Published in final edited form as:

J Gerontol Nurs. 2015 February ; 41(2): 18–25. doi:10.3928/00989134-20150115-99.

Late Life Depression Detection: An Evidence-Based Guideline

Marianne Smith, PhD, RN [Associate Professor], **Christine Haedtke, MSN, RN, PCCN [Doctoral student]**, and **Deborah Shibley, PhD(c), RN [Doctoral candidate]**

The University of Iowa, College of Nursing, 50 Newton Road, Iowa City, IA 52242, Phone: 319-335-7121

Marianne Smith: marianne-smith@uiowa.edu

Abstract

The disability associated with late life depression makes it an important target for screening. Identifying clinically significant depression symptoms in older adults who have known risk factors provides an important opportunity for early evaluation and treatment. Screening that leads to evaluation and treatment is critical to both preventing depression, and reducing the associated disability, symptom burden, and costs of major depressive disorders (MDD). The guideline described here recommends the 9-item Patient Health Questionnaire (PHQ-9) for screening because it is based on diagnostic criteria for MDD and has the advantages of being brief, self-administered, easily scored and interpreted, and reliable and valid in diverse populations and care settings. Nurses and allied health professionals who provide care to older adults across the continuum of care are uniquely positioned to identify at risk older adults, use depression screening scales, make needed referrals for evaluation and treatment, and monitor outcomes across time.

Nurses and allied health providers who provide care to older adults are uniquely positioned to recognize changes in behavior and function that signal the onset of a clinically significant depressive episode. Daily providers often observe a range of depressive syndromes that are associated with greater functional impairment, disability, and reduced quality of life, including subthreshold forms (also called clinically significant or minor depression) that do not meet full criteria for major depressive disorder (MDD) (Strine et al., 2009). Clinically significant depression is common in diverse health settings, including home health (14%), assisted living (32%), hospitals (37%) and nursing homes (44%) (Anstey, von Sanden, Sargent-Cox, & Luszcz, 2007; Ciro et al., 2012; Teresi, Abrams, Holmes, Ramirez, & Eimicke, 2001). Depression is highly associated with medical problems that pervade later life, including cancer, chronic pain, diabetes, heart disease, osteoporosis, Parkinson's disease, stroke, low vision, chronic obstructive pulmonary disease (COPD), anxiety, and dementia (Kempen, Ballemans, Ranchor, van Rens, & Zijlstra, 2012; Lowe et al., 2008; NIH, 2014; Rapp et al., 2011; Schneider, Jick, Bothner, & Meier, 2010).

Depression-related behaviors, thoughts, and feelings interact with social stress and physical health in a "cycle of depression" (IMPACT, 2007) that, if unrecognized and untreated, perpetuates distress and dysfunction. Late life depression increases the risk of needing a higher level of care, including hospitalization among elderly home health patients (Sheeran, Byers, & Bruce, 2010) and nursing home placement for community-dwelling older adults (Harris, 2007). Depression also reduces the likelihood that community-dwelling older adults

who are admitted to acute care settings will recover their prehospitalization level of mobility following discharge (Barry, Murphy, & Gill, 2011).

In spite of its frequency and known risks among medically ill older adults, depression is often not recognized as a treatable problem by providers (Irwin et al., 2008) or older adults themselves. The stigma associated with mental illness, acceptance of depression as an understandable reaction to social and health problems, and beliefs that older people don't want to talk about their feelings are common barriers to depression recognition (NIMH, 2012). In short, additional efforts are needed to assure that health care providers recognize depression symptoms as an important focus of care and treatment. Optimal depression outcomes are associated with using depression-specific scales, targeting high-risk individuals, and following detection with coordinated care, treatment, and monitoring (Thota et al., 2012).

Purpose of the Guideline

The purpose of the guideline is to improve detection of depression symptoms in cognitively intact older adults who may be a higher risk because of social and health-related changes that cluster in late life. This article is derived from the evidence-based practice guideline, *Detection of Depression in Cognitively Intact Older Adults* (Smith, Haedtke, & Shibley, 2014) which can be purchased from the University of Iowa Hartford Center of Geriatric Nursing Excellence at http://www.nursing.uiowa.edu/excellence/evidence-based-practice-guidelines. Detecting depression through screening is recommended by the U.S. Preventive Services Task Force (USPSTF, 2009) and is the essential first step in providing collaborative care that improves depression outcomes across populations, settings, and organizations (Thota, et al., 2012).

All levels of depressive symptoms are important to consider, from clinically significant symptom clusters that cause distress and functional impairment (Lyness et al., 2007) to syndromes that likely meet diagnostic criteria for major depressive disorder (American Psychiatric Association [APA], 2013). See Tables 1 and 2. Variability in late life depression presentation demands thoughtful consideration of diverse levels and types of symptoms, including ones that may not be traditionally associated with depressed mood. For example, depression *without sadness* is common in later life (Gallo & Rabins, 1999); that is, the hallmark symptom *loss of interest or pleasure* often occurs without the presence of depressed mood in elders. Variations in mood, such as irritability or worry, and focusing on depression-related physical symptoms, are also more common in late life (Kane, Ouslander, Abrass, & Resnick, 2009). Depression often overlaps with other psychiatric syndromes, such as anxiety and dementia (Huang, Wang, Li, Xie, & Liu, 2011), and a wide variety of medical problems that are common in later life (APA, 2013; NIH, 2014). Finally, lost quality of life and disability associated with subsyndromal depression (Lyness, Chapman, McGriff, Drayer, & Duberstein, 2009) underscores the importance of recognizing symptoms before they meet diagnostic criteria.

Management of depressive symptoms and related problems can only be addressed if clinically significant depression is identified. In turn, the risks of major depression,

increasing disability, higher health costs, and admission to more restrictive levels of care are all reduced. The large and increasing numbers of frail elders at risk for depression makes depression detection and screening an important focus of care and treatment, one that will continue to grow as the population ages. Detection is the necessary first step in making referrals to assure that late life depression is fully evaluated and treated.

Review Methods

Searches were performed using PubMed database, which comprises more than 22 million citations for biomedical literature from MEDLINE, life science journals, and online books. The primary search focused on articles that included the word “depression” in the title combined with the following additional terms in the title: Detection, assess, assessing, assessment, scale, risk, recognize, recognition, screen, screening, PHQ-9, and PHQ-2. Search limits included articles in English, aged 65 years and older, 80 years and older, and publication after 2004.

Inclusion criteria included articles that addressed 1) rates of depression in late life; 2) risk factors for onset of depression; 3) barriers to detection of late life depression; and 4) approaches to depression screening. Exclusion criteria included 1) depression in cognitively impaired individuals; 2) younger than 65 years of age; 3) measurement, detection or instruments not primarily focused on depression (e.g. disability, pain); 4) unusual or rare medical conditions that are associated with depression (e.g. one report on the topic identified in the review, and 5) intervention or treatment studies. A total of 851 articles were identified in the primary search using the search terms described above. Another 731 articles were identified using related literature search and key topics and references from articles in the primary search. A total of 271 articles are included in the depression detection guideline.

Individuals at Risk for Depression

Four categories of risk factors for major depressive disorder (MDD) are identified by the American Psychiatric Association (2013): (1) temperamental: negative affectivity (neuroticism), particularly in response to stressful events; (2) genetic and physiological: having a first degree relative with MDD; (3) environmental: stressful life events; and (4) course modifiers: substance use, anxiety, and chronic or disabling medical conditions. Although women are more likely to have depressive episodes, there is no evidence that symptoms, course, or treatment response varies by gender (APA, 2013).

Risk factors that are particularly salient to late life depression include (1) medical illnesses; (2) persistent pain; (3) stressful life events, such as loss of a spouse, new onset of illness, loss of functional abilities, or relocation; (4) lack of social support or social isolation, and (5) being a caregiver (Alexandrino-Silva, Alves, Tofoli, Wang, & Andrade, 2011; Garcia-Alberca, Lara, & Berthier, 2011; Thielke & Unutzer, 2008). Any individual age 60 or older that is identified as being at risk using the factors listed here should be screened for depression.

Systematic Depression Assessment

A wide variety of assessment tools are available to assess older adults with depression. This guideline recommends the 9-item Patient Health Questionnaire (PHQ-9) (Kroenke, Spitzer, & Williams, 2001; Spitzer, Kroenke, & Williams, 1999) and the 2-item Patient Health Questionnaire (PHQ-2) (Kroenke, Spitzer, & Williams, 2003; Lowe, Kroenke, & Grafe, 2005) to detect depression in cognitively intact older adults. The PHQ-9 and PHQ-2 have the advantages of concentrating on MDD symptoms and being brief, self-administered, free (in the public domain), easy to score, reliable and valid in older adults, and multipurpose (e.g. can be used for screening, assessing severity of symptoms, and monitoring change over time) (Kroenke, 2012).

Scale Characteristics and Scoring

The PHQ-9 assesses the nine diagnostic criteria of MDD (APA, 2013). Each item starts with the question “Over the last 2 weeks, how often have you been bothered by any of the following problems?” Items are scored as 0=Not at all, 1=Several days, 2=More than half the days, or 3=Nearly every day. The PHQ-9 can interpreted as a continuous measure to identify severity of depression symptoms, including mild (5 to 9), moderate (10 to14), moderately severe (15 to 20), and severe (>20) levels of depression symptoms (Kroenke, Spitzer, Williams, & Lowe, 2010). A score of 10 or greater is considered clinically significant and worthy of further of evaluation (Kroenke, et al., 2010). The scale can also be used as diagnostic algorithm in which MDD is suspected when 5 or more of the 9 symptoms are present “more than half the days” (score=2) and 1 of the 5 is either depressed mood or anhedonia. Other depression is suspected when 2 to 4 depression symptoms are present “more than half the days” and one is depressed mood or anhedonia (Kroenke, et al., 2010). The PHQ-2 assesses only the hallmark symptoms of MDD, depressed mood and loss of ability to experience pleasure (anhedonia). Each item is scored from 0 to 3 like the PHQ-9 and a score of 3 or greater suggests MDD or other depressive disorder (Lowe, et al., 2005).

Populations and Settings

The PHQ-9 has been validated and used successfully with diverse subsets of medically ill older adults, including those with cognitive impairment, diabetes, cancer, stroke, vision loss, COPD, and heart disease (Acee, 2010; Almeida et al., 2011; Boyle et al., 2011; Haq, Symeon, Agius, & Brady, 2010; Lamoureux et al., 2009; Thekkumpurath et al., 2011). Of equal importance, the PHQ-9 has been shown to be effective for use in diverse health care settings, including primary care, home health, community-based and assisted living settings and is part of the Minimum Data Set Version 3.0 used in nursing homes (Arroll et al., 2010; CMS, 2010; Ell, Unutzer, Aranda, Sanchez, & Lee, 2005; Richardson, He, Podgorski, Tu, & Conwell, 2010; Watson, Zimmerman, Cohen, & Dominik, 2009).

Description of the Practice

The recommended screening process is a simple but effective practice that can be widely used to detect clinically significant depressive symptoms. An important consideration in adopting the practice, however, is the associated need for referral for diagnostic evaluation

by a qualified provider so that treatment can be provided as indicated. See Figure 1. Screening alone is NOT effective in changing outcomes for older adults with depression; it must be part of an established practice or routine effort that systematically refers, evaluates, and treats older adults for depression.

The first consideration is the older person's ability to accurately self-report symptoms of depression. If the person seems confused, screen them for cognitive impairment using the Six-Item Screener (SIS) (Boyle, et al., 2011; Callahan, Unverzagt, Hui, Perkins, & Hendrie, 2002). If the person makes 3 or more errors on the SIS (score of 1 to 3), establish whether this is an acute change in mental status (i.e., rapid onset of confusion) that may be better addressed using the *Acute Confusion/Delirium* guideline (Sendelbach and Guthrie, 2009). If depression overlapping with dementia is suspected, apply the Cornell Scale for Depression in Dementia (Alexopoulos, Abrams, Young, & Shamoian, 1988) as outlined in *Detection of Depression in Older Adults with Dementia* (Brown, Raue & Halpert, 2007).

If the person has normal cognitive function (SIS score of 4 to 6, OR appears intact and able self report symptoms without cognitive screening), administer the 9-Item Patient Health Questionnaire (PHQ-9). By design, the PHQ-9 is a self-report measure but the scale can also be clinician-rated base on interview. Scores of 10 or greater on the PHQ-9 should be reported to the primary health care provider for further evaluation and treatment (Thota, et al., 2012).

The PHQ-2 may be substituted for the PHQ-9 if time constraints disallow using the 9-item scale. A score of 3 or greater on the PHQ-2 signals the need for further evaluation and treatment. Low level symptoms of depression should be systematically monitored to detect changes that may place older persons at higher risk for functional impairment and depression-related disability. In particular, mild depression (scores of 5 to 9 on the PHQ-9) should be assessed at weekly intervals or more frequently. Transfer or discharge plans should include recommendations for monitoring depression levels in the community or other health care settings to best assure that symptom levels are within the target range (0 to 9).

Implementing Depression Detection

A number of factors may influence the adoption and implementation of the recommended depression detection practice. Overcoming provider- and older adult-related barriers, as outlined in Table 3, may be an important first step. Having a clear plan for making referrals following detection of clinically significant symptoms is another important consideration and may require organizational planning and input based on the availability and preferences of primary care and specialty care providers (Bartels et al., 2004; Bruce, Van Citters, & Bartels, 2005).

Developing rapport with the potentially depressed older person is another important consideration. The very symptoms of depression, such as fatigue, apathy, psychomotor retardation, and worthlessness, may present challenges to assessing depression. Allowing sufficient time to talk with the person about their mood, not hurrying, and understanding that response time may be slowed are often important communication strategies. Focusing on "low mood" without using the word depression, attending to distressing symptoms,

communicating concern for the person's well-being, staying focused on quality of life and optimal outcomes, and listening without judging may help older persons discuss painful emotional experiences.

Older people may express unrealistic fear or worries, seemingly exaggerated levels of pain or emotional distress, and overly critical opinions of themselves, family members, or providers that are driven by the underlying depression. Allowing the person to express strong emotions without "correcting" them (e.g., it's really not that bad; your family cares about you; we have worked hard to help you) is critical. Offering gentle, conversational education about depression as an illness, one that robs older adults of their quality of life, and makes all problems more intense, is an important and effective intervention (Unutzer et al., 2002).

As noted in the guideline, monitoring the level and type of depressive symptoms across time and care settings is another important focus of nursing care. Transitions from one residential and/or treatment setting to another are common among medically ill older adults. Depression-related monitoring information and recent PHQ-9 scores should be included in discharge and admission information to best assure follow-up by subsequent providers.

Depression detection outcomes may also be monitored at the organizational or systems level. Main outcomes include: (1) the total number of older adults who are screened for depression; (2) the number who are screened, and based on a significant cluster of symptoms, are referred for comprehensive evaluation and treatment of depression; (3) the number who are screened, and based on low level symptoms, are monitored over time to evaluate the number and intensity of symptoms; and (4) the number who are screened and monitored (as in 2) and whose depression symptoms resolve on their own, OR whose symptoms increase and require referral for comprehensive evaluation and treatment.

Summary and Conclusions

The depression detection guideline provides a simple-to-use approach that can be easily implemented in diverse practice settings where older adults live and are routinely treated. Understanding the variability in depressive symptoms, knowing factors that place older adults at high risk for depression, and rejecting common societal beliefs that depression is a natural consequence of age-related health and social changes are essential to depression detection. The self-rated PHQ-9 is easy-to-use and score, and provides many opportunities to engage older adults in their care. The multipurpose scale may be effectively used to (1) screen older adults for clinically significant levels of depressive symptoms; (2) guide diagnosis following an algorithm; (3) monitor level and type of symptoms over time; and (4) stimulate discussion with older adults about additional problems and symptoms. In our guideline, the primary focus is detecting clinically significant levels of depression symptoms so that referral may be made for further evaluation and treatment by qualified health provider. Thus, screening practices must be part of a larger established practice that systematically directs referral, evaluation, and treatment of older adults.

References

Acee AM. Detecting and managing depression in type II diabetes: PHQ-9 is the answer! Medsurg Nurs. 2010; 19(1):32–38. [PubMed: 20336982]

Alexandrino-Silva C, Alves TF, Tofoli LF, Wang YP, Andrade LH. Psychiatry: life events and social support in late life depression. Clinics (Sao Paulo). 2011; 66(2):233–238. [PubMed: 21484039]

Alexopoulos GS, Abrams RC, Young RC, Shamoian CA. Cornell Scale for Depression in Dementia. Biological Psychiatry. 1988; 23(3):271–284. [PubMed: 3337862]

Almeida OP, Alfonso H, Pirkis J, Kerse N, Sim M, Flicker L, et al. A practical approach to assess depression risk and to guide risk reduction strategies in later life. Int Psychogeriatr. 2011; 23(2): 280–291. [PubMed: 20880427]

Anstey KJ, von Sanden C, Sargent-Cox K, Luszcz MA. Prevalence and risk factors for depression in a longitudinal, population-based study including individuals in the community and residential care. Am J Geriatr Psychiatry. 2007; 15(6):497–505. [PubMed: 17545450]

APA. Diagnostic and Statistical Manual of Mental Disorders. 5. Vol. 2012. Arlington, VA: American Psychiatric Association; 2013. (DSM-5)

Arroll B, Goodyear-Smith F, Crengle S, Gunn J, Kerse N, Fishman T, et al. Validation of PHQ-2 and PHQ-9 to screen for major depression in the primary care population. Ann Fam Med. 2010; 8(4): 348–353. [PubMed: 20644190]

Barry LC, Murphy TE, Gill TM. Depression and functional recovery after a disabling hospitalization in older persons. J Am Geriatr Soc. 2011; 59(7):1320–1325. [PubMed: 21668916]

Bartels SJ, Coakley EH, Zubritsky C, Ware JH, Miles KM, Arean PA, et al. Improving access to geriatric mental health services: a randomized trial comparing treatment engagement with integrated versus enhanced referral care for depression, anxiety, and at-risk alcohol use. Am J Psychiatry. 2004; 161(8):1455–1462. [PubMed: 15285973]

Boyle LL, Richardson TM, He H, Xia Y, Tu X, Boustani M, et al. How do the PHQ-2, the PHQ-9 perform in aging services clients with cognitive impairment? Int J Geriatr Psychiatry. 2011; 26(9): 952–960. [PubMed: 21845598]

Bruce ML, Van Citters AD, Bartels SJ. Evidence-based mental health services for home and community. Psychiatr Clin North Am. 2005; 28(4):1039–1060. x–xi. [PubMed: 16325739]

Callahan CM, Unverzagt FW, Hui SL, Perkins AJ, Hendrie HC. Six-item screener to identify cognitive impairment among potential subjects for clinical research. Med Care. 2002; 40(9):771–781. [PubMed: 12218768]

Ciro CA, Ottenbacher KJ, Graham JE, Fisher S, Berges I, Ostir GV. Patterns and correlates of depression in hospitalized older adults. Arch Gerontol Geriatr. 2012; 54(1):202–205. [PubMed: 21570134]

CMS. MDS 3.0 for Nursing Homes and Swing Bed Providers. 2010. Retrieved August 23, 2010, from https://www.cms.gov/NursingHomeQualityInits/25_NHQIMDS30.asp

Ell K, Unutzer J, Aranda M, Sanchez K, Lee PJ. Routine PHQ-9 depression screening in home health care: depression, prevalence, clinical and treatment characteristics and screening implementation. Home Health Care Serv Q. 2005; 24(4):1–19. [PubMed: 16446263]

Gallo JJ, Rabins PV. Depression without sadness: Alternative presentations of depression in late life. American Family Physician. 1999; 60(3):820–826. [PubMed: 10498109]

Garcia-Alberca JM, Lara JP, Berthier ML. Anxiety and depression in caregivers are associated with patient and caregiver characteristics in Alzheimer's disease. Int J Psychiatry Med. 2011; 41(1):57–69. [PubMed: 21495522]

Haq SU, Symeon C, Agius M, Brady R. Screening for depression in post stroke patients. Psychiatria Danubina. 2010; 22(Suppl 1):S33–35. Journal Article. [PubMed: 21057398]

Harris Y. Depression as a risk factor for nursing home admission among older individuals. J Am Med Dir Assoc. 2007; 8(1):14–20. [PubMed: 17210498]

Huang CQ, Wang ZR, Li YH, Xie YZ, Liu QX. Cognitive function and risk for depression in old age: a meta-analysis of published literature. Int Psychogeriatr. 2011; 23(4):516–525. [PubMed: 20937170]

IMPACT. IMPACT: Late life depression treatment manual for collaborative depression management. 2007. Retrieved September 28, 2007, from http://impact-uw.org

Irwin SA, Rao S, Bower K, Palica J, Rao SS, Maglione JE, et al. Psychiatric issues in palliative care: recognition of depression in patients enrolled in hospice care. J Palliat Med. 2008; 11(2):158–163. [PubMed: 18333728]

Kane, R.; Ouslander, JG.; Abrass, IB.; Resnick, B., editors. Essentials of clinical geriatrics. 6. New York: McGraw-Hill; 2009.

Kempen GI, Ballemans J, Ranchor AV, van Rens GH, Zijlstra GA. The impact of low vision on activities of daily living, symptoms of depression, feelings of anxiety and social support in community-living older adults seeking vision rehabilitation services. Qual Life Res. 2012; 21(8): 1405–1411. [PubMed: 22090173]

Kroenke K. Enhancing the clinical utility of depression screening. CMAJ. 2012; 184(3):281–282. [PubMed: 22231681]

Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med. 2001; 16(9):606–613. [PubMed: 11556941]

Kroenke K, Spitzer RL, Williams JB. The Patient Health Questionnaire-2: validity of a two-item depression screener. Med Care. 2003; 41(11):1284–1292. [PubMed: 14583691]

Kroenke K, Spitzer RL, Williams JB, Lowe B. The Patient Health Questionnaire Somatic, Anxiety, and Depressive Symptom Scales: a systematic review. Gen Hosp Psychiatry. 2010; 32(4):345–359. [PubMed: 20633738]

Lamoureux EL, Tee HW, Pesudovs K, Pallant JF, Keeffe JE, Rees G. Can clinicians use the PHQ-9 to assess depression in people with vision loss? Optometry and vision science : official publication of the American Academy of Optometry. 2009; 86(2):139–145. [PubMed: 19156007]

Lowe B, Kroenke K, Grafe K. Detecting and monitoring depression with a two-item questionnaire (PHQ-2). J Psychosom Res. 2005; 58(2):163–171. [PubMed: 15820844]

Lowe B, Spitzer RL, Williams JB, Mussell M, Schellberg D, Kroenke K. Depression, anxiety and somatization in primary care: syndrome overlap and functional impairment. Gen Hosp Psychiatry. 2008; 30(3):191–199. [PubMed: 18433651]

Lyness JM, Chapman BP, McGriff J, Drayer R, Duberstein PR. One-year outcomes of minor and subsyndromal depression in older primary care patients. Int Psychogeriatr. 2009; 21(1):60–68. [PubMed: 18786280]

Lyness JM, Kim J, Tang W, Tu X, Conwell Y, King DA, et al. The clinical significance of subsyndromal depression in older primary care patients. Amercan Journal of Geriatric Psychiatry. 2007; 15(3):214–223.

NIH; National Institute of Mental Health. Health and Education: Publications about Depression. 2014. Retrieved July 31, 2014, from http://www.nimh.nih.gov/health/publications/depression-listing.shtml

NIMH. Older adults and depression. 2012. Available from http://www.nimh.nih.gov/health/publications/older-adults-and-depression/complete-index.shtml

Rapp MA, Schnaider-Beeri M, Wysocki M, Guerrero-Berroa E, Grossman HT, Heinz A, et al. Cognitive decline in patients with dementia as a function of depression. Am J Geriatr Psychiatry. 2011; 19(4):357–363. [PubMed: 20808140]

Richardson TM, He H, Podgorski C, Tu X, Conwell Y. Screening depression aging services clients. The American Journal of Geriatric Psychiatry : Official Journal of the American Association for Geriatric Psychiatry. 2010; 18(12):1116–1123. [PubMed: 20808102]

Schneider C, Jick SS, Bothner U, Meier CR. COPD and the risk of depression. Chest. 2010; 137(2): 341–347. [PubMed: 19801582]

Sheeran T, Byers AL, Bruce ML. Depression and increased short-term hospitalization risk among geriatric patients receiving home health care services. Psychiatr Serv. 2010; 61(1):78–80. [PubMed: 20044423]

Smith, M.; Haedtke, C.; Shibley, D. Detection of Depression in Cognitively Intact Older Adults. In: Butcher, HK., editor. Series on Evidence-Based Practice Guidelines. Iowa City, IA: The University of Iowa College of Nursing John A. Hartford Foundation Center of Geriatric Nursing Excellence; 2014.

Spitzer RL, Kroenke K, Williams JB. Validation and utility of a self-report version of the PRIME-MD: The PHQ primary care study. Journal of the American Medical Association. 1999; 282(18):1737–1744. [PubMed: 10568646]

Strine TW, Kroenke K, Dhingra S, Balluz LS, Gonzalez O, Berry JT, et al. The associations between depression, health-related quality of life, social support, life satisfaction, and disability in community-dwelling US adults. J Nerv Ment Dis. 2009; 197(1):61–64. [PubMed: 19155812]

Teresi J, Abrams R, Holmes D, Ramirez M, Eimicke J. Prevalence of depression and depression recognition in nursing homes. Social Psychiatry and Psychiatric Epidemiology. 2001; 36(12):613–620. [PubMed: 11838834]

Thekkumpurath P, Walker J, Butcher I, Hodges L, Kleiboer A, O'Connor M, et al. Screening for major depression in cancer outpatients: the diagnostic accuracy of the 9-item patient health questionnaire. Cancer. 2011; 117(1):218–227. [PubMed: 20737537]

Thielke SM, Unutzer J. Pain is not a benign symptom among older adults: comment on Blyth et al., "pain, frailty, and comorbidity in older men: The CHAMP study". Pain. 2008; 140(1):1–2. [PubMed: 18950943]

Thota AB, Sipe TA, Byard GJ, Zometa CS, Hahn RA, McKnight-Eily LR, et al. Collaborative care to improve the management of depressive disorders: a community guide systematic review and meta-analysis. Am J Prev Med. 2012; 42(5):525–538. [PubMed: 22516495]

Unutzer J, Katon W, Callahan CM, Williams JW Jr, Hunkeler E, Harpole L, et al. Collaborative care management of late-life depression in the primary care setting: A randomized controlled trial. Journal of the American Medical Association. 2002; 288(22):2836–2845. [PubMed: 12472325]

USPSTF. Clinical Guidelines. Screening for depression in adults: U.S. preventive services task force recommendations. Ann Intern Med. 2009; 151(11):I56. [PubMed: 19949139]

Watson LC, Zimmerman S, Cohen LW, Dominik R. Practical depression screening in residential care/assisted living: five methods compared with gold standard diagnoses. The American Journal of Geriatric Psychiatry : Official Journal of the American Association for Geriatric Psychiatry. 2009; 17(7):556–564. [PubMed: 19554670]

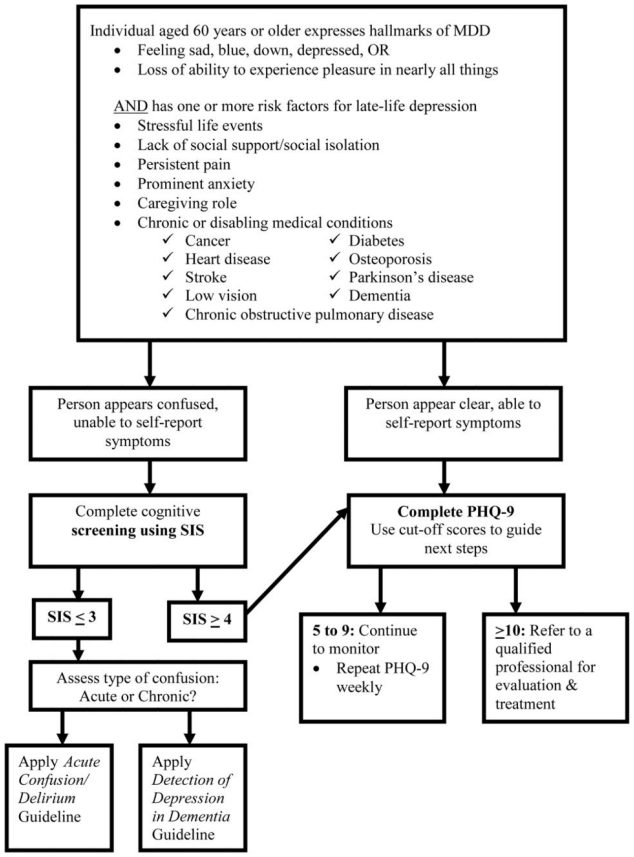

Figure 1.
Depression Detection Flowchart

Table 1

Variations in Late-Life Depression Presentation

Mood disturbances	Physical Complaints
• Irritability, restlessness	• Aches and pains
• Brooding, worry	• Digestive problems, stomach aches
• Unreasonable fears	• Constipation
• Apathy, indifference, withdrawal	• Bowel irregularities
• Pessimism, expecting the worst	• Decreased sexual interest
• Feeling like a failure	• Disheveled appearance
• Low self worth	• Slowed movements and responses
• Helplessness/hopelessness	• Slowed or decreased speech; low or monotonous tone of voice
• Feeling unable to cope	• Persistent headaches, other chronic pain that doesn't go away when treated
• Feeling emotionally "empty"	
• Feeling nervous	

Adapted from Kane, Ouslander, Abrass, & Resnick (2009); NIH (2014).

Table 2

Depressive Disorders and Syndromes

Major depressive disorder (MDD)	**Hallmark symptoms**: 1) Depressed mood (sad, low, blue); 2) Loss of interest or pleasure in nearly all activities that are usually enjoyed (anhedonia) **Additional symptoms**: Significant weight loss/gain; insomnia/hypersomnia; psychomotor agitation/retardation; fatigue (loss of energy); feelings of worthlessness or guilt; impaired concentration (indecisiveness); recurrent thoughts of death or suicide **Level/duration**: One or more hallmark symptoms plus four additional symptoms for a total of five that occur nearly everyday for at least 2 weeks
Minor depression	**Level/duration**: One or more hallmark symptoms plus three to four additional symptoms (not five) over 2 weeks; also described as subsyndromal or subclinical in the literature **Risks**: More common than MDD; highly associated with physical disability, increased health costs, and risk of developing MDD
Clinically significant depression	**Level/duration:** A cluster of depressive symptoms that causes sufficient distress and impairment to be a focus of clinical care **Risk:** More common than MDD; highly associated with functional decline and onset of MDD
Persistent depressive disorder (Dysthmia)	**Symptoms**: Depressed mood and associated symptoms including: poor appetite or overeating; insomnia or hypersomnia; low energy or fatigue; low self-esteem; poor concentration or difficulty making decisions; feelings of hopelessness **Level/duration:** Symptoms occur for more days than not for at least two years

Source: (APA, 2013; Lyness, et al., 2009; Lyness, et al., 2007)

Table 3

Overcoming Barriers to Depression Detection

Barriers	Potential Solutions
Provider perceptions & beliefs • Older adults focus on somatic vs. mood complaints • Older adults don't want to talk about feelings • Depression is an "understandable" part of aging • Time limitations • Inadequate training in psychiatry among primary care providers	• Educate providers about variations in depression presentation in late life • Use short self-report measures (e.g. PHQ-2 to screen for depression) • Institute computer screening (e.g. in the waiting room) • Identify and use billing codes that reimburse for time spent conducting depression screening (e.g. Medicare, Medicaid, some private insurance now pay) • Develop collaborative care teams with consulting psychiatrists and psychiatric nurse practitioners to promote best practices in primary care settings
Older Adults' perceptions & beliefs • Fear of stigma associated with depression • Belief that depression is "normal" with advancing age • Fear of antidepressant medication effects (e.g. make "high" or giddy)	• Provide simple, easy-to-use educational materials to older adults and their family members like those available through NIMH • Offer educational videos about depression in late life • Involve family in patient teaching, particularly younger family members who may have different life experiences related to depression and its treatment • Emphasize depression as a medical, not mental, illness that must be treated like any other disorder

Sources: (IMPACT, 2007; NIH, 2014; Thota, et al., 2012; Unutzer, et al., 2002)