in staff has caused a delay in its implementation. The committee came to a consensus rating of “Not at All.” There was discussion amongst committee members about the differences between referrals and reimbursements with Arizona Health Care Cost Containment System (AHCCCS) Medicaid health plans. It was noted that often when talking about referrals, reimbursements are also mentioned. The program manager stated that both were challenging issues but should be considered separately. For purposes of this evaluation only “DSME referrals with one AHCCCS health plan” was included as a component of the evaluation tool. The committee rated component 7 “Not at all” because steps were not taken towards implementing this component.

Component 8, partnership developed with Arizona Diabetes Coalition and other community based organizations, was rated “Fully” implemented. One of the three organizations has not received DSME accreditation; therefore, component 9 was rated “Substantially.” Component 10 has two parts which asks about the level of implementation for adequate training provided by the consultant in: a) tools for DSME education programs, and b) evidence based guidelines for diabetes care. Both subcomponents were given a rating of “Fully” by the committee based on the program managers’ verbal report on the training evaluation. It was reported that the consultant developed a work plan with the newly accredited sites; therefore, component 11 was rated “Fully.” Component 12 asks the level of implementation of technical assistance provided by ADHS for: a) tools for DSME education programs, and b) evidence based guidelines for diabetes care. After reviewing external survey data, the committee gave both subcomponents a rating of “Fully.”

SNAPSHOT OF OUTCOME PERFORMANCE MEASURES

The CDC-1305 grant requires states to report on CDC developed outcome performance measures annually. The CDC has operationalized all performance measures of the grant, which includes assisting states with the identification of available and feasible data sources. In this section, all short-term, intermediate, and long-term performance measure results related to this strategy are presented.

SHORT-TERM

m 4.1.01 Number of ADA recognized, AADE accredited, or state accredited/recognized DSME programs during the funding year

Data Source: ADA and AADE websites

Approach: A baseline was estimated by diabetes program staff in Year 1. The CDC advised the ADHS evaluation team to use ADA and AADE websites as an appropriate data source for reporting. Year 2 actual data was reported using the websites, and targets were adjusted. Table 1 shows Arizona’s targets and actual performance to date related to DSME programs.

Table 10: Number of ADA recognized, AADE accredited, or state accredited/recognized DSME programs					
	Baseline	Year 2	Year 3	Year 4	Year 5
Targets	N/A	60	52		60
Actual	57	52			

m 4.1.03 Proportion of counties with ADA recognized, AADE accredited, or state accredited/recognized DSME programs

Data Source: ADA and AADE websites

Approach: A baseline was estimated by diabetes program staff in Year 1. The CDC advised the ADHS evaluation team to use ADA and AADE websites as an appropriate data source for reporting. Year 2 actual data was reported using the websites, and targets were adjusted. The address of a DSME program on either the ADA or AADE websites was used to determine county location. . Table 11 shows Arizona’s targets and actual performance to date.

Table 11: Proportion of counties with ADA recognized, AADE accredited, or state accredited/recognized DSME programs					
	Baseline	Year 2	Year 3	Year 4	Year 5
Targets	N/A	80%	67%		80%
Actual	60%	67%			

m 4.1.05 Number of Medicaid recipients with diabetes who have DSME as a covered Medicaid benefit

Data Source: AHCCCS data

Approach: The diabetes program manager met with the chief medical officer (CMO) from the state Medicaid program to discuss the current policies for Medicaid reimbursement. Arizona’s Medicaid plans receive prospective capitation for members, which is based on two components, administrative and medical costs. The medical costs are based on an actuarial assessment of the costs of covered services, and DSME is not a covered service. This means that health plans would need to cover DSME costs within their administrative budget. An increase from the baseline of zero during the five year grant cycle is not expected.

Table 12: Number of Medicaid recipients with diabetes who have DSME as a covered benefit					
	Baseline	Year 2	Year 3	Year 4	Year 5
Targets	N/A				
Actual	0	0			

INTERMEDIATE PERFORMANCE MEASURES

m 4.1.06 Proportion of people with diabetes in targeted settings who have at least one encounter at a DSME program during the funding year

Data Source: CDC and Arizona Living Well Institute database (AzLWI)

Approach: A baseline was set using the number provided by the CDC, which only includes ADA and AADE participants. Because 2013 was the first year of Stanford DSME in Arizona, this data was not included in the baseline. AzLWI tracks data for Stanford DSME programs in the state. Actual Year 2 measures reflect both CDC and AzLWI reported data. Year 3 and Year 5 targets were adjusted based on Year 2 findings. Table 13 shows Arizona’s targets and actual performance to date.

Table 13: Proportion of people with diabetes who have at least one encounter at a DSME program					
	Baseline	Year 2	Year 3	Year 4	Year 5
Targets	N/A	2%	2%		3%
Actual	2%	2%			

LONG TERM PERFORMANCE MEASURES

m 4.1.07 Decreased proportion of people with diabetes with A1C >9

Data Source: Maricopa County Contractor Reports

Approach: Targeted healthcare systems were identified by program staff in Year 1. A target of 66 % was set for Year 2. This target was based on the current data for patients with diabetes control from the Arizona Federally Qualified Health Centers (FQHC) website. Actual Year 2 measures reflect data collected from one healthcare system. There were 135 diabetes participants of which 85 had a documented A1C of less than 9%. Table 14 shows Arizona’s targets and actual performance to date.

Table 14: Decreased proportion of people with diabetes with A1C >9					
	Baseline	Year 2	Year 3	Year 4	Year 5
Targets	N/A	66%	66%		75%
Actual	0%	63%			

m 4.1.08 Age-adjusted hospital discharge rate for diabetes as any-listed diagnosis per 1,000 persons with diabetes

Data Source: Hospital Discharge Database (HDD) and United States Census data

Approach: A baseline was set by calculating the age-adjusted rate using 2012 HDD and US Census population numbers. Year 2 and Year 5 targets were set based on the baseline calculation. Year 2 actual was reported using 2013 HDD and the US Census population. Year 3 and Year 5 targets were readjusted based on Year 2 actual data. Table 15 shows Arizona’s targets and actual performance to date.

Table 15: Age-adjusted hospital discharge rate for diabetes as any-listed diagnosis per 1,000 persons with diabetes					
	Baseline	Year 2	Year 3	Year 4	Year 5
Targets (≤)	N/A	210 per 1000 persons	257 per 1000 persons		220 per 1000 persons
Actual	228 per 1000 persons	257 per 1000 persons			

DISCUSSION AND CONCLUSIONS

Overall, the organizations selected by ADHS for AADE DSME accreditation are making progress. Two out of the three targeted organizations in Year 1 have received accreditation; one of which was the first county health department in Arizona. The third organization has faced challenges in identifying champions within their organization to establish their advisory council. The organization reported in the survey that they were making progress by starting a diabetes support group, which is where they would recruit their patient population for the project once implemented. With county accreditation, the ADHS diabetes program has partnered with other state programs to leverage programmatic activities to increase participation of diabetes patients to DSME programs. One of the organizations was also successful in procuring a certified diabetes educator (CDE) to deliver education and increase patient enrollment.

The external stakeholders that responded to the survey reported various aspects of community involvement as a facilitator to implementation. Respondents stated that working in the community to promote their programs creates awareness of resources and ultimately increases in referrals. The most common barrier was organizational capacity to deliver services. Respondents mentioned staffing and turnover as challenges they face. Respondents also noted limited time and competing priorities within the organization as barriers. A couple of respondents stated that the lack of knowledge regarding the recruitment of clients was challenging. They asked how they might promote the program within their communities and among physicians.

ADHS received positive feedback on the training evaluation conducted by the consultant. Eleven individuals from all three sites attended the training. The amount of information, quality of content, relevance to day-to-day responsibilities, balance of presentation and participant discussion and overall quality of speaker were all rated very high by participants. The training participants were appreciative of the opportunity and left the training feeling motivated.

STATUS OF PROCESS AND OUTCOMES AGAINST TARGETS

The ADHS diabetes program has made progress towards targets. Arizona's performance in the short-term may appear to have fallen short of targets. However, baselines and targets were estimated by program staff prior to using the recommended data source of the ADA and AADE websites. Targets were readjusted based on actual data reported in Year 2. ADHS continues to work with the organization still seeking accreditation by providing technical assistance as needed. It is too soon to discuss the intermediate and long-term outcomes; however, due to an increase in the hospital discharge rate of patients with diabetes, 3-year and 5-year targets had to be readjusted.

RECOMMENDATIONS

There was confusion about which year(s) to include in the first year of the diabetes evaluation plan. In Year 3, it is recommended that the evaluation team assess progress on DSME accreditation for both Year 2 and Year 3 targeted organizations. The evaluation team will also edit the process survey tool based on feedback from stakeholders. As recommended by the committee, the tool will ask specific questions regarding types of technical assistance provided by ADHS.

Although the state of Arizona does not offer DSME as a Medicaid covered benefit for reimbursement, it is recommended that ADHS explore individual AHCCCS health plan referral processes. The committee noted that the component related to the establishment of DSME referrals with an AHCCCS health plan was included in the process tool at the start of the year for this reason. The committee agreed that focusing on only one AHCCCS plan might be more feasible for ADHS at this time. Another recommendation is to collaborate with the Arizona Health Disparities Center to identify ways of increasing enrollment of vulnerable populations. The committee noted, similar to the DSME referrals and AHCCCS health plan component, this component was included in the process survey tool in hopes that program staff would begin to build a relationship with the center.