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### **COMMENT & RESPONSE**

## A Review of Transcatheter Treatment of Valvular Heart Disease

**To the Editor** We believe the recent Review<sup>1</sup> about transcatheter treatment of valvular heart disease has 1 important omission. The description of the "heart team" failed to include an anesthesiologist. In addition to playing an important role in the medical evaluation and selection of patients who undergo this procedure, anesthesiologists administer sedation, general anesthesia, or both; administer as many as 10 additional potent nonanesthetic medications during the procedure; provide echocardiographic assessment and monitoring; work to maintain hemodynamic stability; provide resuscitation, if needed; and oversee recovery after the procedure.

All these duties are critical for a successful outcome in patients undergoing transcatheter treatment of valvular heart disease. In fact, the entire procedure would not be possible without the many services provided by the anesthesiologist.

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**In Reply** We agree with Drs Katz and Suriani that anesthesiologists are integral and highly valuable members of the heart team. Their crucial contributions are one of the primary drivers for the excellent outcomes of transcatheter procedures. Our discussion<sup>1</sup> regarding the heart team was intended to highlight the shared decision-making choices among transcatheter, surgical, and medical therapy options for patients with valvular heart disease.

Anesthesiologists provide conscious sedation in more than 60% of patients undergoing transcatheter aortic valve implantation, which has led to shorter hospital lengths of stay, decreased in-hospital and 30-day mortality, and more frequent discharge of patients to home.<sup>2</sup> Intraprocedural echocardiographic guidance for mitral and tricuspid interventions are supported by cardiologists or anesthesiologists based on center practices.

The success and delivery of high-quality care requires coordinated collaboration and communication from the heart team that extends to many others including, but not limited to, nursing, certified registered nurse anesthetists, technicians, sonographers, advance practice clinicians, and administrators.

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# Depressive Symptom Assessment in Medically III Patients

**To the Editor** We wish to discuss 3 points regarding the recent JAMA Insights article<sup>1</sup> that addressed the assessment of depressive symptoms in medically ill patients.

First, while Drs Baumgart and Garrick provided a comprehensive list of medical illnesses and medications with high prevalence of depressive symptoms, we believe traumatic brain injury (TBI) and obesity should also have been included. A large cohort study found that 53.1% (297/559) of patients met criteria for major depressive disorder (MDD) within the first year after TBI. MDD may be the most common and disabling psychiatric comorbidity following TBI.<sup>2</sup> Because MDD after TBI is highly prevalent and associated with increased disability, routine screening for depressive symptoms is recommended for this group of patients.

Second, there appears to be a bidirectional relationship between obesity and depression. One study showed that individuals with obesity had a 55% increased risk of developing depression, while individuals with depression had a 58% increased risk of becoming obese.<sup>3</sup> Also, genetic evidence (including a mendelian randomization study) has validated the causality between obesity and depression.<sup>4</sup> Therefore, obesity should be added to the list of medical illnesses with high prevalence of depressive symptoms.

Third, although both healthy and medically ill patients may respond to the common antidepressant medications, attention should be paid to clinically depressive symptoms in patients with dementia without a diagnosis of MDD, which represents approximately 32% of patients with dementia.<sup>5</sup> In this population, pharmacotherapy alone was not more efficacious than usual care, and nonpharmacological interventions (eg, occupational therapy, cognitive stimulation, and reminiscence therapy) were more efficacious than pharmacotherapy for reducing depressive symptoms.<sup>5</sup>

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To the Editor The recent article about diagnosis of depression in patients with comorbid medical conditions1 failed to make 3 important points. First, in their discussion of screening tools for diagnosing depression, the authors briefly mentioned the Patient Health Questionnaire 2 (PHQ-2) and Patient Health Questionnaire 9 (PHQ-9)<sup>2</sup> in conjunction with the Center for Epidemiological Studies Depression Scale (CES-D), Beck Depression Inventory II (BDI-II), and Hospital Anxiety and Depression Scale (HADS) and contrasted these with the Structured Clinical Interview for DSM-5 (SCID). This catalog of tools does not do justice to the critical role that the PHQ-2/PHQ-9 currently plays in clinical practice. Screening tools that support categorical diagnostic distinctions, such as the PHQ-9, facilitate more robust clinical response than those which provide continuous symptom severity scores, such as the BDI-II, CES-D, and HADS. Moreover, the SCID requires substantial training to administer, does not have a selfreported version, and is not compatible with physician workflow in both the inpatient and outpatient setting. On the other hand, the PHQ-9 already has a well-established role in clinical practice, has been incorporated in most electronic medical records including the Minimal Data Set 3.0 required in Medicaid/Medicare financed skilled nursing facilities, and is the metric most commonly used in studies of depression in the general medical setting.

Second, when interpreting the significance of the PHQ-9 and other depression scores, responses to the severity of the 2 cardinal symptoms of depression (depressed mood and anhedonia) can increase specificity by identifying patients whose total scores are inflated by other symptoms that may be caused by their medical comorbidities.

Third, in the discussion<sup>1</sup> of the differential diagnosis of depression, the authors failed to mention the underrecognition of bipolar disorder among patients presenting with symptoms of depression. In the outpatient general medical setting, the diagnosis of bipolar depression may be missed in as many as 21%<sup>3</sup> to 25%<sup>4</sup> of patients being treated for unipolar depression. Moreover, recognition of the diagnosis of bipolar disorder may be delayed for 10 years or longer in up to one-third of patients.<sup>5</sup> Patients with bipolar disorder benefit from mood stabilizing medications; antidepressant medications, if used alone to treat bipolar disorder, can have adverse effects. Use of the Mood Disorder Questionnaire should be encouraged as a standard tool to evaluate patients with depression for features of bipolar disorder.

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