

## Comprehensive Behavioral Intervention for Tics

### What is Comprehensive Behavioral Intervention for Tics (CBIT)?

CBIT is a non-medicated treatment consisting of three main components:

- Training the patient to be more aware of their tics and the urge to tic
- Training patients to do competing responses when they feel the urge to tic
- Making changes to day-to-day activities in ways that can be helpful to reduce tics

While tics are neurological in nature, they are also extremely sensitive to the environment in which they occur. CBIT attempts to help children and their families familiarize environments that are more stable, predictable, and easily manageable while learning skills and tools to assist with controlling tics. While many children, especially when younger, report they are not bothered by their tics, many experience body soreness, difficulty concentrating, fatigue, and feelings of shame or embarrassment. Those who are experiencing distress because of their tics may benefit from CBIT.

### What are the different components of CBIT?

CBIT, often referred as habit reversal training (HRT), teaches patients how to become aware of their tics and then express them in a way that is less noticeable and bothersome. Premonitory urges, or “warning signs” that precede the occurrence of the tic behavior, are identified through awareness training assisted by a behavioral health professional.

Next, patients are taught to engage in a specific behavior which is incompatible with the bothersome tic. This is called a competing response, which is a unique movement based on the careful description of the tic described by the patient. The goal of this part of treatment is to try and teach the brain to resist the urge to tic, even when it thinks that it must act on it. It can also be helpful to recognize high risk “tic times” that help patients understand when tics are more likely to occur through functional analysis.

### What factors make someone a good candidate for CBIT?

For the intervention of CBIT to be effective, there are several factors that can make someone a good candidate:

- The patient has a desire to better manage tics and a willingness to practice daily
- Experience of a premonitory urge and being willing to experience the uncomfortable urge, yet not engage in the tic is important
- Social support to participate in treatment both in session and at home to serve as a supportive coach

### How old do you need to be to start CBIT?

The determination of whether a patient is a good fit for CBIT should be based more on characteristics of the patient rather than age. The intervention is typically most effective for children over the age of 9. However, if a child younger than 9 has some tic awareness, motivation, and tolerance of mild discomfort, then they can still be a strong candidate for the intervention.

### Who provides CBIT and what is the format for treatment?

CBIT is usually provided by trained behavioral health professionals who have gone through a certification process and training to provide the evidence-based intervention. Treatment is typically provided during weekly sessions lasting 45-60 minutes each. The duration of CBIT varies based on progress and intensity of tic, but 8-10 consecutive sessions is typical. Booster sessions after graduation from weekly sessions is also common.

### **Is CBIT a substitute for medicine?**

Through the care of your neurology team, a combination of medication and behavioral health therapy may be recommended. CBIT and medication are both appropriate and vary from patient to patient. The American Academy of Neurology recommends CBIT as a first-line treatment for tics, especially mild to moderate tics, though medication may also need to be considered for moderate to severe tics.

### **How do I start CBIT?**

While tic disorders are more common than people think, there is a significant shortage of providers in the US, with fewer than 300 certified providers. Through UPMC Children's Hospital of Pittsburgh, your neurologist will provide a recommendation for CBIT and options for care within the neurology department or provide a list of providers in the community who are known to be certified. The expectation that your child may experience a wait to start treatment is quite common. Talk to your provider about approaches to help control tics while waiting to get connected to care.