

Research at a Glance

Using Mobile Health Strategies in Youth with Type 1 Diabetes

What's known:

According to the National Institutes of Health, more than 200,000 youths aged 20 or younger have been diagnosed with diabetes, and most have type 1 diabetes (T1D).

As youth navigate the complicated path to adulthood, keeping their diabetes in check - by monitoring blood glucose and taking insulin multiple times per day, among other strategies - adds yet another challenge. Clinicians are looking for novel ways to help these kids manage the life-long condition to help to ensure they enter adulthood in better health.

What's new:

Mobile health strategies provide an opportunity to better fit diabetes management into busy families' lives. According to the Pew Research Center, nearly 75 percent of teens aged 13 to 17 own or have access to a smartphone. A recent study that leveraged texting for diabetes management indicated that reminders and educational messages sent to 13- to 17-year-olds diagnosed with T1D offered some support with selfmanagement. The teenagers replied to 78 percent of texts with girls and power texters responding at higher percentages. Thousands of diabetes-themed mobile apps are available but most are tailored for adults and provide guidance, such as insulin doses, that may not be a perfect fit for younger, developing bodies. Mobile apps can sometimes open unexpected two-way information flow if users' cell phone details are available for purchase by unrelated third parties. Clinicians whose young patients struggle with glycemic control should know that mobile health strategies may be helpful tools for select pediatric patients.

Questions for future research:

- Q: Widely used mobile apps may help youths with T1D achieve better glycemic control, but do clinicians know the pros and cons of such mobile health strategies?
- **Q:** How can sending educational text messages to parents help to empower families to better manage youths' T1D?
- **Q:** Are particular technologies better suited to boys, vs. girls, and could their use help to erase possible gender gaps in use of mobile health strategies?