Improving Depression Screening in Patients with type 1 Diabetes Mellitus

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INTRODUCTION

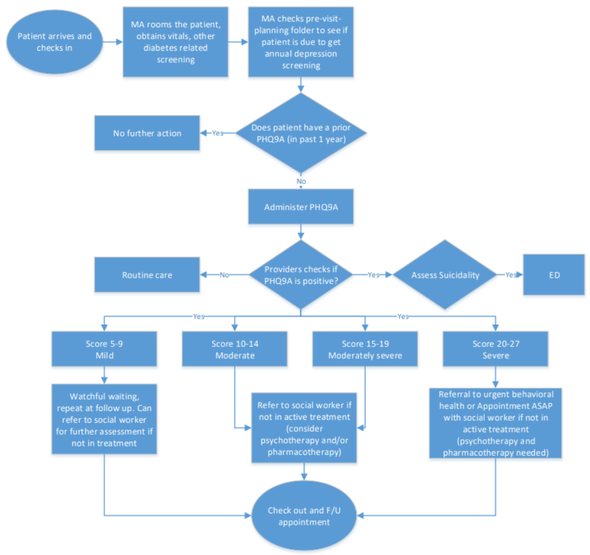
- Depression is among the most common mental illnesses in the pediatric population, particularly among adolescents.
- In 2019, about 15.5% of adolescents (aged 12-17) experienced at least one major depressive episode, and 18.8% reported seriously considering a suicide attempt.
- Youth with type 1 diabetes (T1D) have significantly higher rates of depression than the general population.
- Depression is widely undertreated despite its high prevalence in T1D, and about 40% of patients with T1D do not receive treatment for depression.
- Quality improvement efforts to improve screening with the Patient Health Questionnaire 9 (PHQ-9 in adolescent and adult populations are widespread, particularly in primary care settings. Identifying depression in specialty care is difficult, so standardized screening, diagnosis tools, and a formal diagnostic process are needed
- The Patient Health Questionnaire 9 for Adolescents (PHQ-9A) is a widely used, validated tool used to monitor and measure the severity of depression. The instrument incorporates DSM-IV depression diagnostic criteria and major depressive symptoms. A score of 10 or above has a specificity of 88% and a sensitivity of 88% for major depression.

PURPOSE

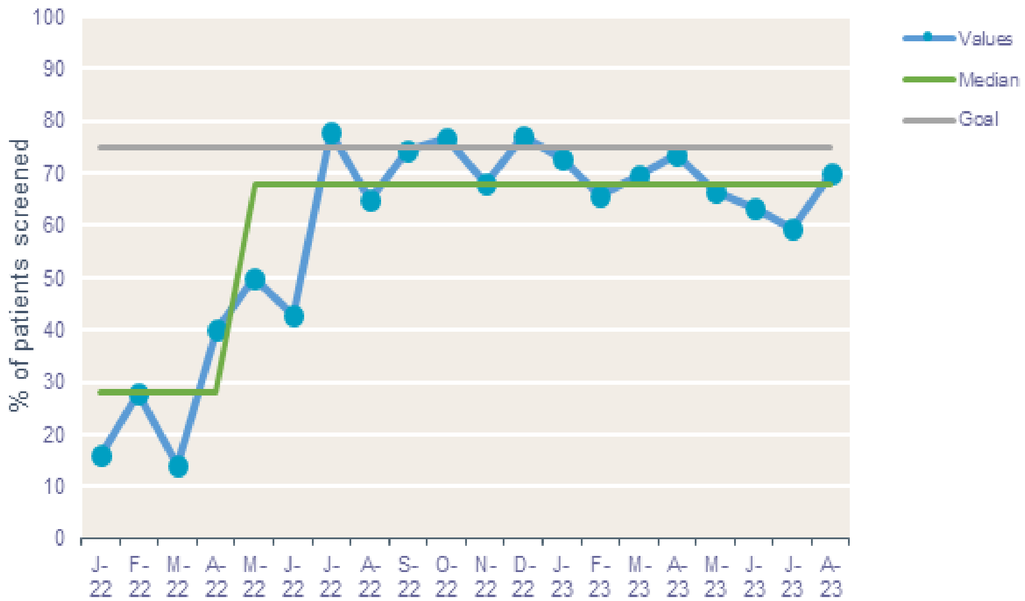
- To improve recognition of adolescent depression in patients, ages 11-17yo, with T1D through implementation of standardized annual screening for depression using PHQ-9A from baseline of 0% to 75% by August 2023.

METHOD

- Multidisciplinary team of physicians, RN, CDCES, medical assistants, social worker was created.
- Multiple PDSA cycles was conducted for education, folder for resources, algorithm, EMR changes, and referral to mental health.



FIGURE



RESULTS

- Systematic processes and multiple PDSA cycles led to increase in the number of patients screened for depression. We used run charts to track our data.
- Many patients with elevated scores were noted to already be connected with a mental health provider and receiving therapies/ medications.
- Depression was noted as a co-morbidity in these patients with type 1 diabetes allowing focus on whole person care in addition to diabetes alone.
- Making changes in EMR facilitated better recognition of patients due for an annual screening.

CONCLUSIONS

- A multidisciplinary approach to chronic disease management is critical to improving patient outcomes.
- Co-location of mental health providers helps facilitate timely screening, referral, and follow-up for patients with depression
- EMR can aid in provider decision support about patients due for screening. However, we are not meeting the benchmark (75%) yet for the following reasons:
  - Patients already being managed by a psychiatrist
  - Patients refusing screening, or inability to complete screening
  - BPA that fires for all patients (not just those with diabetes),
  - Ancillary staff do not recognize that the screening is for patients with T1D
- Social worker helped create a list of community-based providers for timely referral of newly diagnosed patients.
- Tracking data and ongoing PDSA cycles helped initiate and improve screening for depression in adolescent patients with type 1 diabetes.

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