Short Report

Use of clinical pharmacists to perform depression screening

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How this fits in with quality in primary care

What do we know?

Many patients with diabetes have concomitant depression and oftentimes the depression is undiagnosed or untreated. Identification and treatment of depression in this population is important to decrease depressive symptoms and complications of diabetes.

What does this paper add?

This paper demonstrates an interdisciplinary approach to screening patients for depression with the use of clinical pharmacists.

Introduction

Many clinics have received the designation of a patient centered medical home (PCMH). This type of environment allows for an interprofessional approach to managing patients. Since certain provider types may be new to clinics, roles are still being defined.

Our clinic recognized that depression screening for patients with diabetes is important since estimates indicate that 18-28% of patients with diabetes have coexisting depression.¹ Despite the high comorbidity, 50% of these patients remain undiagnosed with depression and two of every three patients are untreated.^{1,2} Identification and treatment of depression are important not only to decrease depressive symptoms, but also to improve diabetes outcomes since depression is associated with increased rates of hyperglycemia, decreased adherence with medication regimens and diet, and increased complications of diabetes.³⁻⁵

Our clinic is affiliated with an academic medical center and is a training site for family medicine residents. We recently obtained the designation of a PCMH and have providers of many backgrounds working in our clinic. Physicians, nurses, medical assistants, social workers, pharmacists, and dieticians all collaborate in the care of our patients.

Clinical pharmacists performing depression screening

Our clinic recently embarked on a project involving clinical pharmacists to increase depression screening among patients with diabetes. We obtained an IRB waiver for this quality initiative project. Clinical pharmacists have many roles in the PCMH which include appointments with patients for comprehensive medication reviews and appointments with patients to assist in managing hypertension, diabetes, and hypercholesterolemia through a collaborative practice agreement. With this collaborative practice, clinical pharmacists have the ability to start medications, stop medications, and adjust medications that are used to treat these disease states. Many of our clinic's patients with diabetes are referred to the clinical pharmacist. The clinical pharmacist conducts appointments both in person and over the phone and visits with 30-35 patients during the 12 hours the pharmacist is in clinic each week. Initial visits are often conducted face-to-face and follow up visits take place over the phone or in person depending on patient acuity and preferences. As a result, about 40% of visits take place face-to-face and 60% of visits take place over the phone. It can be difficult for the clinical pharmacist to assist with improving glycemic control and adherence when depression is one of the underlying causes of these issues. Prior to this quality initiative project, clinical pharmacists used the patient health questionnaire 2 or 9 (PHQ2 or PHQ9) to screen for depression when patients showed signs of decreased mood, but did not routinely screen all patients with diabetes. 6,7

Our project took place over the course of four months. Clinical pharmacists looked at 66 patients during this time for potential inclusion into this screening project. All patients referred to the clinical pharmacist with diabetes and without a current diagnosis of depression were eligible to be screened for depression with the patient health questionnaire 2 (PHQ2). We were surprised to find that over half of patients (36) referred to the clinical pharmacist during this time already had a diagnosis of depression. 30 patients were eligible to be screened for depression, but we were unable to screen 14 patients due to several factors including patients not arriving for their scheduled appointment or other urgent issues arising during the appointment, which did not allow time for the screening. We were able to screen 15 patients for depression. Patients were

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screened during their regular appointment times and regardless of if the appointment took place in person or over the phone; of the 15 patients who were screened, 8 were conducted face-toface and 7 took place over the phone. Any patient that screened positive was educated about clinic services including social workers to discuss mood and the patient was also referred to their physician for further workup of potential depression.

Two of the 15 patients who were screened scored positive on the PHQ2 indicating that they should have further workup for potential depression. One of the positive screenings occurred over the phone and the other occurred face-to-face. One of the patients noted that she scored positive due to transient financial stressors. However, this particular patient had a history of depression and this positive result indicated to us that close follow up is needed. The other patient who screened positive told the clinical pharmacist that he felt he should talk with someone regarding his depressed mood and was happy to learn about social work services that the clinic provided. This patient utilized our social workers and at his follow up physician appointment his stress and mood were noted to be improving.

Implications of findings

Despite the higher than expected rate of diagnosed depression among patients with concomitant diabetes in our clinic—which provided us with a smaller amount of patients to screen during the project time period—the clinical pharmacists still found patients who screened positive with the PHQ2 for potential depression. This service took anywhere from about 30 seconds to five minutes with each patient. Given that the literature suggests 50% of patients with diabetes have undiagnosed depression, we expected more patients to screen positive for depression during this project. This suggests that our clinic physicians and staff have made depression screening a priority. However, we still believe that the two patients we uncovered during this time was an important finding since it allowed for their mood to be more closely monitored.

Future directions

We believe that performing depression screening is a

valuable service and are looking for ways to ensure more of the clinic patients with diabetes are screened for depression and have optimized their therapy. Our clinic primary care physicians were very supportive of the pharmacist's expanded role and quite pleased with the increased depression screening and as a result of this quality improvement project, one area of expansion we are considering is encouraging depression screening among other ancillary staff members in the clinic such as our nurse care navigators and dieticians. Another area of expansion could include monitoring patients who already have a diagnosis of depression to ensure their depression treatment is optimized.

REFERENCES

- Anderson RJ, Freedland KE, Clouse RE and Lustman PJ (2001) Theprevalence of comorbiddepression in adults with diabetes: a meta-analysis. Diabetes Care 24:1069-78.
- Hermanns N, Caputo S, Dzida G, Khunti K, Meneghini LF, et al. (2013) Screening, evaluation and management of depression in people with diabetes in primary care. Prim Care Diabetes 7:1-10
- 3. Lustman PJ, Anderson RJ, Freedland KE, de Groot M, Carney RM, et al. (2000) Diabetes Care. Depression and poorglycemiccontrol: a meta-analytic review of the literature 23:934-42.
- 4. Ciechanowski PS, Katon WJ and Russo JE (2000) Depression and diabetes: impact of depressive symptoms on adherence, function, and costs. Arch Intern Med 27: 3278-85.
- De Groot M, Anderson R, Freedland KE, Clouse RE, Lustman PJ, et al. (2001) Association of depression and diabetes complications: a meta-analysis. Psychosom Med 63:619-30.
- Kroenke K, Spitzer R L and Williams J B (2001) The PHQ-9: validity of a brief depression severity measure. *Journal of General Internal Medicine*16: 606-613.
- Kroenke K, Spitzer RL and Williams JB (2003) The Patient Health Questionnaire-2: validity of a two-item depression screener.*Medical Care* 41:1284–92.

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