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Implementation and Evaluation of Linked Parenting Models in a Large Urban Child Welfare System

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Abstract

During the past decade, there have been increased efforts to implement evidence-based practices into child welfare systems to improve outcomes for children in foster care and their families. In this paper, the implementation and evaluation of a policy-driven large system-initiated reform is described. Over 250 caseworkers and supervisors were trained and supported to implement two evidence-based parent focused interventions in five private agencies serving over 2,000 children and families. At the request of child welfare system leaders, a third intervention was developed and implemented to train the social work workforce to use evidence-based principles in everyday interactions with caregivers (including foster, relative, adoptive, and biological parents). In this paper, we describe the policy context and the targeted outcomes of the reform. We discuss the theory of the interventions and the logistics of how they were linked to create consistency and synergy. Training and ongoing consultation strategies used are described as are some of the barriers and opportunities that arose during the implementation. The strategy for creating a path to sustainability is also discussed. The reform effort was evaluated using both qualitative and quantitative methods; the evaluation design, research questions and preliminary results are provided.

Keywords

Scale-up; Linked evidence-based practices; KEEP; PMTO

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Introduction

There is much to be learned about “what it takes” to scale-up evidence-based practices (EBPs) in real-world community settings. Although increasing attention has focused on factors that influence the adoption, implementation, and sustainability of EBPs in child and family service sectors, examples of large-scale efforts with independent evaluations are rare. In part, this is attributable to the complexity of monitoring and evaluating large-scale initiatives, and due to the reality that such initiatives are likely to be system or community driven, rather than research driven. Capitalizing on one such opportunity, the current paper will describe the evolution of a child welfare system (CWS) initiated large-scale implementation rollout of linked EBPs.

In this paper, the implementation of an initiative that linked evidence-based parenting interventions in a large urban foster care system is described. The interventions were part of a policy- driven system reform initiated by a public child welfare agency that targeted the following outcomes: 1) to decrease the rate of placement disruption (i.e., lateral moves or moves to higher levels of care); 2) to reduce the number of placement days (days children spend in foster care); and; 3) to reduce the number of re-entries into foster care for families who had been reunified. Two evidence-based parenting practices (Keeping Foster Parents Supported and Trained; KEEP and Parent Management Training; PMT) and one developing practice (R³) were implemented in five private foster care agencies serving 2,000 children and families beginning in February 2012. Chapin Hall at the University of Chicago was contracted to design and conduct an independent evaluation of the initiative outcomes.

This paper first will provide background on the overall initiative and intended targets. Next, a detailed description of each of the integrated interventions will be provided. Finally, the evaluation strategy conducted by Chapin Hall and the preliminary results are reported.

Background

The CWS leadership solicited the involvement of Oregon Social Learning Center (OSLC), a research center known for the development and evaluation of EBPs to address the needs of children and families involved in child public service systems, and in this case in the child welfare system. OSLC was asked to lead an initiative to conduct the implementation of evidence-based parenting interventions with a set of primary goals: to strengthen child welfare caseworkers’ and supervisors’ skills for working with caregivers involved in the foster care system including foster and biological/relative, and adoptive parents and to improve child and family outcomes. The initiative was designed to be integrated within the ongoing practice priorities of the CWS including: a) reducing caseworker caseloads, b) use of concurrent planning to achieve permanency goals for children within federal guidelines (Adoption and Safe Families Act, 1997) and, c) use of Family Finding to identify more potential kinship permanency outcomes when permanency with birth parents was not an option.

The goal was to pilot the reformation efforts in 5 of the city’s over 35 private agencies that are contracted to provide all case planning and case management services for families involved in the foster care system. With consultation from the Chapin Hall evaluators, the

initial five “pilot” agencies were chosen to represent agencies of a variety of sizes (serving from 230– 830 foster youth per year), past performance on the targeted outcomes, and cultural backgrounds. The goal was to identify agencies that were not the best performers, and therefore had little room for improvement, but also not the worst performers, who might be overwhelmed with a complex initiative where multiple interventions were to be implemented. The identified pilot agencies were selected to demonstrate the generalizability of the system reform interventions in order to facilitate the eventual rollout to the remaining agencies with the overarching goal of scaling up the initiative to all CWS contracted foster home agencies.

Targeted outcomes—A 17 percent decrease was the goal for each of the targeted outcomes including placement disruptions, length of stay in foster care, and re-entries into the foster care system. The 17 percent level of reduction was selected based on a fiscal calculation. That is, reducing disruptions, and lengths of stay by 17 percent was projected to generate sufficient cost savings to the child welfare system to pay for the start-up and ongoing implementation of the interventions. A 17 percent reduction in these outcomes would not only improve the experience of foster care for participating children and families, it would demonstrate that the initiative could be cost-neutral.

Intervention targets—Two EBPs developed at OSLC that have demonstrated effectiveness in achieving successful outcomes, similar to those desired by the urban CWS, were selected for the initiative. The Keeping Foster Parents Supported and Trained (KEEP) intervention has demonstrated success in reducing placement disruptions in a number of studies (Chamberlain, Price, Leve, et al., 2008; Price, Chamberlain, et al., 2008). KEEP is a group-based intervention for foster and kinship parents focused on increasing the potential for children living in their homes to be exposed to evidence-based parenting practices shown to increase child well-being. Similarly, Parenting Through Change for Reunification (PTC-R), a group-based form of the Oregon Model of Parent Management Training (PMTO) developed for biological parents, has repeatedly demonstrated positive parenting and subsequent child outcomes for serious family problems, including decreased involvement in the child welfare system (Forgatch, Patterson, & Gewirtz, 2013). Because KEEP and PTC-R were developed from the same behavioral and social learning frameworks often utilized in interventions developed at OSLC, the integration of the two was a natural fit. The CWS leadership determined that all caseworkers and supervisors in the five pilot agencies would be trained to provide both KEEP (for foster/foster kinship parents) and PTC (for biological/adoptive parents). The reform was designed so that caseworkers would implement these two interventions as part of their usual casework routines, rather than the previous strategy of referring parents out for support and parenting services. In addition, at the request of the CWS system a casework practice model (R³; Saldana, Chamberlain, & Weber, 2015) was developed by OSLC to train supervisors and caseworkers to provide support to parents in the context of their daily interactions with one another. R³ is based on the social learning principle of reinforcement. Supervisors were trained to use reinforcement with their caseworkers in group supervision meetings and, in turn, supervisors trained the caseworkers to reinforce the effort and strengths of the parents on their caseloads (biological, foster, kin). In order to accommodate for the added time that implementing the suite of interventions

required, caseloads were reduced to 12 families per caseworker and to 6 caseworkers per supervisor. Previous caseloads varied by agency from 12–20 cases per caseworker.

Training—Between June and November 2012, over 250 caseworkers and supervisors were trained to implement KEEP and PTC. In addition, once the training in the basic two models (KEEP and PTC) was completed, supervisors received additional training aimed at bringing the principles and theoretical framework underlying the interventions into their daily interactions with caseworkers, and in turn, to train those caseworkers to generalize the skills to use with the parents on their caseloads (R³, Saldana et al., 2014). By November 2014, over 2,000 children and families had been exposed to the interventions (approximately 20 percent of the children served in the urban foster care system).

Intervention Theory

KEEP and PTC were developed at OSLC as part of a suite of theory-based parent-mediated intervention methods that focus on teaching and supporting parents to attend to and often alter their responses within the context of their daily parent-child interactions (Forgatch & Patterson, 2010). These OSLC interventions are based on four decades of research that was dedicated to the development of family-based methods in which parents were taught to respond to their child's behaviors contingently; to reinforce positive pro-social behaviors and attitudes; and to ignore and/or set clear limits when needed. This body of research was identified as Social Learning Family Interventions and the principles and methods developed in the early studies have subsequently been tested in numerous clinical trials with a range of populations (see Forgatch & Patterson, 2010 for review).

Logistics of Implementation

Linking the Interventions

In order to co-train the caseworkers and supervisors in the two parent-focused interventions (KEEP and PTC), and in the newly developed R³ practice model, the intervention developers collaborated to link several aspects of the training and fidelity monitoring protocols with the aim of decreasing implementation fatigue for the casework and agency staff. The implementation of the three interventions was linked in a number of ways including using consistent language to describe the parenting interventions, using consistent training protocols, a unified system to monitor fidelity, unified protocols for ongoing consultation and communication with agencies, and on reporting on implementation progress. In addition, the three models created a unified strategy for agencies to build the clinical and logistical infrastructure to establish and maintain long-term self-sufficiency and model fidelity.

Language use—We harmonized the language used in the intervention manuals. Even though the three interventions are all based on social learning theory and therefore had a common theoretical core, there were differences in the terminology used (e.g., limit setting versus discipline) in the manuals and training protocols. Prior to any contact with staff, we collaborated to use similar language to describe key concepts.

Training—Training protocols were developed across practices that were responsive to the logistical realities of the agency work practices. For example, each KEEP and PTC training took place over 5 days. The agencies had to maintain services to their clientele during these initial 5-day training workshops. Therefore, we split each agency in half and trained half of the staff during one time period and the second half later (usually within 2 weeks). This required modification for the PTC group that typically trained over multiple 3-day periods. In total, agencies participated in two KEEP (Groups A and B) and two PTC workshop trainings (Groups A and B) for a total of 4 workshops per agency. The R³ component involved a half-day in-person training with supervisors and caseworkers. The R³ training occurred after the KEEP and PTC trainings were completed and the respective parent groups were underway for approximately 5 months. As new staff was hired over time throughout the rollout period, supervisors received R³ training virtually using live video chat technology.

Fidelity Monitoring

The KEEP and PTC models each have their own fidelity monitoring and feedback systems. For both models this involves observing and coding uploaded recordings of the weekly group sessions (foster and kin parents for KEEP, biological parents for PTC). The OSLC clinical and implementation consultants for the respective interventions utilized standardized coding systems to provide feedback to each of the group facilitators.

Given the large volume of recordings each week across agencies and the desire to provide rapid feedback, a single secure web-based system was developed to upload all KEEP and PTC videos to ease the technology burden for caseworkers and agencies. The system involved having caseworkers use a dedicated laptop computer fitted with an external microphone to record and upload the sessions. In addition, caseworkers entered attendance data, a self-evaluation about the session, ratings of parent engagement, and indicated the timestamp in the session where they desired feedback.

Ongoing consultation—Both KEEP and PTC consultants provided weekly telephone consultation with the caseworkers and provided monthly consultation to casework supervisors. These meetings were conducted using a commercially available video conferencing system. This allowed for the consultants and caseworkers to meet “face-to-face” and to view video clips together, making for a richer and more meaningful debrief of the parent group sessions. These weekly consultation meetings were critical to implementing the intervention models with fidelity and they continued despite technological glitches throughout the implementation process.

Monthly consultation meeting with supervisors focused on solving logistical barriers and planning. In addition, KEEP and PTC staff provided several 1–2 day in-person booster trainings and multiple replacement trainings to accommodate agency staff turnover.

Communication—We found that establishing and maintaining consistent and clear communication channels between all three interventions, as they were delivered simultaneously to five agencies, was critical to our ability to solve for barriers and to reinforce progress throughout the implementation process. This communication was

necessary not only between the developer group and the agency facilitators, but also with agency leadership, system level leadership, and across collateral systems.

The OSLC team had regular calls and periodic in-person meetings with the CWS system leaders, agency leaders and agency Program Champions. As part of the readiness process, a Program Champion was selected by each agency to oversee and supervise the implementation at their agency, and to maintain regular contact with the OSLC developers and the CWS leadership. From the developer side, the first author was the lead and represented the KEEP, PTC, and R³ models in communications with the agencies and with the CWS leadership. For the first 6 months following the initial training workshops, while the first KEEP and PTC groups were being launched, weekly telephone contact with the agency program champions was maintained. Following this period, CWS system leaders hosted two regular bi-monthly telephone meetings: one for the agency Program Champions and the first author and the second for the agency Executive Directors and the first author. At OSLC, weekly coordination meetings were held with the KEEP, PTC, and R³ developers and key staff.

Reporting on implementation progress—In addition to providing weekly consultation and feedback to facilitators delivering the EBP to families, part of successful implementation involved regular reporting to agency and system leaders regarding the overall implementation efforts. OSLC produced monthly reports to all agencies and to the CWS system leaders on their cumulative progress on each of the parenting model components. Reports were sent to the agencies 5 days prior to being sent to the CWS in order to give agencies a change to correct missing or inaccurate data. Reports included tallies on the number of KEEP and PTC groups completed and in progress, the number of parents served, the number of sessions completed, the parent attendance rates at sessions, and the average rating of parent engagement in the sessions. In addition the monthly reports included the fidelity rating for each session. Fidelity scores were divided into three categories: red = poor fidelity, yellow = needs work, and green = adequate fidelity. We emphasized the color categories to provide clear feedback and to avoid a focus on small variations in individual scores that were unlikely to be meaningful.

Creating a Path to Establish Long-Term Agency Self-Sufficiency

Given the breadth of the initiative, a sustainability plan that was both feasible and likely to be sustained without the ongoing involvement of the multiple developers was needed. Thus, OSLC sought to build a mechanism whereby the agencies were prepared to use their own internal personnel to take over the implementation activities that initially OSLC developers conducted including the initial staff training workshop and providing ongoing fidelity monitoring and the consulting activities. Drawing on our previous experiences in creating sustainability plans for the KEEP model (Chamberlain, Price, Reid, et al., 2008), we opted to use the Cascading Dissemination model (Buchanan, Chamberlain, Price, & Sprenghelmeyer, 2013).

In collaboration with agency leadership, OSLC developers selected internal trainers from the agency staff who had been directly trained by OSLC (i.e., Generation 1). Internal trainers

were selected for their grasp of the intervention strategies, their leadership ability, and their compliance with the documentation requirements including their ability to use the web-based fidelity monitoring system. To be considered for the agency trainer role, candidates had to have conducted at least three 16-session KEEP or PTC groups, to have attended 80 percent of the scheduled consultations, and to have completed the web-based data (entering group attendance, rating parent engagement, upload videos). Although, the OSLC developers made recommendations for internal trainers, the agency leadership made the final hiring decisions.

Using the Cascading Dissemination model, selected Generation 1 internal trainers received additional training by OSLC developers to develop the skills necessary to train, monitor, and consult with their agency staff. Mirroring the initial fidelity monitoring process, internal trainers recorded their training activities and were consulted with during weekly video conferencing with OSLC trainers. Thus, the Generation 1 facilitators trained and supervised a second generation of facilitators (Generation 2). Importantly, although the OSLC clinical consultant supervises the Generation 1's supervision of Generation 2, there is no direct contact between OSLC and Generation 2. Using this method, agencies are gradually prepared to conduct all in-person training workshops and ongoing consultations internally. In order to assure that drift does not occur across generations, OSLC continues to conduct quarterly fidelity checks of both Generation 1 and Generation 2 facilitators.

Brief Description of the Interventions

KEEP (Keeping Foster Parents Supported and Trained)

KEEP is a training and support intervention developed with direct input from foster and kinship parents. KEEP targets the following outcomes: (a) increasing parenting skills and confidence, (b) decreasing the number of foster care placement disruptions (lateral moves and step-ups to group care placements), (c) improving child behavioral and emotional problems, and (d) increasing the number of positive placement changes (e.g. reunification, adoption). KEEP has been found to be effective at achieving these outcomes in randomized controlled trials (Chamberlain, Price, Leve, et al., 2008; Price, Chamberlain, Landsverk, & Reid, 2009), and quasi-experimental designs (Greeno et al., submitted). More specifically, KEEP has been shown to improve outcomes such as placement stability and behavioral and emotional improvements for children in foster and kinship care (Price et al., 2008; Chamberlain, Price, Leve, et al., 2008).

A major principle of KEEP is that foster and kinship parents can serve as key agents of change for children. This is accomplished by strengthening caregivers' confidence and skills so they can change their child's behaviors, teaching effective parent management strategies, and providing the caregivers with support. As such, KEEP targets foster/kinship parents specifically, and the intervention is delivered in the context of a foster/kinship parent group, where foster parents interact with one another guided by two group facilitators. KEEP groups were in addition to the regular pre-service training that all foster parents receive from the CWS system. A brief description of the content of the KEEP sessions is provided in Table 1. Parents are encouraged to conduct a home practice each week relative to the session

content. Each session begins by debriefing the home practice with parents and tailoring the KEEP strategies to the situation at their home with their child(ren).

To learn the model, facilitators participate in a 5-day experiential training that includes information about the program's theory and practice in the delivery of group sessions. During training, each trainee role plays facilitating several key sessions while other trainees act as foster/kinship parents. KEEP is delivered in 16 weekly group meetings (90 minutes each), and includes detailed manuals for group facilitators (lead and co-lead) and for foster/kin parents. Facilitators tailor the session content based on issues and ideas raised by the group participants.

Fidelity to the KEEP curriculum is monitored closely. Fidelity is measured across three dimensions including (1) content, (2) process, and (3) structure using a standardized rating protocol (Facilitator Adherence Rating; FAR, Buchanan et al., 2013). During groups, the facilitators record each session using a laptop with software that enables the recording to be uploaded to a secure website. KEEP expert consultants view the recordings, rate them using the FAR, and identify areas for reinforcement and feedback. The recordings then are used in weekly consultation meetings (1.5 hours each). Prior to the consultation, facilitators complete a session review form with questions about what went well and challenges experienced. They also complete weekly forms on parent attendance and engagement ratings. Each of these measures informs the consultation process.

Parenting Through Change for Reunification

Parenting Through Change (PTC) is a parent training program for parents whose children are living at home. PTC-R was adapted for biological and adoptive parents with children in foster care. Both PTC programs address important clinical problems (e.g., child and parent trauma, child externalizing behavior) in a parent group format. PTC is designed to increase effective parenting practices to decrease child behavioral and emotional problems and increase prosocial behavior. Parents learn to provide a nurturing, consistent, and safe family environment with an emphasis on strategies that deal with a wide variety of contextual adversities and stressors. Practitioners engage parents in exercises that teach core intervention components to decrease coercive and inconsistent parenting and increase effective parenting (skill encouragement, limit setting, monitoring, positive involvement, and problem solving). Studies report improvements in these parenting practices, which in turn produce positive outcomes for their children, including reduction in behavior problems, police arrests, rate of out-of-home placement, delinquency, deviant peer association, and depression and improved academic performance and social skills (Forgatch, Patterson, DeGarmo, & Beldavs, 2009; Patterson, Forgatch, & DeGarmo, 2010; Ogden & Amlund Hagen, 2008; Kjøbli, Hukkelberg, & Ogden, 2013). The PTC program has detailed manuals that have been tested in numerous randomized controlled trials (Forgatch et al., 2009; Forgatch & DeGarmo, 1999). PTC was delivered in 10 group sessions followed by an additional 6 sessions near the time of reunification (shown in Table 2).

Similar to KEEP, PTC trainees participate in a 5-day experiential pre-service training. Once trained, PTC interventionists deliver the program to parent groups in 90-minute sessions for 10 weeks during the time children are placed in foster care and for 6 weeks at the time of

reunification. Like in KEEP, facilitators record each group session using a laptop with software that enables the recording to be uploaded to a secure website. The recordings are then used in weekly consultation meetings (1.5 hours each). Prior to the consultation, facilitators complete a session review form with questions about what went well and challenges experienced, and complete weekly forms on parent attendance and engagement ratings.

R³ Supervision Strategy

The R³ supervision strategy was born out of a request by the CWS system leadership to train their workforce in the use of evidence-based principles in their everyday interactions with caregivers. Both social learning based interventions (KEEP and PTC) utilize evidence-based reinforcement techniques shown repeatedly to produce positive outcomes, including stability and permanency (Price et al., 2008). Social learning theory, suggests that people learn through their interactions with others by observation, imitation, and modeling (Bandura, 1971). Social learning theory posits that people modify their behavior by observing reinforcement received by others, and that all individuals exist within and respond to their environments in an adaptive way (i.e., the behaviors that they are being reinforced for will increase). It was a natural fit to integrate the shared theoretical component of positive reinforcement as the basis of the R³ model. R³ was conceptualized as a practice model rather than as an intervention; supervisors and caseworkers were asked to incorporate three specific types of reinforcement into the daily interactions that they had in supervision (with each other) and in their daily interactions with families. The R³ principles and strategies are shown in Table 3. These strategies include three specific reinforcement targets: to notice and reinforce parental efforts (R1), positive aspects of parent–child relationships and roles (R2), and to identify small steps toward case plan goal achievement (R3).

The overarching goal is for families to receive these three reinforcement strategies in all of their encounters with their caseworker. Supervisors at the five agencies participating in the initiative received training to reinforce the use of the R³ techniques with the caseworkers they supervise (the R³ supervision strategy).

The CWS is organized in such a way that the social context involves relationships between multiple agents that ultimately affect outcomes for families. Supervisors have relationships with caseworkers, who in turn, have relationships with families. Moreover, the CWS has relationships with involved but separate systems including the courts and treatment providers. In this initiative, supervisors were selected as the main target for the R³ implementation as they are positioned central to the organizational leadership and the on-the-ground workforce, both of whom make daily decisions that affect the outcomes of the families served by the foster care agencies. The goal was for supervisors to utilize the 3 Rs as part of their supervision strategy and encourage the use of the 3 Rs with their supervisee/caseworkers and the families on their caseloads.

Barriers and Opportunities

Technology

The use of technology provided the model developers with the opportunity to observe intervention groups and to provide critical ongoing and timely consultation to the agency group facilitators. In addition, the weekly clinical consultations were conducted through video conferencing. This allowed for a richer interaction between the OSLC consultants and agency caseworkers and supervisors than would have been possible using voice/telephone calls alone. As previously noted, we relied on two types of technology:

1. A secure web-based system to monitor fidelity through directly observing recorded KEEP and PTC sessions, viewing data that caseworker group facilitators entered on parent attendance and engagement, caseworkers' self-evaluations, and weekly data on the occurrence of child behavioral/emotional problems.
2. A commercially available video-conferencing system to conduct weekly consultation meetings with the agencies and monthly meetings with the agency supervisors. This video conferencing was also utilized for virtual trainings in R³.

Although there were considerable advantages to both forms of technology, significant time and resources were also invested by both OSLC and the agencies to learn and consistently optimize the use of these systems. For instance, we received repeated feedback from agency leaders and facilitators that the web-based system was not user friendly. In qualitative interviews about barriers in the implementation process, the most consistent barrier cited was difficulty using the web-based fidelity monitoring system. The difficulties included trouble entering new data, inability to change data already entered to improve accuracy, getting existing agency computers to access the system, and a variety of other logistical and technical problems. The web-based system was innovative in that it allowed for the video upload of all intervention sessions and other critical data onto a single platform, but it lacked sophistication in terms of the level of user friendliness therefore creating a significant barrier throughout the implementation process. Hence, this feedback has been used in the development of a more advanced web-based platform.

Similarly, concerns were experienced in using the commercial video conferencing product. Although it undoubtedly enhanced the consultation and training interaction between OSLC and the agencies, hardware limitations posed barriers to consistently experiencing these video conferences as problem-free. For instance, on multiple occasions the sound was compromised or screens would freeze mid-conversation. Given the value of being able to see one another for consultation, we are pursuing additional video conferencing options. As this technology advances, we anticipate improved performance of these systems.

Interagency Collaboration

One of the emerging tenets of the implementation of evidence-based interventions is the ability to be both flexible and responsive enough to fit the context and organizational culture of the site. Ideally, the intervention components that are key drivers of outcomes are maintained with fidelity, but other aspects of the models can be modified to fit the culture and context of the implementation site (Chambers, Glasgow, & Stange, 2013). In this

initiative, because we were implementing the parenting models simultaneously in five agencies, it was critical that we had consistent procedures across agencies. This required that the five agencies come to agreements about a core set of methods and procedures to be used across agencies. An example of this was whether and how agencies were going to reinforce parents for attending group sessions. A standard cash or gift card bonus was established and credits for continuing education were provided for foster parents who attended the foster parent groups. Agencies also collaborated on fiscal and policy negotiations with the CWS leadership. For example, agencies negotiated on fiscal matters related to hiring more casework staff to meet the lowered caseload requirement.

Prior to this initiative, agencies reported that they saw each other as competitors. However, based on qualitative feedback, all five of the agencies reported that their ongoing communication, problem solving, and negotiations had the effect of bringing them into collaborative relationships with each other. They shared ideas, materials, and strategies about what worked throughout the project. This was an unintended positive effect of the multi-agency implementation.

Evaluation Design and Strategy

Researchers at Chapin Hall at the University of Chicago (the second and third authors on this paper) evaluated the implementation of the initiative. The evaluators were asked to conduct qualitative and quantitative analyses to determine whether the interventions had an effect on child outcomes, with specific attention to permanency and placement stability. For the former, individuals working for private agencies (at all organizational levels), individuals within the CWS (at all levels), and the treatment developers were interviewed. The quantitative evaluation looked at children served by the pilot agencies from the point children in those agencies were exposed to the initiative. Much to the credit of the CWS leadership and the treatment developer, a unique feature of our study is the ability to track when the initial dose of the intervention was administered and whether exposure to the treatment affected the likelihood of changing foster homes or leaving the system altogether. There are few studies, if any, that promise this level of specificity. For the counterfactual or comparison group, a similar group of children who would have been eligible for the initiative had they been placed with a pilot agency was examined. Children cared for by the pilot agencies at the time prior to the start of the initiative were also used for comparison after applying the usual array of statistical controls.

Research Questions and Sources of Data

The following research questions guided the qualitative evaluation: (1) What were the organizational contexts into which the initiative was implemented? What changes needed to be made in order to accommodate the new practice requirements associated with the implementation? (2) How can we describe staff experiences implementing the various model components? (3) To what extent were the models implemented as intended? The quantitative evaluation focused on: (1) What is the impact of the initiative's interventions on the stability of children's placements, such as the likelihood and frequency of moves, and (2) What is the impact on the likelihood of children experiencing a permanent exit from care, both for

children who entered placement after the implementation of the initiative as well as children in-care at the time the initiative is implemented?

Four sources of data informed the answers to these questions. First, Chapin Hall research staff conducted one-on-one interviews with system stakeholders over the course of the pilot year, including provider agency staff, CWS staff, and the developers of the clinical models. Specifically, 31 senior staff members were interviewed across the five pilot agencies and the public child welfare agency. Five interviews were conducted with individuals associated with the development of the two clinical models. Two members of the research team analyzed the interview data (both of whom participated in conducting the interviews). The approach was inductive, and involved thematic content analysis. The second source of data came from an online survey administered to case planning and supervisory staff from the five participating agencies at two points in time: toward the middle of the pilot year and then again toward the end of the pilot year. A link to an online survey was sent to 167 case planners and 38 supervisors. Of those, we received 85 surveys from case planners (51% response rate) and 23 surveys from supervisors (61% response rate). The third source of data came from the web-based fidelity system, the source of implementation and fidelity data for PTC and KEEP. These data were linked with the CWS's administrative data system (CCRS), the fourth source of data, which includes information related to children's placements in out-of-home care. Together, these data were used to create an analytic data file that allows for a comprehensive understanding of system performance while also identifying any initiative-specific effects.

Qualitative Results

Organizational Context

The five agencies chosen to participate varied in their prior experience using evidence-based models in their day-to-day practice with families. However, all five agencies espoused a shared commitment to using evidence-based models as a way to improve their work with children and families. The agencies saw the invitation to participate in the pilot as an opportunity to be at the forefront of progressive change, to help shape the city's new approach to providing foster care services. It was viewed as an opportunity to develop the body of empirically validated interventions specific to improving the safety, permanency, and overall well-being outcomes of children in foster care and their families. Senior agency staff were also excited about the idea of providing more core services in-house. Having agency staff directly provide these services would improve the ability of the providers and the CWS to be accountable for the engaging clients (parents, foster parents, youth) in services and for the quality of the services being provided.

Another important piece of context for considering the changes introduced under the initiative is that prior to the initiative, agency staff did not expect to facilitate the various parent/caregiver training and support programs offered by their agency. In this respect, the process by which agencies – and caseworkers in particular – engaged and worked with families changed considerably under the initiative; caseworkers and supervisors received comprehensive training designed to help them do higher-quality work with families. Training of the sort that was offered under the initiative represented a big shift for

caseworkers, whose training was typically limited to on-the-job training specific to the functional aspects of their role as a caseworker in a foster care agency.

Staff Experiences

The potential for PTC and KEEP to help caregivers connect to and support their children was identified by all of the senior staff that participated in interviews. PTC and KEEP provided staff with a concrete set of tools to use in their work with parents and foster caregivers. Although the work associated with running PTC and KEEP groups was not insignificant, the general message from senior staff was that caseworkers were excited by the new skills they had acquired.

Developing and refining both group facilitation and clinical skills – in training, in groups, and in day-to-day practice – took time and dedication. While widely considered to the benefit of foster parents, parents, children, and staff, the magnitude of the implementation effort (i.e., the added workload) posed real challenges for staff who also needed to monitor the day-to-day compliance-related activities that remain a part of foster care service provision. This was certainly the case for new caseworkers, who also required training in the core responsibilities of the job. While much of the stress associated with managing the new workload was to be mitigated by reductions in caseload to no more than 12 active cases per caseworker, interview and survey data suggested that caseload reductions were not automatic once the initiative went live at the agencies. Rather, it was a process over the course of the pilot year.

The incremental reduction in caseload size not only affected caseworkers but supervisors as well. In fact, interview respondents regularly made note of the additional burden placed on supervisors, in particular, during the first year of the implementation. Two main points were stressed during the interviews with agency staff. First, supervisors generally took on more caseworkers as supervisees than had been the case prior to the initiative. Even with reductions in caseloads happening over time, supervisors were left feeling overwhelmed by the volume of cases for which they were held accountable during the early months of the implementation year, during which they were also required to participate in and support staff training in the core clinical models. Second, the experience of supervision changed under the initiative; in some ways, it became more rigorous. Prior to the initiative, supervision between supervisors and caseworkers was likely to have focused on the administrative tasks associated with casework within a highly regulated child welfare services environment. Under the initiative, supervisors were also expected to incorporate core concepts from PTC and KEEP while modeling for caseworkers the concepts taught through R³.

Implementation Levels

Children were considered eligible for PTC or KEEP if they (1) were in placement in an agency at the time the initiative went live (or were placed in an initiative -operating agency upon admission) and (2) were placed in a regular family foster care program. Children placed with trained foster parents or children of trained parents were regarded as having received a dose of KEEP/PTC.

For both KEEP and PTC, child-specific enrollment in the parent groups was below 50 percent. Barriers to the more widespread enrollment were two-fold. The first has to do with the operational aspects of running several groups at once (i.e., PTC, KEEP, and family-team conferences that were a standard element of case practice prior to the initiative, etc.), the logistics of which were often difficult to figure out. Although some agencies already had flexible scheduling in place (including evening and weekend hours), other agencies were considering this kind of flexible work-time structure for the first time. Finding meeting times that worked for enough parents or foster parents in order to hold a group was, at times, a real challenge.

The second barrier has to do with the issue of engagement. Over the course of the pilot year direct line staff worked to engage challenging parents in the interventions to which parents may not have assigned value. Parents may have already completed a generic parenting skills class in the community; in some cases parents had completed multiple parenting classes by the time they were approached about enrolling in PTC. As well, there remained a group of parents whose constellation of problems made engagement in case planning especially difficult, regardless of the service being offered. Parents coping with pronounced mental illness, addiction, and/or extreme poverty generally fell into this group.

Engagement was also a factor agency staff pointed to when asked to reflect on implementation levels for KEEP. Kinship foster parents often considered themselves quite knowledgeable about how to manage their child's problems; in many cases, these kinship foster parents have been close to the child placed in their home since the child's birth. In other cases, it was the time commitment associated with KEEP that stood in the way of foster parents participating, or push-back from foster parents who were already up-to-date on their annual training requirements.

Quantitative Results

To understand the extent to which the bundle of structural changes and interventions had their intended effects on children's outcomes, we constructed an agency specific person-period data file. The file records the time each child spends with a specific private agency. The agency specific spells (or episodes) are then divided into time intervals (person periods) of a given length; for this analysis, we looked at three-month periods. Each person period has associated with it a flag indicating (1) whether, for that period the child was exposed to the intervention (i.e., in a home supervised by one of the participating agencies after the agreed upon start date) (2) whether the child was eligible for the clinical models based on whether they were in a regular family foster home, and (3) whether the child's foster parents and/or parents had participated in the training during that period. The CWS provided the data for the eligibility flag (2, above); data related to the timing of foster parents/parents training (3, above) were pulled from the web-based fidelity database. The person period also includes a variable that indicates whether a placement move or an exit occurred during that interval. The underlying statistical model evaluates the log odds of movement or exit; the treatment effect is captured by whether person-periods that include treatment are (1) more or less likely to also include a movement and (2) more or less likely to end with an exit to permanency.

Because children are clustered within agencies, we account for the nested structure with a multi-level model. The multilevel model produces properly weighted estimates of the average exit rate to account for the fact that the larger initiative agencies contribute more information to the model. Addition of the treatment effect shows the impact of treatment on the average rate. Adding time as a variable in the model (i.e., indicating the year during which the interval was observed), controls for any trends in the underlying data.

All of the analyses presented here follow this general model – a discrete time model that assesses both the timing and likelihood of exit. Permanency is defined as an exit to reunification, adoption, or guardianship. Non-permanent exits are defined as transfers from one private agency to another, run away, transfer to another child serving system and all other exit types not already listed separately. A placement move was recorded whenever a child changed caregivers.

Sample

The intervention targeted all children between the ages of 0 and 21 years placed in non-specialty family foster homes supervised by the five pilot agencies. The sample includes both children in care at the start of the pilot period (the legacy caseload) and all admissions involving children entering family foster care from the onset of the program forward. The agency-specific, person periods provide a concise way to introduce the treatment (i.e., dose) at the specific time it occurs. For the legacy caseload, this method addresses the fact that children will be at different points in their placement history when the treatment starts. Because the log odds of exit or placement change differ with respect to how long children have been in care, the person periods assess the treatment effects after controlling for the timing of the treatment relative to the child's prior history in care.

Effects on Outcomes: Permanency

Here we show the results of a multi-level discrete time model that compares the experiences of children participating in the initiative agencies with the experiences of children from all other agencies operating in the city from 2003 forward – the comparison group. Among children in that group are children served by the pilot agencies prior to the start of the program. The group also includes children served by non-pilot agencies operating at the time the initiative was active. In addition to knowing when children entered the initiative treatment, we also know how long they had been in care, the number of prior spells of care, their race/ethnicity, age, and gender. We used these variables to control for case mix differences.

The results for the person periods are not shown separately because they do not factor into the underlying impact analysis. We included them in the analysis because the likelihood of permanency differs by person period. For example, on average 13 percent of the children leave care during the first person period. Generally, the likelihood of leaving care shrinks with each person period. Because this is consistent with general exit patterns observed elsewhere and across different models used in this study, we elected not to report that data.

In addition to person-period differences in the rate of exit, prior placement history affected permanency rates in the expected direction – children who returned to care leave their next

spell of care more slowly (Connell, Katz, Saunders, & Tebes, 2006). Demographic attributes also contribute to the rate of permanency: males and older children move to permanency more quickly; African Americans are slower to achieve permanency than whites and Hispanics. Odds ratios greater than 1 imply faster rates of exit to permanency; odds ratios of less than 1 imply slower permanency rates relative to the relevant reference group. For example, males leave care at a rate that about 4 percent faster (1.037) than the rate reported for females.

The treatment related effects are reported in the last three rows of Table 4. Given an evaluation design in which we compare permanency rates among children served by the pilot agencies with permanency rates for children in all the other agencies plus the treatment agencies prior to the program start date, we have to contend with two specific issues: (1) how the pilot agencies in general compare with all the other agencies and (2) are there any time trends in the data that would obscure the treatment effect?

To capture these effects, we first control for pilot agency and period effects. As reported in Table 4, the pilot agencies have historically had higher permanency rates (1.2 odds ratio) than other, non-pilot agencies. In addition, during the time when the initiative became active, exits to permanency were generally slowing down.

With pilot agency and period effects removed, the treatment effect on the children in the pilot agencies is captured as the interaction between the period and the treatment agency. The corresponding coefficient shows that when the children exposed to the treatment (ITT) are compared with children served by non-pilot agencies *together* with children served by the pilot agencies but not during the initiative time period, the rate of permanency for children in the ITT group was greater than the rate for all other children in the comparison group. This difference was statistically significant.

Effects on Outcomes: Stability

The stability outcome, also presented in Table 4, was studied in the same way. There are person-period differences in the likelihood of movement, with the likelihood of movement higher in the earlier person periods. These results are not shown separately. The likelihood of changing placements also depends on demographic characteristics and placement history. All of these findings were in the expected direction, given the literature as it pertains to these issues (Wulczyn, Chen, & Hislop, 2007). Interestingly, children with three or more child spells were more likely to move, but children in their second agency spell or higher were less likely to move.

As before, treatment-related effects are found in the last three rows of Table 4. We control again for agency and period effects, both of which indicate a slower rate of movement. In addition the treatment effect (shown as Treatment agency * Period) indicates that there was no statistically significant effect on placement stability for the ITT group, although one could say that the effect was directionally consistent with the theory of the intervention.

Discussion

This large-scale implementation was initiated by a large urban child welfare system, rather than by researchers. As such this work is unique in that the project brought together real-world system priorities with a carefully conducted qualitative and quantitative independent evaluation. However, the fact that the primary motivator for the design of the work was to accomplish system reform rather than to conduct a controlled research study presents limitations about the conclusions that can be drawn about the effectiveness of the contribution of the KEEP, PTC, and R³ models in this complex context. For example, in order to shift the work-load of caseworkers so that they had time available to run the KEEP and PTC groups and conduct the R³ supervision, caseloads were lowered throughout the first year of implementation. Therefore, the effects observed on the significant reduction of days to permanency and the trend observed on decreased placement disruptions cannot be specifically attributed to the linked intervention models because these models were implemented in the context of other major organizational changes (e.g., reduced caseloads). What can be said is that the combination of policy direction, organizational changes, and the linked interventions did appear to yield some positive preliminary effects on child and family outcomes. Subsequent follow-up assessments will determine if these effects persist over time and if there is any observable effect on the rates of reentry of children whose families participated in the initiative.

Another major limitation is that approximately half of the children in the participating agencies actually received the KEEP and or PTC interventions during the evaluation period. However, all caseworkers and supervisors were intensively trained in the linked models and the R³ intervention was specifically developed to imbue the KEEP and PTC evidence-based strategies into the daily interactions that caseworkers had with families and that supervisors had with caseworkers. Therefore, all families enrolled in the agencies likely received at least some exposure to the evidence-based principles that were taught in the KEEP and PTC groups. In addition, the casework supervisors used the R³ strategy with their caseworkers and supervised them to use R³ in their interactions with families. However, in this real world experiment, it is unclear how the dosage of the interventions interacted with the outcomes that were observed, again limiting the conclusions that can be drawn about the strength of the interventions' contributions to the effectiveness of the initiative. The qualitative interviews indicated that the staff and supervisors experienced a significant burden implementing the linked models. However, they felt that there was good value in the new skills that they gained. In this paper we did not map the impacts of the observed decrease in length of stay in care and the increase in placement stability onto the 17% targeted goals of the CWS system. This set of analyses will be examined in future work.

There were numerous lessons learned from this complex, large-scale project. First, that child welfare systems, private agencies, evidence-based program developers, and evaluators can productively partner to implement policy-driven system reform and in doing so can achieve apparent improvements in outcomes for children and families in foster care. This partnership also produced some unintended positive effects such as closer collaboration among participating agencies than before the initiative. Second, frequent transparent communication between the multiple stakeholders was critical to the success of the project.

The CWS leadership organized weekly telephone conferences for all stakeholders and various subgroups of stakeholders to work through barriers and acknowledge successes. Without this level of commitment from the system leadership, implementing a project this complex and large would not have been feasible. Third, it was critical to have a clear policy mandate that drove all aspects of the implementation. The outcomes that the CWS wanted to achieve were well specified in advance of the project and were used to guide the initial project design and the day-to-day decision-making throughout the implementation period.

The use of technology to achieve and maintain fidelity to the evidence-based models was a critical aspect of the project but one that also caused considerable burden, confusion, and stress on casework staff and supervisors. Clearly, there's a need for improved technology systems that are less complex and time consuming for on-the-ground workers. Simplified systems that maintain the ability to observe the interventions being implemented and that allow for fast turnaround time for consultation and feedback are needed. Finally, the implementation was completed on a short timeline that included multiple intensive trainings of casework and supervisory staff in multiple intervention models. The advantage was that the initiative was implemented quickly but the disadvantage was that the condensed timeframe likely placed added stress on agency staff. Empirical work is needed to find an ideal pace for implementation that allows for sufficient time to complete all necessary planning and activities while at the same time moving implementation progress along so that complex efforts do not stall or get deprioritized over time. Saldana's (2014) work on measurement of the Stages of Implementation Completion is one such effort that should yield valuable data to inform future scale-ups.

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Table 1**KEEP Session Content**

Keeping Foster and Kin Parents Supported and Trained (KEEP)	
Session 1	Identifying the roles and influences of foster parents, setting group ground rules
Session 2	The importance of cooperation, using natural contingencies for reinforcement
Session 3	Teaching new behaviors and skills using reinforcement strategies
Session 4	Using charts and incentives
Session 5	Setting limits, purpose and overview of strategies
Session 6	Take a break, time-out, privilege removal
Session 7	Balancing reinforcement and limit setting
Session 8	Avoiding power struggles
Session 9	Pre-teaching situations that are stressful for the child
Session 10	Super tough behaviors
Session 11	Promoting positive peer relationships
Session 12	Promoting School Success
Session 13	Taking care of yourself as a parent
Session 14	Emotional regulation strategies
Session 15	Review
Session 16	Celebration and future networking

Table 2**PTC-R and PTC-RH Session Content**

Parenting through Change for Reunification (PTC-R)	
Session 1	Creating Change: Identifying strengths and goals for change
Session 2	Encouraging Cooperation: Effective Directions (clear, firm, respectful) to increase compliance
Session 3	Teaching Positive Behavior: Use of token system to encourage prosocial behavior
Session 4	Observing Emotions: Recognizing parents' and children's emotional expressions
Session 5	Regulating Emotions: Strategies to reduce negative emotions and increase positive emotions
Session 6	Setting Limits: Discipline strategies (e.g., Time Out, Privilege Removal, Work Chores)
Session 7	Following Through: Encouragement for prosocial behavior and limit setting for Misbehavior
Session 8	Active Communication: Strategies for effective communication with children
Session 9	Problem Solving: Specific skills for negotiating and resolving family conflict
Session 10	Putting it all together: Reviews curriculum and emphasizes balancing work, love, and play
Parenting through Change: Return Home (PTC-RH)	
Session 1	Building on Strengths: Identify strengths, review encouragement strategies
Session 2	Incentive Charts to Encourage Prosocial Behavior
Session 3	Limit Setting: Review discipline strategies, balance encouragement with limit Setting
Session 4	Promoting School Success: Building skills at home, communicating with schools
Session 5	Keeping our family safe: Strategies to monitor youngsters' whereabouts, activities, peers
Session 6	We're in this Together: Bridging Relationships: Applying problem solving and communication strategies in family meetings

Table 3**R³ technique**

R³ Strategy
1. Reinforcement of effort
2. Reinforcement of relationships and roles
3. Reinforcement of small steps
R³ Principles
1. Use of strength-focused language
2. Notice normative/appropriate behavior
3. Use a scientific approach (observe and reinforce)
4. Take opportunities for smile and laugh

Table 4

Intent-to-Treat Analysis Effect of on Permanent Exits and Placement Stability

	Permanency		Placement Stability	
	Odds Ratio	Significance	Odds Ratio	Significance
Person period – not shown separately				
Placement history				
First child spell	Reference	Reference	Reference	Reference
Second child spell	0.748	***	1.03	
Third child spell	0.659	***	1.22	***
More than 3 child spells	0.436	***	1.44	***
First agency spell	Reference	Reference	Reference	Reference
Second agency spell	0.844	***	0.69	***
More than two agency spells	0.766	***	0.89	
Gender				
Male	1.037	*	0.97	
Female	Reference	Reference	Reference	Reference
Race/ethnicity				
White	Reference	Reference	Reference	Reference
African American	0.916	*	1.43	***
Hispanic	1.029		1.19	*
Other race category	1.314		1.36	***
Age at placement				
Under 1	Reference	Reference	Reference	Reference
1–5 years	1.466	***	1.45	***
6–12 years	1.689	***	1.56	***
13–17 years	1.188	***	1.61	***
> 17 years	0.338	***	0.82	*
Agency effect	1.217	*	0.82	
Period effect	0.611	***	0.92	
Treatment agency * Period	1.198	***	0.86	

^ ***
Denotes significance at the $p < .01$ level

*
Denotes significance at the $.01 < p < .05$ level