

# Utilization of Depression Screening in Patients with Type 2 Diabetes Mellitus

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## Purpose

The purpose of this DNP project is to determine the effectiveness of screening patients with Type 2 Diabetes Mellitus for depression using the PHQ-9 screening tool.

## Specific Aims

- Aims to investigate the feasibility and effectiveness of implementing the Patient Health Questionnaire-9 (PHQ-9)
- Compare effectiveness of implementing PHQ-9 ratings of those with DM Type 2 only vs those with DM Type 2 and comorbid depression
- Correlate age and gender with the likelihood of being screened with the PHQ-9.

## Background

- The coexistence of depression and type 2 diabetes mellitus (T2DM) poses a significant challenge in managing the overall health and well-being of affected individuals.
- Depression may affect the quality of life and may contribute to poor glycemic control. In term, this may contribute to increasing morbidity and mortality rates.
- The Patient Health Questionnaire-9 (PHQ-9) has emerged as one of the most reliable and widely used screening tools for assessing depression symptoms in various populations. Its' comprehensive application in individuals with T2DM requires further exploration.

Table 1. PIO framework and key words		
PIO:		Key words
Population	Adults (aged over 18 years)	Young adults, middle-aged adults, older adults
Intervention/issue	Diagnosed with type 2 diabetes	Type 2 diabetes mellitus, T2DM, adult-onset diabetes, non-insulin dependent diabetes, diagnosis, diagnosed
Outcome	Risk of developing depression	Depressive symptoms, depressive disorders, depressive status, likelihood, possibility, prevalence of depression, associations

(Coley, et al, 2022)

## Methods

### ● Study Design

- Retrospective Chart Review

### ● Setting

- University Clinical health/UT Family Medicine in Memphis, TN

### ● Study Duration

- September 18, 2023-November 29, 2023

### ● Study Population

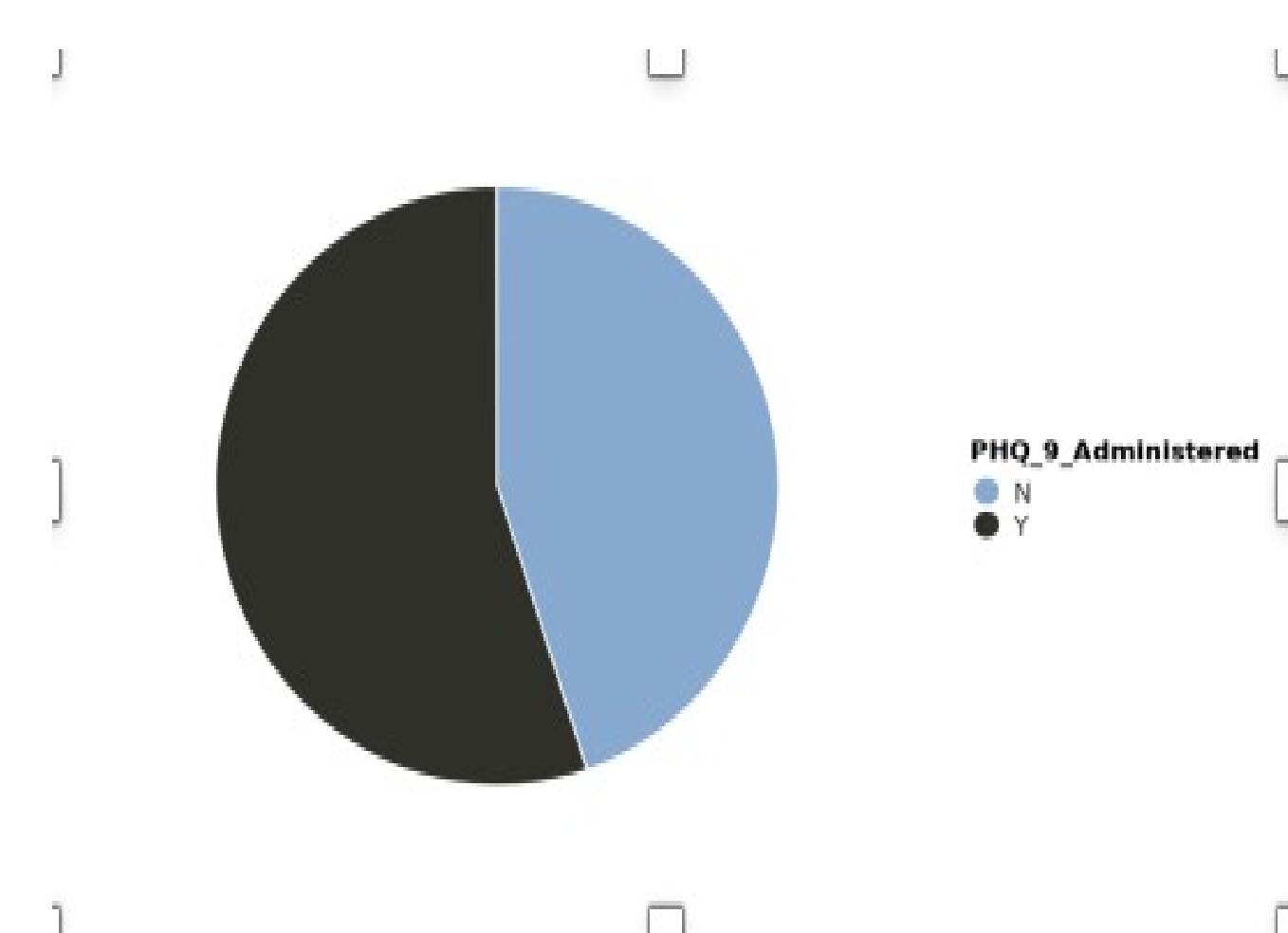
- Adult patients ages 30-78 with a diagnosis of Type 2 diabetes screened for depression

### ● IRB

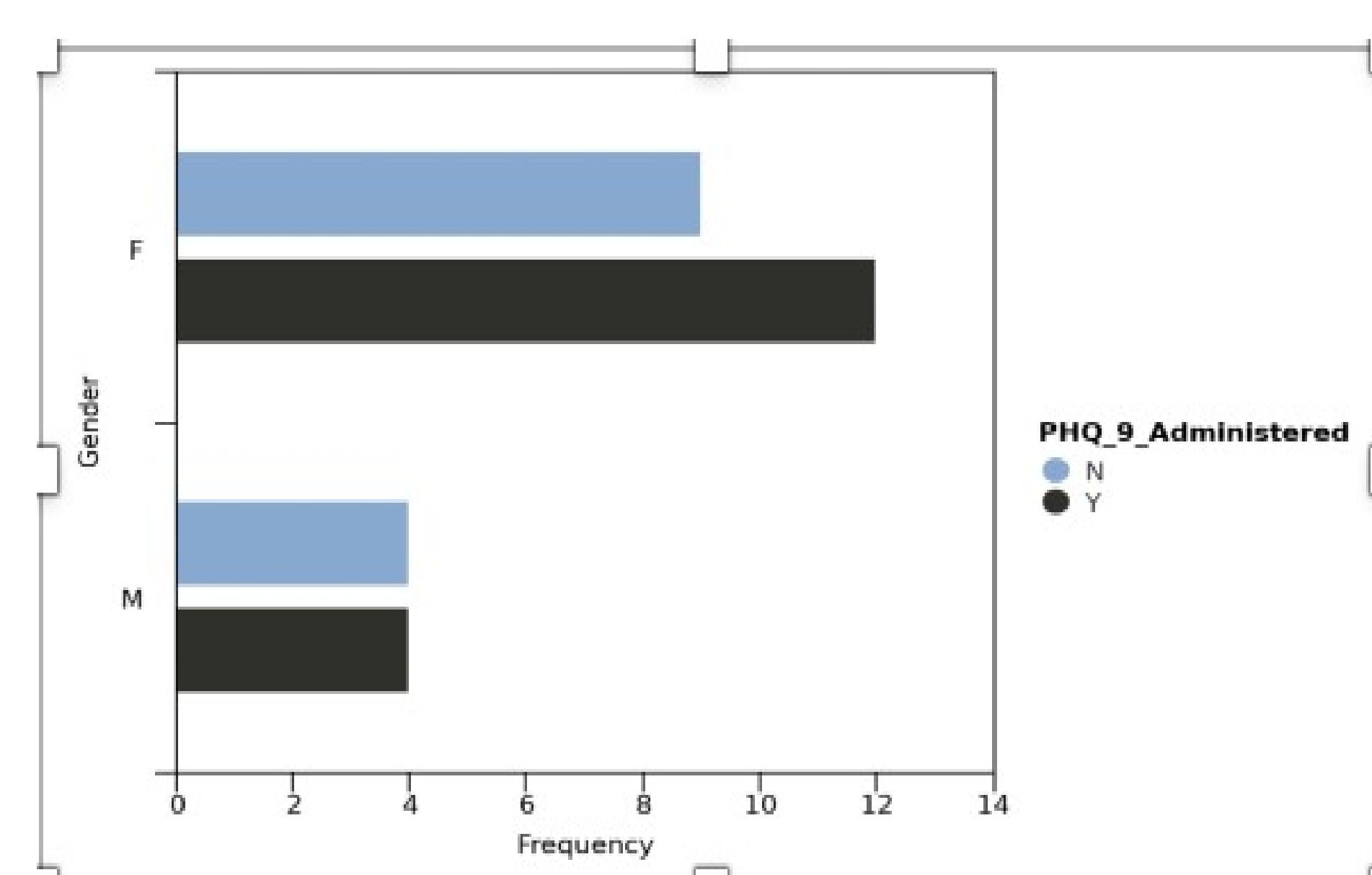
- UTHSC Internal Review Board (IRB) has deemed this project exempt

## Results

- Of the 29 charts reviewed, 16 of the patients that met the criteria were assessed with the PHQ9, and 13 were not



- The data revealed there was a possible decrease in the likelihood of administering the PHQ-9 to patients as they get older
- The data revealed women were screened higher in comparison to men



## Implications for Practice

- Collect data regarding the effectiveness of screening patients with Diabetes Mellitus Type 2 for depression with the PHQ-9 questionnaire
- Determine if a correlation exists between the effectiveness of screening patients with Diabetes Mellitus Type 2 for depression with the PHQ-9 questionnaire than not screening
- Determine if a correlation exists between the age and gender of the patient with DM Type 2 and their likelihood of being screened for depression
- Determine if a correlation exists between implementing PHQ-9 ratings with comorbid depression
- Identify what EBP strategies are currently in place
  - (frequency of depression screenings, medication adherence, maintenance of depression and diabetes symptoms, symptom recognition of DM type 2 and depression)
- Identify strengths and weaknesses of EBP strategies utilized to determine effectiveness of screening DM type 2 patients for depression using the PHQ-9 questionnaire

## References

