

# Text Support for ADHD

by Joseph Biederman, MD

**D**O YOU FIND IT DIFFICULT to get your child's ADHD medication refills on time? Do you want to receive helpful and reputable information about ADHD and its treatment? Do you want to get useful suggestions on how to manage your child's daily life and homework? A team of researchers has developed an online intervention to help support families in all these areas.

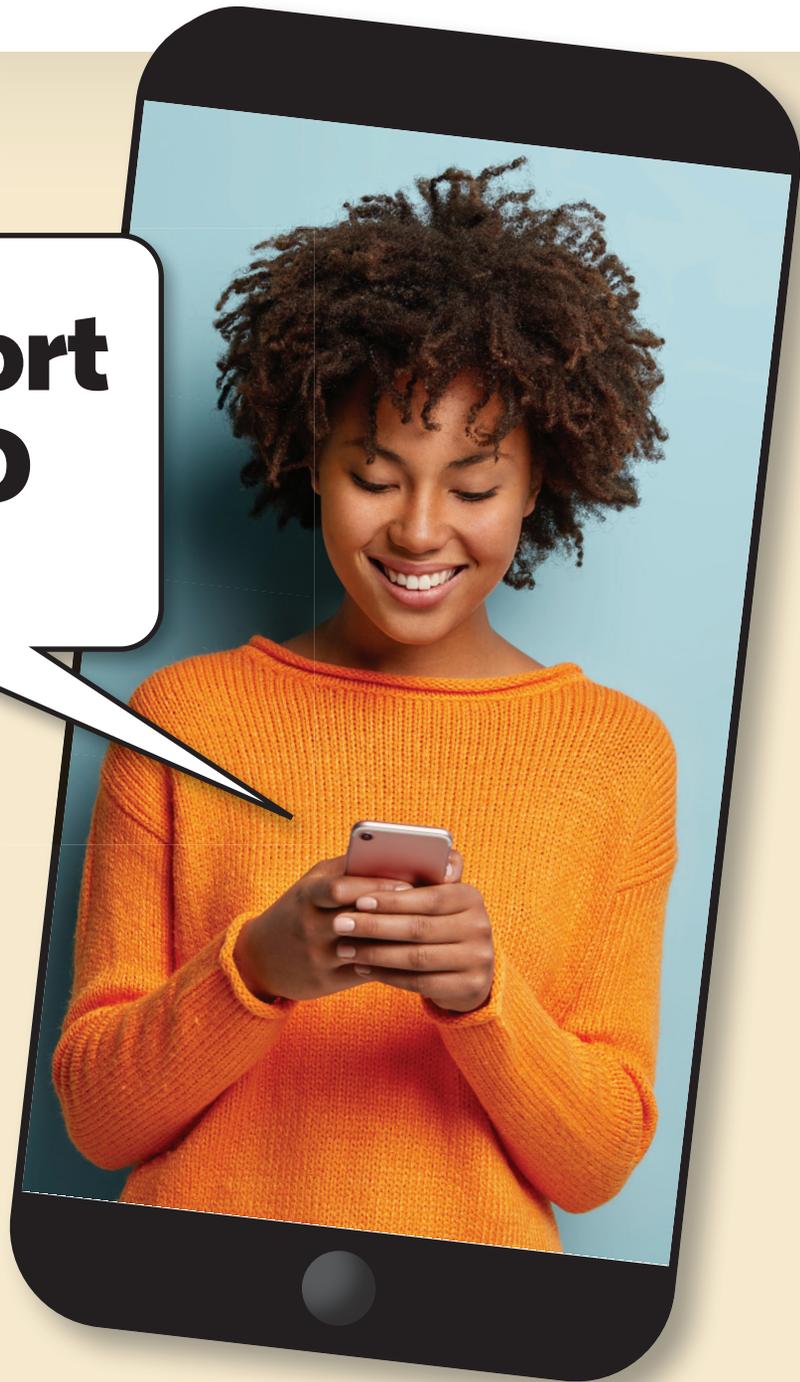
The most common behavioral disorder in children and adolescents, ADHD commonly leads to difficulties in school and problems with anxiety, low mood, and low self-esteem. In some children it can lead to smoking and substance use as well as accidents and injuries. Although any one of these problems can seriously burden a child and their family, fortunately, many of these negative outcomes can be reduced and even normalized when children with ADHD are treated and stay on course with their prescribed medication.

Although it is very clear that stimulant medications are safe and effective, children with ADHD often do not take their prescribed medications regularly, which minimizes the benefits that the medications can provide. At the Massachusetts General Hospital, we recently examined how common this problem is and found that less than half of children prescribed a stimulant medication renew the first prescription in a timely fashion to secure continuity of treatment.

As a practicing clinician-researcher at the Massachusetts General Hospital and the director of one of the larg-

est and most prestigious programs in ADHD in the world, I have seen the remarkable and life-changing positive effects that treatment can provide when used regularly and correctly. I have also seen firsthand the serious consequences that untreated and poorly treated ADHD can have on the lives of children.

Much like pain relievers, stimulants only work for a few hours; ADHD symptoms come back right away after the medication wears off. When ADHD is untreated or poorly treated, it can negatively affect a child's life in a lot of ways. When I meet a family in my practice, I often tell them that



the train of childhood passes through the station only once; it will not come back to get you. In other words, educational opportunities that are missed because a child with ADHD is not adequately treated will be very difficult to recover.

We don't know for sure why this problem of not taking regularly the prescribed medicines for ADHD happens, but we think that it is likely due to forgetfulness, trouble with follow through, and disorganization associated with ADHD. We also believe that the unusual and unique burden of stimulants as controlled substances could be a contributing factor as well, because patients need to contact the prescriber every month to secure a new prescription. Remembering to request a refill on time can be challenging for anyone, but especially for patients with ADHD. It is also possible that the ongoing misconceptions and misinformation in the media about ADHD could negatively impact and discourage treatment.

### **SOFIA: an innovative digital health intervention**

To address the serious problem of failing to take the prescribed medicines regularly, we developed and tested a novel text messaging digital tool to help support children with ADHD and their families called *Simple Online Family Intervention for ADHD* or *SOFIA*. *SOFIA* was created in a partnership between Massachusetts General Hospital and Memotext Inc, a technology company with expertise in digital health. *SOFIA* is a low-cost text-messaging intervention that greatly supports and helps families stay on track with their medication, get trusted information, and support connection with their prescriber. Parents receive text messages reminders about medication, re-contacting the prescriber for timely refills, educational reminders about ADHD and its treatment, and useful tips.

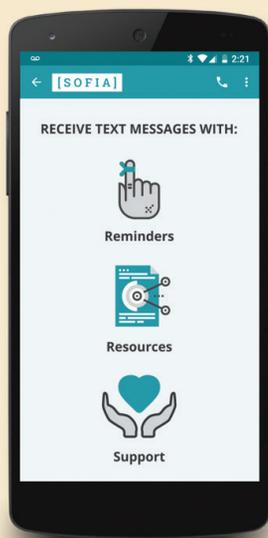
We chose to use a text messaging approach for this pro-

gram because text messaging remains the most salient and easy-to-use means of communication in our society. Through texts, we can reach patients and families in any corner of this country. We wanted to use a system that is easy to use, does not require expensive equipment, and would be minimally disruptive to the busy lives of families. Since it is passive and delivered automatically once a patient signs up, there is no need to download any application or remember a complicated password to log in. The messages arrive during times that are convenient to the family based on their individual choice.

In addition to texts about the timely renewal of prescriptions, messages also include suggestions and tips on such topics as managing homework, relationships with friends and families, and so forth, as well as questions that inform subsequent messages based on the responses received. In that way, *SOFIA* personalizes the content of messages to

maximize their usefulness to each individual family's needs. Our piloting of this intervention at the Massachusetts General Hospital has produced very positive results and has been extremely well received by patients, families, and providers.

If you want to learn more about *SOFIA*, you can go to [mysofia.online](https://mysofia.online) and sign up for a thirty-day free trial with no obligation. A special discount is offered to CHADD members! **A**



**Joseph Biederman, MD**, is chief of the clinical and research programs in pediatric psychopharmacology and adult ADHD at the Massachusetts General Hospital, director of the Alan and Lorraine Bressler Clinical and Research Program for Autism Spectrum Disorders at MGH, and the MGH Trustees Endowed Chair in Pediatric

Psychopharmacology. He is a professor of psychiatry at Harvard Medical School. Dr. Biederman is the author or coauthor of over 800 scientific articles, 650 scientific abstracts, and 70 book chapters. He has been a mentor to more than 15 junior investigators in the field. Dr. Biederman is board certified in general and child psychiatry.

#### **ADDITIONAL READING**

Boland H, DiSalvo M, Fried R, Woodworth KY, Wilens T, Faraone SV, Biederman J. A literature review and meta-analysis on the effects of ADHD medications on functional outcomes. *Journal of Psychiatric Research*. 2020;123:21-30.

Biederman J, Fried R, DiSalvo M, Storch B, Pulli A, Woodworth KY, Biederman I, Faraone SV, Perlis RH. Evidence of Low Adherence to Stimulant Medication Among Children and Youths with ADHD: An Electronic Health Records Study. *Psychiatric Services*. 2019;70:874-880.

Biederman J, Fried R, DiSalvo M, Woodworth KY, Biederman I, Driscoll H, Noyes E, Faraone SV, Perlis RH. Further evidence of low adherence to stimulant treatment in adult ADHD: an electronic medical record study examining timely renewal of a stimulant prescription. *Psychopharmacology (Berl)*. 2020;237:2835-2843.

Fried R, DiSalvo M, Kelberman C, Adler A, McCafferty D, Woodworth KY, Green A, Biederman I, Faraone SV, Biederman J. An innovative SMS intervention to improve adherence to stimulants in children with ADHD: Preliminary findings. *Journal of Psychopharmacology*. 2020;34:883-890.

Biederman J, Fried R, DiSalvo M, Woodworth KY, Biederman I, Noyes E, Faraone SV, Perlis RH. A Novel Text Message Intervention to Improve Adherence to Stimulants in Adults with Attention Deficit/Hyperactivity Disorder. *Journal of Clinical Psychopharmacology*. 2019;39:351-356.

Biederman J, Fried R, DiSalvo M, Driscoll H, Green A, Biederman I, Woodworth KY, Faraone SV. A novel digital health intervention to improve patient engagement to stimulants in adult ADHD in the primary care setting: Preliminary findings from an open label study. *Psychiatry Research*. 2020;291:113158.