

# Depression and Bipolar Support Alliance Consensus Statement on the Unmet Needs in Diagnosis and Treatment of Mood Disorders in Late Life

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**Objectives:** To review progress made during the past decade in late-life mood disorders and to identify areas of unmet need in health care delivery and research.

**Participants:** The Consensus Development Panel consisted of experts in late-life mood disorders, geriatrics, primary care, mental health and aging policy research, and advocacy.

**Evidence:** (1) Literature reviews addressing risk factors, prevention, diagnosis, treatment, and delivery of services and (2) opinions and experiences of primary care and mental health care providers, policy analysts, and advocates.

**Consensus Process:** The Consensus Development Panel listened to presentations and participated in discussions. Workgroups considered the evidence and prepared preliminary statements. Workgroup leaders presented drafts for discussion by the Consensus Development Panel. The final document was reviewed and

edited to incorporate input from the entire Consensus Development Panel.

**Conclusions:** Despite the availability of safe and efficacious treatments, mood disorders remain a significant health care issue for the elderly and are associated with disability, functional decline, diminished quality of life, mortality from comorbid medical conditions or suicide, demands on caregivers, and increased service utilization. Discriminatory coverage and reimbursement policies for mental health care are a challenge for the elderly, especially those with modest incomes, and for clinicians. Minorities are particularly underserved. Access to mental health care services for most elderly individuals is inadequate, and coordination of services is lacking. There is an immediate need for collaboration among patients, families, researchers, clinicians, governmental agencies, and third-party payers to improve diagnosis, treatment, and delivery of services for elderly persons with mood disorders.

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**T**HE ELDERLY are the fastest-growing segment of the US population. In 2000, the number of persons 65 years and older grew to 35 million, or 12.4% of the US population, a 12% increase since 1990. The most explosive growth is among the oldest old.<sup>1</sup> During the next 30 years, the number of persons older than 85 years will more than double, from 4.2 million in 2000 to 8.9 million in 2030.<sup>1</sup> The health care needs of this burgeoning population are assuming greater importance. Among the most significant but often overlooked conditions are mood

disorders, including major depression and bipolar disorder.

Depression is not a natural consequence of aging. However, when it occurs, late-life depression is often associated with marked disability, functional decline, risk of hospitalization, diminished quality of life, caregiver burden, increased service utilization, and mortality from comorbid medical conditions or suicide.<sup>2-5</sup> The World Health Organization predicts that by 2020, depression will be second only to heart disease as a cause of disability and premature death in established market economies.<sup>6</sup>

*A complete list of the author affiliations and financial disclosures appears at the end of this article.*

In 1992, the National Institute of Mental Health published a consensus statement<sup>7</sup> on the diagnosis and treatment of depression in late life, and it was updated in 1997.<sup>8</sup> These seminal reports concluded that late-life depression is underdiagnosed and undertreated, that treatment should be vigorous, that existing services are inadequate, and that community-living elderly people are particularly underserved. Some progress has been made in the intervening years. The number of effective and well-tolerated antidepressant agents has increased, as have studies demonstrating the efficacy of psychotherapeutic interventions. More is known about the risks for and consequences of mood disorders in the context of medical illness.

Nonetheless, serious unmet needs remain for elderly persons with mood disorders. Unlike earlier National Institute of Mental Health consensus statements, this conference emphasized the importance of further research into treatment nonadherence, a particularly important and prevalent issue in elderly depressed and bipolar patients. Participants also underscored the need for greater focus on the oldest old, depression-related cognitive impairment and disability, the unmet needs of the African American elderly population, suicide prevention in the elderly, different depression subtypes in later life (eg, late-onset vascular depression and dysthymia), and geriatric bipolar disorder.

Participants also specified a research agenda in geriatric mental health services emphasizing the importance of partnerships between academic and community-based colleagues. Discriminatory policies persist in the reimbursement of mental health services. The lack of parity in insurance coverage for mental illness creates particular problems for the elderly, who often have difficulty navigating the fragmented and complex system of health care services. Funding for treatment studies of late life continues to lag behind the need for improved care. Many elderly persons lack access to health care services because of economic disadvantage and functional impairment. Stigma contributes to all of these issues, hindering diagnosis, preventing adequate treatment, and impeding individuals and their families from acknowledging mood disorders and seeking help.

#### CONSENSUS STATEMENT

The Depression and Bipolar Support Alliance (formerly the National Depressive and Manic-Depressive Association)—the nation's largest patient-directed, illness-specific organization—convened a consensus conference October 9 and 10, 2001, to address these concerns. The Consensus Development Panel, which consisted of experts in late-life mood disorders, primary care, geriatrics, mental health and aging policy research, and advocacy, was charged with drafting a statement defining the crisis in late-life mental health care and providing short- and long-term recommendations. This consensus statement was developed in response to expert presentations and debates on risk factors, prevention, diagnosis, treatment, and services for elderly persons with mood disorders.

## RISK FACTORS

Risk research is an evolving field that seeks to understand the pathways and interactions leading to mood disorders and their sequelae. Depression and bipolar disorder in the elderly are not necessarily associated with the same risk factors as in younger adults, especially when the first episode occurs at an advanced age.<sup>9</sup> It is necessary to identify temporal relationships, correlates, and causal patterns to develop clinically useful profiles for high-risk patients and to inform prevention and intervention studies and health care policy. Studies of socioeconomic status and nonmodifiable factors (eg, age, sex, and race) that contribute to risk are useful in identifying at-risk populations. Also of value are studies that identify causal risk factors that, when manipulated, alter outcome.<sup>10</sup>

### RISK FACTORS FOR MOOD DISORDERS

Medical illness, functional disability, family and personal histories of mood disorders, social isolation, life stressors, bereavement, and other losses frequently co-occur with depression. Temporal and causal relationships between depression and such correlates are not known with precision and are likely to be bidirectional.<sup>11</sup> Risk factors for depression may also be consequences of depression. For example, social isolation may contribute to depression risk, but depressed elderly persons may shun personal relationships, thereby increasing their level of loneliness and risk for further depression. Correlates of risk for late-life bipolar disorder are less well studied but include comorbid neurological illness, cerebrovascular disease, and a family history of affective disorder.<sup>12-14</sup>

Late-life depression and mania often occur in the context of chronic medical illness and the medications used to treat them (ie, iatrogenic factors).<sup>11</sup> The associations of depression with cardiovascular disease, stroke, and dementia are areas of active research. Myocardial infarction, heart transplantation, and congestive heart failure may be risk factors for depression.<sup>14</sup> Moreover, depression likely impedes compliance with medical treatment and cardiac rehabilitation,<sup>15</sup> and post-myocardial infarction mortality is higher in depressed than nondepressed patients.<sup>16,17</sup>

Depression and cerebrovascular accident are also strongly correlated. Stroke is a risk factor for depression, and, conversely, depression predicts a poor outcome after stroke.<sup>18-20</sup> Depression occurs in roughly one third of individuals after stroke.<sup>21</sup> Emerging evidence<sup>14</sup> suggests that left-hemispheric lesions are associated with early-onset, poststroke depression and a greater degree of cognitive impairment, but these findings require further study.<sup>22</sup> Small intervention studies<sup>23-26</sup> on antidepressant treatment of poststroke depression are promising and suggest a pathway for larger prevention and intervention studies. Vascular depression is a term that is increasingly being used to describe depression in the context of advanced age, atheromatous changes in coronary vessels, and microvascular disease (or silent infarcts) in the brain.<sup>18,21,27</sup> There is emerging evi-

dence<sup>18,28-30</sup> that cerebrovascular disease may play a causal role in some forms of late-life depression.

Late-life depression and depressed mood are common correlates of cognitive impairment and may be prodromes for subsequent cognitive dysfunction and dementia.<sup>31-34</sup> The presence of mild, reversible cognitive impairment during an episode of major depression in late life may forecast the development of irreversible dementia, particularly if the depression is severe, untreated, and associated with psychomotor retardation or psychosis.<sup>35,36</sup> Depressive symptoms, especially those with a late-life onset, can herald the onset of Alzheimer disease in nondemented patients.<sup>32,37,38</sup> Some cognitive abnormalities such as abnormal performance in response inhibition or in initiation and perseveration tasks and structural neuroimaging indices (eg, white matter hyperintensities) may predict a treatment-resistant depression.<sup>39,40</sup> These findings are preliminary and require further study and replication.

The extent and consequences of concurrent behavioral health problems in the elderly are not well studied despite evidence that these issues are common. Limited research suggests that alcohol use and smoking can affect the treatment of late-life depression.<sup>41-43</sup>

Mood disorders in late life are a major correlate of suicidal behavior and are believed to be causal risk factors.<sup>44</sup> Suicide is 6 times more common in elderly white men than in the general population, whereas rates among older adults are lowest among elderly African American women.<sup>45,46</sup> Although medical illness and functional disability also are associated with late-life suicide, the risk associated with these factors is mediated by the presence of depression.<sup>47</sup> Other risk factors such as personal or family history of mood and anxiety disorders, family history of suicide, loneliness, hopelessness, access to handguns, and insufficient social support systems are also important.<sup>44,47-49</sup> Suicidal intent or behavior often is not recognized by physicians, and many older adults who commit suicide have visited a physician in the month before their suicide. Suicide prevention for elderly persons must be a primary focus of intervention efforts in the community.<sup>48,50,51</sup>

Most epidemiologic and treatment data are based on specialty mental health populations. It is thus unclear how common problems such as vascular depression are in community populations with depression.

### Research Priorities

- Longitudinal studies that assess interactions between psychosocial and biological factors and inform the development of clinically useful high-risk profiles for late-life depression, including better delineation of acute vs chronic risk factors for suicide
- Primary and secondary prevention and intervention studies to identify and reduce risk for first-episode and recurrent late-life mood disorders
- Collaborative, multi-institute studies that clarify the association of depression with medical morbidity and mortality, particularly for cardiovascular disease, stroke, dementia, and other behavioral health problems
- Reexamination of genetic liability to mood disorders with late-life onset

## DIAGNOSIS

Late-life mood disorders are significantly underdiagnosed, particularly in primary care,<sup>52-54</sup> which is the health care setting used most often by elderly persons.<sup>55</sup> Depression is missed in approximately half of all elderly persons with mood disorder.<sup>56</sup> Given the risks for deleterious effects of depression on health, the failure to diagnose late-life mood disorders remains a serious public health problem and suggests that geriatric psychiatrists need to be more proactive in working with primary health care systems.

There are a variety of barriers in primary care to the recognition and diagnosis of late-life depression. Many physicians and patients believe that depression is a normal part of aging.<sup>8,57</sup> Primary care providers may miss the diagnosis of late-life depression because of insufficient training, a focus on medical conditions that mask the presence of depression, or overlapping symptoms of dementia. Time constraints, inadequate reimbursement, and lack of support staff also hinder the recognition of late-life mood disorders in primary care settings.<sup>58</sup> African Americans and Medicaid recipients are less likely to receive a diagnosis of major depression by primary care providers.<sup>52</sup> Patient barriers are also important, and stigma about a psychiatric diagnosis and refusal to acknowledge depressive symptoms often thwart diagnostic attempts.<sup>58</sup>

Diagnosis of late-life mood disorders can be difficult, in part, because patients often present with vague somatic symptoms or overlapping symptoms of medical illness.<sup>56,59,60</sup> Depression should be suspected and investigated in elderly persons with anhedonia, hopelessness, anxiety, psychomotor retardation, and unexplained fatigue and weight loss. Late-life depression should also be suspected in high users of health care services or those who have persistent but unexplained pain, headache, fatigue, insomnia, loss of appetite, or gastrointestinal symptoms.<sup>61,62</sup> Depression should be considered in the differential diagnosis of hospitalized elderly persons with myocardial infarction, congestive heart failure, stroke, hip fracture, cancer, or alcohol abuse who exhibit delayed recovery, poor compliance with rehabilitation programs, or treatment refusal. Depression should also be investigated in patients who are apathetic, withdrawn, or agitated or who exhibit increased dependency, functional decline, or delayed rehabilitation. These symptoms are particularly common in patients receiving long-term care.

The *DSM-IV* diagnostic criteria for major depression and bipolar disorder are explicit and are as precise as diagnostic schema in other areas of medicine.<sup>63</sup> However, the language used to describe other forms of mood disorder remains imprecise and consists of poorly defined terms, including clinical depression, depressive symptoms, subsyndromal depression, minor depression, mixed anxiety and depression, and depressed mood.<sup>56,64</sup> This inexact classification and the fact that depressive symptoms that do not meet full diagnostic criteria for major depression are common among older adults hinder diagnosis and the ability to make substantive changes in clinical practice.

There is debate regarding the inclusion of measures of disability or functional impairment in the diag-

nosis of late-life depression. Currently, the diagnosis of major depression requires the presence of functional impairment. Disability in late life is not synonymous with depression but is amplified by depression.<sup>65-67</sup> Although there are synchronies between treatment of depression and improvement in disability, there are many factors other than depression that contribute to late-life disability. Depression, medical burden, and cognitive impairment predict less than 50% of the variance in functional status.<sup>68</sup> Depression and disability require concurrent, yet often distinct, treatments because disability may interact with depression, exacerbating the depressive episode.<sup>65</sup>

The availability of clinically useful assessment tools (including those that address access to handguns) for suicide risk is another unmet need in late-life mood disorders. Current diagnostic tools do not adequately address an individual's potential for suicide. Clinicians would benefit from the development of assessment tools that assist in identifying patients with emergent or acute suicidal risk and those with more chronic, indolent risk factors. The effect of possible correlates of suicide (eg, hopelessness, agitation, and anxiety) and protective factors (eg, female sex, ethnicity, and religious beliefs) needs further study.<sup>49,51,69</sup>

Several subtypes of late-life depression have been identified that may benefit from further study and subsequent development of age-specific diagnostic criteria. For example, vascular depression may be associated with a later age at onset, and patients may exhibit symptoms of motor retardation, anhedonia, poor insight, functional disability, and impaired executive function.<sup>18,27</sup> The features, treatment response, and illness course of late-onset depression, which is defined as a first episode of depression occurring after age 60 years, may differ from those of depression in younger adults.<sup>9</sup> Late-onset depression can be characterized by a greater degree of apathy, cognitive dysfunction, and temporal lobe abnormalities that are similar to changes associated with dementia.<sup>70</sup>

The clinical profile of late-life dysthymia is different from dysthymia in younger adults and also may represent a distinct clinical entity. Late-life dysthymia is often associated with medical illness, disability, institutionalization, chronicity, progression to major depression, and poor response to antidepressant drug treatment. Dysthymic symptoms such as blunted affect, anhedonia, lack of energy, and other somatic complaints are often overlooked or discounted by health care providers who erroneously assume that they are a normal part of aging, particularly in the context of medical illness and residence in a nursing home.<sup>71,72</sup>

The diagnostic criteria for depression in the context of dementing disorders need to be revised. Patient reports often are unreliable, caregivers may inflate symptoms, and clinicians' impressions may be based on biased reports and short observation periods.<sup>73</sup> Depressive symptoms in patients with dementing disorders are unstable and change rapidly over time. Therefore, the duration of symptoms needs to be determined. A recent National Institute of Mental Health workshop suggested provisional diagnostic criteria for depression of Alzheimer

disease<sup>74,75</sup> that emphasize reduction in positive affect or pleasure rather than loss of pleasure and include irritability, social withdrawal, and isolation. Validation studies are needed.

The diagnosis of late-life bipolar disorder is an especially neglected and understudied area.<sup>76,77</sup> Agitated depression in elderly individuals may be a form of bipolar disorder, but this requires further study. Patients with late-onset bipolar disorder may be more likely to have medical comorbidity, particularly cerebrovascular illness, and psychotic features.<sup>13,17</sup> The differential diagnosis of late-life bipolar disorder must include assessment of comorbid conditions or medications that can cause mania (eg, connective tissue disease and corticosteroids). Once these factors are excluded, a detailed cognitive assessment may inform the potential for recovery and long-term outcome. A better understanding of the risk of precipitating mania in depressed elderly individuals treated with antidepressant agents is also needed.

Although screening may be an important first step, used alone it has not been shown to lead to treatment initiation and improved outcome.<sup>78,79</sup> It has been suggested that the modest specificity rates of available depression screening instruments<sup>80</sup> contribute to missed or inaccurate diagnoses and suboptimal treatment plans.<sup>11</sup> Stigma can thwart treatment initiation and a favorable outcome in patients who screen positive for depression. Screening protocols are ineffective if patients and caregivers are not willing to accept a diagnosis of depression and adhere to a course of treatment.<sup>58</sup>

### Research Priorities

- Studies of depression subtypes, including vascular depression, depression of Alzheimer disease, dysthymia, and late-onset depression, and development of clinically useful diagnostic tools that facilitate recognition and appropriate treatment
- Studies of the mechanisms by which mood disorders predispose to dementing illnesses
- Studies of depression and suicide assessment, screening, and diagnosis in primary care settings and in underserved minorities
- Multicenter studies of the diagnosis and treatment of bipolar disorder in elderly patients

### TREATMENT

Although late-life mood disorders in general remain understudied compared with mood disorders in younger adults,<sup>81</sup> the number of treatment studies in this population has increased dramatically in the past decade.<sup>82,83</sup> This proliferation of studies has contributed to increased understanding of the public health impact of late-life mood disorders, including data needed to guide treatment and inform basic research. Treatment is effective across settings, including primary care, rehabilitation, and long-term care. Controlled studies have demonstrated the efficacy of medication therapy,<sup>82,84-86</sup> psychotherapy,<sup>8,87-90</sup> and electroconvulsive therapy.<sup>91</sup> The selective serotonin and norepinephrine reuptake inhibitors seem to be as effective as but safer and better tolerated

than tricyclic antidepressants.<sup>82,92</sup> Compared with younger adults, older persons often exhibit higher and more variable drug concentrations and a greater sensitivity to adverse effects.<sup>93</sup>

The goal of “getting well and staying well”<sup>89</sup> underscores a continued emphasis on full remission and long-term outcomes. It is now known that antidepressant drug therapy, interpersonal psychotherapy, and the combination of medication use and psychotherapeutic intervention are as efficacious in preventing recurrent major depression in elderly patients<sup>89,94</sup> as in younger adults.<sup>87</sup> Treatment of depression associated with medical illnesses such as vascular depression<sup>21</sup> and depression in patients with cardiovascular disease,<sup>95</sup> Alzheimer disease,<sup>96</sup> diabetes mellitus,<sup>97</sup> and macular degeneration<sup>98</sup> is beginning to be studied.

Despite these advances, serious unmet needs persist. Treatment of psychotic depression and bipolar disorder in late life remains especially understudied.<sup>99-101</sup> There are major gaps between the efficacy of treatments as demonstrated in controlled clinical trials and the effectiveness of treatments in real-world settings. The gold standard of treatment is full remission and a return to wellness.<sup>102</sup> How to increase remission rates and identify treatments that achieve remission are important questions, especially in patients who do not respond optimally to first-line treatment. Some elderly patients with mood disorders do not respond to treatment, and more needs to be known about factors associated with treatment response and nonresponse.<sup>103,104</sup>

Underlying the positive evidence from treatment studies is the need to address nonadherence. Patients who do not follow treatment advice do so for many different reasons, including stigma associated with antidepressants, inadequate education and support from providers, adverse effects, drug-drug interactions, complexity of dosing regimens, medication cost, inadequate insurance coverage, and lack of awareness about the sequelae and chronicity of mood disorders.<sup>58,104-106</sup> Although medication adherence is associated with favorable outcomes, approximately 40% of patients of all ages with major depression and 50% with bipolar disorder are nonadherent to antidepressant therapy.<sup>107,108</sup> Compared with nondepressed persons, depressed medical patients are 3 times more likely to be nonadherent to medication regimens, exercise, diet, other health-related behaviors, vaccinations, and appointments.<sup>109</sup> Laboratory testing in elderly patients treated with lithium is often too infrequent.<sup>110</sup> These observations suggest the need to improve collaboration with families and care providers and develop therapeutic alliances to improve treatment adherence. Treatment studies need to move progressively to primary care and community populations to treat representative populations (eg, the IMPACT<sup>111</sup> and PROSPECT<sup>112</sup> studies).

### Research Priorities

- Studies of depression treatment in chronic medical illnesses that are interwoven with the fabric of late-life depression (eg, osteoarthritis, heart disease, diabetes mellitus, sensory impairments, and urinary inconti-

nence), including pharmacokinetic studies of treatment nonadherence, drug interactions, and potential serum concentration differences associated with medical illnesses

- Longitudinal, early-treatment studies (including psychotherapy and combined pharmacotherapy and psychotherapy) that address prevention of treatment resistance, relapse, recurrence, persistence, and chronicity
- Studies to measure the effect of psychotherapeutic and psychoeducational interventions on treatment adherence
- Effectiveness studies in primary care, with particular focus on minority elderly populations
- Development of treatment algorithms specifically tailored to the elderly, including guidelines to optimize treatment response in partially or slowly responding and nonresponding patients and to guide long-term treatment planning
- Studies of pharmacogenetic and pharmacodynamic sources of treatment response variability
- Development of new classes of therapeutic agents for late-life depression (including vascular depression and cognitive impairment) and bipolar disorder

### SERVICES

The current health care system is entirely inadequate to meet the needs of elderly people with mood disorders and has not kept pace with scientific advances in the field. There are significant barriers to care in the service sector, including lack of insurance parity, reimbursement policies that discriminate against persons with mental illnesses, and a confusing system of fragmented care settings. Access to mental health care services remains an important unmet need. The number of geriatric psychiatrists and geropsychologists is currently inadequate, and the projected number of trained health professionals in geriatric mental health is expected to fall far short of demand.<sup>53,113</sup>

Traditionally underserved ethnic minorities may be distrustful of research and the mental health care system, leading to underutilization of services and unwillingness to seek professional help.<sup>114,115</sup> There is a tremendous need to expand culturally competent services to underserved minorities of all ages. The mental health care community must better understand cultural diversity, coping styles, and the varying presentations of mood disorders in racial and ethnic minorities. Strategies for coping with depression are an important determinant of outcome in primary care patients,<sup>114</sup> and coping styles are deeply rooted culturally. For example, African American, Asian American, and Hispanic persons often seek help from religious organizations when confronted with mental illness or other personal problems.<sup>115</sup> This suggests an opportunity for mental health care professionals to forge liaisons with community and religious leaders and to conduct outreach to persons who are not currently well served by the mental health care system.

Inadequate coverage for patients and insufficient reimbursement for health care providers are critical barriers to effective care.<sup>115</sup> The high cost of insurance premiums and coinsurance for mental health services and

inadequate coverage for prescription drugs often prevent the elderly, particularly those with lower incomes, from visiting a physician and filling prescriptions. Reimbursement for mental health care services is also inadequate. The lack of a prescription drug benefit for the elderly and the absence of parity for mental health care coverage can negatively affect quality of care and access to care. There is no appropriate reimbursement strategy in place that supports efforts in coordinating care for elderly patients who are referred to specialists or who are seen by health care providers in different care settings. The elderly generally have multiple health care needs, and successfully negotiating the myriad unrelated agencies, treatment facilities, and referral procedures is a daunting, if not impossible, task.<sup>115</sup>

Depression historically has been held to a higher standard than other illnesses with regard to justification of treatment, resource allocation, and status as an illness deemed worthy of treatment. Personal costs of depression include cognitive and functional impairment, amplification of somatic symptoms, and increased risk of premature death.<sup>2,65</sup> Compared with chronic medical conditions, late-life depression is associated with greater reductions in quality of life, exceeded only by arthritis and heart disease.<sup>5</sup> Caregiver burden, which can be substantial, should also be considered when assessing the costs of late-life depression.<sup>116</sup> Depressed elderly persons consume a disproportionate share of health care resources, including extended hospital stays and increased use of ambulatory care, diagnostic tests, and consultations, compared with the nondepressed elderly population.<sup>117-119</sup> Service utilization by elderly persons with bipolar disorder is even higher.<sup>120</sup>

### Research Priorities

- Development of a public health model for mental health care that encompasses case finding, facilitation of access to and delivery of care, and evaluation of reimbursement for service innovations to improve outcome
- Development of partnerships among the research community, health care providers (including agencies that provide home-based nursing care), and health care payers such as the Centers for Medicare and Medicaid Services to design economically sustainable models of mood disorder care in the general medical sector and to further effectiveness and cost-effectiveness studies of evidence-based, clinical disease management models
- Development of partnerships between researchers and religious and other community agencies for outreach to underserved elderly people and for overcoming mistrust of research and mental health care among minorities

## SUMMARY

The Consensus Development Panel concluded that some progress in the field of late-life depression has been made in the past decade. However, mood disorders remain prevalent, disabling, and lethal in elderly persons and rep-

## Consensus Development Panel

### Steering Committee

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### Conference Sponsor

Depression and Bipolar Support Alliance (Lydia Lewis, executive director).

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### Conference Underwriters

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resent a serious and costly public health problem. Late-life bipolar disorder is remarkably understudied. The existing system of health care services does not meet the needs of elderly persons with mood disorders. Researchers, clinicians, medical educators, advocates, policymakers, and third-party payers must collaborate and take immediate steps to advance and improve the care of elderly persons with mood disorders and to improve long-term outcomes.

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