

Treatment Intervention Advisory Committee Review and Determination

Date: April 29, 2016

To: DHS/DLTC

From: Wisconsin Department of Health Services; Treatment Intervention Advisory Committee: Lana Collet-Klingenberg, Ph.D. (chairperson) LCK

RE: Determination of Social Communication, Emotional Regulation and Transactional Support (SCERTS) as a proven and effective treatment for individuals with autism spectrum disorder and/or other developmental disabilities

This is an initial review

This is a re-review. The initial review was July 25, 2013

Section One: Overview and Determination

Please find below a statement of our determination as to whether or not the committee views Social Communication, Emotional Regulation, and Transactional Support (SCERTS) as a proven and effective treatment for children with autism spectrum disorder and/or other developmental disabilities. In subsequent sections you will find documentation of our review process including a description of the proposed treatment, a synopsis of review findings, the treatment review evidence checklist, and a listing of the literature considered. In reviewing treatments presented to us by DHS/DLTC, we implement a review process that carefully and fully considers all available information regarding a proposed treatment. Our determination is limited to a statement regarding how established a practice is in regard to quality research. We do not make funding decisions.

Description of proposed treatment

SCERTS is a comprehensive intervention model. The SCERTS Model is an educational approach for individuals of all ages and skill levels with autism spectrum disorders (ASD) and related disabilities and their families, across home, school and community settings. SCERTS was developed by Barry Prizant, PhD, Amy Wetherby, PhD, Emily Rubin and Amy Laurant. SCERTS is founded on the theoretical and conceptual principles based on practices from other approaches including ABA (in the form of PRT), TEACCH, Floortime and RDI. The SCERTS Model differs most from traditional ABA by promoting child-initiated communication in everyday activities aiming to help children learn and spontaneously apply functional skills across materials, partners, and settings. SCERTS is usually provided in a school setting by SCERTS-trained educators (i.e., special education or other health-related professionals).

Synopsis of review

In the case of SCERTS, please refer to the attached reference listing that details the reviewed research. The committee's conclusions regarding SCERTS include:

- There have not been any additional, peer-reviewed, experimental studies since the last review of SCERTS. A literature search was conducted for years 2015 and 2016 in order to find updates on

empirical evidence on the SCERTS Model published since the last review. There have not been any additional, peer-reviewed, experimental studies since the last review of the SCERTS Model.

- The SCERTS website at www.scerts.com was reviewed. This website primarily describes the SCERTS model and describes two grants that were funded in 2010 to study SCERTS (one to A. Wetherby at Univ of FL and one to A. Wetherby and C. Lord at Univ of Michigan- *note C. Lord is no longer employed at Univ of Michigan). On the website, there is a "Research Corner" section. This section contains 2 press releases for the 2010 SCERTS grants, and one document, "Evidence-Based Practice and the SCERTS Model," dated September, 2010, v.1, Prizant, Wetherby, Rubin, & Laurent. However, upon review, the research listed as providing evidence for SCERTS consists of a large variety of articles that focus on other treatment approaches, but for which the document says covers the areas of SCERTS. For example, a study examining a social skills treatment (Barry et al., 2003) is listed as providing evidence for the SCERTS domains of SC (Social Communication) and TS (Transactional Support). No research evidence examining SCERTS as a stand-alone package is presented.
- The previous review found one descriptive study "observed" raw score gains in joint attention, symbol use, mutual regulation, and self-regulation among four students (ages not provided) attending a primary special school for children with ASD (O'Neill et al., 2010).
- Additionally, one published descriptive review of comprehensive treatment models determined there are neither published outcome data for SCERTS nor peer-reviewed journal articles supporting the efficacy of SCERTS (Odom, Boyd, Hall, & Hume, 2010).
- SCERTS developers (Prizant, Wetherby, Rubin, and Laurent, 2006) have authored manuals and publications on the SCERTS model. To date, the committee has not been able to locate any published reports of independent, empirical evaluations of the SCERTS model.
- The previous review cited a 4-year grant, awarded to Florida State University in 2010, to test the effectiveness of implementing a SCERTS curriculum for children with ASD. The study, which involves 40 schools with a focus on kindergarten to second-grade classrooms and will test the implementation of the SCERTS Model vs. the typical special education classroom. Anticipated completion of the study was 2014. Outcomes have yet to be published.

In sum, it is the decision of the committee that SCERTS, based on a lack of well-controlled studies in peer-reviewed journals examining the efficacy of SCERTS for children with ASD, retain a Level 4 rating with insufficient evidence (experimental treatment) of efficacy.

Section Two: Rationale for Focus on Research Specific to Comprehensive Treatment Packages (CTP) or Models

In the professional literature, there are two classifications of interventions for individuals with Autism Spectrum Disorder (National Research Council, 2001; Odom et al., 2003; Rogers & Vismara, 2008):

- (a) **Focused intervention techniques** are individual practices or strategies (such as positive reinforcement) designed to produce a specific behavioral or developmental outcome, and
- (b) **Comprehensive treatment models** are “packages” or programs that consist of a set of practices or multiple techniques designed to achieve a broader learning or developmental impact.

To determine whether a treatment package is proven and effective, the Treatment Intervention Advisory Committee (TIAC) will adopt the following perspective as recommended by Odom et al. (2010):

The individual, focused intervention techniques that make up a comprehensive treatment model may be evidence-based. The research supporting the effectiveness of separate, individual components, however, does *not* constitute an evaluation of the comprehensive treatment model or “package.” The TIAC will consider and review only research that has evaluated the efficacy of implementing the comprehensive treatment *as a package*. Such packages are most often identifiable in the literature by a consistently used name or label.

National Research Council. (2001). *Educating children with autism*. Washington, DC: National Academy Press.

Odom, S. L., Brown, W. H., Frey, T., Karusu, N., Smith-Carter, L., & Strain, P. (2003) Evidence-based practices for young children with autism: Evidence from single-subject research design. *Focus on Autism and Other Developmental Disabilities, 18*, 176-181.

Odom, S. L., Boyd, B. A., Hall, L. J., & Hume, K. (2010). Evaluation of comprehensive treatment models for individuals with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders, 40*, 425-436.

Rogers, S., & Vismara, L. (2008). Evidence-based comprehensive treatments for early autism. *Journal of Clinical Child and Adolescent Psychology, 37*, 8-38.

Section Three: DLTC-TIAC Treatment Review Evidence Checklist

Name of Treatment: SCERTS

Level 1- Well Established or Strong Evidence (DHS 107 - Proven & Effective Treatment)

- Other authoritative bodies that have conducted extensive literature reviews of related treatments (e.g., National Standards Project, National Professional Development Center) have approved of or rated the treatment package as having a strong evidence base; authorities are in agreement about the level of evidence.
- There exist ample high quality studies that demonstrate experimental control and favorable outcomes of treatment package.
 - Minimum of two group studies or five single subject studies or a combination of the two.
 - Studies were conducted across at least two independent research groups.
 - Studies were published in peer reviewed journals.
- There is a published procedures manual for the treatment, or treatment implementation is clearly defined (i.e., replicable) within the studies.
- Participants (i.e., N) are clearly identified as individuals with autism spectrum disorders or developmental disabilities.

Notes: At this level, include ages of participants and disabilities identified in body of research

Level 2 – Established or Moderate Evidence (DHS 107 - Proven & Effective Treatment)

- Other authoritative bodies that have conducted extensive literature reviews of related treatments (e.g., National Standards Project, NPDC) have approved of or rated the treatment package as having at least a minimal evidence base; authorities may not be in agreement about the level of evidence.
- There exist at least two high quality studies that demonstrate experimental control and favorable outcomes of treatment package.
 - Minimum of one group study or two single subject studies or a combination of the two.
 - Studies were conducted by someone other than the creator/provider of the treatment.
 - Studies were published in peer reviewed journals.
- Participants (i.e., N) are clearly identified as individuals with autism spectrum disorders or developmental disabilities.

Notes: At this level, include ages of participants and disabilities identified in body of research

Level 3 – Emerging Evidence (DHS 107 – Promising as a Proven & Effective Treatment)

- Other authoritative bodies that have conducted extensive literature reviews of related treatments (e.g., National Standards Project, NPDC) have recognized the treatment package as having an emerging evidence base; authorities may not be in agreement about the level of evidence.
- There exists at least one high quality study that demonstrates experimental control and favorable outcomes of treatment package.
 - May be one group study or single subject study.
 - Study was conducted by someone other than the creator/provider of the treatment.
 - Study was published in peer reviewed journal.
- Participants (i.e., N) are clearly identified as individuals with autism spectrum disorders or developmental disabilities.

Notes:

Level 4 – Insufficient Evidence (Experimental Treatment)

- Other authoritative bodies that have conducted extensive literature reviews of related treatments (e.g., National Standards Project, NPDC) have not recognized the treatment package as having an emerging evidence base; authorities are in agreement about the level of evidence.
- There is not at least one high quality study that demonstrates experimental control and favorable outcomes of treatment package.
 - Study was conducted by the creator/provider of the treatment.
 - Study was not published in a peer reviewed journal.
- Participants (i.e., N) are not clearly identified as individuals with autism spectrum disorders or developmental disabilities.

Notes: The National Standards Project, an organization that reviews the scientific literature to test the effectiveness of behavioral treatments for ASD, failed to include the SCERTS Model within their publication.

Level 5 – Untested (Experimental Treatment) &/or Potentially Harmful

- Other authoritative bodies that have conducted extensive literature reviews of related treatments (e.g., National Standards Project, NPDC) have not recognized the treatment package as having an emerging evidence base; authorities are in agreement about the level of evidence.
- There are no published studies supporting the proposed treatment package.
- There exists evidence that the treatment package is potentially harmful.**
 - Authoritative bodies have expressed concern regarding safety/outcomes.
 - Professional bodies (i.e., organizations or certifying bodies) have created statements regarding safety/outcomes.

Notes: At this level, please specify if the treatment is reported to be potentially harmful, providing documentation

Date: April 29, 2016

Committee Members Completing Initial Review of Research Base: Amy Van Hecke, Shannon Stuart

Committee Decision on Level of Evidence to Suggest the Proposed Treatment is Proven and Effective: Level 4- Insufficient Evidence (Experimental Treatment).

References Supporting Identification of Evidence Levels:

- Chambless, D.L., Hollon, S.D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, 66(1) 7-18.
- Chorpita, B.F. (2003). The frontier of evidence---based practice. In A.E. Kazdin & J.R. Weisz (Eds.). *Evidence-based psychotherapies for children and adolescents* (pp. 42---59). New York: The Guilford Press.
- Odom, S. L., Collet-Klingenberg, L., Rogers, S. J., & Hatton, D. (2010). Evidence-based practices in interventions for children and youth with autism spectrum disorders. *Preventing School Failure*, 54(4), 275-282.

Section Four: Literature Review

<http://www.scerts.com>

Odom, S., Boyd, B.A., Hall, L.J., & Hume, K. (2010). Evaluation of comprehensive treatment models for individuals with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 40, 425-436.

O'Neill, Bergstrand, L., Bowan, K., Elliott, K., Marvin, L., Stephenson, S., & Wayman, C. (2010). The SCERTS model: Implementation and evaluation in a primary special school. *Good Autism Practices*, 11(1), 7-16.