Jessica Dym Bartlett, MSW, PhD

Growing public awareness of the prevalence of child trauma, the potential disruption of children's development and lifelong well-being it poses, and the unique treatment needs of children who experience it, have led to important innovations in traumainformed care. The term trauma-informed care (TIC), often used interchangeably with a trauma-informed approach and a trauma-informed system, generally refers to a service system "in which all parties involved recognize and respond to the impact of traumatic stress on those who have contact with the system including children, caregivers, and service providers" (National Child Traumatic Stress Network, 2012). The child welfare (CW) system, which exclusively serves children who have experienced trauma (i.e., child abuse and neglect, at minimum), is a natural setting for implementing TIC. Accordingly, the U.S. Department of Health and Human Services has invested in such efforts (e.g., the National Child Traumatic Stress Initiative, Substance Abuse and Mental Health Services Administration [SAMHSA]; the Children's Bureau cooperative agreements on integrating trauma-informed practice into child protective service delivery, Administration for Children and Families [ACF]). These initiatives have provided fertile ground for implementing and testing a range of TIC approaches in CW.

TIC in CW takes multiple forms, but an essential element is an expansion of the system's concerns beyond children's physical safety and permanence. It also attends to children's psychological safety; attempts to address trauma-related needs by promoting the well-being and resilience of children, families, and

service providers; treats children and families as partners in their own care; and collaborates with other relevant agencies and systems (Chadwick Trauma-Informed Systems Dissemination and Implementation Project, 2013). A strong commitment to evaluation generally has accompanied public TIC efforts (SAMHSA, 2014). The Massachusetts Child Trauma Project (MCTP), a 5-year project in CW and mental health (MH), exemplified the TIC approach.

The Massachusetts Child Trauma Project

MCTP was a 5-year collaboration among Department of Children and Families (DCF), two behavioral health agencies (LUK, Inc., and the Trauma Center at Justice Resource Institute), and two large, urban medical centers (Boston Medical Center and the University of Massachusetts Medical School) designed to integrate TIC into CW and MH services statewide. Specifically, it was meant to (a) improve identification and assessment of children exposed to complex trauma; (b) build capacity within MH services to deliver traumaspecific, evidence-based treatments and practices in community agencies serving children and families involved in CW; (c) increase referrals of children to trauma treatment; and (d) increase caregivers' awareness and knowledge of child trauma.

MCTP integrated TIC into CW and MH during the implementation period (2012–2016) using three major strategies: trauma training in CW, dissemination of evidence-based and evidence-informed trauma treatments and practices (EBTs/EBPs), and development of Trauma-Informed Leadership Teams (TILTs), which were teams of CW staff and

community service providers with freedom to develop any TIC activities to meet the specific needs of their communities.

The evaluation of MCTP reflected the ambitious, complex nature of the intervention itself, including a mixed method, multi-informant, multi-measure implementation and child outcome study. This study was well-planned and executed in many regards, anticipating many possible stumbling blocks; nonetheless, we encountered methodological and practical challenges for which there were only partial "fixes." In the service of advancing dialogue and improving both TIC efforts and their evaluations, we identify three particularly vexing issues—(1) difficulties in measuring TIC outcomes; (2) lack of consistent engagement among service providers and families; and (3) turnover among providers—and our approach to solving these issues. Additional detail about MCTP implementation and outcomes is provided elsewhere (Bartlett et al., 2016; 2018; Barto et al., 2018; Fraser et al., 2014).

Measuring Outcomes in TIC-CW

Although researchers have been studying trauma for decades, the evaluation of TIC is arguably in its infancy. Little guidance exists on how to define, operationalize, and measure TIC; how to assess components, both individually or in aggregate; or how to identify which components lead to intended outcomes (DeCandia & Guarino, 2015; Hanson & Lang, 2016; Sullivan, Murray, & Ake, 2016). There is no well-specified theory of change, in part because approaches to TIC vary so widely. Moreover, the field lacks valid, reliable, and culturally relevant measures to comprehensively assess its impact.

Evaluating TIC has challenges comparable to studying other systems, which include accounting for the operation of its parts, the interactions of its subsystems, and its functioning as a whole, which theoretically offers more than the sum of its parts (Foster-Fishman, Nowell, & Yang, 2007; Hargreaves, 2010). Systems are inherently complex entities with a multitude of moving parts and shifting conditions; they do not operate in a linear or even a bi-directional way. Trauma-informed care, like other systems initiatives, endeavors to change patterns of behavior

across the system by changing its dynamics, structures, and conditions. Current research (Eoyang, 2007; Hargreaves, 2010) underscores the necessity to include those system-related elements in ongoing evaluations.

The MCTP evaluation effectively employed a number of methods to investigate system change. We conducted both an implementation study and an outcome study, allowing us to thoroughly examine intervention activities and processes. We also used a mixed method design to ensure that any information not captured quantitatively was collected qualitatively through key informant interviews, focus groups, and open-ended questions on surveys. Finally, we collected information from multiple types of informants (i.e., CW leadership, staff, and resource parents; MH leadership, supervisors, clinicians, parents/ caregivers, and youth). Taken together, these strategies enabled us to triangulate findings, highlighting both commonalities and disparities among the experiences of project participants in system components. For example, focus groups with TILTs, MH providers, and CW leadership included questions about the nature and quality of their work within their agencies, with one another, with other community service providers, and with the state CW system as a whole. Qualitative data collection revealed essential elements of TIC we would not have otherwise identified. For instance, participants in focus groups in both CW and MH systems emphasized that developing a shared language around child trauma was a critical foundation of successful collaboration, and one that did not previously exist. As one TILT leader explained:

> It was identified very early on that the language the Department speaks and the language the clinician speaks are completely not in the same world...and people are getting excited about speaking the same language.

We also used surveys on the MH system's readiness to adopt EBTs and changes in trauma-related agency policies and practices, though identifying instruments that had undergone comprehensive psychometric testing was nearly impossible given the nascence of TIC measurement in the field of child trauma. Indeed, findings suggested burgeoning system changes in TIC, including uptake of trauma-informed policies,

practices, and knowledge among service providers and resource parents, increased referrals to EBTs/EBPs, and a shared understanding of child trauma and how to address it collectively (Fraser et al., 2014; Bartlett et al., 2018).

Despite these successes, we encountered considerable difficulties in key areas of measuring TIC. A primary example was the challenge of linking positive child outcomes to changes in the system. The original evaluation plan approved by the state CW agency included an experimental design comparing children in CW offices participating in MCTP with those receiving services as usual. However, concerns from CW leadership about simultaneously increasing awareness of child trauma while unevenly distributing related services (e.g., increasing capacity of communities to refer to and provide EBTs/EBPs) led us to use a less rigorous design. Eventually we agreed upon a quasi-experimental design in which we compared children involved in CW who lived in areas of the state participating in MCTP with those in areas of the state in which MCTP had not yet been implemented. The results showed that MCTP reduced the likelihood of child maltreatment recurrence by 15% and increased the likelihood of adoption by 21% (Barto et al., 2018). This was a particularly encouraging finding because it reflected the effects of TIC as a whole, given that fewer than 300 of the 91,253 children in the sample received an EBT/EBP through the project that year. Nevertheless, we were not able to determine which elements of TIC were most important to these outcomes, either alone or in combination.

Overall, we learned several lessons from this experience. First, the goals of the evaluation are not always compatible with the goals of an institution; or, in this instance, they may be in-sync at one point in time but not another. Second, changes in any one system component can have tangible reverberations for evaluators. Third, TIC system components and contexts can be expected to change in unexpected ways, and evaluations must be nimble enough to accommodate the shifting tides. Finally, some institutions may not be able to accommodate optimal TIC evaluation designs, and even when they can, quality measures may not be available—

standardized tools for assessing trauma-informed are practically nonexistent (DeCandia & Guarino, 2015). Regardless, we believe MCTP made key inroads in the measurement of TIC and we are optimistic that our efforts will contribute to the field's progress in this area.

Engagement of Service Providers and Families

Another challenge that arose during the MCTP evaluation was limited engagement among some participants in the initiative. There is general consensus among researchers, practitioners, and policymakers that "buy-in" at all levels of a system is essential to ensuring successful implementation of social service interventions (Fixen, Naoom, Blase, Friedman, & Wallas, 2005). Engagement in evaluation is no exception to the rule, and this can be further impeded when participant engagement in the intervention itself wanes or fails to develop fully in the first place. While the MCTP evaluation nearly reached its goal to enroll 900 children in treatment (842 enrolled), rates of attrition were considerable approximately 40% of the sample completed or provided data from discharge assessments with children. In addition, only 54% of MH providers who completed a baseline survey completed an exit survey one year later. Statistical techniques (we used Full Information Maximum Likelihood) helped us address missing data in some instances; however, we postulate that our findings suffered from selection bias, at the very least (Legerski & Bunnell, 2010). It is difficult to determine the origin of the problem, though likely a number of problems with engagement were at play (e.g., family drop-out of services or the evaluation; provider turnover; discontinued use of study measures; omissions in data entry).

To support participant engagement, MCTP evaluators selected clinically relevant measures (several were required for certification or rostering in EBTs/EBPs) and conducted in-person trainings on study measures and data entry with MH providers and their supervisors, including role-plays, video clips, and written materials showing effective ways to engage families in the evaluation. We also maintained regular contact with them through a designated email

and EBT/EBP consultation calls, followed up with clinicians with missing data, and requested assistance from the Project Director, who encouraged senior leaders to comply with the evaluation requirements. These techniques were useful in decreasing missing data, but ultimately could not solve some of the quintessential problems in the fields of MH and CW, such as provider turnover.

Provider turnover. One of the most often cited challenges to successful implementation of MCTP by MH and CW providers was provider turnover. Turnover is common in MH agencies, with average rates ranging from 25% to 50% per year (Aarons, Sommerfeld, & Willging, 2011; Eby & Rothrauff-Laschober, 2012; Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012). In MCTP, approximately 27% of MH workers trained in MCTP dropped out. This was a conundrum for evaluators, who were not in a position to decrease burnout and turnover among service providers in either system given larger system challenges related to poor compensation, heavy caseloads, and stressful work conditions in the professions of CW and MH (DePanfilis & Zlotnick, 2008; Morse et al., 2012). In MCTP, provider turnover reduced the number of MH workers prepared to offer treatment once children were referred—particularly very young children for whom there was already an existing shortage of EBT/EBP providers. In response to this challenge, MCTP designed and evaluated a second wave of EBT/EBP training to replenish teams at agencies from prior cohorts who lost staff. We also allowed providers who moved to a different agency to continue participating in the evaluation.

Turnover in CW is also high in the United States, estimated to be between 20% and 60%, annually (National Child Welfare Workforce Institute, 2011). In Massachusetts, turnover rates were higher than usual during the evaluation period, with the opioid epidemic taking hold and a number of high-profile child maltreatment deaths leading to especially challenging working conditions. For the evaluation, this presented innumerable challenges. For example, while our survey response rate among CW managers appeared sufficient at first glance—85% completed both a baseline and follow-up survey 2 years later—we determined that the vast majority of the sample

comprised different individuals at the two time points. Perhaps this helps explain the finding that there were no significant improvements in trauma-informed practices or policies reported by child welfare leaders; or perhaps not, and this would have been the case regardless; we will never know the answer. In addition, after the first 2 years, the Principal Investigator (PI) at the CW agency changed multiple times (there were eight PIs during the project period). These changes required much time and attention from the agency and were accompanied by waning prioritization of TIC.

Were child protection work more highly valued and compensated, perhaps the workforce would stabilize and this turnover problem, ubiquitous across state CW agencies, would decrease. That "fix," which obviously would help evaluators as well, was far outside our influence. We did what we could, however, to generate the best quality data from informants available to us. For example, because we had planned to use multiple informants and methods, we shifted our investments of time and energy to conducting interviews with those who had weathered the storm and could speak to changes in TIC over time. Of course, there are drawbacks to this approach, given that the remaining sample was self-selected and may well have had distinct characteristics from those who left the agency. We also continued to evaluate trainings for each new cohort of MH providers and resource parents, who made significant improvements in their knowledge and practices in TIC. Mental health providers reported more trauma-informed individual and agency practices, as well as more trauma-informed agency policies, and resource parents used more traumainformed parenting strategies, were better able to tolerate their foster children's difficult behaviors, and experienced more parenting efficacy (Bartlett et al., 2016; 2018).

Final Thoughts

Our experiences with MCTP suggest the obvious—that a sound evaluation design and a commitment to its faithful execution are "necessary but not sufficient" conditions for conducting useful TIC-CW evaluation. Other critical attributes include the flexibility to adjust to continually changing conditions

in multiple systems at once, perseverance and creativity in establishing and maintaining participant engagement over time, and acceptance of imperfect but "good enough" methods (e.g., measures, designs) when the "real world" intrudes. Trauma is a complex form of assault on children that includes a broad range of types, etiologies, and consequences. It is not surprising, then, that both the systems interventions meant to ameliorate those consequences as well as the evaluations that strive to document intervention processes and outcomes must acknowledge and reflect that complexity.

Nevertheless, TIC evaluators are in the enviable position of making meaningful contributions, both to the knowledge base on successful trauma interventions and to the operations and effectiveness of TIC-CW. They can be catalysts for improving interventions, not simply by articulating and translating outcomes but also by investigating TIC processes and mechanisms, helping interventions clarify theories of change, offering feedback in an iterative manner, and highlighting the need for course corrections in implementation along the way.

About the Author

Jessica Dym Bartlett, MSW, PhD, is Deputy Program Area Director of Early Childhood Development and Child Welfare at Child Trends. She conducts applied research on childhood adversities with a focus on protective factors and resilience. She completed a MA and PhD at Tufts University and MSW at Simmons School of Social Work. Contact: (240) 223-9218, jbartlett@childtrends.org

Acknowledgements

Funding was provided by the Administration for Children and Families, Children's Bureau, Grant No. 90C01057. The Massachusetts Department of Children and Families served as the Principal Investigator.

References

Lessons From an Evaluation of a Trauma-Informed Care Initiative in Child Welfare

- Aarons, G. A., Sommerfeld, D. H., & Willging, C. E. (2011). The soft underbelly of system change: The role of leadership and organizational climate in turnover during statewide behavioral health reform. *Psychological Services*, 8(4), 269281.
- Bartlett, J. D., Barto, B., Griffin, J. L., Fraser, J. G., Hodgdon, H., & Bodian, R. (2016). Trauma-informed care in the Massachusetts Child Trauma Project. *Child Maltreatment*, 20(2), 101–112.
- Bartlett, J. D., Griffin, J. L., Spinazzola, J., Fraser, J. G., Noroña, C. R., Bodian, R., . . .Barto, B. (2018). The impact of a statewide trauma-informed care initiative in child welfare on the well-being of children and youth. *Children and Youth Services Review*, 84, 110–117.
- Barto, B., Bartlett, J. D., Von Ende, A., Bodian, R., Noroña, C. R., Griffin, J., . . . Todd, M. (2018). The impact of a statewide trauma-informed child welfare initiative on children's permanency and maltreatment outcomes. *Child Abuse & Neglect*, 81, 149–160.

- Chadwick Trauma-Informed Systems Dissemination and Implementation Project. (2013). *Creating trauma-informed child welfare systems: A guide for administrators*. Retrieved January 1, 2018, from https://ctisp.org/
- DeCandia, C. J., & Guarino, K. (2015). Trauma-informed care: An ecological response. *Journal of Child and Youth Care Work*, 25, 7–31.
- DePanfilis, D., & Zlotnik, J. (2008). Retention of front line staff in child welfare: A systematic review of research. *Children and Youth Services Review*, *30*, 995–1008.
- Eby, L. T., & Rothrauff-Laschober, T. C. (2012). The relationship between perceptions of organizational functioning and voluntary counselor turnover: A four-wave longitudinal study. *Organizational Dynamics Within Substance Abuse Treatment*, 42(2), 151–158.
- Eoyang, G. (2007). Human systems dynamics: Complexity-based approach to a complex evaluation. In B. Williams & I. Imam (Eds.), *Systems concepts in evaluation: An expert anthology* (pp. 123–139). Point Reyes Station, CA: EdgePress: American Evaluation Association.
- Fixen, D. L. Naoom, S. F. Blase, K. A. Friedman, R. M., & Wallas, F. (2005). *Implementation research: A synthesis of the literature*. Tampa: University of South Florida Louis de la Parte Florida Mental Health Institute, The National Implementation Research.
- Foster-Fishman, P., Nowell, B., & Yang, H. (2007). Putting the system back into systems change: A framework for understanding and changing organizational and community systems. *American Journal of Community Psychology*, 39, 197–215.
- Fraser, J. G., Griffin, J. L., Barto, B. L., Lo, C., Wenz-Gross, M., Spinazolla, J., . . . Bartlett, J. D. (2014). Implementation of a workforce initiative to build trauma-informed child welfare practice and services: Findings from the Massachusetts Child Trauma Project. *Children and Youth Services Review*, 44, 233–242.
- Hanson, R. F., & Lang, J. (2016). A critical look at trauma-informed care among agencies and systems serving maltreated youth and their families. *Child Maltreatment*, *21*(2), 95–100.
- Hargreaves, M. (2010, April). *Evaluating system change: A planning guide*. Cambridge, MA: Mathematica Policy Research. Retrieved January 20, 2018, from https://www.mathematica-mpr.com/our-publications-and-findings/publications/evaluating-system-change-a-planning-guide
- Institute for Healthcare Improvement. (2003). *The Breakthrough Series: IHI's collaborative model for achieving breakthrough improvement* [IHI Innovation Series white paper]. Boston: Institute for Healthcare Improvement. Available at www.IHI.org
- Legerski, J., & Bunnell, S. L. (2010). The risks, benefits, and ethics of trauma-focused research participation. *Ethics & Behavior*, 20(6), 429–442.
- Morse, G., Salyers, M. P., Rollins, A. L., Monroe-DeVita, M., & Pfahler, C. (2012). Burnout in mental health services: A review of the problem and its remediation. *Administration and Policy in Mental Health*, 39(5), 341–352.

References, cont.

National Child Traumatic Stress Network. (2012). Creating trauma-informed systems. Retrieved July 29, 2018, from https://www.nctsn.org/trauma-informed-care/creating-trauma-informed**systems**

National Child Welfare Workforce Institute. (2011). Child welfare workforce demographics (2000-2010): Snapshot of the frontline child welfare caseworker. Albany, NY. Retrieved January 20, 2018, from https://www.ncwwi.org/files/Workforce_Demographic_Trends_May2011.pdf

Substance Abuse and Mental Health Services Administration (SAMHSA). (2014). Trauma-informed care in behavioral health services: Treatment improvement protocol series 57. U.S. Department of Health and Human Services Publication No. (SMA) 13-4801. Rockville, MD: Author.

Sullivan, K. M., Murray, J. J., & Ake, G. S. (2016). Trauma-informed care for children in the child welfare system: An initial evaluation of a trauma-informed parenting workshop. Child *Maltreatment*, 20(2), 147–155.

