## Behavioral Health and Primary Care: A Status Report

It is 2016 and time to take stock and consider where we in primary care settings, and those in psychiatry and behavioral health professions working with us, are headed. It has been 14 years since the US Preventive Services Task Force (USPSTF) reversed its previous decision and began recommending screening for depression. In 2009 and again this year, the task force issued updates to this recommendation that emphasized its applicability to adolescents<sup>1</sup> and pregnant and postpartum women<sup>2</sup> and the importance of practice resources to actively manage care of those who screen positive for depression. However, while these are good steps, limiting our focus to depression is not adequate.

For our patients to benefit from the reintegration of behavioral health into primary care, primary care practices must become competent with a much broader scope of behavioral health care. The USPSTF recommendation in 2002 was a bold move at the time, a first step in reversing the effects of the wasteland decade of the 1990s, during which mental health carve-outs motivated by economic pressures enforced the separation of behavioral health services from the rest of primary care.

Current economic pressures, however, require a much bolder consideration of the scope of behavioral health competencies required of primary care practice. The move toward outcomes-based quality contracting and other risk-sharing strategies that seek to align benefits and risks in existing and evolving practice modes, including patient-centered medical homes (PCMHs) and accountable care organizations, provides powerful impetus to assess where high costs accrue for primary care populations. Two broad sources account for much of the dramatic increase in medical expenses related to patients with psychiatric conditions, which primary care clinicians must effectively manage if they are to remain viable. A third source may well account for a large part of the residual cost, including costs to society, for such patients.

The first source contributing to medical cost increases is the spectrum of psychiatric disorders themselves. While depression is a significant contributor, other conditions very likely contribute even more. These conditions include bipolar disorder, anxiety disorders (particularly when comorbid with other psychiatric conditions), traumarelated disorders, and substance and alcohol abuse disorders. Screening for depression is a good start but is not adequate by itself. For example, the repertoire of primary care practice must include the competent assessment of the depressed individual to recognize those with bipolar depression, comorbid anxiety, or substance abuse. A 2016 report from a large primary care study in England<sup>3</sup> found that about 10% of patients receiving an antidepressant (usually as monotherapy) in fact had bipolar depression. While the current emphasis of the PCMH is adequate screening and

treatment of major depressive disorder (MDD), if a practice does not have the capability to manage bipolar disorder, the iatrogenic consequences may be profound for some patients. Alternatively, casting a wider net using a screening strategy that also identifies other disorders is more effective.<sup>4</sup>

A second source of increased medical costs that is virtually normative for patients, particularly as they age, is the development of chronic medical illness.<sup>5</sup> The medical and indirect costs of such illnesses are not only considerable but also may easily double with comorbid psychiatric disease. Integration of behavioral care with psychiatric care through the PCMH and other collaborative practice arrangements leads to significantly improved outcomes for both the medical and psychiatric conditions.<sup>6</sup> This integrated approach may involve a family physician who is competent in managing both conditions or a collaboration between a primary care professional and a psychiatrist, with each contributing to patient care. Support of care managers and other behavioral health personnel may further boost the effectiveness of care as well as provide for a broad range of therapies, particularly psychotherapies, which might not be accessible otherwise.

The third source that most likely contributes both to poor medical and psychiatric outcomes and direct costs, as well as to the total costs to society, is impaired cognitive functioning of many patients with psychiatric disease. In some ways, this is the "dark matter" of psychiatry, particularly unrecognized in the primary care setting. Related to depression (and other mood and anxiety disorders), we have viewed impaired cognition as at times problematic but not a potential target for treatment. Functional magnetic resonance imaging studies and other research methods have documented the extent and impact of cognitive deficits in psychiatric disease. The past decade has seen impressive advances in our understanding of the brain and of the regions and neural networks involved in cognition and cognitive impairment.

True to the dimensional conceptualization of the National Institute of Mental Health research domain criteria approach, cognitive deficits are most prevalent and profound in schizophrenia and psychotic disease, with decreasing impact over the range of bipolar, depressive, and anxiety disorders.<sup>7</sup> Perhaps most studied as a component of MDD, it is evident that about 30%-40% of MDD patients have significant decrement in cognitive function (>1 SD in objective cognitive tests), while about 20% have a more profound impact (>2 SD decrease).8 Such cognitive deficits precede the first episode of depression and often continue between episodes and worsen with each subsequent episode, even when patients attain symptomatic remission with therapy. They are particularly prevalent in patients who do not demonstrate recovery of their pre-episode level of functioning (including not returning to work), which occurs even in a high percentage of patients who do attain remission

as measured by usual symptom-based instruments (eg, the 9-item Patient Health Questionnaire<sup>9</sup> or Inventory of Depressive Symptomatology<sup>10</sup>).

A US Food and Drug Administration committee recently recommended that "improved cognitive functions" can be added to the information leaflet of vortioxetine. <sup>11</sup> This is a big step, with the implication that improving cognitive function in patients with MDD is a legitimate goal, rather than one achieved as a byproduct of overall depressive symptom improvement. The ramifications of this recommendation for primary care are likely to play out over the next decade. However, the improvement of cognitive impairment is likely to have high value for our patients as well as their families, social and work connections, and society.

We are not yet prepared for the challenge and opportunities related to cognition—we have neither the tools nor the depth of understanding required to effectively care for patients with cognitive dysfunction related to psychiatric disease. For instance, a starting point is the ability to assess cognitive status and particularly to measure and evaluate change in components most likely to be compromised (executive function, attention, working memory, general and psychomotor processing speed, and heightened negative bias in perception and interpretation of inputs). While a patient's subjective report of cognitive impairment may be of value, we know that subjective perceptions correlate poorly with objective measures. A related dilemma is that for the individual patient, population norms are of little value in initial assessment—an individual who was high performing prior to developing depression might still test objectively above a population norm yet be significantly impaired and unable to be successful at work. Nevertheless, being able to measure change in cognitive status with treatment would still be of value.

In depression, attention-deficit/hyperactivity disorder, and most likely other psychiatric disease, treatment can lead to cognitive improvement, either directly or indirectly. While we have few studies regarding the impact on cognition of various treatments (or treatment classes), in depression such evidence is available for vortioxetine<sup>12</sup> and to a lesser extent duloxetine. <sup>13,14</sup> We also know that certain psychotherapies and other treatment modalities may lead to cognitive improvement and related measurable changes in brain function. We do not know the relationship of depression-related cognitive impairments or the impact of long-term treatment on the eventual increased occurrence of dementing illness in those with MDD.

While the introduction of cognition as an additional consideration in the care of patients with psychiatric illness might seem daunting, particularly for those of us in primary care practice, we are well positioned to incorporate it. The Digit Symbol Substitution Test<sup>15</sup> (possibly the "sed rate" of cognition) and several other brief objective measures are feasible for primary care use and are being "packaged" for administration using electronic tablets or computers either in the office or from a patient's home. For those of us in a PCMH, additional staff may provide the capacity to

effectively manage patients with significant impairments through enhanced care management including brief psychotherapies of potential benefit.

Cognitive impairments may contribute substantially to behaviors that frustrate effective care of chronic illness. Misperceptions and negative biases, low motivation, forgetfulness, and inability to plan or follow through with plans all might stem from the cognitive consequences of depressive and other illnesses. In the long term, the effective management of this dimension of illness may be critical to the effective management of chronic conditions such as diabetes and cardiovascular disease. It also may contribute to activating patients and engaging them in healthy behaviors and lifestyles. At a time when clinicians and their practices are increasingly at financial risk with regard to patient outcomes, the effort in the coming years required to develop the understanding and practice competencies to respond to cognitive concerns in patients with psychiatric disorders will be of great benefit to all.

The Primary Care Companion for CNS Disorders strives to keep you informed and on the cutting edge of effectively integrating the care of psychiatric and central nervous system conditions as part of the full spectrum of primary care practice. We have a vibrant global readership, one encompassing both primary care clinicians and the psychiatrists working with them, that includes those who work as part of a PCMH or their medical "neighborhoods." We invite you to submit your experience to us, through original research, review articles, brief reports, or letters to the editor, and we encourage you to take part in our online activities. Please join us as we recognize the invaluable contribution of our reviewers, whose efforts improve and help focus the content of the Companion.

Larry Culpepper, MD, MPH Editor in Chief

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