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Building an Evidence-Driven Child Welfare Workforce: A University–Agency Partnership

Bridgette Lery, Wendy Wiegmann, and Jill Duerr Berrick

The federal government increasingly expects child welfare systems to be more responsive to the needs of their local populations, connect strategies to results, and use continuous quality improvement (CQI) to accomplish these goals. A method for improving decision making, CQI relies on an inflow of high-quality data, up-to-date research evidence, and a robust organizational structure and climate that supports the deliberate use of evidence for decision making. This article describes an effort to build and support these essential system components through one public-private child welfare agency–university partnership.

The federal government increasingly expects child welfare systems to be more responsive to the needs of their local populations, connect strategies to results, and use continuous quality improvement (CQI) to accomplish these goals. As a method for improving decision making, CQI relies on an inflow of up-to-date research evidence, high-quality data, and a robust organizational structure and climate that supports the deliberate use of evidence for decision making. At least two initiatives by the Administration for Children and Families attempt to help states more effectively and nimbly serve maltreated children and imply the need to develop the child welfare workforce that must be prepared to conduct evidence-informed practice. A 2012 information memorandum calls for the design of CQI systems that involve a “complete process of identifying, describing, and analyzing strengths and problems and then testing, implementing, learning from, and revising solutions” (Administration for Children and Families, 2012, p. 2). Another is the third round of the Child and Family Services Reviews (CFSR-3), which significantly improved the outcomes measures of the prior rounds (Courtney, Needell, & Wolczyn, 2004; Schuerman & Needell, 2009). These new directives offer public child welfare agencies better tools to obtain, process, and use evidence to improve the safety, permanency, and well-being of their service populations.

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FIGURE 1 The cycle of CQI.
Source. From Wulczyn, Alpert, Orlebeke, & Haight, 2014.
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CQI

CQI is a method for problem solving that involves four basic phases: plan, do, study, act. The method incorporates the rigorous use of evidence at each stage and requires child welfare systems that are sufficiently resourced, organized, and primed to use evidence in practice. The stages unfold as shown in **Figure 1** (Wulczyn, Alpert, Orlebeke, & Haight, 2014).

The CQI cycle begins when the agency establishes a baseline performance on the outcome of interest and identifies an intervention that is expected to improve that outcome. Plan: The choice and design of the intervention should be supported by research evidence that demonstrates its effectiveness. Do: Implementing a new intervention requires the agency to invest in the quality of services to be delivered, the processes used to deliver them, and the capacity to deliver them with fidelity. Study: The agency measures process and outcomes along the way to monitor the extent to which the intervention is being implemented with fidelity and is having its intended effect. Act: Finally, the agency uses evidence to make decisions about its future investments. From there the cycle begins again. Staff at all levels of the child welfare agency are responsible for the safety, permanency, and, increasingly, the well-being of children brought to the system’s attention. CQI offers a framework for making practice and policy decisions using the best information available. The strategic use of limited resources to promote established outcomes using evidence as a guiding principle is indicative of the tactics used among highly effective child welfare leaders (National Child Welfare Workforce Institute, 2011).

CFSR-3

The advent of the CFSRs in 2000 marked the beginning of a new focus on the part of the Children’s Bureau of the Administration for Children and Families to promote the use of data to

achieve better outcomes for maltreated children (USDHHS, 2000). However, many of the safety and permanency metrics established and monitored by the CFSR process suffered from measurement problems that at best limited their utility for capturing performance and detecting change over time; at worst they led to erroneous conclusions about outcomes (Courtney et al., 2004). Child welfare agencies were nevertheless held accountable to these measures. Some states, such as New York, supplemented these measures with their own longitudinal metrics developed by university partners (Orlebeke, Wulczyn, & Mitchell-Herzfeld, 2005). California formed a partnership with the California Child Welfare Performance Indicators Project (CCWIP) and the Center for State Child Welfare Data at Chapin Hall at the University of Chicago (hereafter referred to as the Data Center), both of which also work with other states to produce and use CQI-compliant measures. The entry cohort measures developed through these partnerships allowed one to associate outcomes with specific policy and practice changes in a way that the CFSR exit cohort and point-in-time measures could not.

After more than a decade of feedback from researchers, state child welfare agencies, and other stakeholders (Courtney et al., 2004; Schuerman & Needell, 2009), round three of the CFSR revised and vastly improved the measures, adopting an entry cohort approach (USDHHS, 2014). The timing of the new measures is well aligned with state efforts to develop their CQI systems. Insofar as CQI capacity building requires human capital, agency staff need to be trained in the logic of the new measures and understand their value for shaping the policy and practice that drives improved outcomes in a CQI environment. Training modules such as the Advanced Analytics for Child Welfare Administration courses offered by at the University of Chicago, the CCWIP at the University of California, Berkeley, and the Northern California Training Academy at the University of California, Davis have taken the lead in the effort to train existing agency staff on the importance of disciplined data analysis and the power of longitudinal data. The release of the new federal measures, coupled with a renewed focus on building CQI capacity, presents a fresh opportunity to train existing and incoming child welfare staff—including newly trained MSW students—on how to best obtain, process, and apply administrative data and other sources of evidence for better decision making in child welfare administration and practice.

A New Administrative Landscape

Public agencies are not alone in the shift toward the collection and use of evidence to make better decisions. Private foster care agency providers are also being asked to monitor longitudinal performance measures and participate in the CQI process to improve the care and services they provide to children. For example, in some jurisdictions, providers participate in performance-based contracting, a strategy for improving child welfare outcomes, by regularly measuring provider-level performance on outcomes and triggering improvements through fiscal incentives (Wulczyn, Orlebeke, & Haight, 2009). Particularly as the fiscal and policy climate place greater emphasis on reducing the use of foster care, child welfare workers in public and private settings must be able to quickly locate evidence, use it to justify service decisions, and alter the course of service quickly when necessary.

Evidence takes many forms. Staff in leadership positions must not only be aware of scientific research evidence on the impact of policies and interventions, they must also use their own quantitative and qualitative data to understand their local populations, be statistically literate, and have practical data analysis skills, including the ability to intelligibly explain and present

findings and their connection to work on the ground. Once acquired, evidence must be translated into something meaningful that guides a decision about what to do next in the CQI process (Wulczyn et al., 2014). MSW research course work and agency internships often fail to provide opportunities for students to develop these skills, yet the field increasingly demands them. A research curriculum specific to child welfare addresses some of these gaps, relying on a publicly available source of administrative data to train MSW students in statistical literacy and practical data analysis (Lery, Putnam-Hornstein, Wiegmann, & King, 2015).

As public and private child welfare agencies build capacity to accommodate a CQI approach, the Children's Bureau (2012) and Wulczyn and colleagues (2014) offer four fundamental elements of a CQI-supportive infrastructure. First, an agency leadership and culture must normalize CQI and use a common language to describe, create, and sustain an environment where staff are expected to use evidence. Second, supportive agency structures and functions, including roles and operational procedures, should be well articulated and documented. Third, agencies must have data collection and analytic capacity to monitor performance and evaluate the results of interventions. Fourth, training and technical assistance on the purpose and how-to of CQI should be available to provide knowledge and skill building throughout the agency hierarchy that is necessary to carry out evidence-informed decision making.

This article describes an effort to build and support these essential system components through one public-private child welfare agency–university partnership. Cal-Child Welfare Leadership Training (Cal-CWLT) is a 5-year student and staff training and leadership partnership between the San Francisco Human Services Agency (HSA), the University of California, at Berkeley School of Social Welfare (hereafter referred to as Berkeley), and Seneca Family of Agencies, funded by a grant from the National Child Welfare Workforce Institute (NCWWI). Students and agency middle managers and supervisors are the change agents targeted under the partnership. The partnership reenvision the link between MSW research course work, field internships, leadership development, and evidence-driven capacity building in child welfare. Cal-CWLT provides an important exchange between public and private agencies, a local university, MSW students, and currently employed agency supervisors and middle managers. The initiative is a response to the need for child welfare agencies to make better decisions for children by using evidence and the need to prepare the incoming workforce and current child welfare leaders to carry out this directive.

A university–agency partnership offers a platform for accomplishing this by using CQI to bridge the gap between research and practice. The stages of CQI follow those of the scientific method, that is, observation, question and hypothesis development, testing, hypothesis revision, and theory development. Cal-CWLT uses the principles of CQI to translate the scientific method to an applied practice setting.

THE ROLE OF EVIDENCE IN CHILD WELFARE PRACTICE

Social workers have long debated the role of evidence for practice (Zeira, 2014). The field of child welfare has found prominence relatively recently in evidence-based practice (EBP). In the early stages of this movement, researchers and practitioners focused their efforts on establishing a foundational understanding of EBP principles (Gambrell, 1999, 2003) and creating a bank of empirically supported interventions for use with child welfare clients (California Evidence-

Based Clearinghouse for Child Welfare, 2015). Core training of child welfare workers and supervisors has also included EBP as one of the principle themes in an effort to prime new child welfare staff for use of evidence-informed practices in the field (California Social Work Education Center, 2008). Full implementation of evidence-based and evidence-informed practices in child welfare agencies is still new and as yet incomplete (Aarons & Palinkas, 2007; Barth, 2008; Carrilio, Packard, & Clapp, 2004; Collins-Camargo, Sullivan, & Murphy, 2011; Lee, Bright, & Berlin, 2012; Palinkas, Finno, Fuentes, Garcia, & Holloway, 2011).

There are several reasons EBPs are not yet fully integrated into child welfare organizations. One is that practitioners lack knowledge in collecting, interpreting, and applying research evidence (Barth, 2008; Carrilio et al., 2004; Collins-Camargo et al., 2011; Lee et al., 2012; Nelson, Leffler, & Hansen, 2009). Additional barriers include time constraints, difficulties choosing from the large volume of research evidence available, inability to understand research evidence in the long and technical formats in which it is commonly presented, and difficulties in applying evidence to specific situations (Collins-Camargo et al., 2011; Nelson et al., 2009; Tseng, 2012; Walter, Nutley, Percy-Smith, McNeish, & Frost, 2004). Further still, practitioners commonly express skepticism about the validity of research evidence, even going so far as to believe that data are unreliable and can be shaped to express predetermined beliefs (Nelson et al., 2009). Okpych and Yu (2014) argue that this sentiment arose in the 1970s, when efforts to bring empirical rigor to clinical practice backfired. Several evaluations of social work interventions either found no treatment effects or detrimental effects, leaving those in the field disillusioned. Later, staff concerns were, in part, confirmed when the first two rounds of the CFSRs relied largely on measures that derived biased samples of children (Courtney et al., 2004). Specific to the process of collecting data on local practices and outcomes, researchers have found that many workers resent the time taken away from their cases and feel that research-based assessments reduce their work to technicalities without sufficient regard for the contexts in which they work (Carrilio, 2008). Researchers have also found that practitioners often feel that research and data collection are distant from real-world practice and are not as important as other concerns such as public sentiment, potential legal pitfalls, economic considerations, pressure from the media, or the welfare of individuals (Aarons & Palinkas, 2007; Carrilio, 2008; Nelson et al., 2009).

Various strategies have been suggested to strengthen the ability of practitioners to use EBP and other sources of evidence. One is to familiarize workers with data (Lee et al., 2012). Stronger training programs, more stringent hiring criteria, and programs to support staff in reading, understanding, and applying research and local data-based evidence have been suggested as ways to ensure critical reading and interpretation skills (Barth, 2008; Carrilio et al., 2004; Walter et al., 2004). Additional training may help practitioners understand the way their efforts are connected to outcomes, reducing the distance that workers sense between data collection and practice (Aarons & Palinkas, 2007; Carrilio, 2008). Training that takes the form of structured self-evaluation of routine practice could also contribute to an attitudinal shift about the use of evidence (Zeira, 2014). Others have stressed the importance of improving practitioner beliefs and attitudes toward the collection of data and application of research evidence (Aarons & Sommerfeld, 2012; Carrilio, 2008; Carrilio et al., 2004; Estabrooks, Floyd, Scott-Findlay, O'Leary, & Gushta, 2003). Finally, a number of authors have suggested public agencies use university–agency partnerships or other third-party intermediaries as resources for translating research evidence into smaller, more understandable, and user-friendly formats (Aarons,

Hurlburt, & Horwitz, 2011; Barth, 2008; Palinkas et al., 2011; Trocme, Milne, Esposito, Laurendeau, & Gervais, 2014; Tseng, 2012; Walter et al., 2004).

Many researchers have also studied the impact of organizational climates on EBP implementation and the uptake of other forms of evidence for decision making (Aarons & Palinkas, 2007; Aarons et al., 2011; Aarons & Sommerfeld, 2012; Lee et al., 2012; Wang, Saldana, Brown, & Chamberlain, 2010) and data-driven practice such as CQI (Carrilio et al., 2004; Collins-Camargo et al., 2011). Seminal in this field is the work of Aarons et al. (2011) who demonstrate the significance of an agency's absorption capacity, readiness for change, and receptivity toward the collection and use of research evidence. Absorptive capacity refers to an agency's preexisting knowledge/skills, ability to use new knowledge, and mechanisms to support knowledge sharing. Organizations that begin the process of using data with sufficient background knowledge and skills can incorporate new knowledge and have mechanisms in place to spread knowledge through the organization. This capacity toward evidence-driven practice is then maximized when agency cultures value information, quality performance, and measured results (Carrilio et al., 2004). Finally, in adopting new routines and practices, early efforts are strengthened when organizational cultures welcome innovation and promote exploration of new practices in response to challenges (Aarons et al., 2011; Aarons & Sommerfeld, 2012; Wang et al., 2010).

Aarons et al. (2011) and other authors (Aarons & Sommerfeld, 2012; Carrilio et al., 2004; Dearing, 2008; Palinkas et al., 2011) have also demonstrated the importance of opinion leaders in the effort to implement evidence use in public sector organizations. According to Palinkas et al. (2011), agency leaders are often seen as sources of information and advice about organizational changes and looked to for their responses. According to Carrilio et al. (2004), leaders in agencies are also responsible for the attitudes and beliefs that practitioners have about new policies and procedures: "In an environment where leadership and employees are more concerned about avoiding blame than improving quality, progress toward the effective use of data for planning and quality management is not likely" (Carrilio et al., 2004, p. 72).

These findings are supported by those of Aarons and Sommerfeld (2012) and Dearing (2008) who write of the power of change agents and transformational leaders to instill an organizational culture that welcomes innovation and is able to generate more positive attitudes toward adopting evidence-driven practices. Together, leadership at all levels (e.g., director, middle manager, clinical supervisor, frontline staff) combined with an agency's fundamental capacity to absorb and translate research are necessary for organizations to effectively use evidence.

Davies and Nutley (2008) suggest three models for understanding research use in public agencies: the evidence-based practitioner model in which individual practitioners are able to express their needs in terms of researchable questions and then search for and appraise research to meet these needs; the embedded model in which agency management distills and codifies research-based evidence into organizational processes, procedures, protocols, and guidelines; and the organizational excellence model in which agencies develop local strategies for continuous improvement that draw on research-based evidence and local experimentation. Ideally, the future of child welfare practice would embody all three models in which individual practitioners use research findings to answer vexing questions in their daily practice, agency managers base policy and practice mandates on research evidence, and new interventions are evidence informed and subsequently evaluated for their effectiveness with local populations.

By training future child welfare staff to be familiar and comfortable with data; equipped to read, understand, and apply research findings; and positively oriented toward the use of evidence and innovation, the Cal-CWLT training project attempts to build the type of change agents that will implement these models. The effort requires the participation and coordination of all levels of child welfare agency staff and a well-articulated implementation plan (Mildon, Dickinson, & Shlonsky, 2014).

Community and Organizational Context

Like most jurisdictions, San Francisco has long struggled with performance on a number of important indicators for children served in the foster care system. As shown in [Figure 2](#), relative to the rest of California, San Francisco has higher rates of entry into foster care, longer lengths of stay in care, slower and less likely reunification, and higher rates of reentry to care.

A variety of factors contribute to these differences, such as population dynamics; local political, organizational, and legal structures; and access to high-quality, well-targeted prevention, permanency, and after-care services. A number of strategies and interventions are already in place that seek to improve these outcomes, however, their effectiveness is unknown. This is, in part, because of the fact that change efforts are sometimes implemented ahead of a thorough

FIGURE 2 San Francisco foster care outcomes.

Source. California Child Welfare Performance Indicators Project (2015); Center for State Child Welfare Data (2015).

consideration of implementation issues that can sabotage the effectiveness of even a strong evidence-based intervention. A CQI process includes identification of a target population, hypothesis development, intervention selection, and attention to program fidelity, all before implementation begins. Without careful planning in these areas it is virtually impossible to determine whether resources are being directed in ways that lead to better outcomes.

San Francisco is departing from the old style of program evaluation whereby evaluation is separate from program design and implementation, and the analysis is conducted post hoc, long after any opportunity to attend to the preceding considerations has passed. Instead, the county is developing an iterative approach to evaluation using CQI methods that promote better a priori planning and allows midcourse implementation adjustments.

The child welfare workforce constitutes the critical actors who carry out the CQI process. Managers must develop practical processes for capturing information about who is referred to services, who receives them, and when. Data tracking is essential to learning whether clients follow through with service referrals that child welfare workers make. It is also a basic requirement to understand whether those services are effective. The Cal-CWLT initiative capitalizes on an early intervention opportunity by training the incoming child welfare workforce (i.e., MSW students) to seek and use evidence, including data, to improve such processes while also bringing these skills to existing supervisors and middle managers.

Critical features of the partnership contribute to the four CQI infrastructure components of supportive agency structures and functions, data collection and analytic capacity, knowledge and skill building throughout the agency hierarchy, and leadership and culture, identified by Wulczyn et al. (2014) and described in the next two sections.

THE UNIVERSITY-AGENCY MODEL FOR STUDENTS

Structures and Functions

MSW internships in public and private child welfare agencies. Today's child welfare landscape requires active collaboration between public and private nonprofit agencies and between line and administrative staff. Cal-CWLT involves a three-way partnership with university-sponsored internship opportunities in public and private agencies in San Francisco and experiences in management and direct casework. Cal-CWLT is designed for MSW students attending Berkeley who show an interest in working in child welfare following graduation. Modeled in part on the long-standing Title IV-E program, students participating in Cal-CWLT engage in a 1-year program that prepares them to work in public or private agencies serving families involved in child welfare. Five MSW students per year are selected for participation. Students engage in the customized Title IV-E curriculum to become deeply familiar with child welfare practice and policy, and are placed during their second year in the San Francisco public child welfare agency or in a local no-profit agency (Seneca Family of Agencies) that provides contracted child welfare services. Students are obligated to work in a public, private, or tribal child welfare agency for at least 1 year following graduation.

CQI embedded unit. HSA is implementing a new unit in the child welfare division that focuses exclusively on CQI. Seven employees staff the unit and provide a range of technical

assistance services for planning, programmatic, and leadership staff. The unit attends the data workshops described next, and the Cal-CWLT interns work alongside them on selected CQI activities related to the student research group project, also described next. For example, students may use publicly available administrative child welfare data sources to develop summary information about subpopulations of children in foster care who are the least likely to achieve timely permanency. CQI staff can use that information to select a sample of case records to review to learn more about what characterizes these children and their case histories.

Data Collection and Analytic Capacity

Reliance on publicly available child welfare data. Berkeley is home to the CCWIP, a collaborative venture between the University of California, Berkeley, the California Department of Social Services, and the Stuart Foundation. The CCWIP website provides policy makers, child welfare workers, researchers, and the public with direct access to customizable information on California's child welfare system (http://cssr.berkeley.edu/ucb_childwelfare/). Users can examine child welfare performance measures over time and across counties. In addition to stratifications by year and county, data can also be filtered by age, ethnicity, gender, placement type, and other subpopulations. Although the Cal-CWLT partnership is not affiliated with the CCWIP, it uses the publicly available website to train students on the importance of using longitudinal data to measure outcomes and change over time in relationship to the implementation of interventions and other change strategies under a CQI framework.

In addition to the CCWIP, students are trained to use foster care profile reports on statewide and county-level outcomes prepared by the Data Center using the Multistate Foster Care Data Archive. The profile reports offer additional tables and charts that complement the information available on the CCWIP website (for an example, see <https://fcda.chapinhall.org/wp-content/uploads/2013/10/Foster-Care-Dynamics-2000-2005.pdf>).

Agency-assigned student research projects. Prior to this partnership, student interns typically developed their own projects to fulfill their research course requirements. The projects were only occasionally of practical relevance to the child welfare agency. The disconnect was in part because the agency lacked a CQI infrastructure and a defined set of research priorities that could guide students' work. Under the Cal-CWLT initiative students are matched either singly or in groups to research projects based on the lead public agency's research priorities and performance goals. An additional purpose of assigning a project is to more explicitly connect the students' day-to-day internship tasks with their research course. Working on a broad outcomes-oriented topic helps frame and give greater purpose to their internship activities.

For example, during the first year students were asked to use the CCWIP website and the Data Center profile reports to examine the relationship between permanency and reentry, two intractable child welfare outcomes in San Francisco. The Cal-CWLT interns first analyzed permanency and reentry rates over time, by subpopulation, and in comparison to other counties. They conducted their analyses using entry cohort measures as presented on the CCWIP and Data Center websites, allowing one to track the onset of a change in policy or practice with subsequent outcomes. Next, students made observations about the relationship between the outcomes to determine whether reentry is associated with faster or more likely reunification. They then engaged in CQI activities related to visitation, an intervention currently in place to

address permanency and reentry. These activities included, for example, identifying the magnitude and characteristics of the subpopulations in need of visitation services and developing a logic model that explains how and why visitation should contribute to permanency outcomes. The results of these activities, disseminated to HSA and Seneca staff in the form of an executive summary, provide the evidence needed to direct the right clients to visitation services and to monitor whether permanency outcomes improve over time.

Knowledge and Skill Building

Reliance on a child welfare-specific research curriculum. A child welfare-specific research course curriculum provides instruction on problem formulation, research design, data collection, and data analysis (Lery et al., 2015). (The full curriculum is available at <http://calswec.berkeley.edu/specialized-practice-areas>.) The modular format allows the delivery of instruction in discrete workshops held once per month in the lead agency's computer lab. Topics include Child Welfare Data 101, Longitudinal Performance Measurement, Lessons in Using and Misusing Data, Developing Answerable and Relevant Research Questions, Presenting Data Graphically and Writing an Empirical Report, and Basic Statistics. The material is structured around the CCWIP website and Data Center profile reports. Students practice querying summative tables to answer hypothetical research questions and download data to an Excel chart where they further manipulate, summarize, and display the data. The workshops are intended to build students' practical data analysis and evidence-seeking skills to help them carry out their MSW research projects (described next) and other CQI-related internship activities and prepare them to seek and use evidence and data in everyday child welfare practice. A special emphasis of the workshops is on the importance of longitudinal data perspectives in connecting the CFSR-3 outcomes to the onset of interventions or other system changes.

Designated research liaison. Students' unique opportunity to engage with research as deeply as they engage with practice is supported by the efforts of a research liaison, a doctoral candidate at Berkeley who worked in the CCWIP for several years. The liaison is responsible for the activities associated with matching students to appropriate research projects, guiding them in planning and carrying out the work, and helping them navigate the roadblocks that applied practice research in an agency setting inevitably presents.

Access to agency-based child welfare researcher. In addition to the research liaison, students have regular access to a child welfare researcher employed by the local public child welfare agency that gives students an unusual opportunity to receive additional consultation on their research projects as well as professional networking opportunities, particularly for students interested in pursuing public child welfare administration, policy, or research.

Leadership and Culture

HSA child welfare research agenda. HSA has begun setting an annual child welfare research agenda in response to occasional requests from university faculty to conduct specific research in the agency that may not align with the agency's priorities. The research agenda identifies the key areas of permanency and reentry as priorities for research and outlines some CQI activities needed to improve decision making about the provision of a selection of

interventions intended to improve these outcomes. The agenda signals to staff, students, and other stakeholders that the agency is committed to supporting a CQI approach to practice improvement and sets an expectation for staff to use evidence. Cal-CWLT students derive their required MSW research project from this agenda.

Leadership development through CQI. The Berkeley curriculum was recently revised to focus specifically on leadership development as a core MSW competency. Berkeley graduates often move quickly into leadership positions in local and statewide organizations, so it is important to position students' learning so they can take advantage of opportunities to lead when offered. The primary strategy to prepare Cal-CWLT students for leadership is by teaching them how to seek out, process, and apply evidence to problems using the principles of CQI and how to use the narrative derived from data to influence other agency actors to modify practice.

An example of how student interns can practice the CQI process involves the CCWIP and Data Center data sources. A recent HSA priority was to examine subpopulations of foster children in San Francisco who are particularly unlikely to reunify within 1 year of admission. Queries using the CCWIP website and Data Center profile reports revealed that one high-risk group is older teens. From there, one can randomly select a sample of children for deeper case record review to better understand why this age group struggles to reunify quickly. Using the evidence revealed in the data, leaders can engage line staff in discussions about a variety of relevant topics from youth and family engagement to resource allocation, to examine the essential features of the best leverage point for change.

THE UNIVERSITY-AGENCY MODEL FOR MIDDLE MANAGERS AND SUPERVISORS

Structures and Functions

Leadership academy for middle managers and supervisors. As new cohorts of staff enter child welfare trained and prepared to engage in evidence-informed decision making, the supervisory and management structure of the agency must be prepared to accept and embrace staff with new skills and new outlooks on agency practice. The Cal-CWLT initiative is multi-layered so that middle managers and supervisors are prepared in a parallel process to MSW-level students so they can provide examples for leadership that new staff require.

Staff from HSA and Seneca participate in a specialized program mirrored and modified from the student model described previously. One component of the program is a leadership training academy led by NCWWI. The training emphasizes the leadership competencies developed by NCWWI (2011) that includes material relating to fundamental competencies, leading change, leading in context, leading people, and leading for results.

Selected HSA and Seneca supervisors and HSA's middle-management team participated in the initiative during the first year. In future years of the initiative, additional supervisors will be trained with the first-year participants serving as coaches. These staff members will engage in a variety of tasks designed to familiarize them with the CQI framework, including the regular use of administrative data. Undergirding their experience will be their exposure to a leadership curriculum intended to prepare them to effectively manage child welfare reform.

Data Collection and Analytic Capacity

Reliance on publicly available child welfare data. As the students participating in Cal-CWLT, staff involved in the leadership academy become familiar with data housed in the CCWIP and the Data Center. They learn to rely on these sources to regularly answer questions about current and historical child welfare populations, risk factors, inputs, and outcomes. Additionally, they learn how to use longitudinal data to tie practice to outcomes.

Use of a CQI framework. With the support of the designated research liaison and the on-site child welfare researcher, managers and supervisors identify a problem and a population of interest within their sphere of influence. In the context of their workshops, they examine the data surrounding the problem, hypothesize a theory of change, and propose a response. With access to the CCWIP website and the Data Center profile reports, they then measure their outcomes and adjust their intervention accordingly (Wulczyn et al., 2014). Students involved in Cal-CWLT work alongside managers and supervisors, and learn from them about the real-time obstacles and issues associated with implementing and measuring change initiatives.

Knowledge and Skill Building

Exposure to a child welfare-specific research curriculum. Although child welfare managers and supervisors do not participate in a year-long research seminar alongside the Cal-CWLT students, staff are exposed to a condensed curriculum on the fundamentals of child welfare research that includes participation in many of the monthly workshops conducted in an HSA computer lab by the research liaison and the agency-based child welfare researcher.

Access to an agency-based child welfare researcher. Managers and supervisors have regular access to the on-site HSA researcher who is not only closely familiar with the data contained in the CCWIP and the Data Center as a former affiliate of both organizations but who is deeply knowledgeable about child welfare practice in California and nationally. Staff in the specialized CQI unit are available to support data collection, change implementation, and measurement review.

Designated research liaison. Managers and supervisors also have access to the research liaison to further assist them in accessing and making meaning of data for their unit, their division, or for the agency as a whole.

Leadership and Culture

HSA child welfare research agenda. Agency supervisors and managers facilitate the collection of information surrounding the research agenda and with the help of the CQI unit initiate operational changes necessary to integrate data collection and interpretation into all levels of practice.

Leadership development through CQI. Using a CQI framework, agency supervisors and middle managers can use evidence to make informed adjustments to practice within HSA and Seneca. For example, questions relevant for child welfare managers might include, How often are service referrals made to an intended target population, and are they appropriately

timed to the client's clinical need and in the course of a case plan? What is the rate of uptake of those referrals? Is there a relationship between service use and outcomes? Supervisors too are in a position to use aggregated information about referrals, service use, and outcomes to help line workers with their case decisions. Child welfare agencies need to develop workable systems for feeding this type of information back to these agents for use as management tools and day-to-day self-assessment.

Leadership academy for middle managers and supervisors. As HSA and Seneca middle managers and supervisors participate together in the leadership academies, they will build new skills designed to vision, plan, and implement reform. With each successful cohort participating, the large majority of managers and supervisors in both organizations will be trained and supported within 5 years. This penetration into the structure of these organizations means that a new cultural standard can develop that supports the goals of the CQI framework.

DISCUSSION

Lessons from Early Implementation

The university–agency partnership described herein benefits from many natural assets that might not be present in all jurisdictions in the United States. The presence of a rich data source, enthusiastic agency leaders, deep, positive university–agency relationships, and a cadre of MSW students whose educational interests go beyond clinical social work may not be present in all counties or states. Nevertheless, in spite of these considerable benefits, any significant revision to the way social work education is delivered and the way large bureaucracies communicate comes with implementation challenges. We discuss some of the major challenges that arose during the first year of the university–agency partnership and, consistent with the CQI approach, resulting design modifications.

One change was to strengthen communication between the agency and the university. Two strategies were employed. The Cal-CWLT principal investigator on the university side and the child welfare analyst on the agency side began participating in the monthly child welfare agency management team meetings. The attendees at the meetings discuss the implementation of various interventions and other strategies designed specifically to improve the outcomes in **Figure 2**. In each meeting, data on a component of agency performance are first presented and frame the ensuing discussion relating to agency renewal activities. This strategy helps to model for middle managers the director's vision to infuse research findings into everyday considerations as a component of the overall CQI approach. Second, the principal investigator and child welfare analyst learned that regular communication with the university research instructor is critical to the student interns' success in meeting the objectives of the research course work at the same time that all research course work is closely integrated with the evidence needs of the agency.

Another adjustment was to build a time line for frequently sharing consecutive pieces of the group research project with HSA staff for feedback. We recognized the importance of setting early expectations about engaging with staff at the outset of the project, then at regular intervals, to ensure that the work remains properly focused and learning is maximized. This approach

models the CQI behavior we want to see among future child welfare leaders. It also deliberately differs from the post hoc approach that research and evaluation often takes, whereby the analyses are conducted largely in isolation of implementation and not shared with the agency until final results are complete and their relevance may have expired.

A third change to the model is that in subsequent years of the partnership, students' day-to-day internship tasks will be more tightly connected to their research project. One way to facilitate this is for students' field supervisors to discuss progress on the research project with students during weekly supervision. This will allow students to reflect regularly on how the line of inquiry of their research project can inform their direct or administrative practice with or on behalf of clients. The first-year project on the relationship between permanency and reentry to foster care had broad relevance to the students' day-to-day internship tasks at HSA and Seneca, but that connection attenuated without regular reflective discussions in supervision. A critical component of the CQI process is to continuously assess the extent to which one's carefully planned activities are having their intended effects.

CONCLUSION

The culture of public and private child welfare systems is changing. In addition to the Administration for Children and Families' revised outcome measures and CQI initiative, several national training and technical assistance efforts are under way that aim to prepare the workforce with the skills and tools necessary to make better service decisions that bring greater safety and permanency, and contribute to the well-being of maltreated children. One is the Child Welfare CQI Training Academy funded by the Administration for Children and Families, which targets child welfare agency directors and other key leaders (Administration for Children and Families, 2014). Another is the foundation Casey Family Programs, which assists states with their CQI training and implementation, and has a long-standing interest in building the capacity of child welfare agencies to understand and use data.

The term is pithy and popular but it is not enough to be data driven. Managers must model the regular use of high-quality data and other forms of evidence in everyday work. What does this look like in practice? They must be willing to make meaning of data, connect it to hypotheses, and be willing to modify existing processes when the resulting evidence suggests that the current course of action is not yielding the desired results. This is unlikely to occur unless managers and other leaders perceive evidence as credible and relevant. University–agency partnerships are a way to bring credibility and relevance to research for decision makers, so long as the partnerships allow the participation of service providers and policy makers in setting the research agenda, and the use of a variety of sources of evidence to form the basis for improved decision making (Trocme et al., 2014). If successful, after the 5-year grant period the Cal-CWLT initiative will have prepared 25 nascent child welfare professionals to begin practice equipped with the necessary skills to source and understand high-quality data, translate it into evidence, and be effective decision leaders in an organizational environment that values and further develops these skills. Future publications will discuss the extent to which these graduates have begun to apply the techniques of seeking, generating, and using evidence in their work as new professionals.

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