KVC’s Bridging the Way Home: An innovative approach to the application of Trauma Systems Therapy in child welfare

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A R T I C L E   I N F O

Article history:
Received 9 September 2016
Received in revised form 8 February 2017
Accepted 9 February 2017
Available online 10 February 2017

Keywords:
Trauma-informed care
Foster care
Child welfare systems
Implementation

A B S T R A C T

This article presents implementation study findings from a large-scale evaluation of an intervention model for children in foster care, aimed to improve care within the services system. This Bridging the Way Home Initiative, funded by the Anne E. Casey Foundation, and conducted under the auspices of KVC Kansas (KVC) in Kansas created processes by which a defined trauma-informed intervention model (Trauma Systems Therapy-TST) could inform the work of all those involved in the care of a foster child (i.e., clinical and non-clinical providers, and foster parents). This study focuses on how effectively TST was integrated into the full continuum of care at KVC, an organization that provides out-of-home care to children served by the Kansas Department for Children and Families in the Kansas City Metropolitan and East Kansas regions. The implementation study helps explain findings from a complementary outcomes study—covered in a separate article also submitted for review. We found the process of implementing and expanding TST demanding, iterative and complex, yet ultimately TST was implemented across levels. The majority of staff and foster parents completed training in TST, and fidelity measures showed progress in TST use over time. KVC’s implementation of TST provided both the knowledge and the tools necessary for foster parents to better care for the children in their homes. KVC’s efforts show it is possible to infuse trauma-informed care into a large child welfare organization across all levels of care.

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1. Introduction

Across the past few decades there has been growing evidence detailing the detrimental impacts of child maltreatment and other forms of trauma on children’s development (Institute of Medicine and National Research Council [IOM NRC], 2014). The current socio-political climate in conjunction with growing neurodevelopmental research on the prevalence and impact of trauma has created a context in which trauma can no longer be ignored in public systems of care. Further, policymakers, researchers, and service providers are coming together regarding the importance of trauma and the need for a comprehensive approach to trauma. This approach includes “trauma-specific” clinical services to address post-trauma responses, as well as universal strategies for creating “trauma-informed” service systems (Report of the Federal Partners Committee on Women and Trauma, 2011; Substance Abuse and Mental Health Services Administration [SAMHSA], 2014). As such, most child-serving systems, including behavioral health, homelessness, child welfare, education, and justice now recognize the need to address trauma in the lives of the children and families they serve.

Notably, children connected to the child welfare system, and especially those in out-of-home placements, are likely to have experienced at least some form of trauma. At a minimum, the removal from home is traumatic (Child Welfare Information Gateway, 2015). Given this, there has been a growing movement towards creating environments and services for children who have experienced trauma that recognize the consequences of trauma and provide appropriate services and support. One such effort has been a movement to integrate trauma-informed care (TIC) into child welfare systems (Child Welfare Information Gateway, 2015; Hanson & Lang, 2016). SAMHSA (2015) defines “a program, organization, or system that is trauma-informed as one that: 1) realizes the widespread impact of trauma and understands potential paths for recovery; 2) recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; 3) responds by fully integrating knowledge about trauma into policies, procedures, and practices; and 4) seeks to actively resist re-traumatization.”

Because this approach is aimed at creating a tailored response to a child’s trauma, there are not specific prescribed activities. While this flexibility is critical for tailoring responses to individuals’ trauma, it has resulted in a lack of consensus on what exactly it means to be a trauma-informed system. Recent efforts to define trauma-informed approaches in child welfare systems have characterized these systems

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through strategies such as workforce development, screening and assessment of children, data systems, evidence-based and evidence-informed treatments, and an overall system-wide understanding of how to recognize and respond to the impact of traumatic stress (Child Welfare Information Gateway, 2015).

These efforts are limited, however, by the paucity of research examining the implementation, and ultimately, the effectiveness of these approaches. Notably, in a commentary on a recent special issue on trauma-informed care, Berliner and Kolko (2016) note that “direction is lacking about the operationalization from the big idea to every day practice” (pp. 169). Moreover, of the limited research on approaches to implementing trauma-informed care, much has focused on specific types of implementers, such as child welfare professionals (e.g., Lang, Campbell, Shanley, Crusto, & Connell, 2016; Kerns et al., 2016) or foster, adoptive, and kinship caregivers (e.g., Sullivan, Murray, & Ake, 2016). This is problematic because there is emerging evidence highlighting the promise of system-wide integration of trauma-informed care (Bartlett et al., 2016).

This study seeks to help fill these gaps by systematically examining the integration of Trauma Systems Therapy (TST) in a large child welfare system across its full continuum of care. The purpose of the evaluation was to understand how TST was integrated across the child welfare organization and assess whether the integration promoted positive outcomes (well-being, placement stability, and permanency) for the 1500 children (age 6 and up) entering out-of-home care between 2011 and 2014. This article describes the results and implications of the implementation evaluation. The findings of this implementation evaluation are timely for two key reasons. First, there is increasing interest among public and private human services agencies in understanding strategies for effectively implementing trauma-informed care. Second, the findings from the complementary longitudinal, quasi-experimental evaluation are quite promising. An article summarizing findings of the complementary outcomes evaluation is also available (Murphy, Moore, Redd, & Malm, 2016). In brief, we found that children’s well-being improved with increased exposure to TST dosage over time; and placement stability improved with increased exposure to TST dosage over time. Results also suggest that no one category of staff members or caregiver is central to implementing TST.

1.1. Background

KVC Kansas (KVC) provides an extensive continuum of services to children and families served by the child welfare system. This continuum includes case management, child-placing agency services, foster care, hospital and residential treatment services, and community-based therapy services. Many of the children served by KVC have experienced high levels of trauma and exhibit disruptive behaviors. To address children’s emotional and behavioral dysregulation, KVC identified Trauma Systems Therapy (TST) as a research-based approach that could help KVC better serve children. TST was developed by Glenn Saxe, M.D., to improve emotional, social, and behavioral functioning among children and youth ages 6 to 18, who have experienced trauma.

TST recognizes trauma as a barrier to children’s self-regulation that needs to be addressed before children can recognize and deal with trauma through cognitive behavioral therapy and other treatments. It assumes that the “triggers” in children’s environments causing “fight, flight or freeze” behaviors must be reduced or neutralized to foster a feeling of safety in children, which then permits them to recognize and deal with their trauma. The TST approach was developed for clinical staff members who receive special training. Materials were developed to ensure that the approach is implemented with fidelity (for an overview of TST, see Saxe, Ellis, & Kaplow, 2007).

KVC made the decision to integrate TST throughout its entire service continuum because children’s emotional and behavioral dysregulation were serving as barriers to placement stability and timely permanency (Lloyd & Barth, 2011; Newton, Litrownik, & Landsverk, 2000). As originally designed, the TST therapeutic approach did not define specific roles for non-therapists to play in addressing trauma. Thus underutilizing existing child serving teams—comprised of clinical and non-clinical staff as well as foster parents—that are inherent in child welfare systems. By incorporating all members of the child serving team, KVC hoped to provide an integrated system of care that would embed trauma interventions throughout all points of child and family contact. Additionally, utilizing the therapist as the sole interventionist was cost prohibitive, as some activities were not Medicaid reimbursable.

KVC’s Bridging the Way Home initiative was designed to take advantage of TST’s strengths and create a consistent approach to trauma across children’s care settings. KVC selected TST with a goal of increasing child well-being, placement stability, and timeliness of permanency by implementing the approach with fidelity in all KVC service systems. In 2009, KVC piloted TST with youth in residential treatment and conducted a small quasi-experimental study (Brown, McCauley, Navalta, & Saxe, 2013) that found that youth receiving TST exhibited more positive and fewer negative behaviors than did their earlier counterparts who did not receive TST. Specifically, youth receiving TST were less likely to require physical restraint to prevent injury while in the facility, exhibited improvements in all eight areas of functioning assessed by the Child and Adolescent Functional Assessment Scales (CAFAS), and were less likely to experience multiple placements once they left the program. During this pilot, however, as residential staff members prepared to transition children out of residential treatment and into their communities, KVC’s leadership team decided that in order to maintain and build upon the gains made while in treatment, the foster parents, relatives, and birth families caring for these youth needed to be trained in TST. Families needed a lens through which to interpret the traumatized children’s “fight, flight, or freeze” behaviors and they needed specialized strategies to manage the children’s stress responses more effectively. KVC leaders also determined that the child welfare case managers, child placing agency staff and outpatient therapists who would be working with these youth also needed this training. Accordingly, KVC sought to expand the TST approach to provide non-clinical staff with training, materials, oversight, and support to be able to implement TST in role-appropriate ways. In doing so, KVC worked to provide children and youth with safe and supportive environments in which they could continue to process their trauma, improve their behavior, and achieve a safe and permanent home.

KVC sought to meet this goal by partnering with Dr. Saxe and his colleague at the New York University Child Study Center, Dr. Adam Brown, to develop and provide a wide range of training approaches (including web-based e-learning modules) specific to unique roles of individuals that comprise children’s care teams (e.g., therapists, case managers, and foster parents). Additionally, KVC and Drs. Saxe and Brown created fidelity measures that linked these trainings to competency measures and performance evaluations. These materials were ready before a large-scale effort to train staff was launched in February 2012.

1.2. Study goals and objectives

The overarching goal of this study was to systematically examine the process through which KVC integrated Trauma Systems Therapy (TST) throughout its continuum of services. Key research questions guiding this study and the methods used to gather this information are outlined in Fig. 1.

In accordance with our decision to employ a grounded theory approach to analyzing the data collected in this study, we did not develop a priori hypotheses; rather, we employed inductive analysis to identify themes from the data.
2. Materials and methods

2.1. Study design and sample

The study was informed by annual site visits during which a team of two to four researchers used a variety of data collection approaches, including interviews, focus groups, observations, and document reviews to examine how TST was being implemented. Site visits were conducted in February 2012, November 2012, November 2013, and November 2014. In addition to site visits, regular phone calls were held with staff members at all levels of KVC to further explore implementation. Finally, administrative data related to KVC’s implementation of TST were collected and analyzed.

The implementation study procedures, including data collection activities, analysis plans, study participant recruitment, and methods for securing confidential data were approved by an Institutional Review Board operated through the American Institutes for Research.

2.1.1. Administrative data

Administrative data from KVC were used to assess TST training efforts and implementation fidelity. These data included TST training completion dates of all staff and foster parents, as well as the TST fidelity scores of all child-serving staff (caseworkers, therapists, behavioral health technicians, and family service coordinators). See Murphy et al. (2016) for more information on measures of TST fidelity.

2.1.2. Semi-structured interviews and focus groups

A total of 24 in-depth, semi-structured interviews were conducted with the KVC administrative leadership, directors, and managers to discuss overall implementation plans, specific training plans, and challenges and drivers to the implementation of TST. Semi-structured interview and focus group protocols were developed to ensure collection of information to answer the research questions. Slight modifications were made in subsequent years, adding new probes to allow for further clarification of existing knowledge, and to examine change over time.

Focus groups were conducted with the following individuals:

Case managers. During each site visit, we met with one or more groups of case managers. Exploration of TST implementation assessed how staff incorporated their training into daily practice, and examination of challenges and factors that facilitated early and ongoing implementation. Approximately 30 case managers participated in 8 focus groups.

Therapists. We met with two groups of therapists, including those working with children currently in out-of-home care and aftercare therapists working with children and families for one year after the children

<table>
<thead>
<tr>
<th>Research Questions and Data Collection</th>
<th>Data collection methods</th>
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| 1. How is KVC implementing its expanded version of TST across its continuum of services? | • Observations of staff trainings  
• Review of role-specific training workbooks and other documents  
• Focus groups with front-line staff, supervisors, and foster parents  
• Interviews with staff leadership  
• Observations of staff leadership calls |
| 1a. What are the key implementation components that appear to be important in helping to integrate TST fully into practice? | • Focus groups with front-line staff, supervisors, and foster parents  
• Interviews with staff leadership  
• Observations of staff leadership calls |
| 1b. How has implementation varied across departments, disciplines, and levels of staff? | • Focus groups with front-line staff, supervisors, and foster parents  
• Interviews with staff leadership  
• Observations of staff leadership calls  
• Observations of staff trainings  
• Review of role-specific training workbooks and other documents |
| 1c. What is the quality and fidelity of implementation? | • Analysis of administrative data (front-line staff fidelity assessment scores, staff and foster care training completions)  
• Focus groups with front-line staff, supervisors, and foster parents  
• Interviews with staff leadership  
• Observations of staff leadership calls |
<table>
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<tr>
<th>Research questions</th>
<th>Data collection methods</th>
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</table>
| 2. What challenges emerge in implementing TST among non-clinical staff and foster families? | • Analysis of administrative data (front-line staff fidelity assessment scores, staff and foster care training completions)  
• Focus groups with front-line staff, supervisors, and foster parents  
• Interviews with staff leadership  
• Observations of staff leadership calls  
• Observations of staff trainings |
| 3. What implementation and contextual factors facilitate or hinder successful implementation of TST? | • Review of role-specific training workbooks and other documents |
achieve permanency. We assessed their satisfaction with TST training and tools, examined how they were implementing TST, and explored their previous training in trauma-informed therapy and how it aligned with TST. We also asked how, if at all, the training had changed how they work with children and families. Approximately 25 therapists participated in 8 focus groups.

*Foster families.* We met with foster parents to assess their satisfaction with TST training and tools, examine how they are implementing TST, whether they experience challenges, and whether there are factors that make it easier to use the intervention with children in their homes. Approximately 40 foster parents participated in five focus groups.

*Family service coordinators at child placing agencies* (provide direct support to foster parents). We met with family service coordinators to discuss how their work with foster families has changed due to TST implementation and the challenges they and the foster families face in translating TST knowledge into practice. Approximately 30 family service coordinators participated in 4 focus groups.

*Residential staff.* We met with behavioral health technicians and other staff in the residential program to discuss the TST training received and examined how they have transferred knowledge of trauma into their practice. Approximately 20 residential staff participated in three focus groups.

During each site visit, we spoke with 10 to 20% of KVC’s child-serving out-of-home care staff (approximately 260 in 2012; 362 in 2013; and 435 in 2014) at that time. See Fig. 2 for a timeline for data collection and information sources from where data were collected.

2.2. Analysis

2.2.1. Qualitative data

Data from interviews, focus groups, and ongoing calls with KVC were analyzed to identify key themes in the implementation of TST as well as to provide contextual information useful in interpreting the outcomes data (see Murphy et al., 2016). During the site visits, qualitative data were collected through digital recordings which were then transcribed and imported into NVivo, version 9 (QSR International Pty Ltd., 2010), qualitative analysis software. We used the grounded theory approach to analyzing these data and employed inductive analysis to identify themes that emerged from the data. In addition to the themes that emerged from the data, key factors which facilitated and challenged implementation were highlighted.

2.2.2 Quantitative data

Descriptive analyses of administrative data, including information on training participation dates and implementation fidelity, were conducted using Stata SE, version 13 (StataCorp, 2013).

3. Results and discussion

3.1. Staff and foster parents received training, booster sessions, and coaching

The integration of TST across KVC’s system of care was an intensive and iterative process that involved implementing numerous components over multiple years: 1) developing, implementing, and refining training materials and procedures for all staff and foster parents; 2) getting buy-in from all existing and new KVC staff and foster parents; 3) training all existing and new staff and foster parents in TST as well as providing booster sessions to reinforce training; 4) integrating TST with other elements of KVC services; 5) facilitating communication across the organization; and 6) building and implementing procedures for continuous quality improvement, such as quarterly fidelity assessments.

Two key factors related to the success of this initiative include the commitment and dedication of KVC administrators to the initiative—it was not viewed as a “one-time” initiative or one that would get subsumed by new priorities—and a focus on organizational learning and continuous quality improvement which enabled KVC to try new things, and adapt, as needed. Information on each activity completed to integrate TST across its continuum of care is described below.

3.1.1. Staff training

The first formal TST trainings for all staff and supervisors were conducted in early 2012. This training included an in-person training session (with overflow staff receiving training via video conference) and a follow-up training on the use of assessments—the UCLA-Post Traumatic Stress Disorder (PTSD)-Reaction index in particular. To maximize internalization and practical application of the training material, training attendees were required to complete assigned readings of the book written by TST developers (Saxe et al., 2007) and participate in “book reviews” (conducted via WebEx) prior to the in-person training. In addition, all training attendees received a copy of the PowerPoint slides prior to the presentation. The book review compiled the 17 chapters of text into four 90-minute modules. The review was recorded so staff could make use of them as needed. Initially, staff participated in these sessions back-to-back, on four consecutive days. Based on staff feedback, subsequent modifications of the book review allowed for more flexibility for workers’ schedules offering training multiple times to be completed over a 4-week period.

Across the interviews and focus groups that were conducted, KVC staff members reported that their receiving multiple modes of and repeated exposures to training was critical to successfully learning how to apply TST to their daily work. As such, in addition to this initial training, KVC offered workbooks, newsletters, e-mail blasts, podcasts, and online training; participation in and observation of case consultation calls; and coaching and mentoring from supervisors and experienced peers.

Beyond receiving multiple modes of training, across the focus groups and interviews staff emphasized the importance of receiving training that was specific to their roles, included concrete examples of how to implement TST, and provided multiple opportunities to practice implementing TST. As such, the role-specific workbooks developed by KVC staff and TST developers, which reformatted the information in a way that is unique to each staff person’s role, were critical to the success of the initiative. Within these workbooks, the vignettes, practice notes, and critical thinking questions were tailored to case managers, family service coordinators, behavioral health technicians, and foster parents, and appear as different sections of the workbooks. Besides the role-specific knowledge, another powerful tool the workbooks provided was a common language that could be used across all staffing levels as well as foster parents. Finally, in addition to these workbooks, the first formal trainings administered by KVC included half-day “breakout” sessions that were conducted with each specific discipline to provide further role-specific integration of TST training material.

3.1.2. Coaching, mentoring, and continuous quality improvement

All levels of KVC staff were afforded coaching and mentoring in TST through supervision. During weekly case consultations, supervisors mentored staff and provided instruction on TST. An important aspect of this coaching and mentoring was the ability to gauge the fidelity with which staff implemented TST. At the onset of implementation, KVC in conjunction with the TST developers, constructed fidelity measures (described in Murphy et al., 2016) that were administered quarterly by supervisors. In 2014, KVC fully transferred the fidelity assessment process to an online system.

Other efforts to ensure staff received the support they need to successfully implement TST include the development of a “sustainability” team consisting of 12 staff members who provided oversight to the

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To date, no kinship families have participated in these focus groups.
TST implementation effort. This team consisted of members from each of the key divisions—permanency, outpatient, aftercare, and residential. This team also shared ideas about what worked and what did not work in TST. For example, supervisors of case managers in permanency found success in using modules from the case manager workbook to work with staff to review their skills. Additionally, staff in the residential and hospital program developed a number of different training "boosters," which have incorporated experiential learning techniques (e.g., managers and staff participating with the children on the unit in deep breathing and other emotional regulation drills). One example of which includes “TST Thursdays” where staff members were regularly provided boosters to the formal training every Thursday.

3.1.3. Foster parent training

In addition to providing opportunities for foster families to attend formal training sessions, KVC developed an online training component, aligned with a specialized workbook, which families could use in their own homes. Consistent with varying adult learning preferences, foster families participating in focus groups were divided in their satisfaction with the online training method. Some noted that they like the online method because of its accessibility, whereas others preferred in-person training. Some wanting in-person training cited their lack of computer access or familiarity; others expressed the belief that in-person training was more conducive to demonstrating and practicing elements of the intervention. These findings are aligned with those from the staff focus groups and interviews and suggest that multiple modes of training is essential for effectively training all members of children's care teams.

Originally, some case managers reported concern that long-tenured foster families may not be open to TST training because they had fostered for years without using such an approach. Additionally, family service coordinators (who work closely with foster families) initially were concerned that foster families might be too busy to complete the online training and they felt in-person training may be more effective. To overcome this challenge, the family service coordinators suggested providing incentives, so the agency provided $500 raffle drawings at each group training session to encourage participation.

As implementation of TST evolved, however, the pivotal role foster parents have in children's intervention plans and healing was clear; and it became critical that all foster parents be trained in TST. In early 2013, all foster families were sent a letter explaining KVC's expectation that all who are serving or want to serve high-needs2 children (ages 5 and older) would need to complete TST training by July 1, 2013. In addition, prospective foster parents seeking agency licensure were expected to complete TST training within 6 months following receipt of approval as foster parents.

3.1.4. Coaching and mentoring of foster families

Coaching and mentoring of foster families in TST was provided through family service coordinators, who met regularly with foster families and facilitated support groups and helped families by reviewing the knowledge provided during trainings and by helping the families apply the TST tools. Through this work and their own TST training, family service coordinators reported gaining greater appreciation of their importance to the child-family relationship. Moreover, case managers also reported that they valued the additional resources that family service coordinators could provide and that family service coordinators could reinforce the importance of the training with foster families.

<table>
<thead>
<tr>
<th>Data Collection Timeline</th>
<th>Timeline for data collection and information sources</th>
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<tbody>
<tr>
<td>Ongoing-February 2012-January 2015</td>
<td>Monthly calls with: program leadership (presidents, vice presidents, directors, supervisors) and data team</td>
</tr>
<tr>
<td></td>
<td>Document reviews: Role-specific workbooks, training protocols, certification protocols, annual reports to the Annie E. Casey Foundation</td>
</tr>
<tr>
<td>Ongoing-February 2012-June 2015</td>
<td>Analysis of administrative records: Training dates for staff and foster families, fidelity assessment scores for child-serving staff.</td>
</tr>
<tr>
<td>February 2011</td>
<td>Leadership meeting; chief clinical officer; director of evidenced-informed initiatives and data team</td>
</tr>
<tr>
<td>February 2012</td>
<td>Focus groups with: behavioral health technicians, case managers, family service coordinators, therapists.</td>
</tr>
<tr>
<td>November 2012</td>
<td>Leaderships with: directors, supervisors, training technicians, data team, presidents, vice presidents</td>
</tr>
<tr>
<td>November 2013</td>
<td>Focus groups with: behavioral health technicians, case managers, family service coordinators, therapists, foster parents</td>
</tr>
<tr>
<td>November 2014</td>
<td>Focus groups with: behavioral health technicians, case managers, family service coordinators, therapists, foster parents</td>
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Fig. 2. Data collection timeline.

2 High-needs defined as scoring at the intensive level or above on KVC's placement scoring tool.
3.2. Multiple strategies were used to integrate TST knowledge into practice

3.2.1. Case consultation calls

Regularly scheduled conference calls, referred to as case consultation calls, that all members of the child’s team (case managers, supervisors, therapists, and family service coordinators, birth parents, resource parents and, when applicable, school personnel, state social workers, and the child’s attorney) were originally developed for case consultation purposes. While these calls represent an essential component within the overall TST implementation plan, the case consultation calls became an important training tool for staff, resource parents, and community stakeholders.

Consultations were originally conducted by a senior clinical administrator until clinical supervisors were fully trained. A significant portion of each week (2 h a day, 3 days each week) was delegated to serve as case consultation time and any staff member or resource parent could request a call. During consultations, assessment information, case formulation and child-specific next steps related to trauma were discussed in a structured format reinforcing the training and further developing a common trauma language. During focus groups, staff and foster parents repeatedly spoke of the value and importance of this common language which enabled staff and foster parents to feel comfortable during case consultations and other discussions with clinical staff.

3.2.2. TST tools and assessments

In addition to the extensive training methods described above, KVC staff worked with TST developers to provide tools to help staff and foster parents apply their knowledge of TST into daily practice. These tools, which include the Moment by Moment Assessments for Caregivers, Emotional Regulation Guide, and the Priority Problem Worksheet, are described in detail in Appendix A and are summarized in Fig. X below. Beyond the development of these new tools, the integration of TST across KVC’s continuum of care gave the entire system the opportunity to solidify expectations for the newly developed tools as well as tools used previously, such as the Child and Adolescent Functional Assessment Scale.

3.3. Individuals beyond KVC’s system need to be trained

While KVC was successful in integrating TST across its entire system of care, KVC recognized that in order to have the greatest impact on children’s well-being other systems and individuals, such as birth parents, must also operate from a trauma-informed approach. As such, KVC has been working to expand TST to individuals who do not work for KVC. These efforts are currently still underway and are briefly described below.

3.3.1. Community partners training

Originally, TST training for community partners was provided on a child-specific basis to interested partners. For example, on a case-by-case basis, case managers worked to ensure school staff members know about TST and the importance of consistency in addressing children’s trauma. Originally, there was some resistance from the schools, as there was concern it could result in additional work for teachers. However, as TST implementation continued schools reported a positive impact of TST and became more invested in the approach.
Other ways in which KVC worked to train community partners in TST included inviting community partners to attend KVC staff trainings, as well as KVC leadership’s regular participation on local and statewide committees.

In September 2013, KVC provided its first formal training of community partners. A statewide supervisors’ training session was conducted to provide training on TST to all supervisors in the Department of Children and Families (DCF), as well as supervisors from the other contract organization (KVC’s western counterpart). A panel of KVC supervisors took part in the training, which was sponsored by the Children’s Alliance of Kansas. Following the September supervisors’ training, in October 2013, a large-scale formal community partner training was conducted and included judicial staff (i.e., judges, attorneys, court-appointed special advocates) as well as staff from community mental health, early childhood, developmental disabilities, domestic violence, and schools. KVC plans to continue these trainings based on interest from community partners. For example, KVC plans to provide training on TST in some county court systems in the future based on interest expressed by some judges in KVC’s expanded service area.

### 3.3.2. Birth parent training

KVC understood that expanding TST’s reach to include birth parents would be challenging given that children have experienced many forms of abuse and neglect; and that, for many of these children, members of their birth families are the sources of these traumatic events. Expanding TST knowledge and training to birth parents is the last step to full implementation of this approach across its system. KVC has developed the birth parent curriculum and will be rolling it out in fall 2016.

KVC’s approach to training birth parents was informed in a number of ways. First, KVC learned from its implementation of TST for relative caregivers that while family service coordinators serve as a support to non-relative foster families, case managers serve dual roles when working with relatives and birth parent as they serve as the child’s worker and provide support to relatives/birth parents. Case managers were instrumental in encouraging relative caregivers to sign up for TST trainings and will have to provide the same (or more) encouragement to birth parents. Finally, given turnover among case managers, KVC understands their will continue to be challenges in getting family members to participate in training.

At the same time KVC was developing TST for birth parents, the senior KVC administrator served on a work group convened by the National Child Traumatic Stress Network (NCTSN) to develop trauma-informed training curricula for birth parents. KVC distributed a NCTSN fact sheet to staff to be used with birth parents which provides information about recognizing the impact of their own trauma. Other strategies reported for introducing TST to birth parents include case managers and therapists conducting “Moment by Moment” assessments alongside parents and educating parents about what trauma is and how the social environment they create in their homes can help to stabilize a child.

### 3.4. Evidence suggests strategies to integrate TST into practice were successful in promoting a trauma-informed culture of care

#### 3.4.1. Over the course of the study period, more child-serving staff implemented TST with greater fidelity

KVC’s efforts to support organizational learning and ensure continuous quality improvement resulted in sustained improvements in staff members’ implementation of TST, as indicated by supervisor rated TST fidelity assessment scores. Average TST dosage scores for each member of children’s care teams indicate that on average from 2012 to 2014 KVC staff implemented TST with increasing fidelity, with the average dosage score for children’s care teams steadily increasing from 7.95 (SD = 2.25; out of 30) at the start of the roll-out (first quarter of 2012) to 20.77 (SD = 5.67) at the last quarter of 2014.

KVC has developed TST fidelity assessments for therapists, residential behavioral health technicians, case managers, and family service coordinators. The assessments comprise a 10-point scale and are filled out quarterly by supervisors for all child-serving staff. The fidelity assessment is based upon TST treatment principles.

Exhibiting knowledge of each principle and demonstrating it in practice can earn staff members a maximum of one point. There are four questions under “fix a broken system,” each worth 0.25 points. The remaining principles each only have one question, and are therefore worth a maximum of one point. Staff are rated as lacking direct evidence (zero points), partial evidence (partial points), and conclusive evidence (full points).

The fidelity assessment form varies based on what staff members need to be assessed on, but examples of the types of the knowledge and skills assessed are staff members’ implementation of the UCLA-PTSD; knowledge of a child’s trauma history; capacity to problem solve to stabilize the environment to help a child maintain regulation; understanding of the goals of the treatment; and ability to identify the strengths in the child and the environment and to build trauma-informed care around these strengths.

### Table: Overview of Child Well-being Measures Used to Inform TST Implementation

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<tr>
<th>Child Ecology Check-In (CECI)</th>
<th>Measures the child’s level of regulation, the social environment’s ability to respond to the child, and the service system’s ability to respond to the family and the child.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child and Adolescent Functioning Assessment Scale (CAFAS)</td>
<td>Assess a child’s day-to-day functioning across a number of critical subscales and to determine whether their functioning changes over time.</td>
</tr>
</tbody>
</table>

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4 TST treatment principles include: 1) fix a broken system; 2) put safety first; 3) create clear, focused plans that are based on facts; 4) do not go before you are ready; 5) put scarce resources where they will work; 6) insist on accountability—particularly your own; 7) align with reality; 8) take care of yourself and your team; 9) build from strength; and 10) leave a better system.

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5 All scores are calculated based on the average fidelity scores of all staff in that role who worked with the child.
To quantify the level of exposure to TST, otherwise known as “TST dosage,” evaluators collaborated with KVC administrators to develop a measure for the evaluation. Ultimately, the group decided to use fidelity scores of all members of children's care teams to calculate the level of TST dosage that children received. That is, children whose care teams implemented TST with greater fidelity would have higher TST dosage scores than those whose care teams implemented TST with less fidelity. Furthermore, because fidelity scores were assessed on a quarterly basis, we were able to measure changes in children's exposure to TST dosage over time. However, given that many children experienced changes in staff within individual quarters; fidelity scores for each type of role (e.g., case manager, therapist) were averaged so that each quarterly dosage score a child received reflected the average score of all persons in that role who were assigned to that child during that particular quarter.

Average TST dosage scores for each member of children's care teams who have fidelity assessments can be found in Table 03. As shown in Table 03, on average from 2012 to 2014 KVC staff implemented TST with increasing fidelity—that is, children's exposure to TST increased over time. Specifically, the average dosage score for case managers steadily increased from 4.2 (out of ten) at the start of the roll-out (early 2012) to 8.2 at the end of 2014. Similarly, the average dosage scores for family service coordinators increased from 3.6 at the start of 2012 to 8.6 by the end of 2014.

While therapist dosage scores also increased over time—therapists began at an average of 1.2 in the beginning of 2012 and ended 2014 with a 3.5—therapist dosage should be interpreted with some caution. Therapist dosage scores include non-KVC therapists (537 of the 616 therapists assigned to children were non-KVC therapists), almost all of whom did not receive TST training, and as such, received a fidelity score of zero. Together, these results suggest that KVC's extensive efforts to promote fidelity to TST have been largely successful; however, KVC has struggled to train non-KVC therapists in the community, which is to be anticipated given that these therapists are not employed by KVC. (See Table 1.)

3.4.2. Most staff members and foster parents completed formal trainings and report varied training opportunities have been helpful

Over the course of the study period, the research team analyzed training date completion data entered into a data system by KVC staff. In total, 384 KVC staff members were trained during the course of the first formal trainings. Since then, KVC has offered quarterly two-day in-person TST trainings to new staff with accompanying book reviews and case consultation calls. These trainings have been continuously adapted based on staff feedback to incorporate more hands-on learning, opportunities for role-playing, and additional role-specific information. By Fall 2014, KVC had trained approximately 85% of their staff (N = 435) — a number which slightly fluctuated overtime due to staff turnover as well as a large influx of new staff.

In addition, over the course of the study period, approximately 69% of KVC's 397 foster parents were trained. Although KVC's efforts to train all foster parents in TST were hindered by ongoing turnover of foster parents, KVC's efforts to train foster parents were so successful that other child placing agencies approached KVC about providing TST training for their foster families.

Staff members responsible for implementing TST, including case managers, family service coordinators, and therapists, expressed appreciation for the multiple modes of training offered. Staff members differed in their opinions about which types of training they preferred most, but they all expressed appreciation for the varied approaches that were offered for example: large-group in-person sessions, Web-based training, small-group follow-up in-person training and coaching provided through case application staffings). Further, staff valued the additional supports that were provided including professional role-specific workbooks, YouTube videos, email blasts to staff focused on specific TST topics, monthly staff and foster parent newsletters featuring articles on TST and “cheat sheets” (concise TST learning aids). Whereas staff members found the initial large-group training helpful for receiving background information on TST and a general orientation on its use, they noted that repeated opportunities to participate in different types of training helped them to solidify their understanding of how to implement TST. In the smaller-group follow-up sessions, TST training was offered within a department or a team of workers. Because the small-group training occurred after staff members had the opportunity to begin implementing TST, they were able to ask questions and gather input on how to apply TST to specific cases in a more comfortable setting.

Some supervisors identified staff skilled in TST implementation to serve as peer coaches or models for newly hired staff. These peer coaches provided direct support for staff on how to use TST and related tools effectively within their roles.

To boost participation rates of resource parents in the TST training sessions, KVC offered multiple modes of training for them as well. These different approaches included in-person and online training, inclusion in TST staffings and use of a TST workbook designed specifically for resource parents to reinforce their learning. In addition to offering different modes of training, the frequency of training also made a difference. Because some positions integral to TST implementation tend to have higher levels of turnover and staff may have unavoidable scheduling conflicts, it is important for child welfare agencies to anticipate the need to provide ongoing training opportunities. It is also important to anticipate training needs during periods of growth to accommodate the needs of new hires. Otherwise, the burden of training will fall solely on the supervisor or become less of a priority.

If the full integration of TST into practice across all members of a child's team is a goal, then it may be necessary to mandate training as KVC did. For existing staff, knowing that TST training was required may have helped to underscore its importance while making clearer to new staff that TST is not an optional approach that may or may not be used, but is expected to be used by all employees. In addition, because foster parents have many competing demands on their time, their rates of participation in training—when not mandated or given an incentive—were relatively low. As might be expected, KVC was able to achieve high levels of parents completing training (more than 80% once it was mandated. To promote accountability for training completion, it is important to keep track of who has received trained and who has not.

3.4.3. Communication improved through use of shared language and increased opportunities to provide feedback

One of the most widespread comments from staff across departments and levels was that, following implementation of TST, communication across all levels of KVC staff improved. Workers report that hospital staff and caseworkers now use the same terminology (e.g., triggers, emotional regulations), which creates a more unified, supportive and productive environment both within and across departments. Staff members also expressed feeling more involved in decisions around the children they care for and oversee. One specific example was in the hospital setting. Prior to the implementation of TST, behavioral health technicians felt they were not included in decision-making conversations. One behavioral health technician remarked that previously when meetings occurred about the children in their care, most of the conversation took place around a small table and they usually sat elsewhere in the room, not actively involved in the conversation. However, since implementation of TST, this same behavioral health technician was involved in the discussions.
noted they have larger tables in the meeting rooms, so all levels of staff are included equally in meetings. The inclusion of the voices of all care team members was critical to assessment, case formulation and next steps and having a common language was reported to make it possible.

It is also helpful for KVC administrators and key implementation staff to meet regularly to share implementation challenges, success strategies, and provide ongoing feedback regarding TST implementation. The research team observed monthly leadership meetings and found that they were used to help assure accountability, share strategies, and uncover challenges, such as staff perceptions that the UCLA-PTSD was being implemented too quickly after a child entered out-of-home care. KVC fostered open communication through its Quarterly TST Implementation Meetings (involving leadership in Permanency, Child Placing Agency, Outpatient, Management Information System, Hospital and Residential Treatment and Development) and Monthly TST Sustainability Team Meetings (involving all Permanency, Child Placing Agency, Aftercare, and Outpatient supervisors). In addition formal staff feedback was encouraged through TST training evaluations, the KVC Staff Advisory Council and TST Role-Specific Focus Groups.

Feedback on TST implementation was also requested during meetings with supervisors, fidelity monitoring and follow-up training sessions. Through this implementation evaluation KVC has pursued formal independent feedback.

3.4.4. Implementation practices and performance metrics were monitored and discussed regularly

For an organization to assess its effectiveness in achieving implementation and improving child outcomes, implementation and outcome data must be collected and analyzed on an ongoing basis. KVC enhanced its centralized data system to better monitor implementation of TST. Specifically, KVC collected information on staff and foster parent training (i.e., dates attended), and staff scores on fidelity assessments were entered into the system. Through our interviews with staff leadership and observations of leadership team calls, we learned that these data were reviewed and discussed regularly. In areas in which goals were not being achieved, such as in getting foster parents trained in TST, plans were developed and tested to promote continuous improvement.

4. Conclusion

KVC’s effort to infuse trauma-informed care into their overall system of care was not viewed as a “one-time” initiative or one that would get subsumed by new priorities. A multi-year commitment was necessary for a systemic effort, and KVC, with some private funding, provided the high level administrative staff sufficient time to lay the groundwork for staff and foster parent buy-in of the new system of care. In addition, an extended period of time and attention was necessary to develop and fully implement comprehensive training and consultation. A multi-year effort also provided sufficient time to not only develop, but refine the tools that allow for the transfer the knowledge gained through trainings into practice (i.e., case consultations, coaching and mentoring). It also provided the time for KVC to develop procedures to assess continuous quality improvement through administering quarterly fidelity measures (i.e., quarterly fidelity assessments of staff).

KVC’s approach to training—offer varied modes and frequent trainings, require training of new foster parents, provide incentives to existing foster parents, prepare in-house staff to provide the trainings, and expect additional training will be needed—ensured that the largest number of staff and foster parents gained exposure to an array of training opportunities on a continuous basis. Staff and foster parents alike emphasized the importance of having the ability to participate in trainings delivered in a format that best corresponded with their learning style. Moreover, staff and foster parents consistently reported that concrete strategies for implementing TST into their daily care of children and opportunities to practice these strategies are critical to their successful implementation of TST.

Child welfare agencies should not underestimate the extent to which communication across the various levels of staff and foster parents, as well as, across multiple systems can augment system change efforts. In fact, a common language may be the cornerstone to such efforts. The trauma “language” (i.e., triggers, dysregulation, etc.), an essential component of KVC’s training that is highlighted in all written training materials and tools, was clearly important for training participants to understand about trauma and its effects on children. However, perhaps more importantly, the common language allowed all members of a child’s care team to feel respected and heard, as full partners to the effort.

KVC also expended considerable effort over the years to increasing knowledge of trauma-informed care within the broader social services community. KVC’s training on TST included judicial staff, as well as early childhood, community mental health, and school system staff. Here too, a common language is important to successful and long lasting collaborative partnerships with the other services systems.

Finally, foster parents, in particular, needed to be viewed as integral partners on a child’s care team as well as open and willing adult learners. KVC’s experience indicates that foster parents have both an interest in gaining trauma-related knowledge and concepts such as the impact of trauma on brain development, and a desire to learn the skills which TST brings and put the tools into use to ultimately alter the care of the children in their homes.

Table 1

<table>
<thead>
<tr>
<th>Time</th>
<th>KVC case managers</th>
<th>KVC and non-KVC community therapists</th>
<th>KVC family service coordinators</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M(SD)  N (Children)</td>
<td>M(SD)  N (Children)</td>
<td>M(SD)  N (Children)</td>
</tr>
<tr>
<td>2012 Jan–Mar</td>
<td>4.2(1.7) 423</td>
<td>1.2(2) 289</td>
<td>3.6(2.1) 236</td>
</tr>
<tr>
<td>Apr–Jun</td>
<td>5.1(1.9) 518</td>
<td>1.8(2.6) 376</td>
<td>5.5(3.3) 289</td>
</tr>
<tr>
<td>Jul–Sep</td>
<td>5.4(2.4) 585</td>
<td>2.4(2.9) 411</td>
<td>5.9(3.2) 306</td>
</tr>
<tr>
<td>Oct–Dec</td>
<td>5.9(2.4) 647</td>
<td>2.6(3.1) 424</td>
<td>7(2.7) 333</td>
</tr>
<tr>
<td>Jan–Mar</td>
<td>6.3(3) 726</td>
<td>3(3.7) 470</td>
<td>8.1(2.6) 378</td>
</tr>
<tr>
<td>Apr–Jun</td>
<td>6.2(3.6) 788</td>
<td>3.3(4.1) 497</td>
<td>8.4(2.6) 415</td>
</tr>
<tr>
<td>Jul–Sep</td>
<td>5.3(3.7) 811</td>
<td>2.8(3.9) 512</td>
<td>7.6(3.2) 406</td>
</tr>
<tr>
<td>Oct–Dec</td>
<td>6.9(2.8) 816</td>
<td>3.6(4.1) 492</td>
<td>8(2.9) 412</td>
</tr>
<tr>
<td>2013 Jan–Mar</td>
<td>7.2(3.2) 869</td>
<td>3.2(4) 522</td>
<td>8.5(2.8) 439</td>
</tr>
<tr>
<td>Apr–Jun</td>
<td>7.3(3) 918</td>
<td>3.3(4.1) 539</td>
<td>9(2) 459</td>
</tr>
<tr>
<td>Jul–Sep</td>
<td>7.4(2.8) 901</td>
<td>3.2(4) 538</td>
<td>8.7(2.1) 467</td>
</tr>
<tr>
<td>Oct–Dec</td>
<td>8.2(2.4) 881</td>
<td>3.5(4.1) 553</td>
<td>8.6(2.1) 467</td>
</tr>
</tbody>
</table>

All fidelity assessments are based on an 11-point scale (0 = lacking direct evidence, 10 = conclusive evidence); all scores are calculated at the child level, as such, they are based on the average fidelity scores of all workers in that role who worked with the child.
The transfer of a clinical-based intervention to both non-clinical staff and foster parents deserves emphasis. KVC chose to expand TST throughout their system of care in part because of the ability of TST to be flexibly used across systems and providers and its required role specification for clinical and non-clinical providers. This approach ensured foster parents would have an important role, and, in emphasizing their role, would embed trauma interventions throughout all the direct care points of contact children have with the system. Children in foster care would only be able to realize better outcomes from a trauma-informed system, if the tools were put into the hands of those caring for them on a daily basis. In our companion paper, on outcomes for children, we assess whether these implementation efforts made a difference for children’s well-being.

Acknowledgements

This work was supported by The Annie E. Casey Foundation through a subcontract with KVC Kansas, a subsidiary of Health Systems, Inc. In particular, we’d like to thank Cynthia Weaver and Suzanne Barnard for their thoughtful guidance over the course of the project. The report was independently authored with no involvement in the writing of the report from our funding partners.

The cooperation of KVC in supporting data collection and site visits, and providing detailed and ongoing information about the implementation of Trauma Systems Therapy is much appreciated. In particular, we’d like to thank Kelly McCauley, Sherry Love, Wayne Sims, and leaders from several KVC departments who were essential in helping us to schedule and coordinate site visits and to learn about Trauma Systems Therapy, as implemented by KVC. In addition, we are grateful for the collaboration and input of Dr. Glenn Saxe, a developer of Trauma Systems Therapy, and his colleague, Dr. Adam Brown.

Appendix A. Description of TST Implementation Tools

Assessment tools help members of children’s care teams assess the needs and trauma histories of children, and facilitate the implementation of TST.

UCLA Posttraumatic Stress Disorder (PTSD) Reaction Index

Central to TST implementation is use of a trauma assessment tool. KVC chose to train case managers on administering the UCLA-RI (Steinberg et al. 2013). Initially, case managers were required to complete the UCLA-PTSD Reaction Index with each child within 14 days after entry into out-of-home care. However, case managers reported needing more time after entry to establish rapport with a child believing the assessments would be more accurate, given the greater rapport, if they were completed within the first 30 days after entry, rather than during the first 14 days. KVC quickly adapted their expectations and guidelines accordingly, allowing caseworkers 30 days after a child enters out-of-home care to complete the UCLA-PTSD Reaction Index.

Moment by Moment

The Moment by Moment assessment tool is designed to help recognize a child’s triggers. It examines a child’s behavioral disruption in conjunction with the environment and the events that occurred leading up to the dysregulation. The goal is to use the Moment by Moment tool to better understand what a child’s triggers are and use that understanding to inform the child’s treatment. The tool is primarily used by case managers who will often walk through the “Moment by Moment” with the child or caregivers present during the time of the dysregulation. Moment by Moment assessments seek to answer the following questions:

- How was the child presenting emotionally before the dysregulation?
- Was this emotional or did the dysregulation involve harm to self or others (behavioral dysregulation)?
- What was the child doing before the dysregulation?
- What was the trigger of the dysregulation?
- Who initiated the trigger?
- Where did the dysregulation occur?
- How was the child presenting emotionally and behaviorally during and after the dysregulation?
- In the last 30 days, what major stressor was the child having the most difficulty managing?

Emotion Regulation Guide

The Emotion Regulation Guide is an individualized worksheet that identifies triggers, behavioral cues, and appropriate interventions throughout the four phases of regulation. The four phases include regulating, revving, re-experiencing, and reconstituting. A residential staff member described it as a “snapshot of what helps the child calm down.” It is designed to be completed collaboratively by the caregiver and the child. This tool provides guidance to foster parents and KVC staff members to help the child maintain control over his or her behavior and emotions. The guide is reviewed on a regular basis including after the child has experienced a period of dysregulation. It is designed to be a living document that can be adjusted as needed.

Priority Problem

Another tool that has been found helpful by KVC staff is the Priority Problem Worksheet. Priority Problems (TST-developed terminology) are patterns of links between stimuli and emotional or behavioral dysregulation. During consultation, staff members identify the source of a child’s emotional pain, how the child experiences that pain, and how the staff can intervene to help the child and family address the pain. Staff members then develop a framework to create an intervention plan.

Priority Problems are established and discussed during case consultations and are selected in the order of how much they interfere with the child’s and/or family’s functioning. This information is used by the child’s care team to create a specialized plan to meet the unique needs of the child and his or her caregiver. Staff members say that they view identifying Priority Problems as a helpful tool in getting the entire team to embrace the same goals.

The Priority Problem is presented as a statement:

“Signals of _______(messages from past trauma e.g. loss, abandonment, rejection…), such as ______(reminders of past trauma e.g. loss of control, anniversary dates, or seeing people who remind them on the one who hurt them, etc.), lead to feelings of _______(e.g. mad, sad, scared, etc.), which then lead to emotional and or behavioral dysregulation as evidenced by _______(e.g. isolation, cutting, withdrawal, drug use, etc.).”

References


StataCorp (2013). Stata statistical software: Release 13. College Station, TX: StataCorp LP.

