

2017 Tenth National Doctors of Nursing Practice Conference: New Orleans  
Celebrating 10 Years: Diversity & Inclusion in Practice

**A DNP-Led, Culturally-Tailored Program to Improve  
Diabetes Outcomes in Diverse Populations**

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## Problem

## Background

## Purpose

### ➤ **Diabetes Disease Burden**

(Gonzalez, Berry, & Davison, 2013)

- **Magnitude** (CDC 2011, CDC 2014)
  - 29.1 million people
  - \$245 billion
- **Complications**
  - Microvascular
  - Macrovascular

### ➤ **Disparities in Latinos**

(Dominguez et al., 2015)

- **3 times more likely** to have complications
- **Least likely** to have
  - Health insurance
  - Formal **Diabetes Self-Management Education (DSME)**

### ➤ **Formal DSME**

mitigates diabetes

disparities (Brunisholz et al., 2014; Powers et al., 2015)

### ➤ **Healthy People 2020**

(U.S. Department of Health and Human Services, 2015).

- **Increase** the number who receive formal DSME
- **Reduce** the diabetes burden

- **Increase Delivery of Formal DSME** to Hispanic Americans

### ➤ **Evaluate**

- Knowledge
- Self-Efficacy
- Satisfaction
- Glycemic control

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# Objectives

By the end of this presentation, the participant will be able to

- **Articulate the role of the DNP-prepared professional** in mitigating the impact of diabetes disparities;
- **Identify** the statistically and clinically significant result(s);
- **Name three practice implications** for the DNP-prepared APRN.

# Role of the DNP Professional: DNP Essentials (AACN, 2006)

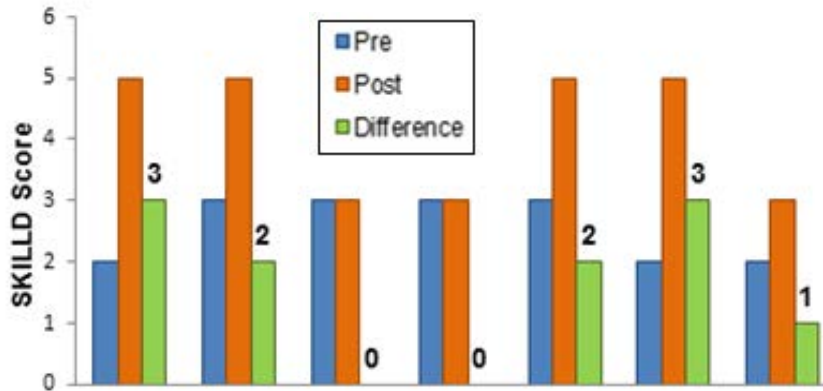
- **Scientific Underpinnings for Practice** - Social Cognitive Theory (Bandura, 2004)
- **Clinical Scholarship and Analytical Methods** for Evidence-Based Practice
  - **Literature Review** (Castillo et al., 2010; Rosal et al., 2011; Swavely, Vorderstrasse, Maldonado, Eid, & Etchason, 2014; Valen, Narayan, & Wedeking, 2012)
    - **Community Health Workers (CHW)**
    - Shared meals/socialization
    - Literacy tailored/**Diabetes Conversation Map**
  - **Outcomes**
    - **Spoken Knowledge in Low Literacy in Diabetes (SKILLD) Scale** (Pena-Purcell, 2011; Rothman, 2005).
    - Stanford Diabetes Self-Efficacy Scale (Lorig, 2003)
    - **Participant Satisfaction Survey** (Herrman et al., 2012)
    - Glycemic Control (Hemoglobin A1c)
- **Interprofessional Collaboration** for Improving Patient and Population Health
  - APRN
  - RNs
  - Bilingual Bicultural Interpreters (BBI)



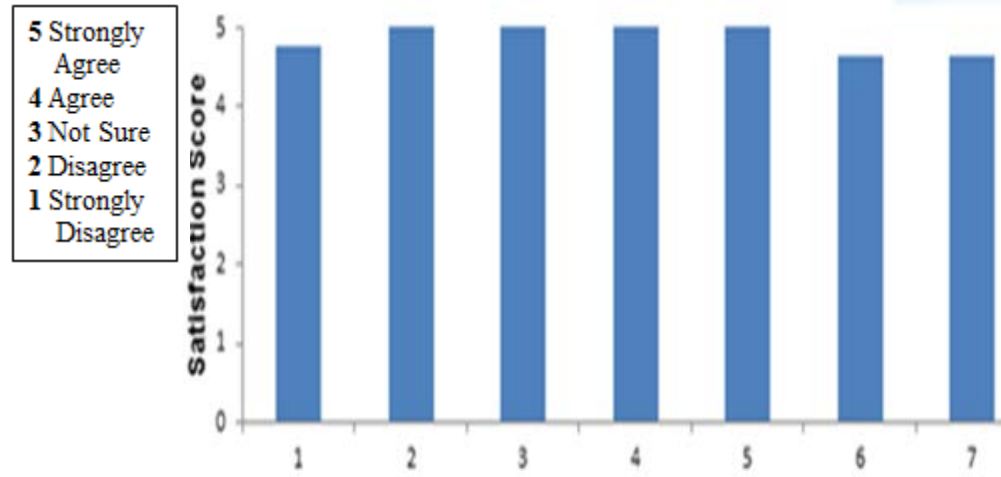


# Results (n=7)\*

## SKILLD Score per Participant ( $p=.041$ )

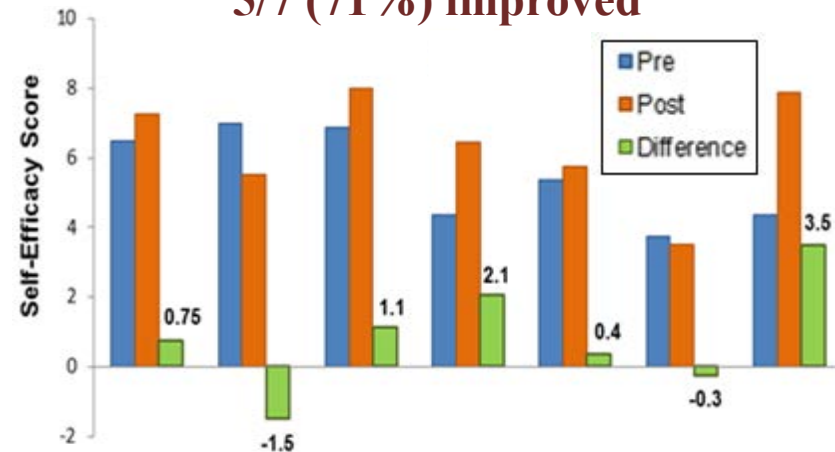


## Satisfaction Score per Participant, 4.8/5 (96.8%)



- **SKILLD Scores were statistically significant\*\*** (Wilcoxon Signed Rank Test,  $p = .041$ ).
- **Satisfaction Scores were high** (4.8/5= 96.8%).
- **Self-Efficacy Scores were clinically significant** ( $p= .176$ ). Five out of 7 participants (71%) improved.
- **Participant Characteristics (n=8)\***
  - 75% Female, Average Age (SD), 51.6 (12) Years
  - 62.5% Completed 5<sup>th</sup> Grade
  - 37.5% from El Salvador, 37.5% from Mexico

## Self-Efficacy per Participant ( $p= .176$ ) 5/7 (71%) improved



\* The **Participant Characteristics** were based on 8 participants. One participant did not complete the pretests; therefore, program evaluation **results** were based on 7 participants.

\*\* Changes in hemoglobin A1c values ( $p=.854$ ) were not statistically or clinically significant.

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# **DNP Practice Implications**

- **Increase delivery of DSME by minimizing barriers to participation.**
- **Improve diabetes knowledge, self-efficacy, and patient satisfaction.**
- **Provide a framework for building culturally-tailored DSME programs for other populations in need.**

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