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Geriatric Depression in Primary Care

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Abstract

Primary care settings present important opportunities for the detection and management of depression in older adults. As many as 10 % of older adults presenting in primary care have clinically significant depression, but only about half are recognized and only one in five depressed older adults receive effective treatment in primary care. We review common barriers to effective treatment such as atypical clinical presentations and comorbid medical conditions that are common in older adults. We identify treatment strategies such as measurement-based stepped care and collaborative care that can substantially improve the effectiveness of treatment in this setting and we highlight opportunities for addressing health disparities in geriatric depression care. We also point out the importance of engaging and supporting family caregivers of depressed older adults. We conclude by identifying three strategic areas to improve the treatment of geriatric depression in primary care: activation and engagement of patients and family members, health care provider training, and broader system changes.

Introduction

Depression is among the leading causes of disability-adjusted life years in the world¹ and a serious public health problem among older adults. General medical settings have been called the “de facto mental health care system” in the United States² and up to 80% of elderly Americans with depression receive their depression care in primary care.³ Depression is one of the most common conditions treated in primary care and from 1997 to 2002, the proportion of depression visits that took place in primary care increased from 51% to 64%.⁴ Primary care thus presents important opportunities for detecting and treating depressed older adults.

Many older adults prefer to receive their depression treatment in primary care, where providers can address not only mental health problems but also acute and chronic medical conditions that are common in this age group and often comorbid with depression. Primary care providers who provide continuity of care also have an important opportunity to track depression over time because depression in older adults is often chronic or recurrent. A number of research studies over the past 10 years have demonstrated that geriatric depression can be treated effectively when mental health providers effectively partner with their colleagues in primary care to provide effective consultation and collaborative care.⁵ In this paper, we will (a) provide a contextualized overview of, (b) identify trends in, and (c) recommend future directions for the management of geriatric depression in primary care.

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Epidemiology of late-life depression in primary care

In community settings, about 5 % of adults aged 65 and older meet research diagnostic criteria for major depression,^{6, 7} with rates of subsyndromal depression estimated at 8% -16%.⁸ Data from the National Comorbidity Study were used to estimate the projected lifetime risk of major depression to be 23 % by age 75.⁹ Recent epidemiological data show overall rates of depression to be similar between developed countries (5.5%) and developing countries (5.9%), but rates of depression tend to decrease with age in developed countries while they tend to increase with age in developing countries. Older adults in developed countries were reported to have relatively low average depression rates (2.6 %) while those in developing countries had an average rate almost three times higher (7.5%).¹⁰ The rates of geriatric depression increase to 12-30% in institutional settings, and up to 50% for residents in long-term care facilities.^{11, 12} Approximately 5-10% of older adults seen in primary care settings have clinically significant depression.¹³

Quality of depression treatment in primary care settings

Although depression is a common problem in older adults, it is often undetected, undiagnosed, untreated, or undertreated.¹⁴ A recent meta-analysis showed that primary care providers detected only 40-50% of depression among older adults and they were less successful detecting depression among older adults than among younger adults.¹⁵ More importantly, only about one in five older adults with depression receives effective treatment for depression in primary care.¹⁶ Poor quality care leads to negative depression outcomes and serious public health problems. In a study of 1,198 consecutive suicide attempters in Helsinki, Finland between 1997 and 1998, Suominen and colleagues¹⁷ found that during the 12 months immediately before the attempt, the majority of elderly suicide attempters had a contact with a health care agency. Only 4% of them had been diagnosed with a mood disorder before the attempt, and only 57% after the attempt. This finding emphasizes the importance of early detection and treatment of late-life depression in primary care.

Barriers to effective late-life depression treatment are at the patient-, provider-, and system-level.^{18, 19} Patients may present with somatic rather than emotional complaints, decreasing the likelihood of being diagnosed with depression.^{20, 21} Patients may also resist a diagnosis of depression and attribute their symptoms to physical causes or to 'normal aging'.²²⁻²⁴ Patients often have limited knowledge about depression and available treatments. Unique help seeking patterns among certain population groups, stigma, and poor adherence have been also identified as barriers. Provider barriers include concerns about stigmatizing patients with a psychiatric diagnosis,²⁵ time pressures,^{26, 27} inadequate knowledge about diagnostic criteria or treatment options,²⁸ lack of a psychosocial orientation, and inadequate insight into different cultural presentations of mental disorders.²⁹ System barriers include productivity pressures, limited mental health coverage, limited availability of mental health specialists, especially for evidence-based psychotherapy,^{26, 30} lack of systematic approaches for detecting and managing depression,³¹ and inadequate continuity of care. Finally, policies that regulate providers' practice contexts and patients' access to evidence-based depression care can create important barriers to effective treatment.¹⁸

Risk factors and protective factors

Risk factors for developing depression after age 65 are similar to those in younger individuals and include being female, unmarried, poor, having chronic physical illness, social isolation, a history or family history of depression.³² Additional risk factors that are particularly important in older adults include loss and grief, loneliness, and care-taking responsibilities. Other risk factors that increase the likelihood of depression in the medically

ill elderly include presence of cognitive impairment, age greater than 75, poor social support, active alcohol abuse, and lower educational attainment.³³

Protective factors include social support and social activities such as volunteering and physical activity.³⁴ Religion and spirituality may play an important part in many older adults' lives.³⁵ They may allow older adults to experience life as meaningful despite losses and challenges and, thereby, reduce the risk of depression. It is also possible that the positive effect of religion on mental health is mediated by the social connectedness and the social support derived from taking part in religious and associated social activities.

a. Loss and grief

In the United States, 800,000 Americans lose their spouse each year, leaving 11 million widows and 2 million widowers, a total of 7% of the population.³⁶ The death of a spouse is associated with declining mental and physical health, increased suicide and non-suicide mortality, and reduced income.³⁷ A grieving person may also have more somatic symptoms, more medical visits, and more accidents. Major depression, substance abuse, anxiety disorders, and post-traumatic stress disorder are common within the first year of the spouse's death.^{37, 38} Specifically, 29-58% of widowed person meet criteria for major depression at one month and 25% still meet these criteria at three months.³⁹ Meeting criteria for major depression at 2 months markedly increases the risk of having major depression at one year.⁴⁰ Although losing a loved one is an extremely stressful experience for all, evidence suggests that widowhood leads to higher rates of depressive symptoms for men than women.^{41, 42} With the aging of the population, older adults also experience other important losses such as losses of children and grand children, which can be even more devastating than the loss of a spouse.

b. Caregiving responsibilities

The risk of depression is particularly great for those older adults who are taking care of a significant other with serious medical or cognitive impairments.⁴³ Studies have shown that the burden from caregiving can compromise immune, cardiovascular, and endocrine functioning and increase the risk for morbidity and mortality.^{44, 45} A study showed that minor depressive symptoms were common in caregivers of spouses with dementia, but only those who had prior histories of major depression developed major depression.⁴⁶

c. Medical illness

Eighty-eight percent of older adults have one or more chronic illnesses with one quarter of this group having 4 or more conditions.⁴⁷ These chronic conditions significantly impair older adults' health and ability to function.⁴⁸ Degenerative arthritis, particularly osteoarthritis affects 50 %, hypertension 40 %, hearing loss 30 %, urinary incontinence up to 30 %, heart disease 30 %, diabetes mellitus 15 %, and significant impairment of vision up to 15 % of population aged 65 or older.³⁶ Medical illness is a well-established risk factor for depression. Between 14 % and 37 % of older medical outpatients suffer from clinically significant depressive syndromes and as many as 40% of older medical inpatients have been found to have clinically significant depressive symptoms. The associated functional impairment may be a greater risk factor for depression than the physical illness per se.^{49, 50}

Conversely, comorbid depression has shown a strong association with increased morbidity and mortality, delayed recovery, and negative prognosis among those with medical illness. The rates of comorbid depression are especially high in certain illnesses such as neurological disorders, endocrine disease (e.g. hypothyroidism), myocardial infarction, and cancer. Depression rates of 29-36% have been found in stroke,⁵¹ 30-50% in Alzheimer's disease,⁵² and up to 76% in Parkinson's disease.⁵³ A variety of changes on MRI have been associated

with depression⁵⁴ and these findings are consistent with a subtype of late life and late onset depression, ‘vascular depression.’^{55, 56}

Several physiological mechanisms have been proposed to explain the relationship between depression and comorbid physical illness, but this relationship is likely bi-directional and more complex than any single theory can explain. Depression is also associated with poor adherence to treatment, lower physical activity, poor diet and other health risk behaviors. Such behavioral effects of depression may lead to poor outcomes in chronic medical diseases such as diabetes.⁵⁷

Clinical presentation

With high rates of chronic medical illnesses, biological changes, socio-developmental challenges related to aging, and atypical depression symptom presentations, geriatric patients can present substantial diagnostic challenges. The symptoms of late-life depression are often attributed to normal aging, grief, physical illness or dementia and providers and patients miss important opportunities to initiate treatment for what is an eminently treatable health problem.¹⁴ In the following section, we will briefly summarize the clinical presentation of late-life depression in primary care.

a. Atypical presentation of depression

Older adults do not always fit the typical picture of depression and some may not report feeling sad at all. Primary care providers should consider such clinical presentations and look for other indicators such as anhedonia, avolition, unexplained physical symptoms, low energy or fatigue. Depressed patients may attribute symptoms to physical causes or stressful life events or simply reply with “I don’t know” to questions eliciting their understanding of depressive symptoms. Depressed patients may not participate in physical, speech or occupational therapy and feel negative or hopeless about treatments offered. Expressions such as “I just can’t do this” or “I can’t seem to do anything any more” are common and may be sign of a patient’s decreased self-efficacy, motivation, and ability to participate in self-care due to depression. Other common feelings and expressions are “I am not needed”, “nobody needs me,” or “I feel I am just in everyone’s way.” Such utterance may indicate a patient’s loss of self-worth or sense of loneliness. Among the oldest old, dysphoric mood may be less evident and reliable as an indicator of depression. In these cases, the absence of positive affect and anhedonia may be a better indicator.^{58, 59}

Conversely, life experience and wisdom may protect or buffer older adults from developmental challenges to some degree. This is one potential explanation for lower rates of major depression with increasing age. Depression is less likely if the patient retains an a sense of humor, responds warmly to affection from family and caregivers, shows an interest in life and pleasurable activities, looks forward to family visits, readily accepts assistance, actively participates in treatment, and points to reasonable causes for pain.

b. Overlap with chronic medical illness, emotional and physical pain

In the medically ill elderly, depressive symptoms may be overlooked because they are assumed to be due to concurrent medical illnesses. Many of the symptoms of depression such as lower energy, fatigue, loss of appetite, and sleep disturbance are also associated with somatic illnesses. Somatic complaints may suggest presence of depression, especially if they are out of proportion to underlying medical disorders.²² Only 25-30% of primary care patients present with purely affective or cognitive symptoms of depression.²⁹ Many studies have found an independent and robust relationship between depressive symptoms and chronic physical pain. With older adults, arthritis pain is one the most common correlates of depression.⁶⁰⁻⁶² The rate of major depression increases in a linear fashion with greater pain

severity.⁶³ Although pain may be an indicator for depression, we caution mental health providers that not all pain signifies depression. Older adults often experience pain and suffering from causes such as osteoarthritis along with depression. While depression treatment may be helpful for such patients,⁶⁴ untreated physical pain is a predictor of poor depression treatment response⁶⁵ and the most effective treatment includes treatment for depression plus effective pain management.⁶⁰

c. Minor and subsyndromal depression

The majority of older adults with clinically significant depressive symptoms do not meet standard diagnostic criteria for major depression or dysthymic disorder.⁶⁶ Although the prevalence of major depressive illness appears to decrease as one becomes older,⁶⁷ incidence of clinically significant non-major forms of depression increases steadily with advancing age and rises steeply among those older than 80 years.^{68, 69} Patients in this group fall short of meeting diagnostic criteria for major depression because of fewer or limited duration of depression symptoms. Nonetheless, several studies suggest that these patients carry a similar disease burden, including poorer health and social outcomes, functional impairment, and higher health utilization and treatment costs.^{68, 70, 71} It is important to detect subsyndromal depression as these patients are at very high risk for subsequent development of major depression, may develop suicidal ideation, and also sustain a fair degree of functional impairment and declined quality of life.⁷²⁻⁷⁴ Unlike major depression, subsyndromal depressive conditions have a relatively small evidence base regarding treatments; existing data suggest that available therapies have modest effects when compared to usual care or placebo.^{14, 75, 76} Targeting interventions for patients with minor and subsyndromal depression may prove useful as both primary and secondary prevention strategies and clinicians should watch such patients carefully because of the high risk of worsening depression, especially if patients have experienced prior episodes of major depression. Psychosocial treatments may at least as helpful as medications for older adults with less severe forms of depression⁷⁷ but such treatments are rarely available in busy primary care settings.

Treatment modalities for major depression and dysthymic disorder

Although older adults are less likely to access and receive adequate mental health care services than their younger counterparts, late life depression is treatable with appropriate psychosocial and pharmacological interventions.⁷⁸⁻⁸⁰ Evidence shows that depression can be treated in both primary care settings and psychiatric specialty care settings, as long as effective treatments are provided. In a recent meta-analysis, Dawson and colleagues⁸¹ found that the remission rate of depression symptoms in interventions in primary care settings range between 50% and 67% although the studies included did not focus specifically on older adults. Antidepressant medications or psychotherapy are recommended as first-line treatments for depression in older adults⁸² and while millions of prescriptions are written for antidepressant medications in primary care each year, few practices are in a position to offer evidence-based psychotherapies for depression. Physical activity has also been shown to be helpful in late-life depression and electroconvulsive therapy (ECT) remains an important and viable treatment option for older adults with psychotic or severe, treatment resistant depression.⁸³ Several chapters in this issue discuss the depression treatment modalities mentioned above in detail and we will focus on strategies to improve the delivery of efficacious treatments to patients seen in primary care.

Depression management strategies in primary care

a. Detection

Geriatric depression in primary care settings is seriously undetected, undiagnosed, and undertreated. Several tools are available to facilitate screening for depression. A single-item screening question is the simplest among all screening tools. A simple question ‘Do you often feel sad or depressed?’ to which the patient is required to answer either ‘yes’ or ‘no’ was tested in a sample of medically ill patients in the community and had a sensitivity of 69% and a specificity of 90%⁸⁴. The Patient Health Questionnaire-2 (PHQ-2) asks patient about depressed mood: (a) ‘during the past weeks have you often been bothered by feeling down, depressed, or hopeless?’ And (b) ‘during the past month have you often been bothered by little interest or pleasure in doing things.’⁸⁵ This questionnaire is useful in identifying patients at high risk for depression, and it has a sensitivity of 100%, a specificity of 77%, and a positive predictive value of 14% in older adults.⁸⁶ Such brief screening tools can be easily administered by office staff or physicians during a primary care visit.

Longer screening tools are also available: short versions of the Geriatric Depression Scale (GDS),⁸⁷ the 9-item Patient Health Questionnaire (PHQ-9),⁸⁸ 19-item Cornell Scale for Depression in Dementia,⁸⁹ the 20-item Center for Epidemiologic Studies Depression Scale (CES-D),⁹⁰ and the Beck Depression Inventory scale.⁹¹ These longer version tools can also be used to monitor a patient’s depression symptoms over the treatment course. Such ongoing symptom tracking is important in order to evaluate the effectiveness of a treatment. We recommend using brief screening tools for the detection and longer screening tools for the establishment and tracking of treatment progress.

Positive response to these questionnaires should alert the primary care provider to further evaluate the patient for depression. Not all depressed patients will answer positively to these questionnaires, and to address the possibility of ‘false negatives,’ clinicians may wish to ask additional questions about depressive symptoms for patients who appear depressed, who have a difficulty engaging in care, or whose functional impairment seems inconsistent with objective medical illness.

b. Promoting treatment engagement and adherence

Use of health services can be viewed as a complex function of sociodemographic, clinical, and other variables.⁹² Variables, such as gender, marital status, social class, minority status, education, race and ethnicity play significant roles in rates and patterns of depression care. Other important variables include type of presenting complaints and comorbid medical problems. Prior experiences of patients, family members, and friends with depression treatment in different settings are also important and may be better predictors of treatment engagement and adherence than clinical variables.⁹²

Sirey and colleagues^{93, 94} have studied the challenges with engaging depressed older adults in treatment and have identified several strategies that can be useful in this regard. Once engaged in treatment, it can be challenging for older adults to adhere to an adequate course of pharmacological or psychosocial treatment for depression. Alexopoulos⁹⁵ and colleagues have proposed several concrete steps to increase treatment adherence among older patients with depression: (a) Promote treatment adherence by personalizing depression care, (b) address the constellation of health threats and social constraints that may contribute to poor treatment outcomes, and (c) create comprehensive care algorithms targeting both modifiable predictors and organizational barriers to care.

Family members often play an important role in patients’ treatment engagement and adherence. Up to half of depressed older adults fail to take a significant proportion of

prescribed antidepressant medication, and recent research indicates that perceived emotional support from family and friends is a critical predictor of adherence.⁹⁶ In clinical practice, a provider's explicit, expressive, and constant message of commitment to the patient's improvement is an important step to engaging the patient and to increasing his or her adherence to treatment.

c. Stepped care

A stepped care approach to treatment first presents patients with relatively simple nonintrusive interventions and proceeds to more intense treatment approaches if patients are not improving as expected. As the first step in a stepped-care approach, the patient and supportive family members may be encouraged to try self-directed interventions such as pleasant events scheduling, physical, or social activities. When these attempts fail to improve depression, more intensive interventions can be offered in the form of guided self-help, which combines a self-help manual with a limited number of brief therapy sessions. More intensive psychosocial or pharmacological interventions can then be offered at the outpatient level, day treatment, and inpatient level if patients do not improve as expected.

A stepped care model starting with treatments offered in primary care can improve access to care, alleviate the demand on limited specialty mental health care resources and may address patients' treatment preferences for less stigmatized treatments. Bower and Gilbody⁹⁷ identified two fundamental features for a successful stepped care model: (a) the recommended treatment within a stepped care model should be the least restrictive of those currently available with possible significant health gain. Least restrictive refers to the impact on patients in terms of cost and personal inconvenience. (b) The result of treatment and decision about the treatment provision are monitored systematically and changes are made if current treatments are not achieving significant health gains. To facilitate such treatment intensification, it is important to use objective measures such as the PHQ-9⁸⁸ to monitor depressive symptoms over time.

d. Collaborative care

In recent years, collaborative care models have gained significant momentum in the U.S. as well as in other countries, such as the United Kingdom, the Netherlands, and Australia. Several interventions have presented a strong evidence for effectiveness with depressed older adults in primary care. Examples include IMPACT (Improving Mood: Promoting Access to Collaborative Treatment for Late-life Depression)⁹⁸ and PROSPECT (Prevention of Suicide in Primary Care Elderly: Collaborative Trial)^{75, 99} in the U.S., and CADET (Collaborative Depression Trial)¹⁰⁰ in the U.K. Building on a robust evidence-base, such collaborative care models are now being widely disseminated in some settings. One such effort is the DIAMOND (Depression Improvement Across Minnesota, Offering a New Direction) program, which uses key components of the IMPACT model and helps practices adapt them to their local context.¹⁰¹

The core tenet of collaborative care is that primary care providers work closely with their patients and a consulting mental health specialist to treat depression. Patients' clinical outcomes are tracked with structured depression rating scales similar to the way primary care providers follow clinical outcomes of other treatments such as blood pressures in the treatment of hypertension. Treatments are systematically adjusted for patients who do not improve as expected, using evidence-based medication treatments and/or psychotherapies.

A depression care manager (typically a nurse, social worker, or psychologist) working in a primary care practice is responsible for assessing a patient's needs, coordinating an appropriate level of treatment following the stepped care model, supporting a patient's

adherence to treatment, and evaluating treatment effectiveness. Such a care management approach ensures close follow-up and contact, supporting streamlined care for the complex, multifaceted needs of depressed older adults. This approach also allows providers to incorporate patients' and families' perspectives on depression management (for example, preferences for medication management or evidence-based psychosocial treatments). The care manager works closely with the primary care provider (PCP) by: educating patients about depression, coaching patients in pleasant events scheduling/behavioral activation, supporting the PCP's antidepressant management, and may offer patients a brief course of evidence-based psychotherapy, such as Problem Solving Treatment in Primary Care (PST-PC) or Interpersonal Therapy (IPT). A consulting psychiatrist consults regularly (usually weekly) on the caseload of patients treated in primary care, focusing on patients who present diagnostic or therapeutic challenges. Such collaborative care programs can double the effectiveness of usual care for depression.^{16, 18, 102}

Primary care as a context to address health disparities in geriatric depression care

Certain population groups are at particularly high risk for poor depression treatment, and the primary care setting is an excellent context to address and reduce such health disparities. These groups include older adults with lower socioeconomic status (SES) or less education, patients from ethnic minority groups, and older men. Older men from ethnic minority groups, for example are particularly unlikely to receive depression treatment in primary care.^{103, 104}

There is a strong association between lower SES and less education, and higher rates of geriatric depression.¹⁰⁵⁻¹⁰⁹ A growing body of literature also shows that the socioeconomic, physical, and emotional milieu of the area of residence correlates with the rates of geriatric depression. The older adult's level of satisfaction with the neighborhood environment, availability of transportation, and economic character of communities (i.e., living in a poor neighborhood) are important determinants of depression among older adults.¹¹⁰⁻¹¹⁴ Because of declining health and functioning, older adults may be less adaptable to the environment and more dependent on resources available in their area of residence.¹¹⁵⁻¹¹⁷ Older adults with multiple comorbid conditions living in a poor neighborhood may experience difficulties in coordinating clinic visits and actually making it to a clinic due to the lack of transportation. Limited mobility due to declining health, poor public transportation, and a negative neighborhood context (e.g. not feeling safe or not feeling connected to neighbors) can increase older adults' feeling of loneliness, further increasing the risk for developing or worsening depression.

Older adults from certain ethnic/racial minority groups have higher rates of depression^{118, 119} and are less likely to be diagnosed with or treated for depression than their white counterparts.^{120, 121} These health service disparities in minority populations become increasingly complicated when considering cultural beliefs and practices of health and attitudes to depression care. Culture influences how individuals experience and express depression.^{122, 123} Minority patients from certain ethnic groups may express their depression more somatically than psychologically.^{29, 124} Such somatic presentations may reduce the recognition of depression by primary care providers or leads to the perception of a patient as 'difficult.'¹²⁵ Some minorities may also have less faith in the biological etiology of depression, be more skeptical about antidepressant medications, and show stronger preferences for counseling than their White counterparts.^{126, 127} When pharmaceutical treatment is the only available option, minority patients may be less likely to engage in treatment and more likely to be non-adherent. Our present primary care systems that focus primarily on pharmacological treatment without considering the unique barriers faced by

ethnic and racial minority populations may not be effective in addressing the pattern of disparities observed.¹²⁸

Evidence suggests that collaborative care programs for depression in which care managers support primary care providers and offer both pharmacological and nonpharmacological treatment options can increase the use of evidence-based depression treatments and improve health outcomes in older minorities and poor older Americans.¹²⁹⁻¹³² Only minor adaptations were made to meet the cultural needs of the different ethnic groups in published studies of collaborative care, indicating that this approach can address a broad patient population if care managers can adapt the treatment approach to meet the specific needs and preferences of individual patients and families.

Although depression is generally more common in women, such gender differences become less evident in older adults¹⁰⁴ and certain ethnic groups.^{133, 134} In most settings, depressed men are less likely than their female counterparts to receive recommended despite the fact that they have the highest risk of committing suicide.¹³⁵ The expression of depression symptoms may be particularly challenging for older men who find such help seeking inconsistent with their sense of masculinity and primary care providers may be less likely to ask older men about depression than women.¹³⁵ Studies of collaborative care for late life depression suggest that it may be more challenging to engage men in such programs but those men who do participate benefit as much from the help offered as do women.¹⁶ Studies also show that widowhood affects men more than it does women. Thus, close observation is indicated for newly widowed or socially isolated older men who may be at particularly high risk for developing depression.

Family: Partners in depression care and target of primary and secondary prevention

According to a national survey,⁴⁴ 44.4 million Americans (21% of people over 18 years old) were providing care to their family members. National data indicate that depressive symptoms in older adults will require additional hours of assistance from their family members, with associated costs reaching approximately \$9 billion.¹³⁶ Family members of depressed older adults experience moderate to high levels of caregiver burden, similar to family caregivers of older adults with Alzheimer's disease.¹³⁷

Engaging with and supporting family caregivers of depressed older adults may benefit both patients and family caregivers. Families have a great impact on older adults' health care utilization, treatment adherence, and depression outcomes and they can help produce enduring changes in older person's health behaviors.¹³⁸ Among people with depression, social supports are independent predictors of geriatric depression outcomes.^{139, 140} Older adults with positive family support are less likely to be institutionalized and the absence of family caregiving is a leading predictor of institutionalization.^{44, 45} While positive family support is protective and beneficial to the patient, negative family emotional life, such as hostility and unresolved conflict are powerful predictors of disease course and mortality in depression.¹⁴¹⁻¹⁴³ Family discord has been identified as a predictor of suicide among older adults.¹⁴⁴

Caring for an ill family member creates strain and stress to family caregivers and increases morbidity and mortality rates among family caregivers.¹⁴⁵ Caregivers who feel burdened by patients' depressive symptoms may be less able to be supportive with regards to the setbacks that patients encounter during treatment, such as treatment side effects and the difficulty of adhering to prescribed treatment.^{137, 146} By providing support to patients and family members with managing depression and navigating the health care system, we may be able

to prevent negative health outcomes in both the patients and their family members. Particularly, family caregivers with a history of major depression along with other risk factors should be considered as targets of secondary prevention. Whereas the burden of caregiving on the family is apparent across cultures and ethnicities, mental illness may be more burdensome to immigrant and minority families because of social and economic constraints that result from immigration and discrimination¹⁴⁷ and these added stresses may influence and shape their experiences with a mentally ill family member.

Studies have demonstrated the effectiveness of education for older adults and their family members,¹⁴⁸ including a psychoeducational workshop for older adults with recurrent major depression,¹⁴⁹ psychotherapy in primary care,¹⁵⁰ and a behaviorally oriented self-help group led by a non-health care professional.¹⁵¹

Where do we go from here?

Although significant progress in depression treatments has been made in the past decades, much work remains if we want to effectively reach the millions of older adults and their family members who struggle with depression. We summarize opportunities to decrease the public health burden associated with late-life depression in several areas: (a) consumer activation, (b) training of health care providers, and (c) broader system changes.

a. Consumer activation

While much attention has been focused on provider education with the hope of increasing the use of evidence-based treatments, there has been relatively little attention focused the demand for effective treatments by patients and their family members. Most older adults are not aware of what constitutes evidence-based effective care for depression and few patients demand such care. Patients who are started on treatment for depression often receive minimal information about the nature and goals of treatment.¹⁵² In many primary care visits, as little as one minute of time is spent in discussing treatment options and plans when patients are started on antidepressant medications.¹⁵² Contrary to the treatments of other health conditions such as hypertension where a blood pressure measurement is taken at every single contact with the health care system, patients started on depression treatment are rarely systematically followed and evaluated for treatment response. As a result, partially effective or ineffective treatments are continued for too long or patients drop out of treatment because they give up hope and millions of Americans remain depressed.

Efforts to improve the management of chronic conditions such as diabetes, hypertension, or depression have demonstrated the importance of helping patients become knowledgeable and active collaborators in their own care.¹⁵³ Such education efforts are also essential to empower depressed patients and their families to advocate for and participate effectively in treatment. Although Direct-to-Consumer advertising of antidepressant medication has increased demand for such medications in recent years, careful analysis shows that these advertisements often have limited educational value for increasing effective evidence-based treatments and exclude effective psychosocial treatments.¹⁵⁴ Similar efforts directed at older adults and their family members could include messages that introduce a broader range of effective treatment strategies and empower older adults and their family members to keep asking for changes in treatment until depression is substantially improved, following the stepped care approach outlined above.

b. Training of health care providers

Training in the assessment and management of late-life depression remains an important educational priority for primary care providers. Given the strong and consistent support for collaborative care programs in which an interdisciplinary team of primary care and mental

health providers effectively collaborate to care for depressed older adults, providers should learn how to practice such effective interdisciplinary team care during their training. The roles of psychiatrists in such teams often vary from traditional outpatient practice or consultation and require training in new skills such as caseload-focused consultation and support of depression care managers and primary care providers in diverse medical settings. Mental health workers trained as psychiatric nurses, social workers, or counselors may need to acquire new skills such as supporting medication management in primary care, engaging and tracking patients using structured outcome rating scales for depression, and providing evidence-based brief psychosocial treatments such as behavioral activation or problem solving treatment in primary care. Effective collaborative care teams may include members from a broad range of disciplines with varying degrees of training. Provider training in such new skills should be coupled with practice-based support mechanisms such as electronic health records and patient registries that can facilitate proactive systematic, measurement based care and effective team work.¹⁵⁵

c. Broader system changes

Even with trained providers and active patients and family members, primary care practices often find it challenging to implement evidence-based collaborative care programs that can reach the large numbers of older adults presenting with depression in primary care. Policies that provide financial support for evidence-based collaborative care programs such as the DIAMOND program in Minnesota¹⁰¹ are necessary for medical groups and primary care practices to implement and support such programs. Financial incentives for primary care providers to provide evidence-based care management for depression may arise in the context of the movement towards a ‘patient centered medical home’ in the United States or through pay-for-performance initiatives such as a program in the U.K. where General Practitioners are rewarded financially for performance on two quality indicators for the detection and management of depression.¹⁵⁶

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