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Identifying Opportunities for Prevention and Intervention in the Youth Depression Cascade: Workshop in Brief

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WORKSHOP IN BRIEF

Board on Children, Youth, and Families

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Identifying Opportunities for Prevention and Intervention in the Youth Depression Cascade—Workshop in Brief

On November 19, 2015, the Forum on Promoting Children's Cognitive, Affective, and Behavioral Health of the National Academies of Sciences, Engineering, and Medicine cohosted a Webinar with the American Academy of Pediatrics on prevention and intervention methods to address the development of clinical depression in children and adolescents. The Webinar featured three presentations focused on various opportunities to identify and intervene in developing cases of clinical depression within current health care settings, viewing the detection and care of depression as a series of steps that a practice could take. The full Webinar recording, speakers' presentation slides, and supplemental materials are available at http://nas.edu/DepressionCascade.

YOUTH DEPRESSION CASCADE

The concept of the Youth Depression Cascade, modeled after the HIV continuum of care cascade, was a prominent feature of the Webinar. C. Hendricks Brown, professor in the Department of Psychiatry, Behavioral Sciences, and Preventive Medicine at Northwestern University, introduced the concept and, as a model, described how Chicago's adoption of the HIV continuum of care cascade and the opportunities for targeted interventions it presented along all parts of the disease development pathway resulted in cumulative improvements in viral suppression among HIV cases in comparison with the usual care for HIV clients. Brown explained that the HIV continuum of care could inform the development and testing of a model of youth depression cascade.

IDENTIFICATION, PREVENTION, AND TREATMENT OF ADOLESCENT DEPRESSION IN PEDIATRIC PRIMARY CARE

Alain Joffe, associate professor of pediatrics and director of the Student Health and Wellness Center at Johns Hopkins University, began by noting that approximately 14 percent of 13- to 18-year-olds meet criteria for a mood disorder, but only 60 percent are ever treated (Costello et al., 2014; Merikangas et al., 2010). To better identify adolescents affected by a major depressive disorder, he said, the United States Preventive Services Task force recommends screening young people aged 12-18 years old when effective diagnosis, treatment, and monitoring can be subsequently offered.

Joffe explained how pediatric care environments are ideal for conducting the recommended screening, since pediatricians are able to maintain trust-based relationships that develop over time and take into account each child's or adolescent's unique circumstances and social support. Pediatricians are well suited for practicing anticipatory guidance to prevent depression from developing, and they can also connect with the right specialists when necessary.

He described the Bright Futures Program as an exemplary interdisciplinary, international framework for adolescent health care. The program is based on recognizing adolescents' strengths and assets, and it is calculated to develop adolescents' resiliency by creating networks of close relationships. Pediatricians can monitor these developing relationships while also overseeing youth's development and recommending ways to prevent fighting, bullying, and other forms of violence or injury.

In primary care settings, practitioners can capture a snapshot of an adolescent's well-being with the HE^{2}ADS^3 evaluation: Home life, Education and Employment, Activities, Drugs, Sexuality, Suicide, and Safety. Practitioners use the tool in slightly different ways, but they are familiar with its overall application and utility.

Joffe highlighted how the American Academy of Pediatrics has been contributing to the health care field by publishing a set of mental health competencies in 2009 (Committee on Psychosocial Aspects of Child and Family Health and Task Force on Mental Health, 2009), followed by the issuance of a clinician's toolkit in 2010.[1] Additional support in detecting and treating adolescent depression is offered to pediatricians through the medical home and integrated behavioral health models for primary care practice.[2]

[1] *Addressing Mental Health Concerns in Primary Care: A Clinician's Toolkit* can be found at https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Mental-Health/Pages/Addressing-Mental-Health-Concerns-in-Primary-Care-A-Clinicians-Toolkit.aspx [January 2016].

[2] More information about the medical home and integrated behavioral health models can be found at http://pediatrics.aappublications.org/content/early/2015/04/08/peds.2014-3941 [January 2016].

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The likelihood that more cases of adolescent depression will be detected early has been increased by the mandate in the Affordable Care Act for screening under all health plans and by the electronic health records measures for screening and for suicide risk assessment published by the National Quality Forum, the Patient Health Questionnaire (PHQ). Pediatricians can use the two-question PHQ2 as a screening tool to quickly assess if further screening is needed. Young people who score highly in depressive symptoms on the PHQ-2 can then be administered the nine-question PHQ-9 questionnaire for more in-depth screening.

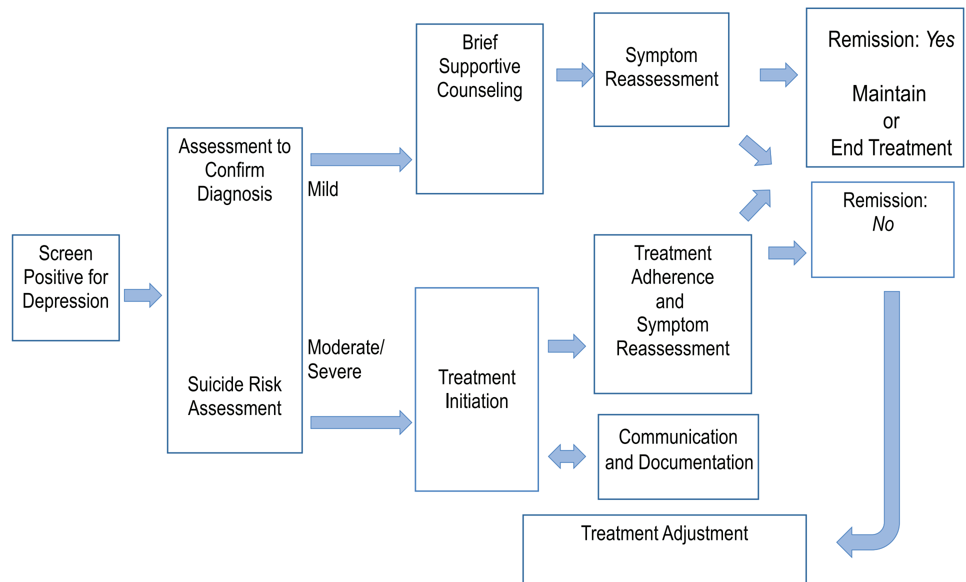

Figure 1 Depression management care pathway. Adapted from Lewandowski et al. (2013).

But screening is not enough on its own, Joffe emphasized: it must be supported by a professional clinical diagnosis and suicide risk assessment if indicated. Adolescents with mild symptoms of depression can be managed in primary care settings. More severe cases can be managed through shared care or the co-location of specialists with primary care providers, although referrals in some cases will still be necessary.

Joffe concluded by mentioning that comprehensive care means integrating the whole family into prevention and treatment goals in order to reduce youth stress, support healthy activities, and provide ongoing monitoring. Research shows that an Integrated model of medical and behavioral health care results in better outcomes than usual care.

MANAGEMENT OF ADOLESCENT DEPRESSION IN HEALTH SYSTEMS

R. Eric Lewandowski, clinical assistant professor in the Department of Child and Adolescent Psychiatry at New York University, discussed depression treatment and management frameworks in health systems.

Lewandowski noted that depression is relatively common among adolescents and has been increasing since the 1960s, harming young peoples' relationships and negatively affecting their achievement. Since most depressed adolescents do not get appropriate care on their own and are not seeing specialists, pediatric care offers a strategic opportunity to diagnose adolescent depression. However, diagnoses are often missed in primary care (Horwitz et al., 1992; Chang et al., 1998; Kramer and Garralda, 1998; Merikangas, 2010), and pediatricians may feel responsible for these lapses while also doubting their ability to accurately detect developing depression in children and adolescents (Olson et al., 2001).

National interest in managing adolescent depression has been increasing—for example, the National Collaborative for Innovation in Quality Measurement has been creating quality measures for health care values and outcomes. As part of the collaborative's activities, Lewandowski's research team was tasked with identifying high-value care practices for managing adolescent depression in order to further develop these national quality measures.

The team conducted targeted literature reviews and synthesized clinical care guidelines to identify 11 quality indicators arranged in a care pathway (see Figure 1). The pathway begins with screenings for depression and includes an assessment to confirm the diagnosis, brief supportive counseling, symptoms reassessment, treatment (including a referral if necessary), treatment adjustment, and ongoing symptom monitoring and checks (Lewandowski et al., 2013). Communication and documentation are key, as are tracking metrics of care effectiveness, such as the number of young people who go into remission or who need treatment recalibration. The quality indicators identified span care given in both the primary care and specialist settings.

After identifying these quality indicators, Lewandowski's team began testing some of them to assess their effectiveness. Field testing occurred in two phases, the first of which focused on routine screening as a high-value practice. In looking at the organization's recommendation for annual screening across three years, the team found a 14-fold increase in the frequency of screening in pediatric primary care. Across the system, the increase in screening led to an increase in the number of cases of depression diagnosed in primary care. The team also noted a higher number of positive screens than confirmed diagnoses, which could be attributed to a number of factors.

In a follow-up study, the team examined the pathway from screening through treatment, including pharmaceutical treatment. Screening was shown to be valuable, and Lewandowski said that clinical workflows should include steps to offer screening and case identification. Comprehensive care takes thoughtful coordination, he added, as both internal and external treatment resources are important, and professionals need to establish referral relationships ahead of time in order to offer the best care.

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DEPRESSION PREVENTION PROGRAMS AS PART OF THE YOUTH DEPRESSION CASCADE

In her presentation, Tatiana Perrino, research assistant professor in the Department of Public Health Science at the University of Miami, discussed depression prevention in youth, including identifying risk factors and evidence-based interventions. Depression is complex and multifactorial, with many risk factors, Perrino noted. Preventive interventions target risks, strengthen protective factors, and enhance adolescent resilience. Such preventive interventions can be provided in different settings, including schools and primary health care offices. The Internet is being used increasingly to deliver prevention interventions, Perrino pointed out, which has important implications.

One example of an effective preventive intervention is cognitive-behavioral intervention for young people whose parents have had depression. In these cases, elevated symptoms may show up years before depression develops, giving practitioners opportunities for early intervention (Garber et al., 2009; Brent et al., 2015). Family-based interventions have also been shown to be effective at reducing depressive symptoms in both parents and adolescents (Compas et al., 2009). Preventive interventions that were provided in primary health care for adolescents who exhibited symptoms reduced the likelihood of a depressive episode and self-harm (Van Voorhees et al., 2009).

Another example of effective preventive intervention is programs such as the Nurse-Family Partnership and Familias Unidas that rely on strengthening family communication skills. They have demonstrated effective results for interventions in the first few years of life that result in fewer depressive symptoms and less behavioral risk-taking years later (Olds et al., 2014; Perrino et al., 2014).

Suicide prevention is also important, and several evidence-based suicide prevention programs have been developed, including the Youth Aware of Mental Health Program (Wasserman et al., 2015) and the Good Behavior Game (Kellam et al., 2011).

Perrino returned to the care pathway presented by Lewandowski and discussed how preventive measures could be added to the beginning of the pathway. Risk factors such as childhood maltreatment and parental depression can be identified early in a child's life, and screening can be done at multiple points in a child's development, including schools, courts, pediatricians' offices, and other locations where professionals are in regular contact with young people and can observe their behavior.

WEBINAR SUMMARY

Vera "Fan" Tait, associate executive director at the American Academy of Pediatrics, briefly summarized the Webinar. We all have to work together to make a difference in the lives of children, adolescents, and their families, she said. The numbers of devloping and active depression cases are significant, and it is important to prevent depression and treat it appropriately whenever possible. The care pathway is a remarkable way to view opportunities for intervention, and she noted that we can all address critical questions along the pathway.

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PLANNING COMMITTEE FOR THE WEBINAR ON IDENTIFYING OPPORTUNITIES FOR PREVENTION AND INTERVENTION IN THE YOUTH DEPRESSION CASCADE: WORKSHOP IN BRIEF

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DISCLAIMER: This Workshop in Brief has been prepared by **Cyan James,** rapporteur, as a factual summary of the presentations and discussion at the Webinar. The statements made are those of the individual speakers and do not necessarily represent the views of all participants, the planning committee, the National Academies of Sciences, Engineering, and Medicine, or the American Academy of Pediatrics. The planning committee was responsible only for organizing the Webinar, identifying the topics, and choosing speakers.

REVIEWERS: To ensure that it meets institutional standards for quality and objectivity, this Workshop in Brief was reviewed by **Marian F. Earls,** Pediatric Programs, Community Care of North Carolina and **Budd N. Shenkin,** Bayside Medical Group, Inc., Berkeley, CA. **Patricia Morison,** Division of Behavioral and Social Sciences and Education, served as review coordinator. The review comments and draft manuscript remain confidential to protect the integrity of the process.

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