

# Implementing a Community-Based Diabetes Prevention Program



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## Background

Sentara RMH Medical Center (SRMH) has had an established Diabetes Self-Management Education (DSME) program, recognized by the American Diabetes Association/American Association of Diabetes Educators (ADA/AADE) since 2006 for meeting National Standards for Diabetes Self-Management Education.

There has been a constant frustration among health care providers regarding the lack of evidenced based resources in Harrisonburg and Rockingham County area for people with prediabetes or high risk of developing type 2 diabetes.

Each year a quality improvement project is identified. Implementation of the National Diabetes Prevention Program (DPP) was chosen as the project for 2016-2107.

Diagnostic criteria for prediabetes is fasting blood sugar (FBS) = 100-125 or A1c = 5.7% - 6.4%.

Diagnostic criteria for diabetes is random glucose > 200 with symptoms or FBS > 125 or A1c > 6.5%.

Diabetes prevention or prediabetes education is not covered by insurances. Medicare is establishing a plan for coverage beginning in 2018 when provided by an accredited/recognized program to provide services. It is anticipated commercial insurances will follow.

#### Statement of Problem

According to Centers of Disease Control (CDC) 1 in 3 adult Americans have prediabetes. Of those that have prediabetes, 9 out of 10 are unaware. Without intervention, many people with prediabetes will develop type 2 diabetes within 5 years.

People with diabetes incur on average \$13,700 annually in medical expenses. That's about 2.3 times the medical expense of a person without diabetes.

Years of research has shown the national DPP created by the CDC can prevent type 2 diabetes by 58% in high risk individuals including those who have prediabetes and by 71% in those aged 60 years or older.

This finding was the result of the program helping people lose 5% to 7% of their body weight through healthier eating and 150 minutes of physical activity a week by ongoing support and education.

### Methodology

- SRMH Foundation provided at \$10, 000 grant for a pilot diabetes prevention program.
- Virginia Department of Health provided \$1400 grant for DPP training and supplies.
- Anthem/Virginia Department of Health partnership provided \$20,000 to develop/implement early screening and referral integration within SRMH electronic medical record (EMR)
- Community Health Workers were trained as DPP lifestyle coaches using established CDC curriculum.
- SRMH applied to be a recognized provider of DPP
- "Rules" developed within EMR to automatically screen patients for BMI ≥ 24, >age 45 or history of gestational diabetes. "Best Practice Advisory" (BPA) will fire if positive for two or more criteria, prompting provider to order labs for early identification of prediabetes

▼ BestPractice Advise	ories			C
① This patient has scre you like to order an	ened at risk for pre A1C?	diabetes. Would	✓ Accept (2)	<b>x</b>   *
Order	Do Not Order	the HGB A1C WITH	EST AVG GLUCOSE	
Order	Do Not Order	BASIC METABO	DLIC PANEL	
Acknowledge Reason	n			
✓ Accept (2)				

 Developed paper referral "prescription pad" for providers to use until electronic referral built and tested.

		n Sentara RMH Medical Center's Diabetes Prevention Progra may enroll at 1-800-SENTARA or online at Sentara.com.
(First Name)	(MI)	(Last Name)
The above person is r	recommended for enrollment in the	e DPP based on the following eligibility criteria:
Be at least 18 years	s old, and	
Be overweight (bod	y mass index ≥ 24; ≥ 22 if Asian), and	
Have no previous di	iagnosis of Type 1 or Type 2 diabetes,	and
Have a blood test re	esult in the prediabetes range within t	he past year:
<ul> <li>Hemoglobin A10</li> </ul>	C: 5.7%-6.4%, or	
<ul> <li>Fasting plasma g</li> </ul>	glucose: 100-125 mg/dL, or	
o 2-hour plasma g	lucose (after a 75 gm glucose load): 14	0-199 mg/dL, or
Be previously diagn	osed with gestational diabetes	
	Healthcare provider	Date
_	SENTARA. For questions or for more in 182 or japieran@sentara.com. This pro	formation, contact Julie Pierantoni, Diabetes Program gram is free.

monty:	Non-Urgent	5-7 Days	2 Weeks   4 Weeks	Jegent			
Nass:	Outgoing						
referral.	Location POS:		From:	MUNISON, AME R. (910038)	To:	ds.	P 99
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teferral Relation:	The state of the s		uired Second Opinion				
Raference Links: 1. VA DPP Sites							
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	Reason for Refers		Table at help and the first facility and it	22. if Asian No Hx T1DM or T2DM A1	C: 57-6.4%   FBS (plasma): 100	3-125 mg/dL	
	2. Barriers 😈		Sarris MANON MINESON IN	-199 mg/dL + Hx Gestational DM red Hearing   Impaired Mobility   Learning	Disability   Morbid Obesity   Visi	usi Impaired	
				chosocial Status   Eating Disorder   Impa	and the control of th		e 1
Comments (f	Det 2 3	ment fin	arties 5				
	Labs must be with	in the past year.					

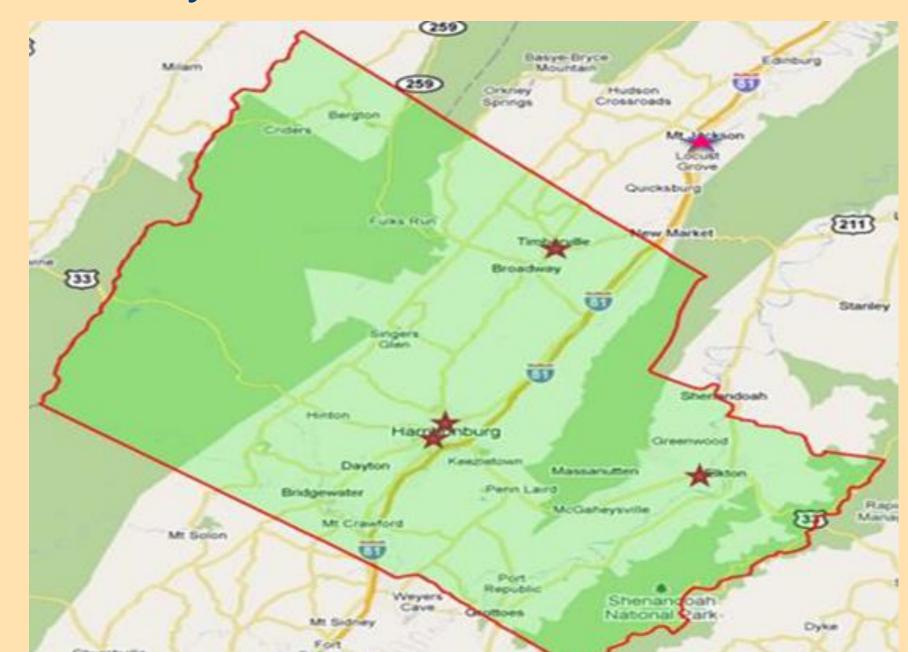
#### Results

DPP is a year long program. First six months participants meet for 16 sessions; second six months participants meet monthly for continued support.

"Prevent T2" curriculum established by CDC.

Module 1-16	Description
Program Overview	An overview of the PreventT2 Lifestyle program, background, goals, explanation of the course structure, and your role as a coach.
Introduction to the Program	Sets the stage for the entire Prevent T2 course. Presented at the first session.
Get Active to Prevent T2	Provides the core principles of getting active. Recommended at the second session.
Track Your Activity	Provides the core principles of tracking activity. Recommended at the third session.
Eat Well to Prevent T2	Provides the core principles of healthy eating. Recommended at the fourth session.
Track Your Food	Provides the core principles of tracking food. Recommended at the fifth session.
Get More Active	Provides the core principles of increasing activity level. Recommended at the sixth session.
Burn More Calories Than You Take In	Provides the core principles of caloric balance. Recommended at the seventh session.
Shop and Cook to Prevent T2	Teaches participants how to buy and cook healthy food.
Manage Stress	Teaches participants how to reduce and deal with stress
Find Time for Fitness	Teaches participants how to find time to be active.
Cope with Triggers	Teaches participants how to cope with triggers of unhealthy behaviors.
Keep Your Heart Healthy	Teaches participants how to keep their heart healthy.
Take Charge of Your Thoughts	Teaches participants how to replace harmful thoughts with helpful thoughts.
Get Support	Teaches participants how to get support for their healthy lifestyle.
Eat Well Away from Home	Teaches participants how to stay on track with their eating goals at restaurants and social events.
Stay Motivated to Prevent T2	Helps participants reflect on their progress and keep making positive changes over the next six months. Recommended at the six-month mark.

DPP implemented in three community sites the Fall 2016-- Harrisonburg, Elkton, Timberville; a second cohort began January 2107. A third cohort began summer 2017 in Harrisonburg and Mt. Jackson. Wide area of outreach enabled patients to receive care in their community.





#### Conclusions

Physicians have an evidenced based prevention program to refer patients with prediabetes or at high risk

Patients are receiving education and support to prevent progression to diabetes in their familiar community settings patients

#### **SRMH DPP Lifestyle Coaches**

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