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## Advances in Psychotherapy for Depressed Older Adults

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### Abstract

**Purpose of Review**—We review recent advances in psychotherapies for depressed older adults, in particular those developed for special populations characterized by chronic medical illness, acute medical illness, cognitive impairment, and suicide risk factors. We review adaptations for psychotherapy to overcome barriers to its accessibility in non-specialty settings such as primary care, homebound or hard-to-reach older adults, and social service settings.

**Recent Findings**—Recent evidence supports the effectiveness of psychotherapies that target late life depression in the context of specific comorbid conditions including COPD, heart failure, Parkinson's disease, stroke and other acute conditions, cognitive impairment, and suicide risk. Growing evidence supports the feasibility, acceptability, and effectiveness of psychotherapy modified for a variety of health care and social service settings.

**Summary**—Research supports the benefits of selecting the type of psychotherapy based on a comprehensive assessment of the older adult's psychiatric, medical, functional, and cognitive status, and tailoring psychotherapy to the settings in which older depressed adults are most likely to present.

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Compliance with Ethics Guidelines

Conflict of Interest

Patrick J. Raue, Amanda R McGovern, Dimitris N. Kiosses, and Jo Anne Sirey report grants from NIMH during the conduct of the study

Human and Animal Rights and Informed Consent

This article does not contain any studies with human or animal subjects performed by any of the authors.

## Keywords

psychotherapy; depression; geriatrics; health care settings

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## Introduction

Major depression affects 1–10% of older adults (>60 years), with increasing rates in settings in which patients experience medical illness, disability, pain, and social isolation [1–7]. Tailoring psychiatric treatment for older adults is necessary given the complexities of late life depression and the mutual relationship of depression with medical burden, functional disability, and cognitive impairment [8–11].

Many forms of psychotherapy have been shown to be effective in the treatment of late life depression, with similar efficacy rates achieved as found for younger and mid-life adults. The strongest evidence base exists for Problem Solving Therapy (PST) and Cognitive Behavior Therapy (CBT), with some evidence for Interpersonal Psychotherapy (IPT) [12–14]. A recent meta-analysis of psychotherapy for older adults found that, while the magnitude of effect depended on the type of control condition used, psychotherapy was overall effective in reducing depression [15].

Increasing the availability of psychotherapy for older adults is especially crucial given consistent evidence that older adults prefer psychotherapy over medication to treat their depression [16–19]. Despite these preferences, however, older adults rarely receive psychotherapy for depression [20] due to a combination of access, availability, clinician workforce limitations, and individual-level factors like stigma.

The need for available psychotherapy is also highlighted given the limitations of antidepressant medication. While several antidepressants are relatively safe for the majority of older adults, only about 44% respond and a third achieve remission with a single agent, rates lower than that for middle-aged adults [8, 21–22]. Moreover, the risk for adverse side effects and drug-drug interactions increases in patients with specific medical conditions, such as cardiac illness [23] and stroke [24–25]. Many depressed and medically ill older adults refuse, or have poor adherence to, antidepressant medication [26–27], with adherence rates varying by health care setting. For example, individuals receiving treatment for depression in primary care are less likely to adhere to medication than are those receiving services from a psychiatrist or other mental health care specialist [28]. In a sample of older veterans, 55% of non-adherent patients received their prescription in a primary care setting as compared to 42% in a mental health setting [29]. These findings highlight a particularly important consideration given that the majority of older adults receive mental health care in primary care settings [20].

In this paper, we extend findings on the overall benefits of psychotherapy for older adults with depression, and report on recent advances in tailoring psychotherapy for specific populations such as patients with chronic medical illness, acute medical illness, cognitive impairment, and suicide risk factors. We then review efforts to increase the accessibility and availability of psychotherapy for older adults by adapting its delivery for non-specialty

settings such as primary care, homebound or hard-to-reach older adults, and social service settings.

## Psychotherapies for Specific Patient Populations

Choice of psychotherapy should be based on the needs each patient population. Therefore, assessment of older adults with depression should include not only symptom presentation, psychosocial history, and life stresses, but a thorough understanding of the nature and impact of medical illnesses, physical disability, cognitive functioning, and suicide risk [12]. Many new psychotherapy approaches as described below target depression in the context of specific comorbid conditions.

### Psychotherapies for depression and chronic medical conditions

Chronic illnesses like chronic obstructive pulmonary disorder (COPD), arthritis, and diabetes may be characterized by pervasive loss of energy, other somatic symptoms, and physical disability. Patients who further experience depression face added challenges in their ability to care for themselves and adhere to a demanding medical and rehabilitation regimen [30].

Alexopoulos et al [31–33] developed a 9-session psychosocial intervention called Personalized Adherence Intervention for Depression and Severe COPD (PID-C). PID-C consists of identification of adherence barriers to medical, rehabilitation, and psychiatric treatment recommendations. Common adherence barriers include misconceptions about COPD, depression and their treatment, denial of need for treatment, functional limitations, and practical obstacles. Targeted PID-C intervention strategies involve psychoeducation and support to help patients address barriers and increase their participation in treatment. In an RCT of depressed patients with severe COPD, PID-C led to higher remission rates (1 more remission for every 3.83 patients), and greater reductions in both depressive symptoms and dyspnea-related disability than usual care [32]. The benefits of the intervention were maintained at 6-month follow-up. Despite the deteriorating course of COPD and high mortality associated with the illness, it is notable that dyspnea-related disability did not worsen over a one-year period. The investigators propose that the PID-C intervention can serve as a model of care for depression and other chronic conditions with a deteriorating course, in which effective management requires active patient participation in multi-modal care.

In a second RCT, Alexopoulos et al [34] compared PID-C to an intervention that combined Problem Solving Therapy (PST) with PID-C. The authors hypothesized that the addition of a depression-specific psychotherapy focused on increasing self-efficacy would further improve clinical outcomes. To complement the focus of PID-C on overcoming barriers to treatment recommendations, PST taught patients skills to solve other problems in living such as lack of pleasant and rewarding activities, social isolation, and relationship difficulties. Contrary to the study hypotheses, however, both 14-session interventions resulted in sustained improvement in depression in 72% of patients over a 26-week period. The investigators suggested that problems related to treatment adherence may be most prominent for patients with severe COPD and depression, and thus addressing these adherence problems directly

through the PID-C approach alone may be sufficient. The implications are that the PID-C psychosocial intervention may be preferred for this particular patient population over PST psychotherapy given the relative ease of training, and better match of skill set for bachelor and master's level clinicians typically employed by rehabilitation programs.

In other studies of patients with chronic medical conditions, Cognitive Behavior Therapy (CBT) has been investigated in patients with heart failure [35] and Parkinson's disease [36]. In each study, CBT focused on enhancing self-care and functioning in the context of the respective chronic medical condition. Freedland et al. [35] conducted an RCT examining CBT for depression and self-care among depressed patients with heart failure, both conditions increasing the risks of hospitalization and mortality. Patients receiving CBT in comparison to usual care enhanced by a heart failure education program had lower depression severity, higher remission rates (46% versus 19%, respectively), and fewer hospitalizations at six months. No differences emerged for self-care or physical functioning outcomes. Calleo et al. [36] examined the feasibility and impact of CBT for depressed Parkinson's patients. The investigators found evidence that CBT is a feasible approach for these patients, specifically that 80% of patients completed a course of 8 sessions. In addition, patients in the CBT group had lower depression severity scores at 1 month follow-up in comparison to those receiving usual care.

### **Psychotherapies for depression and acute medical illness**

Acute medical events like stroke can cause dramatic upheavals in functional ability, role functioning, the family system, and effective care coordination across a variety of medical and rehabilitation providers. Depression is common in the face of such abrupt disability and changes in functioning. Very little research has been conducted on psychotherapies that target the unique needs of these patients.

Hummel et al [37] evaluated the effectiveness of CBT for depressed older adults hospitalized for a variety of acute conditions such as fractures, falls, neurological conditions, and cardiovascular events. Patients receiving 15 sessions of CBT showed significant improvements in depression severity and physical functioning four months after discharge, while those in the wait-list control group showed either no change or deterioration. It is notable that 71% of patients across treatment conditions in this study received antidepressant medication as part of their care. Given the greater morbidity and functional loss associated with acute medical illness and hospitalization, it is encouraging that a psychotherapeutic intervention may be effective in this population.

Alexopoulos et al [38] developed a 12-session intervention called Ecosystem Focused Therapy (EFT) for post stroke depression. EFT targets the disruptive "psychosocial storm" experienced by patients and their families and consists of five components: providing a "new perspective" about recovery; addressing barriers to treatment adherence; providing a problem solving structure; helping the family to "reengineer its goals, involvement, and plans"; and coordinating care with physical, occupational and speech therapists. Pilot work documented that EFT reduced depressive symptoms and disability in comparison to patients randomized to an educational condition on stroke and depression [38]. A larger-scale RCT is currently being conducted, and more recent data on this intervention support its efficacy and

has documented an association between depression severity and greater difficulties in mobility post treatment [39]. The investigators propose that EFT has direct effects on symptoms and functioning, and can also improve adherence to a variety of psychiatric and rehabilitative therapies.

Visser et al [40] investigated whether 8 sessions of PST in group format could improve coping and health related quality of life among patients undergoing stroke rehabilitation. While not specifically targeting depressed patients, this intervention combined with standard outpatient rehabilitation resulted in significant improvement in task-oriented coping, avoidant coping and general quality of life in comparison to outpatient rehabilitation alone.

### **Psychotherapies for depression and cognitive impairment**

Cognitive impairment is common among older adults, and includes a range of mild memory and concentration problems, executive dysfunction (i.e., organization, planning, and initiation difficulties), and more prominent dementing disorders. Cognitive screening and more thorough neuropsychological examination can identify the nature and severity of such impairment and can guide in the selection of appropriate psychotherapeutic strategies [12].

A variety of psychotherapies have been developed and tested for older adults with depression and cognitive impairment. A recent systematic review of cognitive behavioral psychotherapies for older adults with depression and cognitive deficits such as executive dysfunction noted that most studies involved use of problem solving approaches, and concluded that these psychotherapies resulted in significant improvements in both depression and disability [41].

One group adapted Problem Solving Therapy (PST) to a population of depressed older adults with executive impairment [42–43]. Executive impairment is typically characterized by difficulties in goal setting and in planning, initiating, and sequencing behaviors; PST for this population focuses on strengthening executive skills such as planning and task initiation. The investigators found that 12 sessions of PST was more effective than supportive psychotherapy in reducing depression severity [42] and in improving functioning [43] among non-demented depressed older adults with executive dysfunction. The investigators highlight that PST is a promising treatment alternative for this sizable group of older adults resistant to pharmacotherapy [44–47].

Another investigator developed a psychotherapy called Problem Adaptation Therapy (PATH) for older depressed patients with more pronounced disability and cognitive impairment, from mild cognitive impairment up to levels of moderate dementia [48]. The 12-week PATH intervention is delivered in the patient's home. PATH targets emotion regulation and seeks to reduce negative emotions that arise from a patient's functional and cognitive limitations. To achieve emotion regulation, PATH uses PST as a basic framework and incorporates environmental adaptations such as cues, reminders, timers, and step-by-step breakdown of tasks; PATH also encourages family or caregiver participation to assist in problem solving efforts and task completion. In an RCT, PATH reduced depression severity and disability in comparison to supportive psychotherapy for the entire sample [49], and reduced depression severity for the subgroup of patients with mild to moderate dementia [50].

## Psychotherapies for suicide risk

Suicide rates are higher in older adults compared to most other age groups, particularly for older white males [51]. While major depression is the most common condition associated with suicide, other risk factors include suicidal ideation, medical illness, functional impairment, stressful life events, and substance abuse [52]. A number of interventions and psychotherapies have been shown to reduce suicidal ideation among older adults [50, 53–56], and Cognitive Behavioral Therapy for the prevention of suicide has been shown to be effective for younger and mid-life adults who have made suicide attempts [57]. Recent work suggests that different psychotherapies may be appropriate for different intensities of suicidal ideation. In secondary analyses of the PATH RCT, Kiosses [55, 58] found that for patients with major depression, cognitive impairment, and mild forms of suicidal ideation (i.e., “feeling that life is not worth living”) both PATH and Supportive Therapy led to comparable reductions in suicidal ideation. However, in patients with death ideation or active suicidal ideation, PATH led to greater reductions in suicidal ideation than Supportive Therapy.

Building on the above work, there is a need to develop and test psychotherapies that are specifically targeted to reduce suicidal ideation and other suicide risk factors among older adults [59–60], particularly for those at high suicide risk such as recently hospitalized patients and those with treatment resistant depression [61]. A recent pilot by Heisel et al [62] adapted Interpersonal Psychotherapy (IPT) for older adults at risk of suicide. Adaptations to standard IPT strategies included focusing on safety precautions; clarifying factors contributing to psychological pain; expressing interpersonal needs; and enhancing social connectedness and meaningful pursuits. In an open study of 17 older adults with current suicidal ideation or recent self-injury, 16 sessions of IPT combined with antidepressant medication led to significant reductions in depression and suicidal ideation, and improvement in perceived meaning in life and other indices of well-being.

## Overcoming barriers to the accessibility of psychotherapy

In addition to the patient’s clinical and functional presentation, the health care or social service setting in which an older adult is served presents unique challenges to extending the reach and accessibility of psychotherapies [63]. At the same time, these settings represent tremendous opportunities as the majority of depressed older adults do not present at specialty mental health locations [20, 64].

### Primary care

Primary care represents a setting in which older depressed adults are most likely to present for care. The challenge of such integrated care is to transform effective psychotherapy interventions to fit within the competing demands and limited resources of health care settings. Indeed, less than 10% of primary care patients with depression receive a minimally adequate level of evidence-based psychotherapy [20], in part because most psychotherapies have been developed for weekly, one-hour visits with a specialty mental health provider.

Successful efforts have been made in primary care to test the impact of psychotherapies like Problem Solving Therapy and Interpersonal Psychotherapy, often in the context of broader care management interventions [53–54]. Recent data from the multi-site Prevention of Suicide in Primary Care Elderly: Collaborative Trial (PROSPECT) has shown that the intervention, involving IPT for a substantial proportion of patients, significantly reduced all-cause mortality over 8 years in comparison to usual care [65]. Findings were maintained regardless of level of medical multimorbidity. The investigators highlight the importance and benefits of depression care management for patients with significant medical comorbidity, a group whose “competing demands” often downplay depression treatment as a priority in clinical practice [66].

Other recent work in safety-net primary care settings include the BRIGHTEN Heart study, a multi-level intervention including CBT or IPT to reduce depressive symptoms and cardiovascular risk in older African American and Hispanic patients [67]. While no results have been reported to date, findings will provide data on the effectiveness of this intervention in reducing health care disparities among a high risk group.

### **Homebound, rural, and hard-to-reach older adults**

Older adults who are homebound or in hard-to-reach settings present unique challenges regarding access to psychotherapies. Recent efforts have been made to develop psychotherapies for low income, homebound elders that integrate case management services [68]. Low income elders have elevated rates of major depression [69] and have poor response to antidepressant medication both with and without psychotherapy [70], possibly due to daily exposure to numerous life stresses. Investigators hypothesized that while case management (CM) provides access to needed financial, legal, and housing resources, Problem Solving Therapy integrated with case management (CM-PST) can act in synergy by teaching patients skills to use such resources more effectively [68]. Contrary to the working hypothesis, both interventions led to similar declines in depression severity over 12 weeks of treatment, with the entire sample showing a 9.6 decline in Hamilton Depression Rating Scale scores [68]. Both interventions also led to similar improvements in functional ability [71]. The investigators suggested that high quality case management may be a sufficient intervention for low income disabled elders with depression, and is compatible with available social services offered by organizations across the country.

Telephone and Skype-based psychotherapies have been developed to expand the reach of psychotherapy even further, given real-world constraints on available mental health treatments in the home. In a pilot RCT of depressed, low-income homebound older adults, 6 sessions of PST delivered via Skype resulted in high acceptability ratings and a significant reduction in depression severity and disability that were comparable to in person PST [72–73]. Another investigator conducted an RCT of older veterans with major depression comparing Behavioral Activation (BA) provided via telemedicine or in person, and found no differences in treatment response (45% and 39% response rates, respectively) [74]. These findings show the potential for low cost tele-delivered psychotherapy to reach underserved older adults who may face limited access to evidence-based psychotherapies due to cost, mobility and geographical challenges.

Assisted internet-delivered psychotherapy interventions have also been investigated as a way to meet the needs of rural and other hard-to-reach older populations. Dear et al. [75] investigated the efficacy of a therapist-guided internet-delivered CBT (iCBT) intervention for depressed Australian older adults. The intervention was an online 5-lesson CBT course with brief weekly contact from a psychologist to guide patients through the intervention. The investigators found that 70% of patients completed the 8-week treatment, and that patients receiving iCBT had significantly lower depression severity scores than waitlist control patients. Gains were maintained at 3 and 12-month follow ups. Another investigator examined CBT administered online in older adults with knee osteoarthritis and major depression [76], a population which has increased use of pain medication [77] and low adherence to treatment recommendations [78]. Findings showed that a 10-week online CBT intervention resulted in decreased depressive symptoms compared to usual care post treatment and at 3-month follow-up.

### **Other social service settings**

Research has documented elevated rates of depression in a variety of social service settings such as senior centers [79], home meal recipients [80], and elder abuse services [81–82], with low rates of follow through on mental health referrals [80, 83–84]. Investigators have examined the feasibility and acceptability of integrating psychotherapy into such social service and community settings. Sirey [81–82] tested the feasibility and preliminary impact of integrating PST into elder abuse services. The investigators chose PST with the hypothesis that it would work in synergy with elder abuse services by bolstering victims' sense of self-efficacy and problem solving skills needed to implement offered services. In a pilot RCT, PST resulted in both reduced depressive symptoms and improved self-efficacy regarding the abusive situation compared to services as usual [81–82]. Another initiative focused on meeting the mental health needs of older adults living in areas impacted by Hurricane Sandy (Sandy Mobilization, Assessment, Referral, and Treatment for Mental Health; SMART-MH). SMART-MH is a novel service delivery model embedding clinicians into senior centers where they provide outreach services, mental health screening, referral, and the provision of psychotherapy. Preliminary findings highlight the increased mental health needs of this population, with 14% of participants screening positive for depression and hurricane-related stressors predicting increased odds of depression [85]. Among a subsample of diverse elders who received a brief six-session version of ENGAGE psychotherapy (described below), most participants (74.2%) who were offered therapy completed the full 6 sessions. Depression severity decreased an average of 7.5 points on the Patient Health Questionnaire (PHQ-9), and suicidal ideation declined from 28.5% to 8.7% [86].

### **Available clinician workforce**

Extending the reach of psychotherapy and its implementation in the community is also hampered by the available clinician workforce. Most psychotherapies are complex interventions that require a great deal of effort and resources needed for community clinicians to acquire and sustain competencies. Indeed, evidence-based psychotherapies are rarely used in real-world community settings [87–89]. Recent work has focused on



streamlining psychotherapeutic interventions for older adults and tailoring them to community settings and the skill set of the practicing clinician.

“Engage” is a streamlined, stepped-care psychotherapy based on the neurobiology of late life depression, specifically the role of dysfunction in the positive valence system in fueling depression [87]. Engage uses “reward exposure,” defined as engagement in meaningful and rewarding activities, as its principal intervention. Straightforward interventions target negativity bias, apathy, and emotional dysregulation to the extent that they interfere with reward exposure. Investigators conducted pilot work showing that Engage was non-inferior to PST in reducing depressive symptoms and disability in older outpatients with major depression [90], and that increased behavioral activation predicted improvements in depression at follow-up time periods [91]. In addition, clinicians required one third as much training time in Engage in comparison to PST clinicians [90]. The investigators suggest that Engage has potential for broad scale implementation in the community given its streamlined nature and relative ease of training.

## Conclusions

A variety of psychotherapies have been shown to be effective in treating major depression among older adults. The need for available psychotherapies is highlighted given the limitations of antidepressant medication and patient preferences for psychotherapy.

Given the association of late life depression with medical burden, functional disability, cognitive impairment, and suicide risk, assessment of these conditions is crucial in selecting type of psychotherapy. Several distinct psychotherapies and psychosocial interventions have been recently developed and tested for specific populations including those experiencing chronic medical conditions; acute medical conditions; cognitive impairment; and suicide risk factors.

The health care or social service settings in which an older adult is served present challenges and opportunities to extend the reach of psychotherapies. As the majority of depressed older adults present at non-specialty mental health settings, integrating psychotherapy into such settings requires transformations to fit competing demands and limited resources. Promising approaches have been developed and tested in primary care, homebound, rural, and other social service and community settings. Recent efforts have been also made to streamline psychotherapy approaches so that they match the skill set of community clinicians.

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