



**Improving T2DM Management in Adults Through Implementation of DSME Protocol**

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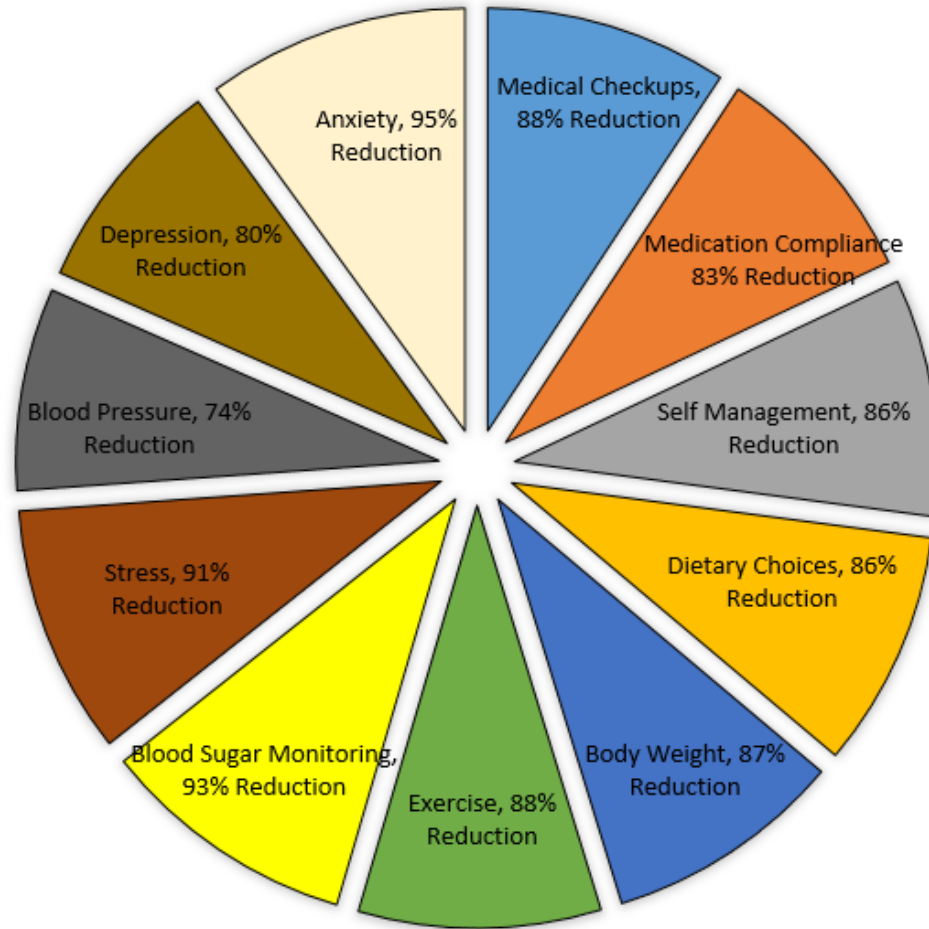
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This project is in partial fulfillment of the degree requirements for the Doctor of Nursing Practice at Touro University Nevada.

# Project Aim

- To foster preventive care, early detection, ensure screening and referrals, and management of a chronic disease inflicting many adults.
- To inspire other APRNs to take initiatives to execute successful change proposals.

BEFORE AND AFTER PROTOCOL T2DM PATIENT IMPROVEMENTS  
PERCENTAGES



What was  
Achieved

*Percentage of T2DM  
Patients Improvement*

## Practice Pearls

- Quality in delivery of healthcare
- Greater percentage of quality of life
- Recognition of susceptibilities
- Prompt identification of issues.

# DNP Problem

- T2DM- a disease with lasting effects that can negatively impact the lives of many people.
- T2DM can be controlled and the complications avoided with education and self-care behaviors (Dehkordi, 2017).
- DSME protocol gives providers the skills necessary to promote healthy lifestyles.

## Background Information

- T2DM prevalence- 4.7% in 1980 to 8.5 % in 2014 (Kasole, 2019).
- 2015- ADA policy statement.
- Minority population mostly affected by T2DM.
- Cost of managing T2DM.
- T2DM & its complications- leading causes of death (Kasole, 2019).
- Effects of Hyperglycemia- major attributors to complications of T2DM.

# Significance to Nursing

- Enhanced and improved patient care, safety, outcome, and healthcare delivery.
- Focuses on experienced providers working in a primary care clinic.
- Credible in clinical examination, advancement, and implementation of a standardized DSME protocol.
- Essential tool for providers and staffs to assess self-management shortcomings.

## Project Site

- A primary care clinic in the Canarsie section of Brooklyn, NY.
- Population of interest- Providers.
- Demographic- primarily African American of different Caribbean nationalities.
- The patient volume- 80-150 patients daily.
- 75 % of the patients in the clinic have T2DM.
- The predominant language-English.



## Project Problem

- The project site did not have a protocol to guide DSME care.
- Practice approach was provider dependent.

## Purpose Statement

To implement a diabetic self-management education protocol (DSMEP) to guide providers and medical staff in evidence-based practice.

# Project Objectives

- To implement an evidence-based DSMEP.
- Administer an educational seminar for the multidisciplinary.
- Improve staff compliance.
- Improve behavior change with T2DM through the implementation of DSMEP.
- Improve T2DM self- management.

## Review of Literature

- Recent full- text articles no greater than 5 years old.
- Written in the English language.
- Specific focus on T2DM, DSME, the transtheoretical model, Knowles adult learning theory and self- management of T2DM.
- Articles regarding reviews, retrospective studies, and pediatric studies were excluded.

# Themes

- Diabetic management.
- Nursing leadership.
- Dietary recommendations.
- Lack of resources.
- Lack of family support.
- Benefits of DSME.

## Sub-themes

- Self- management of T2DM.
- Contents of DSMEP.
- Types of Diabetes.
- Characteristics of T2DM.
- Most common symptoms of T2DM.
- Goals of DSMEP.

## Theoretical Models

- Malcolm Shepherd Knowles's Adult Learning Theory and the Transtheoretical Model (TTM) of health behavior change.
- The TTM was the dominant model used to influence providers changed behavior.

## Project/Study Design

- Quality improvement design.
- DSMEP- directed towards quality improvement activities.
- Independent variable- education/tool.
- The dependent variable- provider compliance.



# Implementation

- Recruitment, protocol introduction, education of staff/providers.
- Pre-test.
- The DSMEP- implemented in week one.
- Data collection- chart audit tool (P-DAT).
- Assessment of the effectiveness of implementation.
- Monitored activities and processes of intervention.
- Data collection completed, analysis performed, evaluation post implementation utilizing IBM SPSS.

# Evaluation

## Post-Test - Pre-Test Differences

<u>Question</u>	<u>Pre Test</u>	<u>Post Test</u>	<u>Differences</u>
<u>6</u>	56	56	0
<u>15</u>	83	83	0
<u>1</u>	78	83	5
<u>5</u>	61	72	11
<u>8</u>	61	72	11
<u>12</u>	78	89	11
<u>9</u>	61	78	17
<u>3</u>	61	83	22
<u>13</u>	72	94	22
<u>2</u>	67	94	27
<u>14</u>	67	94	27
<u>7</u>	72	100	28
<u>4</u>	56	89	33
<u>11</u>	56	89	33
<u>10</u>	56	100	44

## Chart Audit Tool Compliance Questions

Chart Audit Tool - Compliance	Question	Summary		Percentage	
		Yes	No	Yes	No
Have you ever discussed T2DM health education with the patient?	1	14	4	77.8%	22.2%
Do you believe that a DSMEP is necessary?	2	17	1	94.4%	5.6%
Do you think you will get support from the medical team regarding a DSMEP?	3	15	3	83.3%	16.7%
Did the patient meet the criteria for the DSMEP?	4	17	1	94.4%	5.6%
Did you initiate the DSMEP for this patient?	5	15	3	83.3%	16.7%
Was hemoglobin A1C done on the patient to determine target self-management?	6	16	2	88.9%	11.1%
Did you feel comfortable speaking to the patients with T2DM about the DSMEP?	7	18	0	100.0%	0.0%
Did you have to make any change to the patient's plan of care due to the DSMEP?	8	15	3	83.3%	16.7%
Was the DSMEP easy to follow and explain to the patient?	9	17	1	94.4%	5.6%
Do you feel that you can be consistent in complying with the DSMEP?	10	15	3	83.3%	16.7%
Are you receptive to adding the DSMEP to the plan of care for patients who did not meet the criteria?	11	14	4	77.8%	22.2%
Do you refer your patients with T2DM to a Podiatrist?	12	12	6	66.7%	33.3%
Was consult made for other resources such as an Ophthalmologist for the patient with T2DM?	13	13	6	72.2%	33.3%
Are you prepared to help the patients suffering from T2DM to adjust their lifestyle behaviors, enhance glycemic control, and prevent long term complications?	14	18	0	100.0%	0.0%

# Conclusion

- Improved the providers compliance to 83%.
- The project results supported the essential roles of provider awareness, patient self-management, and adoption of a standardized protocol as a means of providing preventative care services to adult patients.
- The DSMEP provided an enhancement in the medical providers standards of practice and increased their professional growth and development.
- The project lead coupled with the collaborative stakeholders were equipped with the expertise, knowledge, and the process to maintain a substantial change.

## Dissemination

- A poster presentation.
- A manuscript of the project.
- Abstract submission at the National Conference of Nurse Practitioners 2021 Spring conference.
- Doctor of Nursing Practice Repository.

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Thank you for  
your attention!!