Improving Utilization of Screening Protocol to Identify Anxiety in a Nursing Home Population

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Introduction

Anxiety is frequently overshadowed by depression, however, it can be just as debilitating and as serious as depression.

- One of the most common mental health disorders in the world according to the World Health Organization. (WHO, 2018)

- As many as 31% of individuals in the U.S. will experience an anxiety disorder in their lifetime. (NIMH, 2017)

- The economic burden of mental health disorders including anxiety is estimated to be 85 billion dollars annually. (WHO, 2018)

Anxiety not only lowers quality of life, but also increases the rate of mortality and morbidity for a wide range of diseases.

- Correlation between anxiety and an increased incidence of heart disease, a significant increase in both dementia and cognitive impairment, and even a 200% increase in the incidence of irritable bowel syndrome (IBS). (Kang et al., 2017; Santabárbara et al., 2019, Gulpers et al., 2016; & Sibelli et al., 2016)

- Additional studies found a link between anxiety and Type II Diabetes Mellitus. (Bickett & Tapp, 2016)

Project Background

- Although anxiety affects many individuals, it often goes undetected due to lack of screening by medical providers. (Remes, et al., 2016)

- Utilizing a standardized screening method can help to detect anxiety. (Plummer, et al., 2016)

- The U.S. Preventative Services Task Force recommends that anxiety be screened for in the primary care setting. (USPSTF, 2021)

Project Purpose

Anxiety in the Elderly

- One of the most common psychiatric conditions for older adults. (Creighton et al., 2018)

- Rates of anxiety amongst older adults range from 1.4% to 17% for those living outside nursing homes.
(Creighton et al., 2019)

- Rates are even higher, up to 30% for those in senior living.
(Smallbruge et al., 2005; Kang et al., 2010)

Project Question

In the geriatric (65+ year old) nursing home population, does the implementation of an anxiety screening protocol over a one-month period improve the identification and treatment of anxiety as compared to current practices?

Project Parameters

- POPULATION: Primary care providers and staff in nursing home.

- INTERVENTION: Implementation of anxiety screening protocol.

- COMPARISON: Currently no protocol established.

- OUTCOME: Improve screening and management of anxiety.

- TIMELINE: Implementation timeline is 4 weeks.

Project Details

- Site Location: Clinic located at a senior living residence in the northern phoenix metropolitan area.

- Patients: All patients are 65+ year-old seniors and residents at the senior living facility.

- Healthcare Staff: There is an NP owner, an additional NP employee, three MA's, and three NP Interns involved in the project and patient intake.

Methodology

- The Plan-Do-Study-Acy (PDSA) project guidelines were used to structure the project.

- A comprehensive literature review was conducted to identify anxiety related evidence-based practices (EBP).

- Protocol was developed that would be time efficient, effective, and easy to use.

Protocol Developed Based on EBP
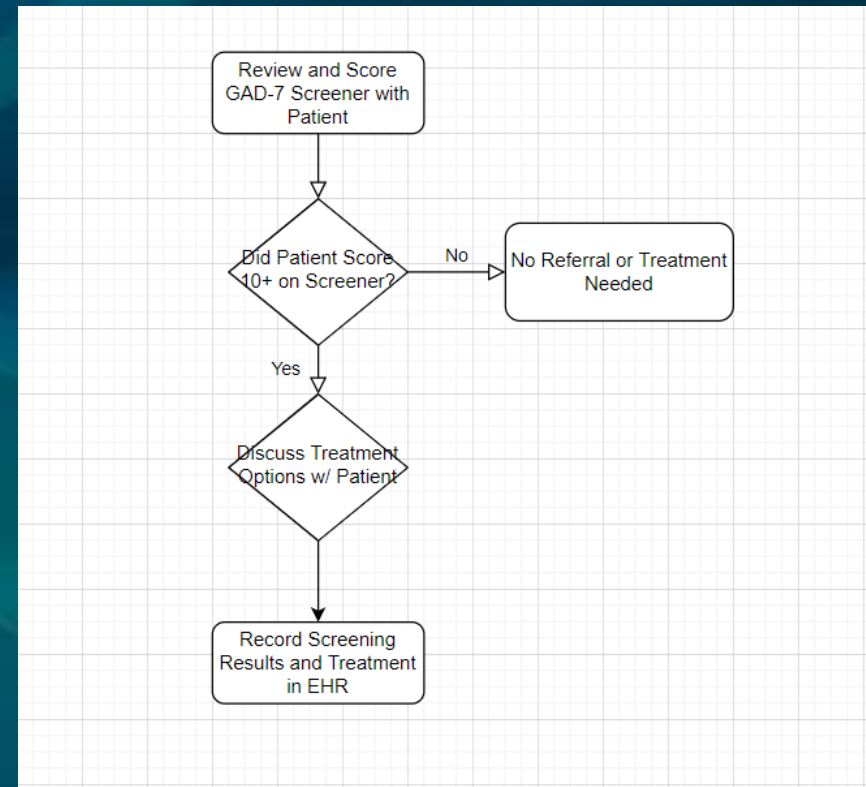
Tool Selection

- Multiple anxiety screening tools were reviewed and evaluated.

- GAD-7 Tool was selected due to the following:

  - Tool is evidence-based and widely used and recognized.

  - Ease of use.

  - Appropriate for this population.

  - No specific permission needed.

  - High level of specificity and sensitivity in detection of anxiety.
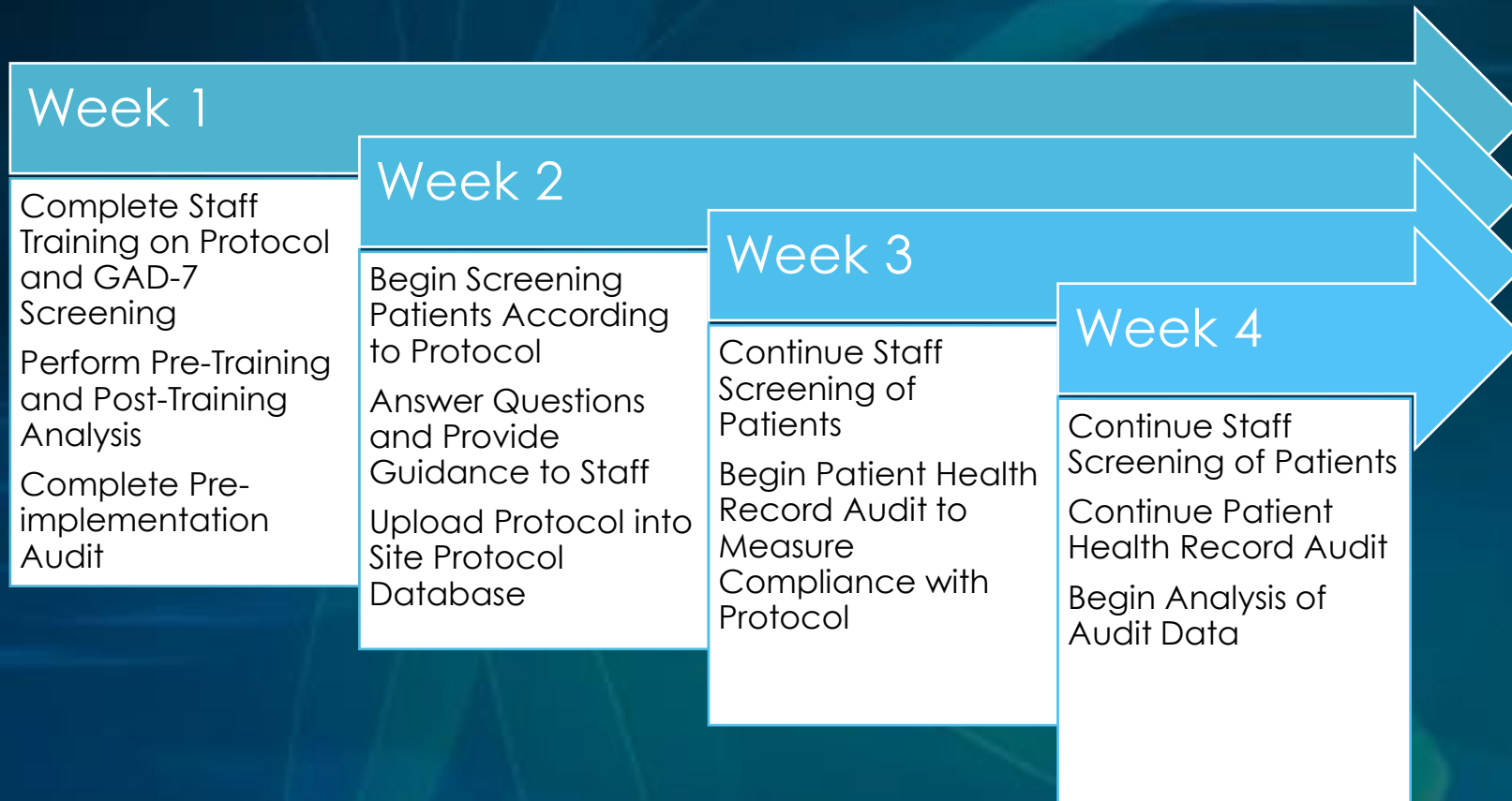
Implementation Timeline

Week 1

Complete Staff Training on Protocol and GAD-7 Screening

Perform Pre-Training and Post-Training Analysis

Complete Pre-implementation Audit

Week 2

Begin Screening Patients According to Protocol

Answer Questions and Provide Guidance to Staff

Upload Protocol into Site Protocol Database

Week 3

Continue Staff Screening of Patients

Begin Patient Health Record Audit to Measure Compliance with Protocol

Week 4

Continue Staff Screening of Patients

Continue Patient Health Record Audit

Begin Analysis of Audit Data

Analysis – Protocol Compliance

**Means & Standard deviation
(Pre-Implementation)**

p< 0.0001*

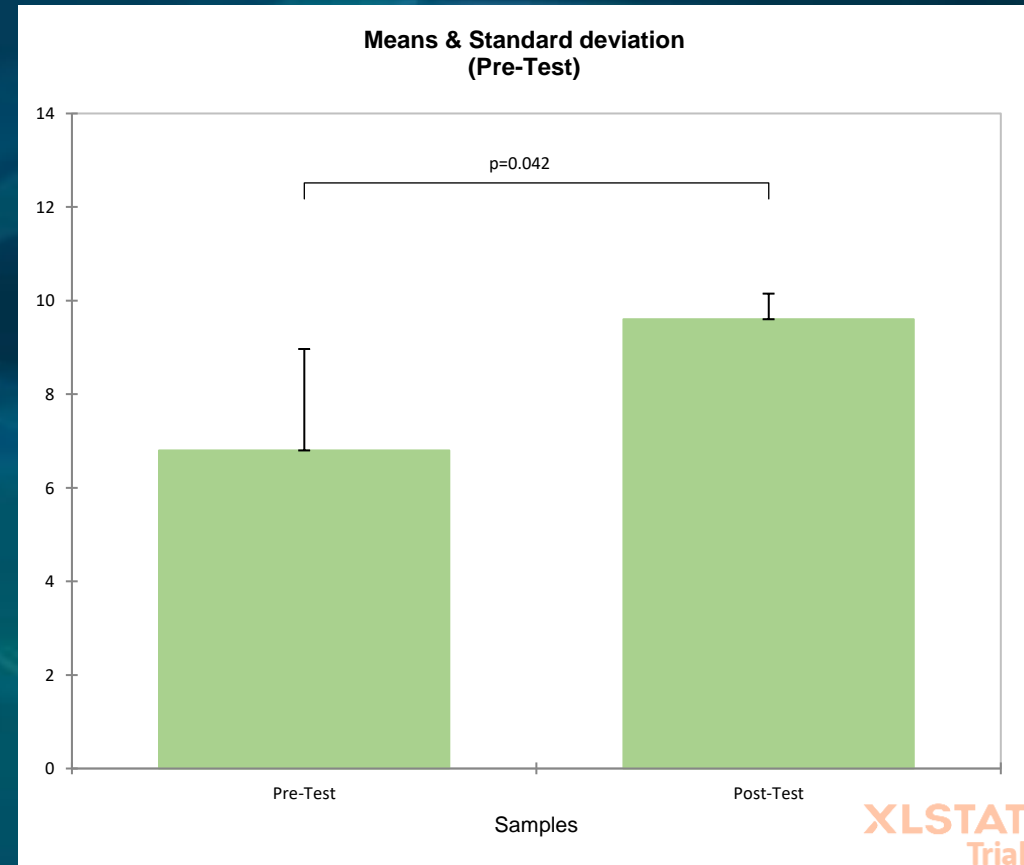Pre-Implementation   Post-Implementation

Samples

*: significant at level alpha=0.05

XLSTAT
Trial

- Audit of 120 patient records were gathered to compare anxiety screening before vs. after protocol implementation.

- Additional 120 patient records audited post-implementation.

- Audit showed a 1.7% screening rate baseline vs. more than 95% screening rate compliance post- implementation.

- Two-Tailed t-test completed to confirm improvement in level of screening performed pre and post implementation (p-value: <0.0001).

Analysis - Training

- An anxiety screening and protocol training was completed with staff.

- A pre-training and post-training learning analysis was completed with staff.

- Staff knowledge scores improved from 68% to 96%.

- A Wilcoxon Signed-Rank Test was completed to determine if improvement in staff learning was statistically significant (p-value: 0.042).

Means & Standard deviation (Pre-Test)

p=0.042

Samples

Pre-Test   Post-Test

XLSTAT
Trial

Project Limitations

- There were some limitations related to this study including:
  - Pre-defined implementation period of 4 weeks and inability to audit longer-term compliance with protocol.
  - Limited size of study being conducted at a single site.
  - Semi-homogenous patient study group being confined to only patients 65+ located onsite at senior living facility.

Project Summary

- Protocol established as part of standard protocols.

- Training on screening and protocol met or exceeded objective.

- Compliance with anxiety screening protocol is excellent.

Implications for Nursing

- Project will be posted to DNP database and submitted to multiple journals for easy access to implement at other sites.

- The findings from this QI project demonstrate that the introduction of evidence-based practices can improve the knowledge of both experienced and less experienced nurses.

- The field of nursing often differentiates itself by focusing on a person holistically rather than just treating the symptom or disease for patients that are primary complaints or are readily seen. (Shah et al., 2017)

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