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Successes and challenges in developing trauma-informed child welfare systems: A real-world case study of exploration and initial implementation☆,☆☆,☆☆☆

Becci A. Akin[a,*], Jessica Strolin-Goltzman[b], Crystal Collins-Camargo[c]

[a] University of Kansas, School of Social Welfare, 1545 Lilac Lane, Twente Hall, Lawrence, KS 66045, USA
[b] University of Vermont, Department of Social Work, Waterman 437B, Burlington, VT 05405, USA
[c] University of Louisville, Kent School of Social Work, 2217 S. Third Street, Louisville, KY 40292, USA

ABSTRACT

Trauma and behavioral health problems among children in foster care are significant and prevalent, affecting their well-being and permanency. Despite the wide scope and magnitude of social and emotional problems among youth in out-of-home care, few child welfare systems have an integrated service response into their routine procedures and practices. This paper describes three federally-funded statewide demonstration sites, which represent northeast, south, and Midwest regions of the U.S., and that aimed to implement trauma and evidence-informed initiatives. Applying implementation science frameworks, we share our experiences with three key stages of implementation: exploration, installation, and initial implementation. During the exploration stage, each state engaged community stakeholders in a comprehensive data mining process to define the needs of children in care and relevant gaps in the evidence-informed service array. To respond to trauma and behavioral health needs of children, these states' initiatives established implementation plans for screening, functional assessment, data-driven case planning, ongoing progress monitoring, and service array reconfiguration. Each state's distinct installation and initial implementation experiences are described as well their shared successes and challenges. While vast differences existed within the administrative and policy context of these three states, the study demonstrates both unique and common experiences of successes and setbacks. Across the exploration, installation, and initial implementation, these analyses revealed six themes of common successes to include collaboration, building consensus, conducting trainings, teaming, optimizing opportunity, and establishing data systems. Additionally, nine themes of common challenges were workforce, turf, client voice, data sharing, coaching and support for fidelity, time, competing priorities, momentum, and policies and leadership. Implications for practice, policy, and future research are discussed.

1. Introduction

Youth in out-of-home care face many challenges impacting their well-being. Despite incredible resiliency, many struggle with behavioral health, and other functional and relational challenges (Casanueva, Ringeisen, Wilson, Smith, & Dolan, 2011). There are disproportionally high rates of mental health diagnoses (Horwitz, Hurlburt, & Zhang, 2010) among youth involved in child welfare. Further, mental health services for child welfare involved youth and families are frequently inaccessible and fragmented due to overwhelmed systems (Cooper & Vick, 2009; Davis, Jivanjee, & Koroloff, 2010; Kataoka, Zhang, & Wells, 2002; Lupton, North, & Khan, 2001; McCarthy, Marshall, Irvine, & Jay, 2004).

Untreated and misdiagnosed trauma and mental health needs of both children and parents may have adverse effects throughout a lifetime (Administration for Children and Families (ACF), 2012). Examples

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* Corresponding author at: University of Kansas, School of Social Welfare, Twente Hall, 1545 Lilac Lane, Lawrence, KS 66045, USA.
E-mail addresses: becciakin@ku.edu, beccia@ku.edu (B.A. Akin), Jessica.strolin@uvm.edu (J. Strolin-Goltzman), Crystal.collins.camargo@louisville.edu (C. Collins-Camargo).

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of adverse effects may include difficulty in school, loss of parental custody, unemployment, unhealthy relationships and lifestyles, homelessness, and involvement in juvenile or criminal justice systems (ACF, 2012; Davis et al., 2010). An estimated 75–80% of youth with a diagnosable disorder do not receive services (Kataoka et al., 2002). One study of Child and Family Services Reviews and Program Improvement Plans from 32 states found that "97 percent of states did not meet the standard in providing adequate services to meet the 'physical and mental well-being' of the children under their care" (McCarthy et al., 2004). These insufficiencies and oversights could have grave consequences for the well-being of children and youth involved in child welfare. Further, research findings suggest that the proportion of child welfare involved youth who exhibit trauma related needs is high (Kisiel, Fehrenbach, Small, & Lyons, 2009). However, child welfare systems struggle to identify and meet these behavioral health needs. Conradi, Wherry, and Kisiel (2011) note that current public child welfare systems lack effective screening procedures to identify the trauma and behavioral health needs of children in care until only after there has been a behavioral escalation or disruption leading to referral for trauma and behavioral health assessment and treatment.

Consequently, beginning in 2011, the United States Department of Health and Human Services, Administration for Children and Families' Children's Bureau invested in three cohorts of demonstrations grants (HHS-2011-ACF-ACYF-CO-0169; HHS-2012-ACF-ACYF-CO-0279; and HHS-2013-ACF-ACYF-CO-0637) to investigate whether child welfare systems that are trauma-informed are better able to address children's safety, permanency, and well-being. The main premise is that screening children for trauma and behavioral health needs will lead to improved identification of these needs, and better connections to case plans and treatment plans that will address these needs and assist children with accessing trauma-informed and evidence-based behavioral health services. Eighteen sites were funded to test whether child welfare system changes related to (a) behavioral health and trauma screenings, (b) functional/well-being assessments, and (c) evidence-based treatments matching identified needs, would improve outcomes such as child functioning and increased well-being, use of psychotropic medications, placement stability, and permanency.

1.1. Implementing with science

The use of implementation science quickly became the norm across the grantees in an attempt to maximize positive outcomes. Implementation science is the study of factors that influence the full and effective use of innovations in practice (Blase, Van Dyke, Fixsen, & Bailey, 2012). The formula behind the science suggests that in order for socially significant outcomes to be achieved one must multiply *effective innovations* by *effective implementation* by *enabling contexts* (Blase & Fixsen, 2013). A growing focus on translational research and implementation has led to a proliferation of implementation frameworks (Moullin, Sabater-Hernández, Fernandez-Llimos, & Benrimoj, 2015; Nilsen, 2015).

For the purpose of the present study, the implementation stages framework was selected due to its practical fit and consistency with the design of the demonstration project. The implementation stages framework is one of five frameworks in the Active Implementation Frameworks (Metz & Bartley, 2012) developed by the National Implementation Research Network (http://nirn.fpg.unc.edu/). There are four distinct and dynamic implementation stages involved in implementing a quality practice or intervention. The stages of implementation are *Exploration*, *Installation*, *Initial Implementation*, and *Full Implementation* (Metz & Bartley, 2012). Although not linear, each stage is necessary for successful sustained implementation.

During the *Exploration Stage* implementation teams begin mapping consumer needs; identifying the target population; and, assessing readiness, fit, and capacity of a system to engage in a new innovation. Usually, this stage includes a broad community assessment with stakeholders from various perspectives. This stage concludes with using data from the assessment to select a set of interventions that are most appropriate for meeting the strengths and needs of a community or organization.

Installation is the stage when implementation teams begin to identify structural supports that are essential for successful implementation. These activities include the structural and instrumental changes that are needed to put new practices in place. Installation efforts may include funding streams, hiring and training staff, developing policies and procedures to support implementation, and purchasing any technology for data systems.

Initial Implementation is the most fragile stage of implementation, when practitioners and staff are beginning to use newly learned skills (e.g., screening, trauma informed approaches to parenting) in the context of a system that is just learning how to support the new ways of work. "This is the most fragile Stage where the awkwardness associated with trying new things and the difficulties associated with changing old ways of work are strong motivations for giving up and going back to comfortable routines (business as usual) (National Implementation Research Network, 2017)."

Finally, *Full Implementation* occurs when 50% of practitioners are using the intervention with fidelity. This is the stage when the newly learned practices have become part of the daily routine. Although complete stability may never be achievable, this stage is characterized by practices that are integrated and supported into the organization's way of work (Metz & Bartley, 2012).

Despite increasing use of implementation frameworks, research indicates that the uptake of evidence-based interventions continues to be a challenge (Kainz & Metz, in press). Further, literature on the application of the stages of implementation to public and private child welfare systems is sparse. The purpose of this manuscript is to illustrate common successes and challenges across the exploration, installation, and initial implementation stages through real world community-based settings in three states. Through these case descriptions, readers will better understand systematic issues that might be essential to attend to in future cross-system implementation projects.

2. Method

2.1. Research design and sample

This article is a descriptive case study of three states' federally-funded demonstration grants, focusing on the lessons learned during their exploration, installation, and initial implementation stages. The descriptions represent a retrospective longitudinal view of these early stages of implementation, which occurred during years 1 through 4 of a five-year federal grant. The states' projects were implemented statewide and located in the northeast, south, and midwest regions of the United States.

2.2. Project background

Each of the 18 grantee sites funded under the Children's Bureau's trauma cluster engaged in an exploration, or planning, stage (phase 1), followed by phase 2, the installation and implementation stages (Fixsen, et al., 2005). The planning phase required comprehensive data collection and analysis to ensure a locally specific, data-driven implementation plan based on community assessment findings. The findings from the community assessments provided pertinent information to inform activities necessary to successful installation and implementation of practice, policy, and system change related to five core interventions including: (a) screening, (b) functional assessment, (c) case planning, (d) progress monitoring, and (e) service array reconfiguration.

The exploration stage included assessment activities that helped define the target population, assess implementation drivers available in

the system, determine barriers to desired outcomes for the target population, identify implementation teaming structures, select and promote buy-in for an intervention, develop a theory of change and locally specific, data-driven plan for installation, implementation and evaluation of the interventions. Specifically, the findings from phase 1 provided pertinent information to inform implementation activities necessary to the successful installation and implementation of practice, policy, and system change related to the five intervention areas.

2.3. Data collection and analysis

Narrative descriptions were developed by each state's project director to include descriptions of the project's exploration, installation, and initial implementation stages. In addition to describing each stage, the project directors identified the lessons learned during these stages. Descriptions were combined across the three sites and analyses conducted by the directors through an iterative process of peer consulting and debriefing.

3. Results

Each site approached the exploration, installation, and initial implementation stages with some common and distinguishing approaches. Tables 1 and 2 summarize each site's core intervention strategies and implementation supports as identified from comprehensive community assessment processes. Below is a description of the exploration and initial implementation stage for each site, including analyses of planned versus implemented strategies.

3.1. Site 1: SAFESPACE

3.1.1. SAFESPACE: context

This collaborative project, driven by shared recognition that the system was not adequately identifying and responding to the behavioral health needs of children in out-of-home care, involved the state public child welfare and behavioral health agencies, their training partner, and an organization contributing the voice of children and families with emotional, social and behavioral challenges. Approximately half of these children were in private child welfare agency placements, primarily because they required a higher level of care, and their behavioral health needs were expected to be met by those agencies as a part of a bundled rate. The other half were in public agency foster homes, and their behavioral health needs were met primarily by community mental health centers and funded through a managed care environment administered by five Managed Care Organizations.

This project began amidst other initiatives, which both drove and complicated implementation. The state benefitted from a legislatively authorized Statewide Interagency Council and respective regional and local councils, which established a process for representatives of the array of state agencies serving children to address the needs of children with behavioral health challenges. This entity was concurrently engaged in efforts to redesign the overall children's behavioral health system. In addition, the child welfare agency had been working toward unbundling reimbursement rates for private child placement agencies as well as initiating performance based contracting with those agencies. All of these competing initiatives confounded the implementation of Project SAFESPACE.

3.1.2. SAFESPACE: exploration stage activities and results

SAFESPACE embarked on a multifaceted assessment process to guide intervention and implementation planning using a collaborative approach on a state, regional and agency level, combined with efforts to reinforce interagency relationships and shared vision. The team conducted 19 focus groups with 5–25 participants each, including child welfare and behavioral health practitioners, supervisors and administrators, managed care organizations, agency billing specialists and other stakeholders. In addition, an online survey collected data from child welfare and behavioral health agency staff. Child welfare and Medicaid data were analyzed to determine the characteristics and needs of the target population. Finally, document review of existing policies and procedures, training curricula, and interagency contracts was conducted.

Table 1
Core intervention strategies by state.

Core intervention strategy	SAFESCPACE	PSP	APP
Universal screening for trauma and behavioral health needs	● Young Child PTSD Checklist, Upsetting Events Survey, Child PTSD Symptom Scale (screen for trauma) ● SDQ & CRAFFT (screen for behavioral health) ● Completed by CW worker within 10 days of entry into care	● Child PTSD Symptom Scale (screen for trauma) ● SDQ, ASQ-SE (screen for behavioral health) ● Completed by CW worker within 30 days of entry into care	● CSDC-XX version, CROPS (screen for trauma) ● Completed by CW worker within 20 days of entry into care
Functional assessment for treatment determination and progress monitoring	● CANS ● Completed by BH clinician to determine if treatment needed and inform EBT selection ● Repeated every 90 days to monitor progress	● SDQ & ASQ-SE ● Completed by CW worker within 30 days of entry into care ● Repeated every 6 months to monitor progress ● Database to support progress monitoring	● CAFAS, PECFAS, ASQ-SE, PSI ● Completed by CW worker within 20 days of entry into care to inform case plan and treatment plan ● Repeated every 164 days to monitor progress
Data-informed case planning	● BH clinician provides CANS report on recommended tx ● CW worker uses data from screeners and CANS to inform case planning	● Support use of CANS as case planning tool ● Pilot Team Decision Making to improve placement stability	● CW worker uses data from screening and assessments to inform case planning
Evidence-based/informed treatment	● Pilot use of PracticeWise to enable a common elements approach to evidence based behavioral health treatment	● ARC, CPP, PCIT ● Behavior Management Training for caregivers (RPC plus CARE) ● Caregiver mentoring program	● Trauma Systems Therapy
Service array reconfiguration	● Data from screening, assessment, treatment used and progress monitoring integration with Medicaid and SACWIS data to inform capacity building and decision-making on a system's level	● Data from progress monitoring tools to be used to inform the CW and MH systems on services that are most effective so that resources can be funneled to those services best matching child needs	● Database to gather data from screening and assessment ● Statewide team of leaders for cross-system collaboration and accountability ● Leadership team to use data gathered in central repository to ensure evidence-based service array matches children's needs

Table 2
Planned implementation supports by state.

Implementation stages	SAFESCPACE	PSP	APP
Exploration	● Form implementation teams at state, regional, and agency levels ● Conduct community assessment ○ Focus groups ○ Online survey of multiple stakeholders ○ Analyses of child welfare and Medicaid administrative data ○ Document review of policies, procedures, training curricula, and interagency contracts	● Form implementation teams at regional and state executive levels ● Conduct community assessment ○ Interviews and focus groups with caregivers and providers ○ Online survey of multiple stakeholders ○ Analyses of child welfare administrative data	● Form implementation teams at state, regional, and agency levels ● Conduct community assessment ○ Interviews and focus groups with multiple stakeholders ○ Online survey of multiple stakeholders ○ Analyses of child welfare administrative data ○ Review recent state-based research studies
Installation	● Staged rollout: begin with 2 pilot regions, scale up to all 7 regions by end of year 4 ● Address regulations, policy, and contractual communication ● Conduct training	● Staged rollout: begin with 3 districts, add 3 each year to scale up over 4 years ● Develop curriculum and training ● Build infrastructure – team development and community preparation ● Develop database and quality improvement systems	● Staged rollout: begin with 4 pilot offices, scale up to all offices by end of year 4 ● Address implementation drivers: training, coaching, info systems, procedures & policies, education of other systems
Initial implementation	● Implement electronic system for screening & assessment, push back & forth ● Develop tip sheets, supervision protocols, SAFESPACE scoops ● Provide region-to-region mentoring ● Track data and follow-up ● Provide clinical consultation	● Pilot with 25% of sites for first round ● Begin training and coaching	● Implement pilot testing to examine procedures ● Begin data tracking ● Seek feedback from workers, administrators, clients
Full implementation	● Scale up to 2 comparison regions, entire state ● Embed CW training in Academy & capacity for agency-based CANS trainers	● Scale up to all 12 sites, entire state	● Scale-up to entire state ● Integrate into new-hire training ● Establish multi-stakeholder collaborative leadership group

Synthesis of these data revealed an array of important results regarding the needs of children being served, frontline practice, interagency collaboration, and systemic barriers. The state had no universal screening for trauma and behavioral health needs of children coming into care, and so there was no systematic approach to determining which children needed further behavioral health assessment. Those referred tended to be those exhibiting externalizing behaviors. The Child Behavior Checklist (CBCL) (Achenbach & Rescorla, 2001) had been used for many years to determine level of care for children referred for private agency placement, but child welfare workers typically did not use it as intended. Workers were not trained to use it as a clinical tool but rather a paperwork requirement to get a placement; did not collect information to sufficiently complete the instrument; and, statewide had a largely negative opinion of its usefulness. Child welfare leadership determined it was not feasible to sufficiently recast this tool for more appropriate use, and instead favored a new approach that could be appropriately trained and contextualized into the work. Among private child caring agencies and community mental health centers, the process for assessing children and determining treatment needs varied widely and did not utilize standardized assessment instruments to monitor treatment progress, although policy and interagency agreements dictated overall domains to be assessed. Nearly a quarter of children in out-of-home care received six or more mental health diagnoses while in placement, and 42% had been prescribed psychotropic medications (the percentage being higher for those in private agency placements). Capacity for evidence-based treatment in the behavioral health community varied widely and data regarding it was unreliable. Little information was exchanged between child welfare and behavioral health agencies, hindering case planning. Both child welfare and behavioral health agencies rated administrative support and human resources processes to support trauma-informed care in the low range.

A number of systemic barriers were also identified. There was limited capacity for specialized behavioral health treatment, particularly in rural areas of the state. Self-report regarding evidence-based practice capacity and a general absence of fidelity measures compounded a total absence of data on treatment modality effectiveness. There was a lack of statewide processes for information and data-sharing across systems on the case and system levels, and management information systems were not integrated. Significant challenges with documentation of medical necessity and Medicaid reimbursement for behavioral health services left agencies uncertain regarding commitment to proposed interventions. There was a need for cross-system monitoring and accountability processes, and data-driven capacity building.

3.1.3. SAFESPACE: intervention and implementation strategies planned

These strategies were planned based on exploration stage data. A hallmark of the plan was practitioner workload neutrality to the extent possible. Specifically, child welfare workers would screen for trauma and behavioral health needs using the Strengths and Difficulties Questionnaire (Goodman, 1997), Young Child PTSD Checklist (Scheeringa, 2010), Upsetting Events Survey, Child PTSD Symptom Scale (Foa, Johnson, Feeny, & Treadwell, 2001) within ten days of entry into care. When indicated by screening, the behavioral health provider would conduct a functional assessment using the Child and Adolescent Needs and Strengths (CANS) (Lyons, Griffin, Fazio, & Lyons, 1999) as a part of their biopsychosocial assessment within 45 days to determine services needed, and inform selection of treatment modality and case planning. The CANS is repeated every 90 days to monitor progress. The project piloted training interested clinicians in using PracticeWise (Chorpita & Weisz, 2009) to enable a common elements approach to evidence-based behavioral health treatment. Screening, assessment, treatment, and progress monitoring data were to be integrated with child welfare and Medicaid data to inform capacity building and systems level decision-making.

The implementation plan was structured to support staged rollout beginning with two pilot regions, and then scaling up in five more regions by the end of year 4. Two comparison regions were not to receive the intervention until the end of the study. As the decision was made to pilot the new intervention in a primarily urban as well as a rural region, those selected were matched with comparison regions determined to be

most similar to the pilots in terms of a variety of factors including the number of children in care, work-related processes, and cultural factors. During the installation stage, implementation teams on the state, regional and agency level were established to promote buy-in and troubleshoot challenges. Adjustment of administrative regulations and child welfare policy as well as official contractual communication delineating expectations were used to establish practice expectations. This required reviewing existing regulatory and contractual language regarding assessment and treatment of children in out-of-home care and making necessary revisions to allow for the changes in practice the intervention required. For example, the regulations had to be expanded to not only the CBCL but to allow for use of the screening and assessment instruments. The timeframes established for completion of intervention-related activities were incorporated into policy and contractual documents to reinforce expectations. Child welfare and behavioral health clinician training was provided. Electronic systems to collect and score the screeners and CANS were developed. During initial implementation, these systems were refined in order to facilitate pushing data back and forth between agencies to streamline information-sharing. Tracking systems and follow up strategies such as tip sheets and reminders, termed “SAFESPACE Scoops”, were used to assess and promote compliance. Child welfare and behavioral health agency case review and clinical consultation processes were established. Because of a rolling implementation plan, some areas were involved in installation activities while others were in initial or full implementation, enabling limited mentoring and protocol adjustment based on lessons learned.

3.1.4. SAFESPACE implementation successes and challenges

The project was not able to provide the level of implementation supports as needed due to limited funds and a compressed timeline. During the *exploration stage*, the data collected was compelling, and the project enjoyed excellent partner engagement overall. However, despite agreement on the value, resistance to embedding screening data into the state's SACWIS system and integrating data systems was a barrier to collaboration and workload neutrality. In addition, increasing the likelihood that providers would receive Medicaid reimbursement was hampered until billing codes and processes could be agreed upon.

The *installation stage* was extremely challenged when the web-based application development contractor backed out after pilot region staff had been trained. In hindsight, this partner was ill-equipped for this complicated task and should have been better vetted. Although poised for initial implementation, the pilot was delayed while another vendor was located. Regional engagement paid off as both child welfare and behavioral health providers agreed to participate in a “mini-pilot” using paper-based processes on a limited basis during this time. Ultimately, this data application crisis yielded a better technology solution in which the screener was embedded into the SACWIS system, which interfaces with the CANs data system so data and reports can be exchanged. However, critical time and buy-in were lost. As the project eventually moved forward with roll out, staff had to be re-trained.

Initial implementation was promising, as the project started implementing in three regions with two more launching soon. Support from state child welfare and behavioral health leadership had not waned and was critical for problem resolution associated with resistance to change practices, roles and processes. Descaling old practices such as use of the CBCL remained a challenge. The project continued to struggle with child welfare and behavioral health practitioner workload, and concerns about Medicaid reimbursement. Challenges related to information exchange due to HIPPA regulations had not been fully resolved. Implementation delays led to a compressed regional roll out schedule and inadequate time to engage new regions prior to implementation. Project resources were inadequate to support the level of coaching, practice consultation, and fidelity measurement needed for high fidelity practice. Finally, as is common in child welfare, this substantial systems reform effort struggled with competing initiatives and turf battles.

3.2. Site 2: Placement Stability Project (PSP)

3.2.1. PSP: context

The Placement Stability Project was initiated in a small rural state in order to address (a) the poor placement stability rates, 12% lower than national average, for children and youth in care, (b) the higher than average number of youth in custody placed in congregate care, and (c) the many adoptive disruptions resulting in children either returning to custody in foster or congregate care placements. Upon further examination of these data by state leaders in the system of care and their university partners, it became clear that the reason for placement disruption was repeatedly recorded as resulting from child behavior. To respond to the current research showing that child mental and behavioral health challenges are often have their root cause in unaddressed trauma (Ballard et al., 2015), the state leaders focused on finding ways to more effectively address the behavioral and trauma related needs of children in the child welfare system.

Simultaneously to the roll out of PSP, there were several contextual challenges occurring within the child welfare system including child deaths, the murder of a child welfare caseworker, the passing of new child welfare legislation, and the roll out of a new state integrated family services (IFS) framework. IFS aimed to bundle funding sources to provide more flexibility in how services were accessed and provided. Further, it was deciding upon a single intake screening for the entire child serving system of care. Each of these contextual features occurred during the planning and initial installation stages of PSP.

3.2.2. PSP: exploration stage activities and results

In order to assess the nature, structure, quality, and availability of trauma-informed and adoption-competent services across the state's child serving system of care including mental health, child welfare, and education, PSP embarked on a comprehensive community assessment to determine areas of need related to behavioral/mental health, placement stability, and permanency outcomes for children and youth in custody. The aim of the community assessment was to inform the collaborative development of a comprehensive plan for the state to respond to the social, emotional, and trauma related needs of children and youth in custody, and their caregivers.A mixed methods evaluation was used to collect the community assessment data through three primary mechanisms: (1) 422 surveys with mental health clinicians, child welfare social workers, school staff, and resource parents; (2) 236 caregivers and providers across the continuum of services across child welfare, mental health, and pre and post adoption participated in qualitative interviews and focus groups; and, (3) secondary analysis of state administrative data. The community assessment revealed six main areas that should be addressed in order to best meet the behavioral and trauma related needs of children and youth in custody. These included the following: (1) poor collaboration and continuity between mental health and child welfare service systems; (2) turnover rates in mental health agencies lead to a service system with few clinicians trained in evidence based and trauma specific interventions; (3) no standard use of behavioral health, functional, or trauma screening by child welfare, or mental health systems; (4) no progress monitoring to inform case/treatment planning is occurring; (5) lack of foundational and advanced training for system of care professionals and caregivers related to trauma informed and trauma specific services; and, (6) caregivers were “bowling alone” - they need supports and trainings to improve their ability to better support younger children and youth who have experienced trauma and may be presenting with emotional and behavioral challenges – particularly externalizing behaviors.

3.2.3. PSP: intervention and implementation strategies planned

Based on the findings from the community assessment and the resulting logic model, five strategies were planned to address needs of the (a) workforce, (b) children and youth in care, and (c) caregivers. The first strategy targeted all three populations by developing foundational

training related to interagency collaboration, secondary traumatic stress, and foundations of trauma informed and adoption competency. The second set of strategies targeted the child welfare workforce to support mental/behavioral health and trauma screening for youth in state custody. The third strategy provided training and support to both the child welfare and mental health workforce related to collaborative, data driven case planning, using screening and functional assessment tools, including the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997), Child PTSD Symptom Scale (CPSS) (Foa et al., 2001), and the Child and Adolescent Needs and Strengths (CANS) (Lyons et al., 1999). The fourth strategy supported training of evidence informed trauma treatments and the foundational trauma-specific concepts necessary to effectively implement family based trauma treatments (i.e., ARC, PCIT, CPP). Finally, PSP developed a caregiver training intervention for foster, kin and adoptive caregivers called the RPC + TIPS, which integrates trauma informed psychoeducation with evidence based parenting strategies.

The implementation of PSP's five strategies began in three districts with the plan to roll out three districts each year through the five years of funding. Implementation was supported by regional implementation teams, which collaboratively made decisions on specific roll out processes and practices. In addition, there was a state level executive team which consisted of top-level leadership from the state's Department of Mental Health and Department of Children and Families. During the installation phase of the project, training was provided to the child welfare workforce (screening tools, collaborative case planning, progress monitoring, trauma 101, secondary trauma) and the mental health workforce (SDQ, CPSS, CANS screening, ARC, RPC +). Development of the data sharing contract and technical database to capture and share the screening data began during the installation phase. Each district had a PSP coach to support implementation.

3.2.4. PSP: implementation successes and challenges

During the *exploration stage*, the PSP community assessment was completed to assess readiness and fit, and identify the needs and strengths leading to the project's logic model. The logic model illustrated that the foundation of social and emotional well-being for children and youth in foster care begins with a knowledgeable, skilled, and collaborative workforce who engage with families to assess strengths and needs and identify appropriate resources within the systems of care (SOC). The exploration stage of PSP invigorated the SOC. It provided a forum for the concerns of professionals in child welfare, mental health, and schools, while also providing a space for identifying and building off the many successes the state has accomplished to date. In addition, it gave voice to children, youth and caregivers about the strengths they carry and the challenges they encounter within the service system. At the end of this stage, there was a gathering of key stakeholders to share the data and use design teams to develop an implementation plan. The momentum in this stage was vibrant.

However, due to state and federal contextual issues related to funding and implementation approval, the initial installation was significantly delayed leading to challenges in maintaining momentum for the project. Unfortunately, it took an additional 8 months until final approval was given to move forward with the implementation. Simultaneously, there was a mismatch between federal and state partners on what screening tool and functional assessment would be most useful. As noted later in this manuscript, this particular discrepancy would eventually lead to challenges in the initial implementation stage that would cause further delays and stakeholder resistance toward the process. The lesson from this mismatch of priorities supports implementation science suggesting the need for buy in on implementation strategies from all stakeholders in order for success.

PSP began the *installation stage* seven months into year 2. During installation, the project team selected staffing for the project, identified the pilot districts, developed training and coaching resources, created an initial training plan and curricula (RPC + , PSP trainings, etc.), provided initial training to staff, and facilitated the acquisition of additional resources necessary for successful implementation. Concurrently, during installation there were some challenges related to database development and data sharing agreements. Database development was stalled when developers were unable to meet the mandates that linked screening and functional assessment data to service referral and provision. This resulted in delays and a need to contract with a new provider. In addition to database development challenges, data sharing agreements between the state and the University led PSP team proved inaccessible in this stage as a result of new state regulations that were put in place during the installation stage.

Despite the challenges in the first two phases, the state's perseverance led to many successes in the *initial implementation stage* related to workforce and caregiver initiatives. For instance, there was deep enthusiasm for both the online foundational training for trauma-informed and adoption competent practice that features experts from across the country providing training on various foundational theories that aim to facilitate understanding of the foundational principles essential for the uptake of trauma-specific treatments. Furthermore, there were caregivers and districts eager to participate in the newly developed Resource Parent Curriculum Plus, which augments the National Child Traumatic Stress Network's RPC with parent behavior management strategies (McMahon & Forehand, 2005).

In addition to the successes described above, PSP was met with a couple of significant challenges. First, as noted above, there were competing priorities and simultaneous rollouts of two different screening tools within the child serving system of care. While the PSP team was delivering training of the SOC workforce related to (a) screening (using federally approved screening tools – SDQ, CPSS), (b) progress monitoring, and (c) collaborative case planning, the state's IFS team was moving forward and gaining momentum with the use of the Child and Adolescent Needs and Strengths (CANS) as their progress monitoring tool. Specifically, IFS began to mandate that the CANS be completed with all children and youth receiving funds services in IFS districts.

Child welfare and mental health workers and leaders began questioning why the state was moving forward with two similar tools. Despite all of the implementation drivers that the PSP team was attempting to use, the administration of the CANS completions were increasing exponentially, while the other tools use was decreasing as was child welfare leadership's buy in for having their workforce use the SDQ and CPSS screening tools. After one full year of attempting to gain momentum on the screening tool that was approved for use for PSP, the state child welfare leaders decided to substitute the use of the SDQ for the CANS given that mental health agencies were already using it and they had concerns about the increased workload of their child welfare staff. This decision mandated that PSP revise its implementation plan with the federal grantors in order to address the current momentum in the state toward the use of the CANS as its primary screening and progress monitoring tool. In year 3, PSP began using the CANS as its screening and progress monitoring tool in one district with the plan to support different implementation models in 3 regions. Additionally, challenges related to information exchange and data sharing have not yet been resolved. Lawyers across the university and state bureaucracy have been meeting for close to two years.

On the positive side, direct training and supports provided through this project to foster, kin, and adoptive caregivers may be related to the trend in improved placement stability. Similarly, the access of the online training modules and in person advanced interdisciplinary Academy for Trauma Informed Practice is growing rapidly as is the use of more evidence informed treatments and services within the service array. By the end of implementation it is hoped that the state will be able to contribute to the national landscape of trauma informed practice in the following ways: (1) improved understanding of the impact of CANS on case planning for children in foster care, (2) improved caregiver efficacy among foster parents in parenting children with mental

and behavioral health challenges, and (3) a system of care that is more collaborative and educated on evidence-informed ad trauma specific practices.

3.3. Site 3: Assessment Permanency Project (APP)

3.3.1. APP: context

The APP project grew out of this Midwestern state's experiences of a public-private-university partnership that had recently been through a staged implementation process for another Children's Bureau-funded project. Key partners included the university, the public child welfare agency, and the state's two providers of foster care. This state's earlier project had successfully implemented an evidence-based intervention aimed at reducing long-term foster care among children with serious social, emotional, and behavioral problems. Having spent several years working collaboratively and using an implementation science approach, these partners were eager to begin a new, broader initiative to address trauma and behavioral health needs in child welfare. While the earlier project established a new intervention model across the state, it was delivered by special units within the foster care agencies. The trauma initiative was bolder and broader in that it aimed to change practices of the entire frontline workforce within the foster care system.

Additional contextual factors during the project's exploration and initial implementation stages included child deaths, a legislature-initiated audit of foster care, the state's Child and Family Service Review and associated program improvement plan, new adoption training, newly-implemented managed care for behavioral health services, and turnover among leadership positions (middle and upper management) within the public child welfare agency. Additionally, the two private providers of foster care also experienced significant changes (e.g., new executive directors, re-organization, and adoption of new casework models).

3.3.2. APP: exploration stage activities and results

The APP project's exploration stage comprised four major data gathering activities: (1) descriptive and multivariate analysis of child and case characteristics associated with time to three types of permanency – reunification, guardianship, and adoption (N = 16,620); (2) an electronic (online) survey of key stakeholders that represented multiple systems (N = 325); (3) key informant interviews of stakeholders representing public and private child welfare agencies, court personnel, mental health providers, domestic violence providers, foster parents, and adoptive parents (N = 59); and, (4) focus groups with youths who had experiences in foster care (N = 16 youth). In addition, the project team reviewed the key findings of several state-based research studies that documented the characteristics of children in foster care and their behavioral health needs. In summary, these analyses resulted in several key conclusions. First, trauma and behavioral health needs among children in foster care are significant and prevalent. Second, parents (birth, foster, adoptive) need better preparation to understand and respond to the current and future trauma and behavioral health needs of children in their care. Third, a number of systemic barriers were identified, including a lack of system-level capacity for understanding and responding to children's trauma and behavioral health needs; a lack of routine, proactive procedures to identify and respond to trauma and behavioral health needs prior to crises; lack of expertise and trauma treatments, particularly for young children ages 0–5; and, a lack of cross-system collaboration and accountability for meeting the needs and achieving better outcomes among children in foster care.

3.3.3. APP: intervention and implementation strategies planned

Based on the needs described above, the APP project aimed to develop and implement a consistent and statewide system for early identification and treatment of children's trauma and behavioral health needs. An overarching strategy included implementing a statewide trauma-informed framework for all frontline caseworkers (Trauma Systems Therapy) and training behavioral health providers in the TST clinical model. Additionally, five key components were to planned for implementation: (1) screening for trauma needs, by day 20 of children entering foster care (using the Child Stress Disorder Checklist (CSDC), Child Report of Post-traumatic Stress symptoms (CROPS)); (2) conducting a functional assessment of all children's behavioral health needs by day 20 (using the Ages and Stages Questionnaire, Social Emotional (ASQ-SE) for children 0–2; the Preschool and Early Childhood Functional Assessment Scale (PECFAS) for children 3–5; the Child and Adolescent Functional Assessment Scale (CAFAS) for children 6–18; and the Parenting Stress Index short form for parents); (3) using data-driven and family-friendly case planning by integrating information from screenings and assessments; (4) monitoring children's progress by re-administering screenings and assessments every 164 days; and, (5) establishing a data-oriented, collaborative, and accountable system of leaders and stakeholders that use ongoing tracking and progress monitoring at a systems level, which keeps them informed of the target population's needs and able to realign the service array to those needs.

To support a successful implementation, the APP project sought to apply a staged implementation approach that used a gradual rollout of the intervention strategies. Several local offices were selected as pilot sites due to their readiness for implementation, and the remaining offices were scaled-up a few at a time until all offices had implemented by the end of year 4. Child welfare agency administrators assessed readiness based on their knowledge of the local offices, considering factors such as perceived support of the local court personnel, stability and tenure of managers and supervisors, turnover rates among case managers, and potential champions at the frontline and supervisor levels. The installation stage comprised several key activities, including: forming implementation teams at the state, regional and agency levels; fine-tuning screening and assessment tools for use in the field; identifying and establishing necessary procedural and policy changes; developing training and supervision materials; modifying information systems for collecting, scoring, and sharing data from screening and assessments; and, reaching out to key stakeholders, such as judges and other court personnel, to educate them on the initiative. Many of these activities extended into the initial implementation stage when training began and the pilot sites started implementing the intervention strategies.

3.3.4. APP implementation successes and challenges

During the *exploration* stage, the APP teams experienced high participation rates and were able to build broad consensus on the needs of children and families, gaps in the service array, and needed practice changes. Overall, buy-in was strong and wide-ranging among a variety of stakeholders. When, during the *installation* stage, teams began discussing the fine details of using new screening and assessment tools, some ambivalence was revealed. Foster care administrators worried that adding screening and assessments would increase paperwork burden for frontline caseworkers, who were already overburdened and stressed by significant turnover. Administrators advocated for identifying strategies to realistically and meaningfully streamline assessment and case planning. Despite these challenges, enthusiasm for the initiative remained high as individuals worked through the specifics of procedures and policies that required modifications. Simultaneously, some team members began to see the initiative as a mechanism for addressing other system issues, viewing APP as a window of opportunity for implementing changes across several key areas. Concerns about paperwork overlapped with this idea of allowing the project to maximize change opportunities, and soon the steering committee initiated a new effort to review and revise all case planning forms. Another example of the project extending to other system issues included discussion of how to make child protection investigations trauma-informed, how to improve the hand-off from investigation to foster care or family preservation, and how to engage additional stakeholders, such as the managed care organizations and mental health centers, to bring more

evidence-based treatments to the state.

The *initial implementation* stage included several key accomplishments: holding a kick-off event; establishing local, agency-based implementation teams; conducting training; modifying data systems; and beginning bi-monthly meetings to review all case planning forms. In addition to accomplishing these important milestones, the steering committee remained committed and persisted through numerous discussions focused on troubleshooting implementation obstacles. Despite these successes, the initiative was challenged by ongoing workforce issues (i.e., high caseworker turnover and caseloads, workforce shortages), turnover among administrators, and a slowing in implementation successes which made contributed to weakened enthusiasm. When the uptake of screening and assessment tools was low, foster care agencies responded by adding supplemental training supports (e.g., lunch-n-learns) and revamping the rollout to a slower expansion to more offices. They did not, however, find a way to add coaching to the implementation. Although the foster care providers successfully modified information systems for the planned data-related components of the project, data sharing agreements between the university and the state agency were significantly delayed. These delays seem to be attributable to staffing shortages (i.e., state staff to escort the agreement through a bureaucratic approval process) and distractions caused by important crises (e.g., child dying in foster care). External conditions further challenged the project to maintain momentum, such as the state's focus on the Child and Family Service Review (CFSR) by the regional office of the Administration for Children and Families; the state's development of a program improvement plan (PIP) in response to CFSR findings; newly implemented mental health managed care with three new managed care organizations; extreme state budget cuts; and, increased scrutiny via a legislative post-audit review of the entire foster care system. In sum, the project was challenged to remain a high priority among these other pressing issues.|

3.4. Implementation lessons learned across three sites

The relevance of this paper to the field extend beyond lessons learned in individual states and become clear from implementation challenge themes that emerged. The successes and challenges found to be in common across varied states and interventions may suggest systemic issues that need to be addressed before true child welfare, and particularly cross-system, reform can be truly achieved. Six success and nine challenge themes were identified through cross-project peer consultation and debriefing.

3.4.1. Implementation successes

3.4.1.1. Engagement and collaboration. Perhaps due to the overall vision of improving the behavioral health response to children in out-of-home care, in general each project enjoyed stakeholder and partner involvement in each stage of implementation. The foundation for such collaboration, or at least cross-agency and -system participation, is no doubt laid through an array of other activities. Intentional efforts to engage relevant stakeholders from planning through each of the implementation stages promoted buy-in and enabled agreed-upon strategies to address challenges.

3.4.1.2. Use of exploration data to promote consensus. Multi-faceted needs assessment strategies yielded compelling data regarding the needs of the target population, evidence-based service gaps, practice and systemic challenges, and readiness for change. With stakeholders already bought in to the projects' vision, these data were effective in communicating the case for change as well as fueling the energy to plan the details of proposed interventions. The exploration stage illuminated challenges and opportunities in both the child welfare and behavioral health system, which could be leveraged to avert efforts to blame to solution-building.

3.4.1.3. Training and initial implementation of screening and assessment. Any practice change initiative requires training, and it can be a challenge to achieve this given pressure to keep practitioners on the job. Efforts to streamline training efforts and utilize established training processes and structures facilitated completion of this important installation activity to enable staff to start implementing practice change. Grant funds support curriculum development and testing, so it can later be integrated into established training mechanisms for sustainability. A mixture of web-based and face-to-face mechanisms minimized time off task. In each state, screening and assessment has begun, and data generated are beginning to inform case planning.

3.4.1.4. Teaming. Implementation science tells us that inter- and intra-agency teams are required not only in exploration but throughout all stages of implementation. By establishing an array of such teams to guide the overall projects as well as local and agency-based change, both buy-in and enthusiasm were established. When the inevitable challenges ensued, these teams served as the problem-solvers, developed tracking mechanisms, and altered practices to address implementation obstacles. Such teams served as champions to keep momentum from flagging. A critical determination is how often teams should meet and how technology can be leveraged to minimize their burden.

3.4.1.5. Optimizing opportunity. Each of the three state offered examples of ways in which the planned interventions or implementation supports could not go forward as planned. Rigid adherence to work plans or practice protocols can cause initiatives to fail. In each project, flexibility and using interim process evaluation results to adjust practices or approach, or to develop new implementation supports, promoted successful implementation.

3.4.1.6. Data systems. Child welfare systems often struggle with inefficient, non-user-friendly or poorly used decision-support data systems. Federal funds were leveraged in each of these projects to push the systems toward technological innovation. These new systems enhanced functionality and minimized workload burden for staff thereby facilitating implementation. In addition, these new systems, and interface between systems, lays the foundation for the service array reconfiguration intervention both within and among the agencies partnering in the projects.

3.4.2. Implementation challenges

3.4.2.1. Workforce. Innovation and reform in child welfare seems to always be plagued by the existing workload of frontline staff. It can be challenging to get staff to buy in to new initiatives, even when their goals are shared. Some of this may be related to initiative fatigue. Like death and taxes, child welfare professionals may be heard to quip that the only thing they can count on is change. On top of work overload and resistance to change, turnover of frontline staff requires constant repeat of installation activities and drains resources. Behavioral health systems seem to be similarly challenged.

3.4.2.2. Turf issues. Perhaps fueled by the complexities and volume of workload on each of the systems engaged, and despite collaborative structures and processes, child welfare reform typically involves stakeholders outside the public child welfare system. These projects depend on public and private child welfare, behavioral health, court systems, and Medicaid agencies, at a minimum. Because this is a high-stakes field under frequent public scrutiny—and historically under-resourced in each system—this environment promotes and invigorates turf battles. This is no doubt influenced by misinformation on the constraints of other agencies and stakeholders. For example, child welfare agencies are typically unaware of the requirements and limitations behavioral health providers face related to providing

services in a managed care environment, while clinicians may be unclear on the statutory limitations on child welfare regarding circumstances under which children may be removed from the home or timeframes within which permanency decisions must be made and action taken. Because of different roles, mandates, responsibilities, and disciplines, agencies often have legitimate but competing agendas.

3.4.2.3. Youth, parent and kin voice. While aspired to in these projects, engagement efforts were largely unsuccessful, even when funding was provided to support it. For example, the state's Partnership for Families in Children was represented on the steering committee in one project and they received a subcontract to pay a stipend and expenses for youth and parent participation in implementation committees. Despite being trained and paid to do so, their participation has been minimal. While the field recognizes the importance of this piece, the goal is easier to state than it is to achieve in a meaningful way. Youth and parents were included on committees and trained by an agency designed to promote the inclusion of their voice, but they indicated they really had little to add to the discussion, and didn't feel their contribution was very valuable. Over time their attendance dwindled. Despite a number of strategies designed to elicit their voice in various ways and in different forums, this challenge has not been resolved. As an alternate plan, one of the grantees used different strategies to seek youth and parent input. For example, project leaders attended meetings of the state's foster youth advisory council, birth parent network, and foster/adoptive parent advisory group to obtain their feedback on key strategies.

3.4.2.4. Data systems and data-sharing. While each of the states made significant progress in terms of the functionality of data systems to support the projects, overall this area remains a challenge. The information systems developed for the project came at a significant cost, which would probably not be affordable without federal funds. While built with sustainability in mind, changes to such systems are costly. What is truly needed to support cross-system reform is integration of data across agencies, and while this has been discussed for years, real progress is elusive. Many state agencies may not have the capacity to pull this off.

3.4.2.5. Coaching, supervision and fidelity supports. Despite the best laid plans and an understanding of the importance of these activities to support implementation of practice change, resource limitations significantly impacted our ability to provide sufficient amounts of these supports to genuinely facilitate the implementation. Efforts in this regard had to be piecemeal given limited project staff and a requirement for statewide implementation.

3.4.2.6. Time. As has been stated, all of these projects experienced significant delays in implementation for a variety of reasons. Well-planned rollout timelines ended up being significantly compressed in order to achieve full implementation by the end of the grant period. We underestimated the amount of time required for local engagement and uptake past those areas implementing first. The sort of effort used in early adopter regions was not possible elsewhere given compressed timelines.

3.4.2.7. Competing initiatives and priorities. In child welfare systems, priorities shift frequently. Some of this is driven by the political factors and leadership change. It also can be initiated due to budget crises, scandal, or pressures to divert attention toward other priorities, such as Child and Family Service Review results and program improvement plans. Because of public and policymaker scrutiny, and the constant push to improve a beleaguered system, there are often multiple initiatives being implemented concurrently. These projects all suffered from this tremendously. Leadership buy in early on cannot be counted on to sustain, which frequently afflicts demonstration grants, even when positive outcomes are realized.

3.4.2.8. Sustained momentum. This factor is significantly impacted by many of the others already described. With initiative fatigue, competing priorities, workload constraints, compressed rollout and virtually all of the other challenges described, momentum is lost. It can be difficult to maintain excitement about the vision and energy around promising projects over time in general. Often the further along you get in rollout, the more momentum flags.

3.4.2.9. Policy and leadership. This category of challenge can include many things. As political appointees in leadership positions change, commitment to projects is at significant risk. Even with sustained leadership support, keeping decision-makers at the table so that troubleshooting and appropriate action can be taken when needed can be difficult. Often, people are missing when important issues are discussed and then make decisions counter to what is needed due to lack of information or understanding.

On the policy side, there are challenges at the state as well as federal levels. Each project experienced policy decisions at the state child welfare agency level that inhibited project implementation such as choosing not to mandate screening, or changing the instrument to be used midstream. Public agencies are not swayed often by federal funder expectations or approved work plans. On the federal level, despite indications that multiple federal agencies support the type of collaboration required to support child welfare/behavioral health service reform for children in out-of-home care (U.S. Department of Health and Human Services et al., 2012), actual interpretation of policy can be a barrier. For example, many agencies interpret HIPPA requirements very stringently and are suspect that the sort of case-related information exchange required in these projects would be out of compliance. Time consuming processes and agreements soak up limited project effort. Federal and state Medicaid regulations fall short of clearly confirming that the interventions in these projects would be reimbursable or practical application falls short. When states have multiple managed care organizations serving the out-of-home care population, each with different processes and expectations reimbursement, issues are exacerbated. While not directly involved in implementing the interventions in these projects, they cannot be successful without the support and cooperation of state Medicaid agencies who may operate from a very different paradigm than their child welfare and behavioral health colleagues.

Finally, the nature of research and demonstration grants themselves can bring additional challenges. Projects are expected to plan and implement all stages of implementation and a full-fledged evaluation in five or fewer years. While this seems like a lot of time, the implementation science literature provides evidence that it is most certainly not sufficient because implementation alone takes two to four years (Fixsen, Blase, Naoom, & Wallace, 2009). Overlay significant delays in processing of federal continuation and funding carry forward applications, and project success suffers tremendously. In summary, while research and demonstration projects hold promise for testing innovation and child welfare reform, many aspects of our systems functioning in the United States can hamper implementation and contribute to disappointing results.

4. Discussion

Overall, this study's findings highlight important themes about the accomplishments and setbacks of initial implementations that were aimed at integrating trauma- and evidence-informed approaches into child welfare systems. Although each site occurred within a unique state context and planned distinct strategies, the overarching approach was similar in that all sites were implementing five core components of screening, assessment, case planning, progress monitoring, and service array reconfiguration. Importantly, the study revealed commonalities across sites in regards to the successes and challenges experienced during exploration, installation, and initial implementation stages.

Despite marked differences among these three states, our findings showed numerous shared themes. This study suggests that within child welfare there may be systemic, overarching issues that supersede the individual context of an implementation site or state government setting. Potential suspects include data sharing and privacy policies (HIPAA), managed care in mental health care, fragmented funding mechanisms, four-year election cycles and related leadership shifts, and an overburdened workforce. Clearly, successful implementations cannot rest solely as the responsibility of individual frontline workers. More attention is needed to investigate the requisite policy, cross-agency and cross-system practices, and organizational structures and supports that will facilitate effective and sustainable interventions.

This study extends the field's knowledge of initial implementation, which is relevant and meaningful because evidence-based interventions have been called for throughout child welfare (Chadwick Center for Children and Families, 2004; Horwitz, Chamberlain, Landsverk, & Mullican, 2010; Wilson & Walsh, 2012), and many of these interventions have yet to be tested in this specific and complex setting. While prior studies have described implementation of other child welfare reform efforts (e.g., Pipkin, Sterrett, Antle, & Christensen, 2013), few studies exist that include multiple states. In fact, implementation scientists often advise that the particular context of an implementation site must be carefully considered (Wandersman, Alia, Cook, Hsu, & Ramaswamy, 2016). We found that a number of themes were relevant regardless of the specifics of the implementation site. As evidence-based interventions continue to proliferate throughout child welfare systems, policy level and structural changes may be needed to support their successful use and sustainment.

A prevalent and powerful theme of this study was time. That is, all three sites experienced delays in their implementations. Common reasons for delays included establishing data sharing agreements, developing or modifying information systems, experiencing turnover among workers and administrators, shifting state priorities, and waiting for federal approvals to move forward with each stage of the project. When time became an issue, these projects encountered added pressures to move quickly through some activities that deserved more time. Further, when projects were slowed, they often experienced an unevenness between the project's momentum and its ability to move forward. In other words, sometimes project stakeholders were ready to move forward; yet, extenuating circumstances forced them to wait. This up-and-down trajectory in implementation activities created havoc for buy-in and momentum across the life of the project. Consequently, project stakeholders had to move back-and-forth between the tasks of different stages. For example, projects were delayed waiting for federal approvals. When the approvals eventually came through, additional time was needed to regain the involvement, commitment, and enthusiasm of stakeholders and staff. Given that delays are commonplace across implementations, administrators, funders, and other stakeholders may find it advantageous to figure them into their plans. Moreover, although we find value in the movement toward increasing and institutionalizing the use of evidence in child welfare, funders and policymakers must also understand the time needed to effectively move an innovation from science to service. Implementation matters, and implementation takes time (Fixsen, Blase, & Van Dyke, 2011). On a related note, time is also needed for staged evaluations, which ensure that resource-intensive evaluations are not used until an innovation is ready (Epstein & Klerman, 2013). While funders and policymakers may wish that five years is an adequate timeline for moving from exploration to sustainability, more time may be required by child welfare systems, particularly if stakeholders desire to complete the project with a robust intervention and sound evidence.

As trauma and behavioral health screening and assessment are viewed as best practices in child welfare (Conradi et al., 2011; Romanelli et al., 2009), this study's implications point toward expanding efforts to document and examine the implementation experiences of child welfare systems. In our experiences, many hours and staff resources were dedicated to selecting valid and practical screening and assessment tools. While this selection process may continue to require individual sites to weigh the advantages and disadvantages of different screening and assessment approaches, much has been learned by the Children's Bureau's trauma grantees. An important next step is to compile data on which screening and assessment tools were selected as these findings may assist future implementers in reducing the amount of time required for the decision-making processes that occur during the exploration stage. Further, data could be compiled across demonstration sites to inform the field about the feasibility and usability of the selected screening and assessment tools.

Despite the challenges described above, accomplishments and successes were also realized. Our findings emphasize the value of the exploration stage and its relevance for establishing shared vision and buy-in (Fixsen, Blase, Metz, & Van Dyke, 2013). This beginning stage of implementation assisted each community with increasing its knowledge of the target population. Importantly, exploration provided the opportunity for incorporating the views of youth and parent consumers. As indicated in earlier studies (Aarons et al., 2014), we also found that these projects' teams, while encountering turnover, had consistency among some key leaders who demonstrated a critical characteristic of successful implementation: perseverance. Additional strengths included the use of data-informed decision-making and collaborative processes. At the center of each project was a public-private-university partnership. In all, our findings affirm that universities can play a critical role in supporting evidence-based practice in child welfare agencies (Anderson & Briar-Lawson, 2015).

While numerous other implementation frameworks have been developed in recent years, and some have been specified for the public sector and disseminated broadly (Aarons, Hurlburt, & Horwitz, 2011), some may be more readily applied in real world settings that are developing and testing new innovations versus established evidence-based interventions. In the present study, the use of Active Implementation Frameworks (Metz & Bartley, 2012) proved helpful for each site's efforts to develop and execute their implementation plans. Beyond following the *stages of implementation*, these demonstration sites also selected *usable innovations* that were matched to the needs of children and families, established *implementation teams* at state and local levels, addressed *implementation drivers* with a variety of organizational and procedural strategies, and employed *improvement cycles* by piloting new practices and closely tracking data (Metz & Bartley, 2012). In short, these three sites attempted to follow the best practices laid out by the Active Implementation Frameworks. While unforeseeable obstacles still emerged, it is likely that the use of implementation frameworks helped to avert other possible roadblocks. Future implementation and research should continue to apply these, or similar, frameworks to investigate whether the common successes and challenges identified in this study exist broadly among other federal demonstration sites and child welfare jurisdictions. Implementation science literature will continue to benefit from additional case-based applications illustrating the stages of implementation.

4.1. Limitations

This study should be considered in light of its limitations. First, the information shared in this report represents three states from three distinct regions of the U.S. While we have no reason to believe that these states would generally differ from other states, it is unknown whether these study findings generalize beyond these three states. Second, this study primarily represents the views of the project directors. Although the project directors had frequent contact and close collaboration with project partners, future research should represent a diverse group of stakeholders and examine whether other themes are identified. Finally, this study is constrained by its descriptive and exploratory approach. Additional studies are needed to collect both quantitative and qualitative data and rigorously compare and contrast

the experiences of different sites.

5. Conclusion

Chiefly, this study showed that even when consensus is strong about the need to address a significant and prevalent problem, such as trauma and behavioral health needs among children in foster care, the execution of a solution may be difficult and complicated. Moreover, although contextual factors often influence implementation and should be fully incorporated into implementation plans, the lessons learned from these three states suggest that systemic and structural issues may be as relevant as each jurisdiction's unique circumstances. Successful implementation may depend upon a more comprehensive, multi-level approach that considers the development of implementation supports both locally and systemically. As the field of child welfare continues to develop and implement evidence-based and evidence-informed programs, policies, and procedures, further examination of system issues may be required, as well as the development of implementation strategies that take into account the micro, mezzo, and macro levels.

Declaration of interest

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