Nurse Practitioner Satisfaction with Initiation of Depression Screening on an Inpatient Diabetes Service

Emily Sorensen, MSN, RN, FNP-C
Faculty Chair: Sue Ellen Bell PhD, RN, PHCNS, BC
Clinical Preceptor: Kathleen Zarling, MS, RN, ACNS-BC, FAACVPR, FPCNA

Problem
- The providers on the nurse practitioner-run Diabetes Consulting Service at a large Midwestern hospital do not formally screen patients with diabetes for depression.
- Through an analysis of the clinical research literature, it was demonstrated that it is beneficial for nurse practitioners on the Diabetes Consulting Service to screen for depression as part of their care of patients with diabetes.

Clinical Practice Question
- In nurse practitioners on a diabetes consulting service in a large uper-midwestern hospital who are following adult inpatients who have diabetes mellitus type two, how does using the PHQ-2 depression screening tool with initial consult visits impact satisfaction of the nurse practitioners in their ability to appropriately screen patients with type two diabetes for depression (measured by an after-only questionnaire), and impact follow-up for patients after discharged from the hospital as measured over 60 days compared to the current standard of care (no standard depression screening)?

Current Evidence
- Read 173 abstracts; selected 21 articles for full review; reviewed five guidelines
- Literature focused on diabetes mellitus type two and depression

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<th>Intervention</th>
<th>Level of Effectiveness</th>
<th>Level of Evidence</th>
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Theoretical Underpinnings
- Middle range Theory of Chronic Sorrow by Eakes, Burke, and Hainsworth (1998)
- Provides framework in which to explain the normal process of coping with a loss experience, including the diagnosis of a chronic illness
- Loss experience leads to individual’s despair
- Offers an explanation of an individual’s reaction to loss with chronic sorrow
- Theory supports evaluating the psychological impact of individuals with chronic disease

Evidence-Based Practice Model
- Stetler Model of Research Utilization (2001)
- Theory guided the development of the proposed project, as the process of utilizing evidence-based research in a practice change followed Stetler’s model
- Stetler model applicable to the providers of the Diabetes Consulting Service who make the decision whether or not to pursue depression screening on their patients

Cost/Benefit Analysis
- Total direct cost of project: $20 in printing fees for PHQ-2
- Benefit: No immediate financial benefit in project; long-term potential cost savings from treating depression so as to lead towards medication and nutrition compliance (Acee, 2010), thus decreasing need to treat diabetes complications

Process Considerations Stakeholders
- Nurse practitioners (18) and physician assistants (2) on Diabetes Consulting Service
- Hospitalized patients who have diabetes
- Clinical site of capstone as well as other hospitals around the country

Feasibility/Utility
- Nurse practitioners already have initial consult visit with patient
- Feasibility based upon feedback from providers
- Some patients critically ill or not feeling well; circumstances may impact PHQ-2 score

Method
- PHQ-2 depression screening tool used for depression screenings
- Implementation period: 60 days
- Patients intubated, confused, or otherwise unable to answer questions were ruled out

Results
- The Diabetes Consulting Service saw 957 patients during 60 day screening.
- A total of 21% of the patients seen by a nurse practitioner or physician assistant were screened for depression.
- Of the patients screened for depression, 33% had PHQ-2 score 3 or more (prompting message to primary care provider)
- One patient’s PHQ-2 screening led to a psychiatric service consult.
- Two patients received post-hospital follow-up for depressive symptoms.

Protection of Human Subjects
- IRB approval obtained from Minnesota State University Mankato
- IRB approval not deemed necessary at clinical site, as it was a practice improvement project
- Approval obtained from clinical site’s practice committee

Transferability to Other Settings
- Other Diabetes Consulting Services at other large hospitals may be able to incorporate depression screening into their visits.
- Other hospital services at this clinical institution and at other institutions may determine whether it would benefit their patient population to standardize depression screening.

Survey Comments
“Please share any other comments or barriers you may have regarding the implementation of depression screening for inpatients with diabetes.”

Themes of Survey Comments
- Lack of time for the depression screening, especially pre-surgery
- Lack of reception by primary care services, particularly by physicians in surgical services
- Emphasis on the felt positive practice improvement with depression screening

Clinical Practice Implications
- Depression screening deemed a positive practice change by 60% of participants.
- Barriers of time and openness of other hospital services to be addressed.
- Frequency of depression screening variable between providers, causing inconsistent practices

Recommended Changes to Practice
- Diabetes Consulting Service practice committee addressed topic.
- Depression screening with PHQ-2 tool will continue at discretion of providers.
- Providers will determine which patient will receive the PHQ-2 screening based upon time, felt possibility of depressive symptoms, and each providers’ comfort with the depression screening.
- Depression screening will not be a standard practice change for all patients.