Screening For Adult Depression in Primary Care by Family Doctors

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Abstract: Depression is the most typical psychiatric disorder in the basic population and the most typical psychological health condition in patients seen in medical care. Although symptoms of anxiety are prevalent amongst medical care patients, few patients go over these symptoms straight with their medical care clinicians. Instead, two-thirds of medical care patients with depression present with somatic symptoms (eg, headache, back problems, or chronic pain), making detection of depression more difficult.

In the absence of screening, it is estimated that only 50 percent of patients with significant anxiety are identified. Unless straight asked about their state of mind, patients omit information about depressive symptoms for a range of factors, consisting of fear of stigmatization, belief that anxiety falls outside the province of primary care, belief that anxiety isn't a "real" disease however rather a personal flaw, issues about medical record privacy, and issues about being prescribed antidepressant medication or being described a psychiatrist.

Keywords: Adult Depression, psychological health condition, depressive disorder.

1. INTRODUCTION

Depression: Epidemiology and Burden of Disease:

Depressive disorders, including significant depressive disorder (MDD), relentless depressive disorder, and other subsyndromal disorders, are important direct reasons for morbidity and an indirect reason for death, in the United States and worldwide. The lifetime prevalence of anxiety has been approximated to be 10% to 15%. In the United States, 12-month frequency for depressive disorders is 9.0%, and 3.4% for major anxiety⁽¹⁾. Information from the National Health and Nutrition Evaluation Study (NHANES) collected from 2009 to 2012 recommend that 7.6% of the United States population aged 12 and older had moderate or extreme depressive symptoms⁽²⁾. Worldwide, around 350 million people are affected by depressive disorders, making it among the leading 3 causes of morbidity as measured by disability-adjusted life-years⁽³⁾.

Extreme and moderate anxiety is associated with substantial impacts on quality of life, with impact in multiple domains, especially social, work, and home performance. Those with moderate or severe depressive symptoms were a lot more most likely to report problems in these realms, compared to those with mild symptoms (74%-88% vs 46%)⁽²⁾. Depressive disorders likewise have a massive economic effect, approximated for the United States at more than \$210 billion in 2010, up from \$173 billion in 2005⁽⁴⁾.

Depressive disorders in adults start to increase in prevalence in those ages 20 to 30, and continue to increase into midlife, with females more likely to be impacted than males. In the United States, persons living listed below the poverty line are more than two times as likely to have moderate or extreme depressive symptoms as those with higher earnings. After taking into account earnings, depressive symptom prevalence does not vary substantially throughout ethnic groups or different races. Depression is more common amongst those who are single, divorced, or widowed, compared with those who are married; in those who have actually suffered traumatic life events; and in those with a family history of anxiety⁽²⁾. Nevertheless, rates of depression remain substantial even in those without these risk aspects. Anxiety itself is related to increased threat from other comorbid conditions, consisting of cardiovascular disease⁽⁵⁾. Regrettably, more than 70% of patients who evaluate positive for depression do not receive treatment⁽⁶⁾.

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Who Should Be Screened?

The United States Preventive Solutions Task Force (USPSTF) suggests evaluating all adults for anxiety⁽⁷⁾. The Task Force emphasizes that "screening needs to be carried out with appropriate systems in place to guarantee precise diagnosis, efficient treatment, and proper follow-up." The American Academy of Family Physicians makes a comparable suggestion.8 On the other hand, the Canadian Task Force on Preventive Healthcare (CTFPHC) does not suggest routine screening. The CTFPHC websites a lack of evidence on advantages and harms of screening in asymptomatic people, made complex by an issue for prospective damages through incorrect positives and unnecessary treatment⁽⁹⁾.

Special Populations:

Older adults:

For adults older than 65, the proof base supporting screening is less robust due to a lack of trials specific to older adults. However, in 2016, the USPSTF suggested screening in older adults based upon the totality of the evidence across the age spectrum and called for more research study into the best technique for screening and treatment in older adults⁽⁷⁾. Identifying depression in older adults can be more complicated than in younger adults, due to the fact that depression might manifest as somatic grievances, such as weight loss, tiredness, insomnia, and bad concentration that mimic physical ailments typical in older patients. Depression is also most likely to exist side-by-side with medical comorbidities, consisting of cancer, neurologic disability, arthritis, and heart disease⁽¹⁰⁾.

Pregnant and postpartum women:

Both the USPSTF and the American College of Obstetrics and Gynecology (ACOG) note the significance of screening women during pregnancy and the post-partum duration, when the threat of anxiety is increased^(7,11).

Screening Instruments:

A variety of screening tests are used for anxiety screening in asymptomatic patients without a history of depression. The Patient Health Questionnaire (PHQ) is validated and extensively used in a variety of clinical settings. The PHQ-2, a 2-question kind of the PHQ, is popular for screening since it is short and highly delicate. An expanded form, the PHQ-9, likewise is typically used⁽¹²⁾.

Dozens of studies have actually examined the utility and diagnostic precision of the PHQ in clinical practice. A 2016 meta-analysis by Mitchell and colleagues ⁽¹²⁾ examined 40 studies and pooled information from 14,760 unique adult patients in medical care settings with an occurrence of MDD of 14.3%. Both the PHQ-2 (sensitivity 89.3%, specificity 75.9%) and the PHQ-9 (sensitivity 81.3%, specificity 85.3%) demonstrated excellent clinical utility as screening instruments for anxiety⁽¹²⁾.

Table 1: Advantages and disadvantages of different modes of Patient Health Questionnaire (PHQ)-2 administration

Administration		Advantages	Disadvantages	Other Considerations	
Advance	self-	High reach	Limited access to, and use	Receipt and	
administration	via	Low cost	of, portal	management of	
patient portal		Ease of tracking	Literacy concerns Concerns	screening results	
		results	about	Responsibility for	
			administration of follow-up	follow-up	
			PHQ-9	_	
Advance	self-	Easier to implement Can be	Literacy concerns		
administration	via	administered in waiting	Data entry burden on		
written questionn	aire	room	staff		
Nurse administra	ation	Can be included in existing	Fidelity with wording of		
during check-in		check-in process	questions can be challenging		
		In-person administration	Competing nursing demands		
		can overcome literacy			
		barriers			
Provider		Direct linkage to treatment	Fidelity with wording of		
administration during		decision- making	questions can be challenging		
clinical encounter		In-person administration	Competing provider		
		can overcome literacy	demands		
		barriers			

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Special Populations:

Older adults:

For older adults, a 2003 review of 18 studies in patients older than 65 compared 9 various screening instruments, consisting of the Geriatric Anxiety Scale (GDS.30-item and 15-item versions), the Center for Epidemiologic Research Anxiety Scale, and the Self-CARE(D). These 3 common screeners all carried out likewise with sensitivities of 74% to 100% and specificities of 53% to 98% for MDD⁽¹³⁾. The American Geriatrics Society recommends utilizing a short preliminary screener, such as the PHQ-2 or GDS⁽¹⁴⁾.

Postpartum and pregnant ladies:

The Edinburgh Postnatal Depression Scale (EPDS) includes questions about anxiety and omits somatic symptoms, such as sleep disruption, that are common after pregnancy, somewhat increasing its level of sensitivity and specificity relative to the PHQ-9 in the postpartum and pregnant populations⁽¹¹⁾. In its 2016 review, the USPSTF pointed out 2 United States trials that supported a typical sensitivity of the EPDS (! 13) of 0.80, yielding a favorable predictive worth of 47% to 64% in a population with 10% occurrence of MDD. They identified no research studies of the precision of the PHQ9 in pregnant and post- partum females⁽⁷⁾. The ACOG recommends use of "a verified screener," including either the PHQ-9 or the EPDS⁽¹¹⁾.

2. FREQUENCY OF SCREENING

The optimum frequency of screening is unclear. Lots of practices repeat screening on an annual basis in those who have actually previously evaluated negative, however the effectiveness and effectiveness of this period (compared to others) has not been studied in trials. Patients with a recent history of anxiety need to be kept an eye on more often (see Treating Depression section, later on in this post).

Benefits of Screening:

A growing body of evidence supports the benefits of screening for depression when coupled with appropriate resources for management of disease. As early as 2002, the USPSTF published support for depression screening⁽¹⁵⁾. A meta-analysis of 7 trials, including more than 2400 patients, revealed that depression screening and feedback of the results to providers resulted in a 9% absolute reduction in the proportion of patients with persistent depression at 6 months compared with usual care. If the prevalence of treatment-responsive depression is 10% in primary care, then screening 110 patients would identify 11 depressed patients and yield 1 additional remission after 6 months of treatment. The signal for improvement was strongest when screening was coupled with adequate treatment and follow-up⁽¹⁶⁾.

An updated USPSTF recommendation in 2009 identified 2 new trials and emphasized that depressive symptoms are most improved when screening is coupled with changes in care delivery and treatment⁽¹⁷⁾. The smaller new trial (n 5 59) provided only feedback on screening and found no improvement in depression outcomes⁽¹⁸⁾. A larger trial that included provider and staff education, expanded support staff roles, collaboration with behavioral health specialists, and follow-up contacts demonstrated a 10% absolute reduction in screen-positive depression at 6 months and a persistent 8% absolute reduction in depressed patients at 57 months⁽¹⁹⁾.

The 2016 USPSTF recommendation continued to support screening for depression. It recognized a general increase in resource availability among practices and removed any recommendations to limit screening to specific populations. It also recognized the need to support primary care providers and practices in modifying their care delivery to accommodate depression care⁽⁷⁾.

Form of Therapy **Brief Description Intensity** OR (95% CI) of Remission Face-to-face cognitive Replace negative thinking At least 6 sessions with 1.49 (0.90–2.46) therapist or psychologist behavioral therapy with healthier thoughts (CBT) oriented with 1.29 (0.83–2.02) Face-to-face problem-Improve goal-At least 6 sessions solving therapy decision- making therapist, physician, or counselor Face-to-face **Emphasis** resolving least 6 session with 1.37 (0.81-2.34)

Table 2: Forms of psychotherapy

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interpersonal psychotherapy	interpersonal problems	psychiatrist, psychologist, or nurse	
Remote therapist-led CBT	Replace negative thinking with healthier thoughts	8–10 telephone or online sessions with psychologist or therapist	1.51 (0.98–2.32)
Remote therapist-led problem-solving therapy	Improve goal- oriented decision- making	6 telephone sessions with trained student or nurse	1.22 (0.23–6.57)
Guided self-help CBT	Replace negative thinking with healthier thoughts	3–4 self-guided sessions with minimal assistance from nurse or psychologist	1.73 (1.21–2.50)
No/minimal contact CBT	Replace negative thinking with healthier thoughts	Computerized	1.46 (0.96–2.23)

Harms of Screening and Treatment:

Comprehensive literature evaluations expose little evidence on prospective harms of evaluating for depression. Assumed damages, consisting of treatment avoidance, wear and tear in patient-provider stigma, labeling or relationship, and inappropriate or unnecessary treatment as a result of screening have not been substantiated in any studies to this day, although very few research studies straight taken a look at damages of depression screening⁽²⁰⁾.

Harms of treatment initiated on the basis of screening are also important to consider. Psychotherapy and pharmacotherapy are both first-line treatment options⁽²¹⁾. Psychotherapy in different modalities (eg, cognitive behavioral therapy, issuesolving treatment) is typically safe and without major negative results besides the time needed.

Pharmacotherapy is another alternative for preliminary therapy and is recommended to be consisted of in programs of patients who present with serious symptoms⁽²¹⁾. Rates of adverse results differ by representative, and no representative is without possible adverse effects. Commonly reported unfavorable results of second-generation antidepressants include gastrointestinal (GI) distress (6.4%-42.5%), headache (6.8%-38.3%), sleep disturbance (5.5%-- 31.0%), lightheadedness (3.9%-20.4%), sexual adverse effects (8.0%-73.0%), and weight gain⁽²²⁾. More major negative results include self-destructive habits (however not finished suicides), greatest in more youthful patients in the month in the past and the month after starting treatment. Upper GI bleeding is another essential potential negative result of selective serotonin reuptake inhibitors (SSRIs), with threat increasing with age. A 2014 meta-analysis that consisted of 393,268 participants exposed a chances ratio (OR) of 1.66 (95% confidence interval [CI] 1.44-- 1.92) for GI bleeding in patients taking SSRIs. The risk of GI bleeding increased with concurrent SSRI and nonsteroidal anti-inflammatory drug use (OR 4.25; 95% CI 2.82-- 6.42).23 In pregnant ladies, observational proof supports that second-generation antidepressant usage might be associated with a slightly increased risk of preeclampsia, postpartum hemorrhage, miscarriage, perinatal death, pre-term birth, serotonin withdrawal syndrome, respiratory distress, pulmonary hyper- tension, congenital malformations, and babies little for gestational age. Cognitive behavioral therapy may be preferred by some women; its effectiveness has actually been shown in several trials⁽⁷⁾.

3. IMPLEMENTATION OF THE SCREENING PROCESS

Establishing, implementing, and sustaining a high-fidelity screening process is an important initial step for enhancing the care of patients with anxiety in primary care. In this area, we analyze some crucial aspects of the screening procedure.

Administering the Screening Instrument:

As noted earlier, we recommend preliminary screening with the PHQ-2, based upon its well-tested accuracy, short duration, and ease of administration. Practices have numerous choices for ways to administer the PHQ-2, including advance administration through a patient website or composed survey that can be distributed to patients in advance of an arranged check out, patient self-administration in the workplace in advance of the go to, nurse administration throughout check-in, or provider administration within the clinical go to. Each of these specific choices has disadvantages and advantages (Table 1) and can be integrated with one another in blended approaches also.

Patients who evaluate negative on the PHQ-2 and who have no history of, or existing symptoms of, depression or associated conditions require no further attention and can continue to other aspects of their medical care go to. Those who screen positive must continue on to finish the PHQ-9.

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The PHQ-9 is designed for self-administration, and practices may opt to have their physicians or nurses ask their patients to self-complete the instrument throughout check-in or while waiting to see the supplier. The nurse or supplier ought to provide support to patients who might have difficulty finishing the PHQ-9 due to restricted literacy. When completed, the nurse or supplier ought to evaluate and score the PHQ-9, recording the lead to the health record (preferably in a discrete data field to allow for simpler tracking). If necessary, the nurse needs to interact the results to the supplier.

Following up on an Irregular Anxiety Screen:

The PHQ-9 has been shown to be valuable in determining the seriousness of depressive symptoms (mild, moderate, or serious)⁽²⁴⁾. However, prior to treatment can be appropriately identified, extra assessment is warranted.

The Analytical and diagnostic Manual of Mental Disorders, Fifth Edition (DSM-5) criteria for a major depressive episode need the existence of 5 or more symptoms to have actually happened together over a 2-week duration, that these symptoms "cause clinically substantial distress or impairment," and that they are not much better described by another disorder (eg, compound misuse, a medical condition such as hyperthyroidism, schizoaffective disorder, or bipolar illness)⁽²⁵⁾.

The PHQ-9 questions map well to the DSM-5 criteria, and the score offers a sign of severity, degree of functional impairment, and an useful step to assess improvement after treatment. Scores of 10 to 14 recommend mild symptoms, 15 to 19 moderate symptoms, and 20 or greater serious symptoms⁽²⁴⁾. As such, the diagnostic assessment can begin with a review of the PHQ-9, followed by more specific questioning related to favorable responses.

In patients with substantial depressive symptoms based upon the PHQ-9, it is helpful to look for symptoms of mania to distinguish bipolar illness from unipolar depression. Mania is often identified by symptoms like distractibility, irresponsibility or uninhibited behavior, grandiosity, unusual boost in activity (sometimes connected with weight reduction), changes in sex drive, decreased sleep, and increased or pressured speech. If any of these symptoms exist, service providers might wish to administer the well-validated State of mind Disorder Questionnaire, a screening instrument particular for bipolar disorder⁽²⁶⁾. Those patients with symptoms of mania need to be assessed by a psychiatrist, as need to patients expressing misconceptions or other symptoms of a schizoaffective disorder.

Suicide is the most serious repercussion of depressive disorders, and has been increasing in frequency over the past decade, with more than 42,000 deaths in the United States in 2014⁽²⁷⁾. Assessment of self-destructive thought is consisted of in the PHQ-9 and practices and companies utilizing the PHQ-9 needs to establish a method for evaluating self-destructive threat for patients who report suicidal ideas. A number of prospective danger assessment tools are available. In our practice, we have actually opted to use the P4⁽²⁸⁾. The P4 screener examines "past suicide efforts, suicide plan, possibility of completing suicide, and preventive aspects" and stratifies patients into 3 threat categories: minimal, lower, and greater danger. The efficiency of such an approach, however, remains to be shown, an obstacle made more difficult by the relative infrequency of completed suicide.

4. DEALING WITH ANXIETY

We have actually examined techniques for implementing screening and diagnosis of depression. Now we turn our focus on implementation of team-based treatment of anxiety through collaborative care, shown to enhance treatment adherence, anxiety outcomes, and quality of life⁽²⁹⁾.

Collaborative care models are evidence-based methods to anxiety treatment and follow-up that can be probably started in the primary care setting⁽³⁰⁾. Collaborative care is multidisciplinary, engaging both the primary care supplier and another staff member, normally a nurse, social worker, care psychologist, supervisor, or psychiatrist. The group utilizes strong interaction approaches through a shared electronic medical recable, gathers, or team meetings to stick to a structured management strategy and close patient follow-up. In a variety of settings, collective care has actually been revealed to be an economical technique to increase adherence, enhance results, and enhance fulfillment of both patients and suppliers⁽³¹⁾.

Initial treatment:

Preliminary treatment for depression need to include psychiatric therapy, pharmacotherapy, or a combination of both ⁽²¹⁾. It is very important to partner with the patient to establish an individualized treatment method. Higher PHQ-9 ratings reflect more extreme symptoms, and patients with a higher symptom concern should be provided multimodal treatment. Patient safety always should be the highest priority, and indicators of suicidality or psychosis need to be explored and triaged to acute care settings or psychiatric consultation as suggested.

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After assessing safety, take into consideration patient preferences and deal treatment. Pharmacotherapy is generally readily offered. Medications can be prescribed by any certified practitioner and there are multiple budget-friendly first-line choices. In the absence of particular preferences, treatment can start with a low- expense SSRI⁽²¹⁾.

Suppliers and patients who select psychiatric therapy ought to choose a therapist based upon local schedule and the patient's funds. Numerous forms of psychiatric therapy have actually proven effective; patient option appears essential to the result. See types of therapy in *Table 2*. Less extensive interventions, such as online cognitive behavior modification modules might be as effective as more intensive in person alternatives⁽³²⁾.

When a patient effectively establishes care with a behavioral health expert, following up on depression management stays a responsibility of the medical care team. Belonging to a robust "medical neighborhood" in which communication streams easily and effectively in between medical care and experts, consisting of behavioral health service providers, can improve access to behavioral health, facilitate a collaborative technique amongst service providers, and create an assistance network for a particularly susceptible population of chronically ill patients (33). Informal relationship-building and official contracts with regional behavioral health professionals may enhance patients' access to care and motivate prompt and constant interaction between providers.

Follow-up of Treatment:

During the acute phase of treatment, close follow-up can improve depression out- comes. Lots of organizations have established treatment algorithms that include follow-up contact 1 to 2 weeks after the initial treatment go to (Table 3). This close follow-up is typically carried out by non-physician members of the care group, such as medical assistants, care supervisors, nurses, or social workers. The care team ought to follow-up on treatment in a step-by-step approach, increasing the intensity of treatment every 8 to 10 weeks to achieve optimum anxiety results⁽³⁰⁾. After an inadequate response to initial pharmacotherapy, provide a boost in dosage, shift to an alternative agent, or suggest augmentation⁽²¹⁾. In our experience, stepped care is most effective when providers in the practice endorse the stepped care method and have systems in place to support shipment of standard care.

5. INTEGRATING BEHAVIORAL HEALTH INTO PRIMARY CARE

Integrating behavioral health into the medical care setting gets rid of substantial barriers to supplying comprehensive take care of patients with anxiety. Standard practices (least integrated) deal independent primary care and behavioral health services that seldom communicate with each other. Reasonably integrated practices tend to be collocated but have not completely turned into a cohesive health care group. The most integrated practices are collocated and work together formally and informally to provide care with a shared vision⁽³⁴⁾.

	Table 3 Acute	schedule with critical decision points (CDP)				
CDP	PHQ-9	Baseline	Treatment	Treatment	Options	I

CDP	PHQ-9 Baseline	Treatment	Treatment Options Designed for		
	Severity Parameters	Modification	Medication Treatment Only.		
			Psychotherapy for Mild to Moderate		
			Depression Is Also Considered Evidenced		
			Based		
WEEK 0 CDP 1	Severity !10		Initiate antidepressant medication at lower		
			end of the dose range.		
WEEK 1 Phone	If severity >20 or		Evaluate patient status, initial response to		
call	clinical concern		therapy, medication tolerance; if PHQ-9		
			question 9 (suicide) was 1, conduct Suicide		
			Screening and assessment; May be from		
			trained physician, therapist, nurse, or care		
			manager. (If indicated, return appointment		
			scheduled before week 4.)		
WEEK 2 Phone	Recommended for all		Evaluate patient status, initial response to		
call	patients (do PHQ-9)		therapy, medication tolerance. Increase		
		antidepressant dose to medium dose rang			
			as tolerated. May be from trained physician,		

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			therapist, nurse, or care manager. (If
			indicated, return appointment scheduled
	PHQ-9 5	None	before week 4.)
WEEK 4 CDP 2	PHQ-9 >5 and <10 PHQ-9 !10	Modify based on functionality and patient preference	Continue antidepressant in medium dose range, as tolerated. Communicate with psychotherapist about progress (if applicable). Consider switch to a different antidepressant if tolerability is an issue. Schedule a return appointment for week 6. Consider switching to a different antidepressant. If no improvement at week 6, recommend switching antidepressant.
		treatment	
WEEK 6 Phone call	Recommended for all patients (do PHQ-9)		Evaluate patient status, response to therapy, medication tolerance. If PHQ-9 question 9 (suicide) was 1, conduct Suicide Screening and assessment. May be from trained physician, therapist, nurse, or care manager. (If indicated, return appointment scheduled before week 8.)
	PHQ-9 5	None	Enter continuation phase.
WEEK 8 CDP 3	PHQ-9 >5 and <10	Modify based on functionality and patient preference	Increase antidepressant dose to higher dose range as tolerated. Communicate with psychotherapist about progress (if applicable). Consider switching to a different antidepressant. Increase antidepressant dose to higher range
		Modify	if there has been a partial response.
	PHQ-9 !10	treatment	Consider switching antidepressant.
WEEK 10 Phone call	For patients who remain in the acute phase (do PHQ-9)		Evaluate patient status, response to therapy, medication tolerance. If PHQ-9 question 9 (suicide) was 1, conduct Suicide Screening and assessment. May be from trained physician, therapist, nurse, or care manager. (If indicated, return appointment scheduled before week 12.)
	PHQ-9 5	None	Enter continuation phase.

Managing the Health of Populations:

To achieve the highest level of effectiveness in screening and treatment of anxiety, practices and companies must develop systems to resolve care spaces outside of traditional workplace goes to. Such systems require coordination of the roles of different staff member, including advancement of standard care procedures ("basic work"). It is necessary to recognize which care employee are responsible for non-visit-based population management and provide protected time to complete the work.

Numerous types of tools enable population health management of anxiety (and other persistent conditions). Some electronic health records allow a practice to identify patients diagnosed with anxiety and follow their symptom control over time. Discrete information entry of PHQ-9 ratings allows a service provider to trend an individual patient's reaction to treatment. On a population level, discrete PHQ-9 information entry allows the care team to recognize patients with the best symptom concern. The development of a depression computer system registry (either paper or electronic) to identify and monitor these patients enables team members to proactively support patients rather than wait on patients to provide to the workplace. Outreach efforts might consist of follow-up telephone call after sees to examine adherence to the treatment

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strategy, identification of patients with inadequately controlled symptoms for mobilization of additional care, including practice-based and neighborhood resources, and engagement of patients overdue for follow-up.

6. MEASURING IMPROVEMENT

Producing and sustaining a premium anxiety care program requires engagement in continuous enhancement, consisting of tracking of process, outcome, and balancing steps. Specific processes will vary from practice to practice, but there are standard steps that represent the structure of strong anxiety management practices and can cultivate support for a collective care design, even in a fee-for-service environment in which team members' work is not straight compensated (Table 4). Practices new to collective care might begin by concentrating on a specific patient population, such as patients with diabetes or stroke, then scale up their efforts with time. Work can be financially supported by billing for anxiety screening with Medicare G codes⁽³⁵⁾.

Cost-Effectiveness of Screening:

The cost-effectiveness of evaluating for anxiety remains questionable. Valenstein and colleagues36 utilized a Markov decision analytical technique to design the cost-effectiveness of screening in medical care. They found one-time screening to have a cost-utility ratio of just more than \$45,000 per quality-adjusted life-year gained. Regular screening was not cost-efficient compared with one-time screening. The results depended on the expense of screening, frequency of anxiety, and rate and efficacy of treatment. Notably, this analysis did not presume application of the collaborative care design, nor did it represent reduced non depression-related healthcare costs.

Table 4 Examples of process, outcome, and balancing measures in depression management

Measure	sure Description Numerator		Denominator	Exclusion Criteria
Process measures				
Screening rate	% of all adult patients screened for depression	Adult patients completing depression screening tool in the last 12 mo	All adult patients managed by the practice	Deceased Diagnosis of depression
Appropriate treatment	% of adult patients with depression engaged in evidence- based treatment	Patients on an antidepressant or with a completed behavioral health visit	All adult patients with a diagnosis of depression managed by the clinic	Deceased
Outcome measures				
Depression improvement	% of adult patients with depression whose PHQ-9 score has improved by 5 points or more since an elevated index PHQ-9 score	Patients with an elevated index PHQ-9 score whose subsequent PHQ-9 has decreased by 5 points or more	All adult patients with an elevated index PHQ-9	-
Depression response	% of adult patients with depression whose PHQ-9 score has improved by 50% or more since an elevated index PHQ- 9 score	Patients with an elevated index PHQ-9 score whose subsequent PHQ-9 has decreased by 50% or more	All adult patients with an elevated index PHQ-9	-
Depression remission	% of adult patients with depression whose PHQ-9 score has decreased to <5 since an elevated index PHQ-9 score	Patients with an elevated index PHQ-9 score whose subsequent PHQ-9 has decreased to <5	All adult patients with an elevated index PHQ-9	-

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7. CONCLUSION

Depression is a significant cause of morbidity and typically goes without acknowledgment or efficient treatment. Screening has the prospective to improve detection of depression. Paired with a robust system for treatment that utilizes collaborative care, screening has the possible to enhance and minimize symptoms quality of life and practical status. In spite of evidence of effectiveness, depression screening stays incompletely implemented. Companies who wish to enhance their effectiveness in execution ought to execute a standard office technique to screening and diagnostic verification, followed by shared decision-making about treatment choices. Service providers likewise ought to develop a standard approach for follow-up to make sure treatment effectiveness (or execution of an alternative method if preliminary treatment is not successful). The most reliable approaches involve a multidisciplinary group, and utilize both in- practice and outside-of-practice care.

REFERENCES

- [1] Le pine JP, Briley M. The increasing burden of depression. Neuropsychiatr Dis Treat 2011;7(Suppl 1):3–7.
- [2] Pratt LA, Brody DJ. Depression in the U.S. household population, 2009–2012. NCHS data brief, no 172. Hyattsville (MD): National Center for Health Statistics; 2014.
- [3] Ferrari AJ, Charlson FJ, Norman RE, et al. Burden of depressive disorders by country, sex, age, and year: findings from the global burden of disease study 2010. PLoS Med 2013;10(11):e1001547.
- [4] Greenberg PE, Fournier AA, Sisitsky T, et al. The economic burden of adults with major depressive disorder in the United States (2005 and 2010). J Clin Psychiatry 2015;76(2):155–62.
- [5] Barth J, Schumacher M, Herrmann-Lingen C. Depression as a risk factor for mor- tality in patients with coronary heart disease: a meta-analysis. Psychosom Med 2004;66:802–13.
- [6] Olfson M, Blanco C, Marcus SC. Treatment of adult depression in the United States. JAMA Intern Med 2016;176(10):1482–91.
- [7] Siu AL, Bibbins-Domingo K, Grossman DC, et al. US Preventive Services Task Force (USPSTF). Screening for depression in adults: recommendation statement. JAMA 2016;315(4):380–7.
- [8] Maurer DM. Screening for depression. Am Fam Physician 2012;85(2):139–44.
- [9] Canadian Task Force on Preventive Health Care, Joffres M, Jaramillo A, Dickinson J, et al. Recommendations on screening for depression in adults. CMAJ 2013;185(9):775–82.
- [10] O'Connor EA, Whitlock EP, Gaynes B, et al. Screening for depression in adults and older adults in primary care: an updated systematic review. Evidence Syn- thesis No. 75. AHRQ Publication No. 10-05143-EF-1. Rockville (MD): Agency for Healthcare Research and Quality; 2009.
- [11] Committee on Obstetric Practice. The American College of Obstetricians and Gy- necologists Committee Opinion No. 630. Screening for perinatal depression. Ob- stet Gynecol 2015;125:1268–71.
- [12] Mitchell A, Motahare Y, Gill J, et al. Case finding and screening clinical utility of the Patient Health Questionnaire (PHQ-9 and PHQ-2) for depression in primary care: a diagnostic meta-analysis of 40 studies. BJPsych Open 2016;2:127–38.
- [13] Watson LC, Pignone MP. Screening accuracy for late-life depression in primary care: a systematic review. J Fam Pract 2003;52(12):956–64.
- [14] Brown AF, Mangione CM, Saliba D, et al. California Healthcare Foundation/American Geriatrics Society panel on improving care for elders with diabetes. Guide- lines for improving the care of the older person with diabetes mellitus. J Am Geriatr Soc 2003;51:265–80.
- [15] US Preventive Services Task Force. Screening for depression in adults: U.S. Pre- ventive Services Task Force recommendation statement. Ann Intern Med 2009; 151(11):784–92.
- [16] Pignone MP, Gaynes BN, Rushton JL, et al. Screening for depression in adults: a summary of the evidence for the U.S. Preventive Services Task Force. Ann Intern Med 2002;136(10):765–76.

- Vol. 5, Issue 2, pp: (590-599), Month: October 2017 March 2018, Available at: www.researchpublish.com
- [17] O'Connor EA, Whitlock EP, Beil TL, et al. Screening for depression in adult patients in primary care settings: a systematic evidence review. Ann Intern Med 2009;151:793–803.
- [18] Bergus GR, Hartz AJ, Noyes R, et al. The limited effect of screening for depres- sive symptoms with the PHQ-9 in rural family practices. J Rural Health 2005;21: 303–9.
- [19] Wells K, Sherbourne C, Schoenbaum M, et al. Five-year impact of quality improvement for depression: results of a group-level randomized controlled trial. Arch Gen Psychiatry 2004;61:378–86.
- [20] O'Connor E, Rossom RC, Henninger M, et al. Screening for depression in adults: an updated systematic evidence review for the U.S. Preventive Services Task Force. Evidence Synthesis No. 128. AHRQ Publication No. 14-05208-EF-1. Rock- ville (MD): Agency for Healthcare Research and Quality; 2016.
- [21] American Psychiatric Association. Practice guideline for the treatment of patients with major depressive disorder. Arlington (VA): American Psychiatric Association; 2010. 10.
- [22] Gartlehner G, Hansen RA, Reichenpfader U, et al. Drug class review: second- generation antidepressants: final update 5. 2011. PMID: 21595099.
- [23] Anglin R, Yuan Y, Moayyedi P, et al. Risk of upper gastrointestinal bleeding with selective serotonin reuptake inhibitors with or without concurrent nonsteroidal anti-inflammatory use: a systematic review and meta-analysis. Am J Gastroen- terol 2014;109(6):811–9.
- [24] Lo we B, Kroenke K, Herzog W, et al. Measuring depression outcome with a brief self-report instrument: sensitivity to change of the Patient Health Questionnaire (PHQ-9). J Affect Disord 2004;81(1):61–6.
- [25] American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th edition. Washington, DC: American Psychiatric Association; 2013.
- [26] Hirschfeld RM, Williams JB, Spitzer RL, et al. Development and validation of a screening instrument for bipolar spectrum disorder: the Mood Disorder Questionnaire. Am J Psychiatry 2000;157(11):1873–5.
- [27] Heron M. Deaths: leading causes for 2014. National vital statistics reports, vol. 65. Hyattsville (MD): National Center for Health Statistics; 2016. no 5.
- [28] Dube P, Kurt K, Bair MJ, et al. The P4 screener: evaluation of a brief measure for assessing potential suicide risk in 2 randomized effectiveness trials of primary care and oncology patients. Prim Care Companion J Clin Psychiatry 2010; 12(6).
- [29] Grochtdreis T, Brettschneider C, Wegener A, et al. Cost-effectiveness of collabo- rative care for the treatment of depressive disorders in primary care: a systematic review. PLoS One 2015;10(5):e0123078.
- [30] Unutzer J, Park M. Strategies to improve the management of depression in pri- mary care [review]. Prim Care 2012;39(2):415–31.
- [31] Van den Broeck K, Remmen R, Vanmeerbeek M, et al. Collaborative care regarding major depressed patients: a review of guidelines and current practices. J Affect Disord 2016;200:189–203.
- [32] Linde K, Sigterman K, Kriston L, et al. Effectiveness of psychological treatments for depressive disorders in primary care: systematic review and meta-analysis. Ann Fam Med 2015;13:56–68.
- [33] Huang X, Rosenthal MB. Transforming specialty practice—the patient-centered medical neighborhood. N Engl J Med 2014;370:1376–9.
- [34] Heath B, Wise Romero P, Reynolds K. A standard framework for levels of inte- grated healthcare. Washington, DC: SAMHSA-HRSA Center for Integrated Health Solutions; 2013.
- [35] CMS. Decision memo for screening for depression in adults. Baltimore (MD): Cen- ters for Medicare and Medicaid Services; 2011.
- [36] Valenstein M, Vijan S, Zeber JE, et al. The cost-utility of screening for depression in primary care. Ann Intern Med 2001;134(5):345–60.