

PII-TTAP

PERMANENCY INNOVATIONS
INITIATIVE

Training & Technical
Assistance Project

ANNOTATED BIBLIOGRAPHY INFORMING TRAINING AND TECHNICAL ASSISTANCE



**Children's
Bureau**

Acknowledgments

To support the Permanency Innovations Initiative (PII) Grantees in better meeting the needs of children and families, the PII Training and Technical Assistance Project (PII-TTAP) team created the *Annotated Bibliography Informing Training and Technical Assistance*. PII-TTAP conducted extensive research to develop and refine the *Development, Implementation, and Assessment Approach* and organized the research into an annotated bibliography related to organizational and system development, change management, leadership, and implementation science. This Annotated Bibliography was created by Roseana Bess, Emily Fisher, Brian Jones, Jeannie Newman, and Jacquelyn Spangler of JBS International, Inc., and Tori Russell and Mary Jane Peck, formerly of JBS.

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Introduction

This annotated bibliography lists articles that the Permanency Innovations Initiative Training and Technical Assistance Project (PII-TTAP) incorporated into the development of the Development, Implementation, and Assessment Approach (the Approach). While extensive and comprehensive, the bibliography does not include abstracts on every article on the topics listed below; it concentrates on those considered most relevant in the current literature.

We searched EBSCO and other databases using a number of key terms. We also searched other sources, such as Google Scholar, Metacrawler, and other pertinent publications' reference lists for possible inclusions.

The bibliography is divided into two main sections. The first section is a collection of abstracts on articles exploring and/or arguing for the use of implementation science or some sort of well-structured implementation process when implementing programs and services. The second section includes abstracts on articles addressing the stages used in the Approach. It is important to note that these stages are informed by the National Implementation Network (NIRN) stages of implementation:

1. **Exploration stage activities** – This stage includes the following activities:
 - Identify a problem
 - Identify the primary population(s)
 - Examine the reasons/root causes behind the identified needs
 - Develop a theory of change
 - Identify a proposed solution to the problem
 - Assess organizational and system capacity
 - Create a plan for installation and implementation
2. **Installation stage activities** – This stage includes the following activities:
 - Operationalize the innovation
 - Develop or adapt the implementation supports
 - Prepare the system for change (e.g., organizational and system-level supports)
3. **Implementation stage activities [Initial and Full]** – The Approach includes an initial and a full implementation stage. For the purposes of this bibliography, we have combined them. The activities that take place during implementation include:
 - Implement and test the innovation (e.g., usability testing)
 - Monitor and assess the innovation
 - Adjust the innovation
 - Plan for sustaining the innovation

Many of the articles can be used across the three stages. Generally, the abstract for each article was placed in the section where it was most pertinent. Unless noted otherwise, all of the abstracts are adapted from the authors' own abstracts. When the documents are in the public domain, we have included their links; most of the remaining documents can be accessed either through EBSCO or the Child Welfare Information Gateway.

Section I: Implementation Frameworks

The following articles explore and/or argue for the use of an implementation science framework or some sort of well-structured implementation process when implementing programs and services. The research and the frameworks presented below support and/or are consistent with the Approach.

Akin, B. A., Brook, J., Lloyd, M. H., Bhattarai, J., Johnson-Motoyama, M., & Moses, M. (2016). A study in contrasts: Supports and barriers to successful implementation of two evidence-based parenting interventions in child welfare. *Child Abuse & Neglect*, 57, 30-40. doi:10.1016/j.chiabu.2016.06.002

Although evidence-based interventions (EBIs) are spreading to child welfare, research on real-world dynamics of implementation within this setting is scarce. Using a six-factor implementation framework to examine implementation of two evidence-based parenting interventions, the authors sought to build greater understanding of key facilitators and barriers by comparing successful versus failed EBI implementation in a child welfare setting. Semistructured interviews were conducted with a purposive sample of 15 frontline practitioners and state-level managers. Interviews were transcribed verbatim, and data analysis used a modified analytic approach. The results showed the successful EBI was viewed more positively on all six factors; however, implementation was multidimensional, multilevel, and mixed with accomplishments and challenges. An accumulation of strengths across implementation factors proved beneficial. Implementation frameworks may be advantageous in organizing and explaining the numerous factors that may influence successful versus failed implementation. While encountering obstacles is largely inevitable, understanding which factors have shaped the success or failure of EBI implementations in child welfare settings may optimize future implementations in this context.

Akin, B. A., Mariscal, S. E., Bass, L., McArthur, V. B., Bhattarai, J., & Bruns, K. (2014). Implementation of an evidence-based intervention to reduce long-term foster care: Practitioner perceptions of key challenges and supports. *Children and Youth Services Review*, 46, 285-293. doi:10.1016/j.childyouth.2014.09.006

Although a growing literature base defines significant components of systematic and effective implementation of evidence-based interventions (EBIs), little information exists about real-world successes and setbacks from child welfare practitioners' perspectives. This study sought to identify key challenges and supports during implementation of an EBI to reduce long-term foster care. Semistructured, individual interviews were conducted with 28 child welfare practitioners implementing an EBI—Parent Management Training, Oregon Model. Transcripts were coded and analyzed using theoretical thematic analysis. Member checking was used to confirm identified themes across interviews. Using six implementation factors to organize the results, multiple facilitators and barriers were identified. Study findings suggest that implementation of EBIs in child welfare should consider promoting and ensuring (1) a learning culture with effective communication, rapid improvement cycles, and timely feedback loops; (2) frequent, direct, supportive, and high-quality coaching and supervision; (3) strong leadership and organizational fit; and (4) strategies for tailoring the EBI to the child welfare setting, including responses to families' multiple and complex needs and practices for effective client engagement.

Aarons, G. A., Hurlburt, M., & Horwitz, S. M. (2011). Advancing a conceptual model of evidence-based practice implementation in public service sectors. *Administration and Policy in Mental Health and Mental Health Services Research*, 38, 4-23. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3025110/pdf/10488_2010_Article_327.pdf

Implementation science is a quickly growing discipline. Lessons learned from business and medical settings are being applied, but it is unclear how well they translate to settings with different historical origins and customs (e.g., public mental health, social service, alcohol/drug sectors). The purpose of this paper is to propose a multilevel, four-phase model of the implementation process (i.e., Exploration, Adoption/Preparation, Implementation, and Sustainment) derived from existing literature and apply it to public sector services. The article highlights features of the model likely to be particularly important in each phase, while considering the outer and inner contexts (i.e., levels) of public sector service systems.

Aladjem, D. K., & Borman, K. M. (2006, April). *Summary of findings from the National Longitudinal Evaluation of Comprehensive School Reform*. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Thousands of schools have implemented comprehensive school reform (CSR) models over the past decade, using either self-developed models or externally developed models. In September 2000, the U.S. Department of Education awarded a grant to conduct the National Longitudinal Evaluation of Comprehensive School Reform (NLECSR). This paper summarizes the major findings of the NLECSR. The paper examines CSR through a series of phases from adoption to implementation to sustainability, describing (a) the process schools use to adopt CSR modes and the implications of this process for subsequent implementation; (b) the relationship between the fidelity of implementation and important outcomes, such as social capital, student achievement, and making adequate yearly progress; and (c) the sustainability of reform within schools. The paper finds that voting among school faculty to adopt a CSR model is almost universal, but data showed only a moderate connection between the openness and participatory nature of the adoption process and later teacher buy-in and implementation fidelity.

Armstrong, M. I., McCrae, J. S., Graef, M. I., Richards, T., Lambert, D., Bright, C. L., & Sowell, C. (2014). Development and initial findings of an implementation process measure for child welfare system change. *Journal of Public Child Welfare*, 8(1), 94-117. doi:10.1080/15548732.2013.873759

This article describes a new measure designed to examine the process of implementation of child welfare systems change. The measure was developed to document the status of the interventions and strategies that are being implemented and the drivers that are being installed to achieve sustainable changes in systems. The measure was used in a Children's Bureau-supported national effort to assess the ongoing implementation of 24 systems-change projects in child welfare jurisdictions across the country. The article describes the process for measure development, method of administration and data collection, and quantitative and qualitative findings.

Barbee, A. P., Christensen, D., Antle, B., Wandersman, A., & Cahn, K. (2011). Successful adoption and implementation of a comprehensive casework practice model in a public child welfare agency: Application of the Getting to Outcomes (GTO) model. *Children and Youth Services Review*, 33(5), 622-633.

In recent years, several states have been developing or adopting casework practice models in an effort to shape the thinking and behavior of front line child welfare workers with a

commitment to improving the safety, permanency, and well-being outcomes of vulnerable children in their care. This article presents one framework for approaching the organizational changes that need to be made in order to support a practice model. The "Getting to Outcomes" Framework (Wandersman, 2009) is a useful approach for ensuring that all areas to support practice change are addressed.

Best, M., & Neuhauser, D. (2006). Walter A. Shewhart, 1924, and the Hawthorne factory. *Quality and Safety in Health Care*, 15(2), 142-143. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2464836/>

In 1924, Walter Shewhart described the first control chart, which launched statistical process control and quality improvement. In November of that year, a series of research projects, which came to be known as the Hawthorne studies, began. This work was central to the creation of the fields of work place sociology, social psychology, and anthropology. The Shewhart cycle, or Shewhart learning and improvement cycle, combines management thinking with statistical analysis. The constant evaluation of management policy and procedures leads to continuous improvement. This cycle has also been called the Deming cycle, the Plan–Do–Check–Act (PDCA) cycle, or the Plan–Do–Study–Act (PDSA) cycle.

Bertram, R., Suter, J., Bruns, E., & O'Rourke, K. (2011). Implementation research and wraparound literature: Building a research agenda. *Journal of Child & Family Studies*, 20(6). Retrieved from <http://www.nwi.pdx.edu/pdf/JCFS-2-BertramSuterBrunsORourke.pdf>

The authors describe the framework identified by the National Implementation Research Network's (NIRN) analysis of 35 years of implementation outcomes literature from diverse fields of endeavor to review the current state of wraparound implementation research. Model definition, model fidelity, and intervention outcomes were areas of relatively greater development, while target population, theory base, theory of change, organizational context and readiness, staff selection, training, supervision or coaching, purveyor selection, and program installation were less examined or even overlooked. The authors conclude with suggestions for building a research agenda on wraparound implementation.

Brooks, H., Pilgrim, D., & Rogers, A. (2011). Innovation in mental health services: What are the key components of success? *Implementation Science*, 6(120). Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3214129/pdf/1748-5908-6-120.pdf>

Experts in the mental health field view service development innovation in health technology and practice as a pressing need, yet it is relatively poorly understood. This study aimed to identify contextual influences inhibiting or promoting the acceptance and integration of innovations in mental health services in both National Health Service and community settings. Key barriers to innovation included resistance from corporate departments and middle management, complexity of the innovation, and the availability and access to resources on a prospective basis within the host organization. The results informed the construction of a proposed model of innovation implementation within mental health services, the main components of which are context, process, and outcomes. The study produced a model of conducive and impeding factors drawn from the composite picture of 11 innovative mental health projects, and this is discussed in light of relevant literature. The model provides a rich agenda to consider for services wanting to innovate or adopt innovations from elsewhere. The evaluation suggested the importance of studying innovation with a focus on context, process, and outcomes.

Chamberlain, P., Feldman, S. W., Wulczyn, F., Saldana, L., & Forgatch, M. (2016). Implementation and evaluation of linked parenting models in a large urban child welfare system. *Child Abuse & Neglect*, 53, 27-39.

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 5 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). This paper describes the policy context and the targeted outcomes of the reform. The authors discuss the theory of the interventions and the logistics of linking them 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.

Chinman, M., Hunter, S. B., Ebener, P., Paddock, S. M., Stillman, L., Imm, P., & Wandersman, A. (2008). The Getting To Outcomes demonstration and evaluation: An illustration of the prevention support system. *American Journal of Community Psychology*, 41(3/4), 206-224.

State and federal funders are increasingly requiring communities to achieve outcomes and to be accountable, yet they often do not provide the guidance or the tools needed for communities to successfully meet these challenges. To improve the likelihood of achieving positive outcomes, the Getting To Outcomes (GTO) intervention (manual, training, TA) is designed to provide the necessary guidance and tools, tailored to community needs, in order to build individual capacity and program performance. GTO is an example of a Prevention Support System intervention, which as conceptualized by the Interactive Systems Framework, plays a key role in bridging the gap between prevention science (Prevention Synthesis and Translation System) and prevention practice (Prevention Delivery System). The authors evaluated the impact of GTO on individual capacity and program performance using survey- and interview-based methods. The authors tracked the implementation of GTO and gathered user feedback about its utility and acceptability. The evaluation of GTO suggests that it can build individual capacity and program performance and, as such, demonstrates that the Prevention Support System can successfully fulfill its intended role. Lessons learned from the implementation of GTO relevant to illuminating the framework are discussed.

Chinman, M., Imm, P., & Wandersman, A. (2004). *Getting To Outcomes 2004: Promoting accountability through methods and tools for planning, implementation, and evaluation*. Retrieved from http://www.rand.org/pubs/technical_reports/TR101

Substance abuse prevention can improve community health, but only when implemented well. Good implementation is difficult given the significant amount of knowledge and skills required, the large number of steps that need to be addressed (e.g., needs assessment, setting of priorities, planning and delivering programs, monitoring, and evaluation), and the wide variety of contexts in which prevention programs need to be implemented. These challenges have resulted in a large gap between the positive outcomes often achieved by prevention science and the lack of these outcomes by prevention practice at the local level. Common mechanisms

to address this gap are available (e.g., Internet and training), but these mechanisms lack outcomes. A new model, emphasizing collaboration between science and practice, is needed. Incorporating traditional evaluation, empowerment evaluation, results-based accountability, and continuous quality improvement (CQI), this manual's 10-step process enhances practitioners' prevention skills while empowering them to plan, implement, and evaluate their own programs. The manual's text and worksheets address needs and resources assessment; goals and objectives; choosing programs; ensuring program "fit;" capacity, planning, process, and outcome evaluation; CQI; and sustainability. The model presented in the manual is meant to be a best practice process—prescriptive, yet flexible enough to facilitate any prevention program.

Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology*, 41(3-4), 327-350.

The first purpose of this review was to assess the impact of implementation on program outcomes, and the second purpose was to identify factors affecting the implementation process. Results from over 500 quantitative studies offered strong empirical support to the conclusion that the level of implementation affects the outcomes obtained in promotion and prevention programs. Findings from 81 additional reports indicate there are at least 23 contextual factors that influence implementation. The implementation process is affected by variables related to communities, providers, and innovations, as well as aspects of the prevention delivery system (e.g., organizational functioning) and the prevention support system (e.g., T/TA). The collection of implementation data is an essential feature of program evaluations, and more information is needed on which and how various factors influence implementation in different community settings.

Fixsen, D. L., Blase, K., Duda, M., Naoom, S., & Van Dyke, M. (2010). Implementation of evidence-based treatments for children and adolescents: Research findings and their implications for the future. In J. Weisz & A. Kazdin (Eds.), *Implementation and dissemination: Extending treatments to new populations and new settings* (2nd ed., pp. 435-450). New York: Guilford Press.

A growing number of evidence-based psychotherapies hold the promise of substantial benefits for children, families, and society. These therapies are the product of a tremendous investment in research on interventions over the past few decades. For the benefits of evidence-based programs (EBPs) to be realized on a scale sufficient to be useful to individuals and society, evidence-based psychotherapies need to be put into practice outside of controlled clinical trials. Efforts to make use of EBPs in typical service settings have not gone well. As the EBP movement has unfolded, national reviews across service sectors have documented: the "science-to-service gap," the variability and lack of effectiveness commonly found in typical human services, the lack of sustainability of various pilot and demonstration programs, and the lack of progress toward achieving socially important outcomes. These deficiencies have occurred despite dramatic improvements in the number and quality of evidence-based practices and programs. As indicated in these reviews, the process of putting EBPs into practice is where some of the best therapies fail. Fortunately, there is more of an understanding that the "to" in "science to service" represents implementation, that is, "science implemented in practice."

Fixsen, D. L., Blase, K. A., Timbers, G. D., & Wolf, M. M. (2001). In search of program implementation: 792 replications of the Teaching-Family Model. In G. A. Bernfeld, D. P. Farrington, & A. W. Leschied (Eds.), *Offender rehabilitation in practice: Implementing and evaluating effective programs* (pp. 149-166). London: Wiley.

This article discusses a solution-oriented and incremental approach to solving major social problems. If solve important social problems, such as child abuse, delinquency, and illiteracy, are to be solved, researchers need to generate effective programs that can be replicated, and social service providers need to implement those programs with fidelity. The Teaching-Family Model, based on over 30 years of research, evaluation, and program experience, has been replicated across North America. The article presents an analysis of 792 attempted replications over a period of 15 years. The analysis reveals certain aspects of the treatment program that were found to be sufficient conditions for treatment program implementation and survival. The article describes the "Site services" and presents the implications for effective practices in services for children.

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network. (FMHI Publication No. 231).

This monograph summarizes findings from the review of the research literature on implementation. The review process began by identifying literature reporting any efforts to collect data on attempts to implement practices or programs in any domain, including agriculture, business, child welfare, engineering, health, juvenile justice, manufacturing, medicine, mental health, nursing and social services. Nearly 2,000 citations were found, 1,054 met the criteria for inclusion in the review, and 743 remained after a full text review. There were 377 out of 743 citations deemed to be most relevant, and 22 studies that employed an experimental analysis of implementation factors.

Fixsen, D., Blase, K., Metz, A., & Van Dyke, M. (2013). Statewide implementation of evidence-based programs. *Exceptional Children (Special Issue)*, 79, 213-230.

Evidence-based programs will be useful to the extent they produce benefits to individuals on a socially significant scale. It appears the combination of effective programs and effective implementation methods is required to assure consistent uses of programs and reliable benefits to children and families. To date, focus has been placed primarily on generating evidence and determining degrees of rigor required to qualify practices and programs as "evidence based." To be useful to society, the focus needs to shift to defining "programs" to developing state-level infrastructures for statewide implementation of evidence-based programs and other innovations in human services. In this article, the authors explicate a framework for accomplishing these goals and discuss examples of the framework in use.

Fraser, M. W., & Galinsky, M. J. (2010). Steps in intervention research: Designing and developing social programs. *Research on Social Work Practice*, 20(5), 459-466.

This article describes a five-step model of intervention research. From lessons learned in their work, the authors developed an outline of core activities in designing and developing social programs. These include: (a) develop problem and program theories, (b) design program materials and measure, (c) confirm and refine program components in efficacy tests, (d) test effectiveness in a variety of practice settings, and (e) disseminate program findings and materials. Last, using a risk and protective factor perspective, they discuss the adaptation of interventions for new settings and populations.

Fraser, M. W., Richman, J. M., Galinsky, M. J., & Day, S. H. (2009). *Intervention research: Developing social programs*. New York: Oxford University Press.

When social workers draw on experience, theory, or data in order to develop new strategies or enhance existing ones, they are conducting intervention research. This relatively new field involves program design, implementation, and evaluation and requires a theory-based, systematic approach. *Intervention Research* presents such a framework. The five-step strategy described ushers the reader from an idea's germination through the process of writing a treatment manual, assessing program efficacy and effectiveness, and disseminating findings. Rich with examples drawn from child welfare, school-based prevention, medicine, and juvenile justice, *Intervention Research* relates each step of the process to current social work practice. It also explains how to adapt interventions for new contexts and provides extensive examples of intervention research in fields such as child welfare, school-based prevention, medicine, and juvenile justice, and offers insights about changes and challenges in the field.

Greenberg, M. T., Domitrovich, C. E., Graczyk, P. A., & Zins, J. E. (2005). The study of implementation in school-based preventive interventions: Theory, research, and practice. *Promotion of Mental Health and Prevention of Mental and Behavioral Disorders*, 3, 1-72.

The Substance Abuse and Mental Health Services Administration (SAMHSA) recognizes the complexity of adopting and implementing evidence-based practices in community settings. An important and often underestimated influence in providing quality preventive services is the community context in which the intervention is delivered. This monograph offers a new conceptual framework for implementation. Although the examples exclusively relate to a school setting, the concepts can be generalized to other domains. The intended audience includes practitioners, families, other consumers, policymakers, and researchers.

Hardcastle, K. A., Bellis, M. A., Hughes, K., & Sethi, D. (2015). Implementing child maltreatment prevention programmes: What the experts say. Copenhagen Ø, Denmark: World Health Organization. Retrieved from <http://www.euro.who.int/en/publications/abstracts/implementing-child-maltreatment-prevention-programmes-what-the-experts-say-2015>

Measurably reducing child maltreatment requires action from politicians, practitioners, and the public. Internationally, some individuals and groups have pioneered programmes to prevent child maltreatment, or been instrumental in changing strategies or policies to protect children's rights. Although scholarly papers capture many of these successes, they can omit key points on how to establish and sustain successful interventions. This handbook authored by World Health Organization Europe and Liverpool John Moores University – based on a series of interviews with the world's leading experts on preventing child maltreatment – aims to fill this gap by providing practical information to policy-makers, practitioners and others on implementing prevention programmes. The handbook describes key principles for selecting and delivering programmes, and important practical considerations, including resources and technical support. This handbook is intended to be used, alongside other resources developed by the WHO Regional Office for Europe, to implement the European child maltreatment prevention action plan.

Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: National Academy Press.

This report from the Committee on the Quality of Health Care in America makes an urgent call for fundamental change to close the quality gap; recommends a redesign of the American health care system; and provides overarching principles for specific direction for policymakers, health care leaders, clinicians, regulators, purchasers, and others. It offers a set of performance

expectations for the 21st century health care system, a set of 10 new rules to guide patient-clinician relationships, a suggested organizing framework to better align incentives inherent in payment and accountability with improvement in quality, and key steps to promote evidence-based practice and strengthen clinical information systems. Analyzing health care organizations as complex systems, this report also documents the causes of the quality gap, identifies current practices that impede quality care, and explores how systems approaches can be used to implement change.

Kaye, S., Depanfilis, D., Bright, C. L., & Fisher, C. (2012). Applying implementation drivers to child welfare systems change: Examples from the field. *Journal of Public Child Welfare*, 6(4), 512-530. doi:10.1080/15548732.2012.701841

Implementation science is a relatively young field of research that studies efforts to put improved policies or programs into routine practice. In recent years, the Children's Bureau has placed increasing emphasis on implementation of child welfare system reforms to promote improved outcomes for children, youth, and families. Using an implementation framework from the National Implementation Research Network, this article reviews the relevance of core drivers to child welfare and describes selected examples to illustrate how public agencies can apply and adapt concepts from implementation science to drive and sustain their system reforms.

Lambert, D., Richards, T., & Merrill, T. (2016). Keys to implementation of child welfare systems change initiatives. *Journal of Public Child Welfare*, 10(2), 132-151. doi:10.1080/15548732.2015.1113226

The article provides information on changes in initiatives for implementing improvements in child welfare systems. Topics discussed include funding raised by Children's Bureau for development of implementation centers, works of the National Implementation Research Network, and infrastructure improvement.

Landsverk, J., Brown, C., Reutz, J., Palinkas, L., & Horwitz, S. (2011). Design elements in implementation research: A structured review of child welfare and child mental health studies. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(1), 54-63. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050572/pdf/nihms264548.pdf>

Implementation science is an emerging field of research with considerable penetration in physical medicine and less in the fields of mental health and social services. There remains a lack of consensus on methodological approaches to the study of implementation processes and tests of implementation strategies. This paper addresses the need for methods development through a structured review that describes design elements in nine studies testing implementation strategies for evidence-based interventions addressing mental health problems of children in child welfare and child mental health settings. Randomized trial designs were dominant with considerable use of mixed method designs in the nine studies published since 2005. The findings are discussed in reference to the limitations of randomized designs in implementation science and the potential for use of alternative designs.

Manuel, J. I., Mullen, E. J., Fang, L., Bellamy, J. L., & Bledsoe, S. E. (2009). Preparing social work practitioners to use evidence-based practice: A comparison of experiences from an implementation project. *Research on Social Work Practice*, 19(5), 613-627.

The implementation of evidence-based practice (EBP) as a professional model of practice for social work has been suggested as one approach to support informed clinical decision making. However, different barriers and processes have been identified that affect the use of EBP at individual, organizational, and systemic levels. This article describes results from a project that sought to enhance practitioner use of EBP by using a supportive strategy, including training and technical assistance through a partnership between university-based researchers and three social work agencies. Results compare similarities and differences across each of the three agencies in terms of barriers and promoters at the team, organizational, and system levels. They suggest that comprehensive, multilevel interventions are needed to support the use of EBP in social work organizations and that further research is needed to test explicit partnership components. Findings suggest that a multilevel approach has the greatest potential to support implementation of EBP in social agencies.

McCall, R. B. (2009). Evidence-based programming in the context of practice and policy. *Society for Research in Child Development: Social Policy Report*, 23(3). Retrieved from <http://www.eric.ed.gov/PDFS/ED509748.pdf>

Scholars, practice professionals, and policymakers should welcome the new era of evidence-based programming and policies, but these constituencies need to be realistic about the complexities, uncertainties, and limitations that lie beneath what could easily become a simplistic process. This paper discusses some of the requirements for the replication of EBPs, suggesting that many of these underlying assumptions are often not met. One of these requirements is the evidence itself, and alternative evidentiary criteria are discussed. A main theme is that, even if a well-documented program exists, implementing it in communities on a broader scale requires different processes that are less well studied. In addition, strategies are discussed that hold the promise of bringing scholars and community stakeholders together in a collaborative process that will build community capacity and create and implement effective programs and services on a broader scale. Finally, the research enterprise itself needs to be transformed to more effectively contribute to program and system community change. Recommendations for improving the process are offered.

Metz, A., & Albers, B. (2014). What does it take? How federal initiatives can support the implementation of evidence-based programs to improve outcomes for adolescents. *Journal of Adolescent Health*, 52, S92-S96. Retrieved from [http://www.jahonline.org/article/S1054-139X\(13\)00790-8/pdf](http://www.jahonline.org/article/S1054-139X(13)00790-8/pdf)

This article proposes that the wide-scale implementation of evidence-based practices requires: (1) careful assessment and selection of the “what”; (2) a stage-based approach that provides adequate time and resources for planning and installation activities; (3) the co-creation of a visible infrastructure by a triad of key stakeholders including funders and policymakers, program developers, and implementing sites; and (4) the use of data to guide decision-making and foster curiosity into continuous improvement among grantees. Each of these strategies is explored in greater detail through the lens of the Teen Pregnancy Prevention (TPP) Program, a \$100 million initiative overseen by the Office of Adolescent Health (OAH) in the U.S. Department of Health and Human Services.

Metz, A., & Bartley, L. (2012). Active implementation frameworks for program success. *Zero to Three*, 32, 11-18. Retrieved from <http://www.iod.unh.edu/APEX%20Trainings/Tier%20%20Manual/Additional%20Reading/4.%20Implementation%20article%20Metz.pdf>

Over the past decade, the science related to developing and identifying evidence-based programs and practices for children and families has improved significantly. However, the science related to implementing these programs in early childhood settings has lagged far behind. This article outlines how the science of implementation and the use of evidence-based Active Implementation Frameworks (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005) can close the research-to-practice gap in early childhood and ensure sustainable program success. Four implementation frameworks include: Implementation Stages; Implementation Drivers; Policy – Practice Feedback Loops; and Organized, Expert Implementation Support. The authors provide examples and discuss implications for early childhood settings.

Metz, A., Naoom, S. F., Halle, T., & Bartley, L. (2015). An integrated stage-based framework for implementation of early childhood programs and systems (OPRE Research Brief 2015-48). Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

This brief introduces key elements of effective implementation within an integrated, stage-based framework. This framework posits that (1) implementation happens in four discernible stages; and (2) three common “threads” or core elements exist across each of these stages. The brief defines these three common elements, demonstrates their basis in previous syntheses of the implementation science literature, and describes the way these elements function at each stage of implementation. This brief includes examples of how this integrative, stage-based framework can be used by early childhood program developers, researchers, and policymakers. An appendix contains a planning tool that captures key activities and questions that arise at each stage for each of the three core implementation elements.

Meyers, D., Durlak, J., & Wandersman, A. (2012). The quality implementation framework: A synthesis of critical steps in the implementation process. *American Journal of Community Psychology*, 50(3-4), 462-80.

Implementation science is growing in importance among funders, researchers, and practitioners as an approach to bridging the gap between science and practice. The authors addressed three goals to contribute to the understanding of the complex and dynamic nature of implementation. The first goal was to provide a conceptual overview of the process of implementation by synthesizing information from 25 implementation frameworks. The synthesis extends prior work by focusing on specific actions (i.e., the “how to”) that can be employed to foster high quality implementation. The synthesis identified 14 critical steps that were used to construct the Quality Implementation Framework (QIF). These steps comprise four QIF phases: Initial Considerations Regarding the Host Setting, Creating a Structure for Implementation, Ongoing Structure Once Implementation Begins, and Improving Future Applications. The second goal was to summarize research support for each of the 14 QIF steps and to offer suggestions to direct future research efforts. The third goal was to outline practical implications of the findings for improving future implementation efforts in the world of practice. The QIF’s critical steps can serve as a useful blueprint for future research and practice. Applying the collective guidance synthesized by the QIF to the Interactive Systems Framework for Dissemination and Implementation emphasizes that accountability for quality implementation does not rest with the practitioner delivery system alone.

Mildon, R., & Shlonsky, A. (2011). Bridge over troubled water: Using implementation science to facilitate effective services in child welfare. *Child Abuse and Neglect*, 35(9), 753-756.

To maximize benefits to children and their families, effective practices need to be used competently in child welfare settings. Since the 1990s, researchers and policy makers have

focused attention on empirically supported interventions. Much less attention has been paid to what is needed to implement these in a range of real-world settings. Without proper implementation, which includes an evaluation strategy from feasibility to fidelity to on-going work on moderators and mediators of program effects, established effective programs can be rendered ineffective in practical application. The paper touches on progress, to date, of implementation science and its application to child welfare programs and practices and highlights a set of practical strategies for implementing empirically supported interventions in child welfare.

Pipkin, S., Sterrett, E. M., Antle, B., & Christensen, D. N. (2013). Washington State's adoption of a child welfare practice model: An illustration of the Getting To Outcomes implementation framework. *Children and Youth Services Review*, 35(12), 1923-1932. doi:10.1016/j.childyouth.2013.09.017

Despite a great need for evidence-informed practices (EBPs) in child welfare, very few child welfare systems have implemented evidence-based, case-management models statewide. While the literature on implementation from the perspective of model developers and researchers is steadily increasing, there has been little attention to the process of implementation originating from the reverse direction—by community organizations themselves—or with regard to going-to-scale implementation in child welfare. The Getting To Outcomes (GTO) model, which was originally created to help organizations choose and implement prevention programs, is a promising guide for child welfare systems seeking to initiate systemwide implementation of EBPs. The GTO framework provides a step-by-step guide for surveying a system, building motivation, training, and evaluating. This article will illustrate the statewide implementation of Solution-Based Casework (SB (EPBC), an evidence-based model of case management, by Washington State's Children's Administration, following the GTO framework. Despite some barriers and obstacles, the GTO model proved to be feasible and to aid in the implementation of SBC. The authors discuss the implications for the GTO model as a framework for empowering community organizations to choose and implement relevant EBPs.

Proctor, E. (2012). Implementation science and child maltreatment: Methodological advances. *Child Maltreatment*, 17(1), 107-112. doi:10.1177/1077559512437034

This issue's articles persuasively make the case for evidence-based practices in the child welfare system. The quality of care across the social services is substandard and perilously so in publicly funded settings, such as those that serve child maltreatment. From a research perspective, these articles reflect significant strides in implementation science within child welfare by (1) emphasizing external validity; (2) informing the role of context on implementation success; (3) advancing knowledge about implementation strategies, especially strategies involving provider education; (4) addressing implementation outcomes, notably fidelity, adoption, and sustainability; and (5) demonstrating methodological innovations. Three features of the articles in this special issue emphasize external validity. First, the articles focus on questions that derive from the field. This issue's articles markedly improve the understanding of empirically supported program (ESP) implementation in child maltreatment. Implementation researchers need to incorporate the kinds of new and innovative methods that can inform the penetration, scale-up, and sustainability of ESPs in complex systems of care and yet work in everyday practice settings. In short, implementation research must correspond to the knowledge needs, service challenges, and practical realities of child welfare practice.

Staggs, S. L., White, M. L., Schewe, P. A., Davis, E. B., & Dill, E. M. (2007). Changing systems by changing individuals: The incubation approach to systems change. *American Journal of Community Psychology*, 39(3/4), 365-379.

This article describes and evaluates the implementation of an innovative approach to systems change, the incubation approach, which was developed on a systems change project designed to increase the capacity of multiple systems (e.g., law enforcement, child protection, domestic violence, mental health, and early education) to respond to children's exposure to violence. The incubation approach encourages change agents to collaborate with project staff to gently nurture, or "incubate," feasible and warranted change in target systems. Project staff gain concrete commitment from motivated and accessible change agents and collaborate with those agents to implement change actions. This approach works well with committed, executive-level change agents in target systems with stable systems that have low turnover and well-integrated subsystems and when seed funds are provided to key organizations.

Wandersman, A. (2009). Four keys to success (theory, implementation, evaluation, and resource/system support): High hopes and challenges in participation. *American Journal of Community Psychology*, 43(1/2), 3-21.

In this article, the author attempts to merge two themes. First, there is often a large gap between high hopes about impacts of policies or programs and the demonstrated results. He describes four keys/threats to success in any social problem area: theory, implementation, evaluation, and resource/system support. Second, he presents theory and research from over 30 years of work on participation, conducted by him and his colleagues, which can illuminate and be illuminated by theory, implementation, evaluation, and resource/system support. He offers ideas for solutions that increase the probability of success. He concludes with the need to have high hopes tempered by theory and research to develop realistically ambitious solutions to social problems.

Wandersman, A., Duffy, J., Flaspohler, P., Noonan, R., Lubell, K., Stillman, L., & Saul, J. (2008). Bridging the gap between prevention research and practice: The interactive systems framework for dissemination and implementation. *American Journal of Community Psychology*, 41(3/4), 171-181. Retrieved from <http://prevention.psu.edu/media/prc/files/ajcpisf2008wandersmanetal.pdf>

Concerns about the gap between science and practice are longstanding. There is a need for new approaches to supplement the existing approaches of research-to-practice models and the evolving community-centered models for bridging this gap. This article presents the Interactive Systems Framework for Dissemination and Implementation that uses aspects of research-to-practice models and of community-centered models. The framework presents three systems: the Prevention Synthesis and Translation System (which distills information about innovations and translates it into user-friendly formats), the Prevention Support System, and the Prevention Delivery System. The framework is intended to be used by different types of stakeholders (e.g., funders, practitioners, and researchers) who can use it to see prevention not only through the lens of their own needs and perspectives, but also as a way to better understand the needs of other stakeholders and systems. It provides a heuristic for understanding the needs, barriers, and resources of the different systems, as well as a structure for summarizing existing research and for illuminating priority areas for new research and action.

Wulczyn, F., & Landsverk, J. (2014). Research to practice in child welfare systems: Moving forward with implementation research. *Children and Youth Services Review*, 39, 145-146. doi:10.1016/j.childyouth.2013.11.011

This article presents an overview of the papers presented in a special issue of *Children and Youth Services Review*. This special series on implementation issues related to practice and policy in child welfare settings is not exhaustive as it does not discuss all of the studies and

initiatives occurring currently in child welfare systems. However, the papers provide an in-depth discussion of major critical issues in implementation for evidence-based intervention in this complex system, which may be relevant to all innovative initiatives whether or not the interventions have a strong research base. In the next decade, the authors expect robust growth in the research area of implementation science, hopefully related to the improvement of child welfare services and its outcomes in the core domains of safety, permanence, and well-being.

Implementation Research Methods

Horwitz, S., & Landsverk, J. (2011). Methodological issues in child welfare and children's mental health implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(1), 1-3.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3045952/pdf/nihms264594.pdf>

This is the introduction to a special issue of *Administration and Policy in Mental Health and Mental Health Services* that explains the various articles. The focus for the five papers is on implementation research specific to two child service sectors, child welfare and child mental health. The focus on these sectors is historically and conceptually based. The first decade of studies were observational in design and did not speak to issues related to effective approaches to implementing evidence-based practices in usual care settings, which these papers do.

Nutt, P. (2002). *Why decisions fail: Avoiding the blunders and traps that lead to debacles*. San Francisco: Berrett-Koehler.

Why Decisions Fail critiques 15 infamously bad decisions that became public debacles. The author examines how these mistakes could have been avoided and explains how any organization's decision-making process can be improved to prevent such failures. The author began by looking at 400 decisions made by top managers involving such topics as products and services, pricing and markets, personnel policy, technology acquisition, and strategic reorganization. Analyzing how each decision was made, he determined that two out of three decisions were based on failure-prone or questionable tactics. He identifies these key errors and suggests alternatives that have proven successful.

Palinkas, L. A., Aarons, G.A., Horwitz, S., Chamberlain, P., Hurlburt, M., Landsverk, J., (2011). Mixed method designs in implementation research. *Psychiatric Services*, 62(3), 255-263. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3025112/?tool=pubmed>

This paper describes the application of mixed method designs in implementation research in 22 mental health services research studies published in peer-reviewed journals over the last 5 years. The analyses revealed seven different structural arrangements of qualitative and quantitative methods, five different functions of mixed methods, and three different ways of linking quantitative and qualitative data together. Complexity of design was associated with number of aims or objectives, study context, and phase of implementation examined. The findings provide suggestions for the use of mixed method designs in implementation research.

Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., & Hensley, M. (2011). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(2), 65-76. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3068522/pdf/10488_2010_Article_319.pdf

An unresolved issue in the field of implementation research is how to conceptualize and evaluate successful implementation. This paper advances the concept of “implementation outcomes” distinct from service system and clinical treatment outcomes. This paper proposes a heuristic, working “taxonomy” of eight conceptually distinct implementation outcomes: acceptability, adoption, appropriateness, feasibility, fidelity, implementation cost, penetration, and sustainability—along with their nominal definitions. The authors propose a two-pronged agenda for research on implementation outcomes. Conceptualizing and measuring implementation outcomes will advance understanding of implementation processes, enhance efficiency in implementation research, and pave the way for studies of the comparative effectiveness of implementation strategies.

Scannapieco, M., & Iannone, M. (2014). Native American Indian child welfare system change: Virtual implementation of a data system based on practice models. *Journal of Technology in Human Services*, 32(3), 220-235. doi:10.1080/15228835.2014.937551

There are 565 federally recognized Tribes who are independent, sovereign nations in the United States. These Tribes have varying capacity to manage and administer child welfare programs. Although many have a children's code directing child welfare practice, standardized practice models—including procedures, policies, and subsequent forms and documentation—are not common, and management information systems (MIS) are rare. A virtual implementation model, informed by the Technology Acceptance Model, was undertaken with three Tribal child welfare agencies to design an MIS based on Tribal child welfare practice models. Description and discussion of the implementation process, future research required, and lessons learned from the implementation project are presented. This article will inform Native American Tribes, states who work with Tribes, and rural area agencies similar in context to the Tribal agencies.

Schorr, L. (2001). The role of evidence in improving outcomes for children. In National Center for Service Integration Resource Brief 10, *Funding what works: The role of research on effective programs and practices in government decision-making* (pp. 1-6).

The author makes the case for use of a broader range of evidence than that obtained from randomized clinical trials in making funding decisions. She further articulates a set of attributes of effective practice and their own body of evidence supporting their effectiveness.

Simpson, K., Porte, K., McConnell, E., Colón-Emeric, C., Daily, K., & Stalzer, K. (2013). Tool for evaluating research implementation challenges: A sense-making protocol for addressing implementation challenges in complex research settings. *Implementation Science*, 8(2), <http://www.implementationscience.com/content/pdf/1748-5908-8-2.pdf>

Many challenges arise in complex, organizational interventions that threaten research integrity. This article describes a Tool for Evaluating Research Implementation Challenges (TECH), developed using a complexity science framework to assist research teams in assessing and managing these challenges. In this article, the authors describe a protocol developed to address the research challenges arising during implementation of two complex interventions in health care organizations. Proposed is a sense-making approach to managing implementation challenges for intervention research in complex settings.

Section II: The PII-TTAP Framework for Training and Technical Assistance

Section II addresses the implementation stages used in the Development, Implementation, and Assessment Approach.

1. Exploration

This section is divided by Exploration topics and activities outlined in the Introduction, beginning with the first three activities: Identify a problem, identify the primary population(s), and examine the reasons/root causes behind the identified needs. It also includes a subsection for articles regarding Teaming.

Identify the Problem, Population(s), and Root Causes

The articles below are relevant to identifying the problem, understanding the characteristics of who is at risk of experiencing the problem, and identifying the root causes of the problem.

Duncan, D. F., Kum, H., Weigensberg, E., Flair, K. A., & Stewart, C. (2008). Informing child welfare policy and practice: Using knowledge discovery and data mining technology via a dynamic website. *Child Maltreatment*, 13(4), 383-391.

Proper management and implementation of an effective child welfare agency requires the constant use of information about the experiences and outcomes of children involved in the system, emphasizing the need for comprehensive, timely, and accurate data. In the past 20 years, there have been many advances in technology that can maximize the potential of administrative data to promote better evaluation and management in the field of child welfare. Specifically, this article discusses the use of knowledge discovery and data mining, which makes it possible to create longitudinal data files from administrative data sources, extract valuable knowledge, and make the information available via a user-friendly public website. This article demonstrates a successful project in North Carolina where knowledge discovery and data mining technology was used to develop a comprehensive set of child welfare outcomes available through a public website to facilitate information sharing of child welfare data to improve policy and practice.

Hyde, C. (2012). Organizational change rationales: Exploring reasons for multicultural development in human service agencies. *Administration in Social Work*, 36, 436–456.

This article examines how rationales for organizational change shape the subsequent change effort. The change process in question is multicultural development in nonprofit human service agencies. Analysis is based on interviews with consultants and practitioners experienced in multicultural development. To further illustrate connections between rationales and outcomes, three case studies are presented. Results indicate that how the organizational change is framed in part determines the degree of change that occurs.

Schoech, D., Quinn, A., & Rycraft, J. R. (2000). Data mining in child welfare. *Child Welfare*, 79(5), 633-650.

Data mining is the sifting through of voluminous data to extract knowledge for decision-making. This article illustrates the context, concepts, processes, techniques, and tools of data mining using statistical and neural network analyses on a dataset concerning employee turnover. The resulting models and their predictive capability, advantages and disadvantages, and implications for decision support are highlighted.

Teaming

The articles below are relevant to teaming. Constructive and effective teaming is critical for success across the stages of the implementation process.

Albritton, E., Edmunds, M., Thomas, V., Petersen D., Ferry, G., Brach, C., & Bergofsky, L. (n.d.) *Implementation guide number 1: Engaging stakeholders to improve the quality of children's health care*. The National Evaluation of the CHIPRA Quality Demonstration Grant Program. Retrieved from <http://www.ahrq.gov/sites/default/files/wysiwyg/policymakers/chipra/demoeval/what-we-learned/implementation-guides/implementation-guide1/impguide1.pdf>

This guide was designed to help state officials and other program administrators engage and partner with stakeholders in initiatives to improve the quality of child health care. Stakeholders can include a range of people and organizations, such as caregivers, clinicians, advocacy groups, and policymakers. By engaging stakeholders in quality improvement (QI) initiatives, state officials and program administrators can help ensure that the initiatives are implemented effectively, achieve intended outcomes, and contribute to sustainable changes in the quality of child health care. This guide describes a five-step approach to engaging stakeholders. The guide breaks down each step into tasks, lists questions to guide the implementation of each task, and identifies key points to consider when determining what will work best for a state. Although this guide is focused on stakeholder engagement in child health care, the steps and resources provided may also be applicable to engagement efforts in other areas. The guide is based on the early experiences of three States in the CHIPRA Quality Demonstration Grant Program that are using funds to engage stakeholders in meaningful ways.

Bens, I. (1999). Keeping your team out of trouble. *Journal For Quality & Participation*, 22(4), 45. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=her&AN=2068353&site=ehost-live>

This article suggests ways to avert team conflict at work. Topics include conducting a comprehensive team launch; training provisions; creating team norms; identifying team problems; and implementing leader feedback.

Gilley, J.W., Lane Morris, M., Waite, A.M., Coates, T., & Veliquette, A. (2010). Integrated theoretical model for building effective teams. *Advances in Developing Human Resources*, 12, 7–28.

The purpose of this article is to construct an integrated theoretical model for building effective teams based on a literature review guided by several research questions on all aspects of teams, team building, team member selection, team development, and theoretical constructs that affect the development of effective teams. The principal outcome of this article is a relationship model that is grounded in the teams, teamwork, and team building literature and based on several theoretical frameworks. This rigorous model may be applied consistently among human resource development (HRD) practitioners and scholars to help them build effective teams.

Guzzo, R. A. & Dickson, M.W. (1996) Teams in organizations: Recent research on performance and effectiveness. *Annual Review of Psychology*, 47, 307-338.

This review examines recent research on groups and teams, giving special emphasis to research investigating factors that influence the effectiveness of teams at work in organizations. Several performance-relevant factors are considered, including group composition, cohesiveness, and motivation, although certain topics (e.g., composition) have been more actively researched than others in recent years and so are addressed in greater depth. Also actively researched are certain types of teams, including flight crews, computer-supported groups, and various forms of autonomous work groups. Evidence on basic processes in – and the performance effectiveness of – such groups is reviewed. Also reviewed are findings from studies of organizational redesign involving the implementation of teams. Findings from these studies provide some of the strongest support for the value of teams to organizational effectiveness. The review concludes by briefly considering selected open questions and emerging directions in group research.

Hackman, J. (2004). What makes for a great team? *Psychological Science Agenda*, 18(6), 161-168. Retrieved from <http://www.apa.org/science/about/psa/2004/06/hackman.aspx>

Research has identified five conditions that, when present, increase the probability of team effectiveness.

Higgins, M., Weiner, J., & Young, L. (2012). Implementation teams: A new lever for organizational change. *Journal of Organizational Behavior*, 33(30), 301-315.

This paper introduces a team form called an “implementation team”—a team charged with designing and leading the implementation of an organization-wide change strategy—and investigates this team type in a context ripe for change, U.S. public school systems. Unlike prior teams research that has focused on teams as diagnostic collectives or strategic decision-making bodies, this study forwards the notion that teams can be used to implement organizational change. In this study, the authors examined how positional and tenure diversity and work context relate to team member learning, a critical factor in sustaining organizational change. Results from 25 school district instructional improvement strategy teams over two years challenge some basic assumptions regarding what constitutes a “real team.” The authors find that some taken-for-granted aspects of teams, such as team member stability, may not be central or even appropriate when considering “real teams” in this change context; rather than stability of team membership, the stability of members’ roles may matter most. They conclude by suggesting that scholars further investigate this team form and reframe, reconsider, and renew their conceptualizations of “real teams,” especially for teams engaged in implementing organizational change.

Kahn, W. A. (1990) Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724. Retrieved from [http://engagementresearch.wikispaces.com/file/view/Kahn+\(1990\)_Psychological+conditions+of+personal+engagement+and+disengagement+at+work.pdf](http://engagementresearch.wikispaces.com/file/view/Kahn+(1990)_Psychological+conditions+of+personal+engagement+and+disengagement+at+work.pdf)

This study began with the premise that people can use varying degrees of their selves, physically, cognitively, and emotionally, in work role performances, which has implications for both their work and experiences. Two qualitative, theory-generating studies of summer camp counselors and members of an architecture firm were conducted to explore the conditions at work in which people personally engage, or express and employ their personal selves, and disengage, or withdraw and defend their personal selves. This article describes and illustrates three psychological conditions—meaningfulness, safety, and availability—and their individual and contextual sources. These psychological conditions are linked to existing theoretical concepts, and directions for future research are described.

Kahn, W. A. (1992) To be fully there: Psychological presence at work. *Human Relations*, 45(4), 321-349.

This article develops the concept of psychological presence to describe the experiential state enabling organization members to draw deeply on their personal selves in role performances, i.e., express thoughts and feelings, question assumptions, innovate. The dimensions of psychological presence are described along with relevant organizational and individual factors. The concept's implications for theory and research about the person-role relationship are described.

Katzenbach, J.R., Smith, D.K. (1993). The discipline of teams. *Harvard Business Review* 71, 111-146.

In this groundbreaking 1993 article, the authors say that if managers want to make better decisions about teams, they must be clear about what a team is. They define a team as “a small number of people with complementary skills who are committed to a common purpose, set of performance goals, and approach for which they hold themselves mutually accountable.” That definition lays down the discipline that teams must share to be effective. Katzenbach and Smith discuss the four elements—common commitment and purpose, performance goals, complementary skills, and mutual accountability—that make teams function. They also classify teams into three varieties—teams that recommend things, teams that make or do things, and teams that run things—and describe how each type faces different challenges.

Maciolek, S., Arena, C., Fisher, C., & Helfgott, K. (2014). *From start to finish: Child welfare implementation teams that go the distance*. Baltimore, MD: University of Maryland School of Social Work, Ruth H. Young Center for Families and Children. Retrieved from http://socialwork.umaryland.edu/cwa/RYC/assets/ACCWIC-2014-Implementation_Teams.pdf

Implementation teams were a central strategy used by the Atlantic Coast Child Welfare Implementation Center (ACCWIC) to support efforts to implement change and achieve goals. This brief presents strategies for building, managing, operating, and supporting effective implementation teams. It is intended for those who establish, authorize, and/or lead teams, as well as those who serve as team members. It is particularly designed for child welfare agency staff who are implementation or project directors, and their supervisors and managers. Insights, advice, and lessons learned through trial, error, and success are shared, as well as research on the importance of teams for achieving and sustaining change.

Mealiea, L., & Baltazar, R. (2005). A strategic guide for building effective teams. *Public Personnel Management*, 34, 141–160. Retrieved from <http://www.psychosphere.com/A%20strategic%20Guide%20for%20Building%20Effective%20Teams%20by%20Mealiea%20&%20Baltazar.pdf>

Managers must recognize that they play a central role in effective team building. However, to be successful, managers require a framework to guide their activities. The purpose of this paper is to provide such a framework in the form of a seven-step process that can guide managers in their team-building efforts. The model itself is built upon the assumption that there are identifiable team characteristics that, if present, will help ensure team success. The model presents a set of decision strategies for the selection and sequencing of team-building efforts and interventions. The model is an iterative, multi-staged effort that requires considerable planning and environmental knowledge to successfully implement.

National Child Welfare Resource Center for Organizational Improvement. (2005). Stakeholder involvement in child welfare. *Child Welfare Matters (Fall 2005)*, 1-2. Retrieved from <http://muskie.usm.maine.edu/helpkids/rcpdfs/cwmatters2.pdf>

Increasingly, child welfare agencies realize they cannot achieve the outcomes of safety, permanency, and well-being for children by acting on their own. A wide array of “stakeholders”—within agencies, across public organizations, in communities, and in families—must join in the work to achieve these outcomes. Many agencies are shifting from thinking about what the child welfare agency can do to what all the stakeholders can do together to improve outcomes. Successful stakeholder involvement means making collaboration and partnerships a way of life for the agency.

National Implementation Research Network. (n.d.) *Implementation Teams*. Retrieved from <http://nirn.fpg.unc.edu/learn-implementation/implementation-teams>

An implementation team is more than a name. Implementation team members have special expertise regarding programs, implementation science and practice, improvement cycles, and organization and system change methods. They are accountable for making it happen; for assuring that effective interventions and effective implementation methods are in use to produce intended outcomes for children and families.

Patras, J., & Klest, S. (in press). Group size and therapists’ workplace ratings: Three is the magic number. *Journal of Social Work*. ISSN 1468-0173.

This study compares therapists’ workplace ratings of collective efficacy, collaboration, and teamwork in Norwegian child welfare and child psychiatric agencies. Participating therapists were trained in the Parent Management Training Oregon model (PMTO) as part of a nationwide implementation of the program. Respondents were part of three conditions: (1) PMTO therapists working in agencies with no other PMTO therapists; (2) two PMTO therapists working together in the same agency; and (3) three therapists working together in the same agency. PMTO therapists working in clusters of three appeared to have better experiences with their workplace than therapists with no other PMTO colleagues or those with only one other PMTO colleague. The results of this study suggest that clustering therapists together in groups of at least three may create a better work environment for therapists using newly-implemented interventions.

Rycraft, J. R., & Dettlaff, A. J. (2009). Hurdling the artificial fence between child welfare and the community: Engaging community partners to address disproportionality. *Journal Of Community Practice*, 17(4), 464-482. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=sih&AN=45427221&site=ehost-live>

As with many national and state social service systems, child welfare agencies have traditionally functioned in isolation. A multitude of federal and state laws and policies direct the functions and practices of child welfare systems, setting up an artificial fence around the agency that has created a culture lacking in interprofessional collaborations. However, recent reform efforts have emphasized the importance of engaging the community in discussions and decisions regarding child welfare practice. Child welfare agencies are now expected to work with community leaders, key stakeholders, affiliated service providers, and families to address issues impacting children and families. A major obstacle is determining where to begin, how to proceed, and what is needed to develop those partnerships. This article reports the efforts of one state agency in hurdling that artificial fence to address the overrepresentation of minority children in the system. Through focus group interviews with community members, child welfare staff, and legal

professionals, barriers to community engagement are identified, and recommendations are provided for facilitating meaningful relationships and partnerships between child welfare agencies and the communities they serve.

Smith, B., Hurth, J., Pletcher, L., Shaw, E., Whaley, K., Peters, M. & Dunlap, G. (2014). *A guide to the implementation process: Stages, steps and activities*. The Early Childhood Technical Assistance Center. Retrieved from <http://ectacenter.org/~pdfs/implementprocess/implementprocess-stagesandsteps.pdf>

Improving child and family outcomes is a cornerstone of early childhood education. To improve outcomes, an evidence-based practice or innovation must be selected and the process of implementing that practice or innovation must be effective. Implementation science is the study of the processes needed to bring new practices into widespread use. The stages described in the guide include: (1) exploration; (2) installation; (3) initial implementation; (4) full implementation; and (5) expansion and scale-up. Each stage has specific steps and associated activities. While the stages, steps and activities suggest a linear sequence of events, in actual implementation there is often a more dynamic flow to the work. This guide is based on a review of the literature of implementation science (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005) and the collective experiences of federally funded national centers in conducting state-wide system change initiatives.

Stagl, K. C., & Salas, E. (2008). Best practices in building more effective teams. In R. J. Burke, C. L. Cooper (Eds.), *Building more effective organizations: HR Management and performance in practice* (pp. 160-182). New York: Cambridge University Press.

Organizations rely upon teams to navigate their complex challenges because collectives can draw upon a wider range of capabilities and social networks to be more adaptive, productive, and safer than individuals (Stagl et al., 2006). Despite the inherent advantages of teamwork, teams of experts often fail to evolve into expert teams (Salas et al., 1997). It is thus meaningful to consider the conditions, processes, and practices that can be instituted to cultivate effective team performance and thereby organizational profitability and viability. This chapter leverages current theory and practice to discuss what it takes to build more effective teams. The authors begin by defining core constructs and concepts that, in turn, serve as platform for identifying levers of change for building more effective teams. Specific levers are then discussed in greater detail.

State Implementation and Scaling-up of Evidence-based Practices Center (n.d.). *Module 3: Implementation teams*. Retrieved from FPG Child Development Institute, University of North Carolina, Active Implementation Hub website: <http://implementation.fpg.unc.edu/module-3> See also: <http://implementation.fpg.unc.edu/book/export/html/186> and <http://implementation.fpg.unc.edu/module-1/implementation-teams>

Implementation teams support the implementation, sustainability, and scale-up of usable interventions by integrating the use of implementation stages, drivers, and improvement cycles. This module is designed to assist new and existing implementation teams in actively building capacity and scaling-up programs and innovations. Active Implementation Hub Modules are short (45-60 minute) online modules designed to be self-paced, or blended with in pre-service and in-service training. They include content, activities, and assessments designed to promote the knowledge and practice of implementation science and scaling-up.

Wageman, R., Gardner, H. and Mortensen, M. (2012). The changing ecology of teams: New directions for teams research. *Journal of Organizational Behavior*, 33: 301–315. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/job.1775/full>

The nature of collaboration has been changing at an accelerating pace, particularly in the last decade. Much of the published work in teams research, however, is still focused on the archetypal team that has well-defined membership, purposes, leadership, and standards of effectiveness—all characteristics that are being altered by changes in the larger context of collaboration. Each of these features is worth attention as a dynamic construct in its own right. This article explores what the teams research community has to gain by researching, theorizing, and understanding the many new forms of contemporary collaboration.

Western and Pacific Child Welfare Implementation Center. (2013) *Stakeholder engagement tools for action*. Retrieved from <http://wpicenter.org/inc/resources/isc/stakeholders/Stakeholder-04-21-14.pdf>

This toolkit was developed for use by Los Angeles Department of Children and Family Services (DCFS) in implementing the stakeholder engagement objectives in their strategic plan, however the concepts and materials can be adapted to other child welfare systems and organizations working to develop and implement a comprehensive strategy for engaging and sustaining the input of internal and external stakeholders. This Toolkit was designed to support the consistent integration of stakeholder engagement principles into policies, strategies, and day-to-day operations. It includes an overview of the Los Angeles Department of Children and Family Services' Stakeholder Engagement Framework, as well as recommended planning, management, and implementation strategies.

Develop a Theory of Change

The articles below are relevant to the Exploration activity of developing a theory of change. This step helps to identify a pathway of change from the root cause of the problem to the desired outcome.

Anderson, A. A. (2006). *The Community Builder's approach to theory of change: A practical guide to theory development*. Retrieved from http://www.dochas.ie/Shared/Files/4/TOC_fac_guide.pdf

A theory of change can be a helpful tool for developing solutions to complex social problems. This guide is for planners and evaluators who are going to facilitate a process for creating a theory of change with community-based programs and community-change initiatives. The guide is organized in two sections. Section One answers the question “What is a theory of change?” It provides all the information needed to facilitate a theory of change process with a community group. Section Two is a resource toolbox for the theory of change facilitator.

Connell, J., & Klem, A. (2000). You can get there from here: Using a theory of change approach to plan urban education reform. *Journal of Educational and Psychological Consultation*, 11(1), 93-120.

Using examples from ongoing work with urban school districts, the authors begin from the idea that a theory of change approach “helps make plans for urban education more sensible—more grounded in current research, in demonstrated best practice, and in local experience.” After exploring the roots of the theory of change approach, the authors provide a step-by-step example of how an initial change framework is transformed into a fully articulated theory of

change. The benefits of this planning approach for district-level educational reform are then discussed, and the authors conclude by outlining its implications for educational consultants and TA providers working in diverse education settings.

Connell, J. P., & Kubisch, A. C. (1998). Applying a theory of change approach to the evaluation of comprehensive community initiatives: Progress, prospects, and problems. Retrieved from http://www.seachangecop.org/files/documents/1998_ToC_and_evaluation_of_community_initiatives.pdf

This paper presents a theory of change approach to evaluating comprehensive community initiatives (CCIs). It describes three stages in carrying out this approach: surfacing and articulating a theory of change; measuring a CCI's activities and intended outcomes; and analyzing and interpreting the results of an evaluation, including their implications for adjusting the initiative's theory of change and its allocation of resources. The paper concludes with reflections on the constraints and promise of the approach, including its capacity to reinforce the basic principles of a CCI and to contribute to a knowledge base that can inform future neighborhood-based interventions.

James, C. (2011). Theory of change review: A report commissioned by Comic Relief. Retrieved from http://www.dmeforpeace.org/sites/default/files/James_ToC.pdf

The report aims to draw together Comic Relief staff and partners' experiences in using theory of change, to identify others in development that are using theory of change and analyze their different approaches and experience, to capture learning from everyone to promote debate, and to help inform what agencies using or advocating for the use of theory of change do next.

Oosthuizen, C., & Louw, J. (2013). Developing program theory for purveyor programs. *Implementation Science*, 8(23). Retrieved from <http://www.implementationscience.com/content/pdf/1748-5908-8-23.pdf>

Purveyor organizations provide external support to implementers to develop that capacity and to encourage high fidelity implementation behavior. Literature on the theory underlying this type of program is not plentiful. Research shows that detailed, explicit, and agreed-upon program theory contributes to and encourages high-fidelity implementation behavior. This study was designed to develop and depict the program theory underlying the support services delivered by a South African purveyor. This paper describes the methods, results, and recommendations of the study.

Taplin, D. H., Clark, H., Collins, E., and Colby, D. C. (2013). *Theory of change technical papers: A series of papers to support development of theories of change based on practice in the field*. Retrieved from http://www.theoryofchange.org/wp-content/uploads/toco_library/pdf/ToC-Tech-Papers.pdf

These technical papers from ActKnowledge cover core components of the concept of theory of change and key requirements for its effective implementation. The papers are based on the extensive experience of ActKnowledge in developing and implementing theories of change in a variety of settings across the world.

Walker, J. S., & Matarese, M. (2011). Using a theory of change to drive human resource development for wraparound. *Journal of Child and Family Studies*, 20(6), 791-803. Retrieved from <http://www.nwi.pdx.edu/pdf/JCFS-9-TheoryOfChange-WalkerMatarese.pdf>

Achieving coherence and integration across staff professional development activities is facilitated when training, coaching, and staff evaluation are guided by a clearly articulated program theory or “theory of change” that describes how skillful practice promotes desired outcomes. The article focuses on a theory of change for wraparound, a widely implemented approach to providing community-based care for children with high levels of mental health and related needs. Training, coaching, and staff evaluation efforts within wraparound programs have typically been linked only very loosely to theory. The authors argue that wraparound’s unique history allowed it to evolve with limited theoretical grounding and then describe a theory of change for wraparound, focusing on the major causal routes that are hypothesized to lead to outcomes. Finally, they provide an extended illustration of how the theory can provide the basis for a coherent and integrated approach to developing the skills and capacities of staff members playing key roles in wraparound implementation.

Identify a Proposed Solution

The articles below are relevant to the Exploration activity of identifying a proposed solution to the problem (e.g., when possible, an existing evidence-based or evidence-informed practice) that aligns with the Theory of Change and addresses needs.

Chaffin, M., & Friedrich, B. (2004). Evidence-based treatments in child abuse and neglect. *Children and Youth Services Review*, 26, 1097–1113.

This article summarizes the background and basic concepts of EBP, contrasts EBP with traditional approaches, and examines how EBP fits within child welfare and child maltreatment related service systems. The emerging recommendations of best practice workgroups are reviewed, along with evidence across a range of child welfare target areas, including prevention, treatment, and foster care settings. The article concludes with a review of challenges and possible solutions for implementing EBP in child welfare- and child maltreatment-related service systems.

Horwitz, S., Hurlburt, M. S., Goldhaber-Fiebert, J. D., Palinkas, L. A., Rolls-Reutz, J., Zhang, J., & Landsverk, J. (2013). Exploration and adoption of evidence-based practice by U.S. child welfare agencies. *Children and Youth Services Review*, 39, 147-152.

This article examines the extent to which child welfare agencies adopt new practices and identify barriers to and facilitators of adoption of new practices. Data included telephone interviews with the directors of the 92 public child welfare agencies that constituted the probability sample for the first National Survey of Child and Adolescent Well-being (NSCAW). Almost all agencies (94 percent) had started a new program or practice, but only 24.8 percent were evidence based, and strategies used to explore new programs or practices usually involved local or state contracts. Factors that were associated with program success included internal support for the innovation (27.3 percent) and an existing evidence base (23.5 percent). The researchers concluded that directors of child welfare agencies frequently institute new programs or practices, but they are not often evidence based. Because virtually all agencies provide some continuing education, adding discussions of EBPs may spur interest. Reliance on local and state colleagues to explore new programs and practices suggests that developing

well-informed social networks may be a way to increase the spread of evidence-based practices.

U.S. Department of Health and Human Services, SAMHSA. (2012). *A road map to implementing evidence-based programs*. Retrieved from <https://www.ncoa.org/center-for-healthy-aging/basics-of-evidence-based-programs/offering-evidence-based-programs/implementation/>

This course provides guidance to facilitate selection and implementation of one of the EBPs related to prevention and treatment. It instructs on how to select the program that best matches your organization's needs and carry out the steps necessary to implement the program you choose. A printable version of the course is provided in PDF format.

Wei, W., Saldana, L., Brown, C., & Chamberlain, P. (2010). Factors that influenced county system leaders to implement an evidence-based program: A baseline survey within a randomized controlled trial. *Implementation Science*, 5(72). Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2972235/>

Despite the burgeoning number of well-validated interventions that have been shown in randomized trials to produce superior outcomes compared to usual services, some estimates are that only 10 percent of public systems deliver evidence-based mental health services. This study evaluates the willingness among county leaders of child public service systems to adopt a new evidence-based model, MTFC, as a way to decrease the prevalence of out-of-home placements. Specifically, the study examines how county-level, socio-demographic factors and child public service system leaders' perceptions of their county's organizational climate influence their decision of whether or not to consider adopting MTFC. The study is part of a larger randomized trial comparing two methods of implementation where counties are randomized to one of three time cohorts and two implementation conditions. System leaders' decisions to consider implementing a new evidence-based model were influenced most by their objective need for the program and next by their perception of the county's organizational climate and motivation to change. These findings highlight the importance of understanding the fit between the needs of the systems or agencies and the potential for addressing those needs with the proposed new program.

Assess Organizational and System Capacity

The articles below are relevant to the Exploration activity of assessing organizational and system capacity to support this change.

Aarons, G. A. (2004). Mental health provider attitudes toward adoption of evidence-based practice: The Evidence-Based Practice Attitude Scale (EBPAS). *Mental Health Services Research*, 6(2), 61-74. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1564126/>

Mental health provider attitudes toward organizational change have not been well studied. Dissemination and implementation of evidence-based practices (EBPs) into real-world settings represent organizational change that may be limited or facilitated by provider attitudes toward adoption of new treatments, interventions, and practices. A brief measure of mental health provider attitudes toward adoption of EBPs was developed and attitudes were examined in relation to a set of provider individual difference and organizational characteristics.

Aarons, G. A. (2005). Measuring provider attitudes toward evidence-based practice: Consideration of organizational context and individual differences. *Child and Adolescent Psychiatric Clinics of North America*, 14(2), 255-271. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1564127/pdf/nihms10920.pdf>

Mental health provider attitudes toward adoption of innovation in general, and toward EBP in particular, are important in considering how best to disseminate and implement EBP. This article explores the role of attitudes in acceptance of innovation and proposes a model of organizational and individual factors that may affect or be affected by attitudes toward adoption of EBP. The author describes a recently developed measure of mental health provider attitudes toward adoption of EBP along with a summary of preliminary reliability and validity findings. The author describes attitudes toward adoption of EBP in regard to provider individual differences and the context of mental health services. Finally, the author discusses potential applications of attitude research to adoption of EBP.

Aarons, G. A., Cafri, G., Lugo, L., & Sawitzky, A. (2012). Expanding the domains of attitudes towards evidence-based practice: The Evidence Based Practice Attitude Scale-50. *Administration and policy in mental health and mental health services research*, 39(5), 331-340.

Mental health and social service provider attitudes toward evidence-based practice have been measured through the development and validation of the Evidence-Based Practice Attitude Scale (EBPAS; Aarons, Ment Health Serv Res 6(2):61-74, 2004). Scores on the EBPAS scales are related to provider demographic characteristics, organizational characteristics, and leadership. However, the EBPAS assesses only four domains of attitudes toward EBP. This study expands and further identifies additional domains of attitudes towards evidence-based practice by using a qualitative and quantitative mixed-methods approach to: (1) generate items from multiples sources (researcher, mental health program manager, clinician/therapist); (2) identify potential content domains; and (3) examine the preliminary domains and factor structure through exploratory factor analysis. Participants for item generation included the investigative team, a group of mental health program managers (n = 6), and a group of clinicians/therapists (n = 8). For quantitative analyses, a sample of 422 mental health service providers from 65 outpatient programs in San Diego County completed a survey that included the new items. Eight new EBPAS factors comprised of 35 items were identified. Factor loadings were moderate to large and internal consistency reliabilities were fair to excellent. The authors found that the convergence of these factors with the four previously identified evidence-based practice attitude factors (15 items) was small to moderate suggesting that the newly identified factors represent distinct dimensions of mental health and social service provider attitudes toward adopting EBP. Combining the original 15 items with the 35 new items comprises the EBPAS 50-item version (EBPAS-50) that adds to the understanding of provider attitudes toward adopting EBPs. The authors discuss directions for future research.

Aarons, G. A., Ehrhart, M. G., Farahnak, L. R., & Hurlburt, M. S. (2015). Leadership and organizational change for implementation (LOCI): a randomized mixed method pilot study of a leadership and organization development intervention for evidence-based practice implementation. *Implementation Science : IS*, 10, 11. doi:10.1186/s13012-014-0192-y. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4310135/pdf/13012_2014_Article_192.pdf

Leadership is important in the implementation of innovation in business, health, and allied health care settings. Yet there is a need for empirically validated organizational interventions for coordinated leadership and organizational development strategies to facilitate effective

evidence-based practice (EBP) implementation. This paper describes the initial feasibility, acceptability, and perceived utility of the Leadership and Organizational Change for Implementation (LOCI) intervention. A transdisciplinary team of investigators and community stakeholders worked together to develop and test a leadership and organizational strategy to promote effective leadership for implementing EBPs.

Aarons, G. A., Farahnak, L. R., Ehrhart, M. G., & Sklar, M. (2014). Aligning Leadership Across Systems and Organizations to Develop Strategic Climate to for Evidence-Based Practice Implementation. *Annual Review of Public Health*, 35, 255. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4348088/>

There has been a growing impetus to bridge the gap between basic science discovery, development of evidence-based practices (EBPs) and their availability and delivery in order to improve public health impact of such practices. In seeking to capitalize on factors that support implementation and sustainment of EBPs, it is important to consider that healthcare is delivered within the outer context of public health systems, and the inner context of healthcare organizations and workgroups. Leaders have a key role in determining the nature of system and organizational context. This article addresses the role of leadership across levels in developing strategic climate for EBP implementation within the outer (i.e., system) and inner (i.e., organization, work group) contexts of healthcare. Within the framework of Edgar Schein's "climate embedding mechanisms," the authors describe strategies that leaders at the system, organization, and work group levels can consider and apply to develop a strategic climates that support the implementation and sustainment of EBP in healthcare and allied healthcare settings.

Aarons, G. A., Fettes, D. L., Flores, L. R., & Sommerfeld, D. H. (2009). Evidence-based practice implementation and staff emotional exhaustion in children's services. *Behaviour Research and Therapy*, 47(11), 954-960. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2784174/pdf/nihms132105.pdf>

Understanding the implementation of EBP in community service settings is critical for the successful translation of research to practice. However, there is limited research evidence about the impact of EBP implementation on the mental health and social service workforce. In a previous study, the authors demonstrated reduced staff turnover where an EBP was implemented with fidelity monitoring in the form of supportive ongoing supervision and consultation. Other research has shown that staff burnout, and emotional exhaustion in particular, is associated with poor quality of care and increased staff turnover intentions and turnover. Current research, however, has focused less on the effects that EBP implementation may have on staff emotional exhaustion. The present study investigates the association of EBP implementation and fidelity monitoring with staff emotional exhaustion in a statewide EBP implementation study. The 21 case-management teams in this study were randomized in a 2 (EBP vs. services as usual [SAU]) by 2 (monitoring vs. no monitoring) design. Results supported the hypotheses in that they found lower emotional exhaustion for staff implementing the EBP, but higher emotional exhaustion for staff receiving only fidelity monitoring and providing SAU. Together, these results suggest a potential staff and organizational benefit to EBP implementation. The authors discuss implications of the findings relative to EBPs and to fidelity monitoring.

Aarons, G., Glisson, C., Green, P., Hoagwood, K., Kelleher, K., & Landsverk, J. (2012). The organizational social context of mental health services and clinician attitudes toward evidence-based practice: A United States national study. *Implementation Science*, 7(56). Retrieved from <http://escholarship.org/uc/item/57v8d1sg#page-2>

This paper examines the association of organizational social context, other organizational factors, and clinician demographics with clinician attitudes toward adopting EBP in a United States national sample of mental health clinicians. Discussed are the methods to an in-person and group-administered study. The study examines these associations with a two-level Hierarchical Linear Modeling analysis of responses to the EBP Attitude Scale at the individual clinician level as a function of the Organizational Social Context measure at the organizational level, controlling for other organization and clinician characteristics.

Akin, B., Brook, J., Byers, K., & Lloyd, M. (2016). Worker perspectives from the front line: Implementation of evidence-based interventions in child welfare settings. *Journal of Child and Family Studies*, 25(3), 870-882. doi:10.1007/s10826-015-0283-7

Despite the expansion of evidence-based interventions (EBIs) into child welfare settings, there are gaps in existing knowledge about how to put them into practice effectively. Implementation scientists suggest that multiple factors influence quality EBI delivery and, ultimately, positive outcomes. To understand the applicability of existing implementation evidence for child welfare settings and to document real-world experiences of EBI implementation in this setting, this study interviewed program staff from two child welfare agencies in two separate states. The authors sought their perspectives on what helps and what hinders EBI implementation. Transcripts were coded and analyzed with a modified analytic induction approach. This analytic technique permitted researchers to confirm or disconfirm prior research on key implementation factors. Findings describe the role of six broad factors consistent with extant literature: process, provider, innovation, client, organizational, and structural. Front-line workers conceptualized these factors as distinct but interrelated and viewed them as influencing the success of EBI implementation. Child welfare staff made several important suggestions, including interactive, engaging training; coaching supports that facilitate high-fidelity implementation alongside well-tailored interventions; organizational supports and leadership that create a welcoming environment for the EBI, including adequate resources for the day-to-day use of the EBI and proactive problem solving to manage the inevitable unforeseen implementation barriers; and, efforts to actively educate and gain the buy-in of external stakeholders.

Claiborne, N., Auerbach, C., Zeitlin, W., & Lawrence, C. K. (2015). Organizational climate factors of successful and not successful implementations of workforce innovations in voluntary child welfare agencies. *Human Service Organizations: Management, Leadership & Governance*, 39(1), 69-80. doi:10.1080/23303131.2014.984096

This study advances research on implementing innovations in child welfare organizations, confirming the association between a positive organizational climate and successful change initiative implementation. Administrators and child welfare workers from six agencies were surveyed using independent samples t-and OLS regressions. The organizational climate dimensions found significant were organization, job, and role, indicating the three agencies that fully implemented a change initiative enjoyed a more positive organizational climate. The organization dimension was also significant for administrators, indicating a more positive climate perception than workers. Supervisor dimension was not significant, indicating no association whether or not the change initiative was implemented.

Ehrhart, M. G., Torres, E. M., Wright, L. A., Martinez, S. Y., & Aarons, G. A. (2016). Validating the Implementation Climate Scale (ICS) in child welfare organizations. *Child Abuse & Neglect*, 53, 17-26. doi:10.1016/j.chiabu.2015.10.017

There is increasing emphasis on the use of evidence-based practices (EBPs) in child welfare settings and growing recognition of the importance of the organizational environment, and the organization's climate in particular, for how employees perceive and support EBP implementation. Recently, Ehrhart, Aarons, and Farahnak (2014) reported on the development and validation of a measure of EBP implementation climate, the Implementation Climate Scale (ICS), in a sample of mental health clinicians. The ICS consists of 18 items and measures 6 critical dimensions of implementation climate: focus on EBP, educational support for EBP, recognition for EBP, rewards for EBP, selection for EBP, and selection for openness. The goal of the current study is to extend this work by providing evidence for the factor structure, reliability, and validity of the ICS in a sample of child welfare service providers. Survey data were collected from 215 child welfare providers across 3 states, 12 organizations, and 43 teams. Confirmatory factor analysis demonstrated good fit to the six-factor model, and the alpha reliabilities for the overall measure and its subscales was acceptable. In addition, there was general support for the invariance of the factor structure across the child welfare and mental health sectors. In conclusion, this study provides evidence for the factor structure, reliability, and validity of the ICS measure for use in child welfare service organizations.

Farley, K., Thompson, C., Hanbury, A., & Chambers, D. (2013). Exploring the feasibility of conjoint analysis as a tool for prioritizing innovations for implementation. *Implementation Science*, 8(56). Retrieved from <http://www.readcube.com/articles/10.1186/1748-5908-8-56>

This paper presents an approach for capturing and incorporating professional values into the prioritization of health care innovations being considered for adoption. Researchers used a Conjoint Analysis (CA) in a single United Kingdom Primary Care Trust to measure the priorities of health care professionals working with women with postnatal depression. Rating-based CA data was gathered using a questionnaire and then mapped onto 12 interventions being considered as a means of improving the management of postnatal depression. This study forms the initial phase in developing a targeted implementation strategy. Also discussed is one solution to the challenge of incorporating clinician preferences into the prioritization of innovations in health care systems.

Finn, N. K., Torres, E. M., Ehrhart, M. G., Roesch, S. C., & Aarons, G. A. (2016). Cross-Validation of the Implementation Leadership Scale (ILS) in child welfare service organizations. *Child Maltreatment*, 21(3), 250-255.

The Implementation Leadership Scale (ILS) is a brief, pragmatic, and efficient measure that can be used for research or organizational development to assess leader behaviors and actions that actively support effective implementation of evidence-based practices (EBPs). The ILS was originally validated with mental health clinicians. This study validates the ILS factor structure with providers in community-based organizations (CBOs) providing child welfare services. Participants were 214 service providers working in 12 CBOs that provide child welfare services. All participants completed the ILS, reporting on their immediate supervisor. Confirmatory factor analyses were conducted to examine the factor structure of the ILS. Internal consistency reliability and measurement invariance were also examined. Confirmatory factor analyses showed acceptable fit to the hypothesized first- and second-order factor structure. Internal consistency reliability was strong, and there was partial measurement invariance for the first-order factor structure when comparing child welfare and mental health samples. The results

support the use of the ILS to assess leadership for implementation of EBPs in child welfare organizations.

Glisson, C. (2007). Assessing and changing organizational culture and climate for effective services. *Research on Social Work Practice*, 17(6), 736-747.

From the 2007 Aaron Rosen Lecture presented at the annual meeting of the Society for Social Work and Research, the paper begins by describing the gap between what is known about efficacious treatments and other EBPs on the one hand and the services that are provided in actual community-based practice settings on the other to address this gap. The paper calls for the development of a science of implementation effectiveness and describes the author's research on assessing and changing the social context of mental health and social service organizations as contributing to that effort. The findings of two national studies and one controlled clinical trial are summarized to: (a) link organizational social context to service outcomes, (b) describe a new profiling system for assessing organizational social context, and (c) demonstrate how social context can be changed with planned organizational intervention strategies.

Glisson, C., & Green, P. (2011). Organizational climate, services, and outcomes in child welfare systems. *Child Abuse & Neglect*, 35(8), 582-591.

This study examines the association of organizational climate, casework services, and youth outcomes in child welfare systems. Building on preliminary findings linking organizational climate to youth outcomes over a 3-year, follow-up period, the current study extends the follow-up period to 7 years and tests main, moderating, and mediating effects of organizational climate and casework services on outcomes. The study applies Hierarchical Linear Modeling analyses to all 5 waves of the NSCAW with a U.S. nationwide sample of 1,678 maltreated youth aged 4–16 years and 1,696 caseworkers from 88 child welfare systems. Maltreated youth served by child welfare systems with more engaged organizational climates have significantly better outcomes, but a better understanding is needed of the mechanisms that link organizational climate to outcomes. In addition, there is a need for evidence-based organizational interventions that can improve the organizational climates and effectiveness of child welfare systems.

Helfrich, C., Blevins, D., Smith, J., Kelly, P., Hogan, T., Hagedorn, H., & Sales, A. (2011). Predicting implementation from organizational readiness for change: A study protocol. *Implementation Science*, 6(76). Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3157428/pdf/1748-5908-6-76.pdf>

There is widespread interest in measuring organizational readiness to implement EBP in clinical care. However, there are a number of challenges to validating organizational measures, including inferential bias arising from the halo effect and method bias—two threats to validity that, while well-documented by organizational scholars, are often ignored in health services research. The authors describe a protocol to comprehensively assess the psychometric properties of a previously developed survey, the Organizational Readiness to Change Assessment. They propose a comprehensive protocol for validating a survey instrument for assessing organizational readiness to change that specifically addresses key threats of bias related to halo effect, method bias and questions of construct validity that often go unexplored in research using measures of organizational constructs.

Hemmelgarn, A. L., Glisson, C., & James, L. R. (2006). Organizational culture and climate: Implications for services and intervention research. *Clinical Psychology: Science and Practice*, 13(1), 73-89. Retrieved from http://dev-wpicenter.airprojects.org/inc/resources/isc/environment/Org_Culture_Climate.pdf

Efforts to disseminate and implement EBP in children's mental health service and other human service systems have had limited success. There is evidence that this limited success is in part a function of the characteristics of the human service organizations that provide the services. Human service organizations create a social context for the services they provide, and this context affects the quality and outcomes of the services in a variety of ways. A half century of research in a variety of organizations provides evidence that an organization's social context affects whether new core technologies (of which EBP are an example) are adopted, how they are implemented, and whether they are sustained and effective. This article defines two dimensions of an organization's social context, climate and culture, that have been shown to be particularly important to human service quality and outcomes and reviews current organizational research to identify the potential mechanisms through which climate and culture influence the adoption and implementation of EBP in mental health. The authors also suggest a variety of organizational research methodologies for integrating organizational culture and climate into services and interventions research.

Hunter, D., & Perkins, N. (2012). Partnership working in public health: the implications for governance of a systems approach. *Journal of Health Services Research & Policy*, 17(2), 45-52. Retrieved from http://www.netscc.ac.uk/hsdr/files/project/SDO_FR_08-1716-204_V01.pdf

Most of the research on partnerships has centered on health and social care, and while many of the findings remain relevant, public health partnerships concerned with “wicked issues” give rise to a different and more complex set of issues that merit exploration. The study aimed to identify those factors promoting effective partnership working for health improvement, to assess the extent to which partnership governance and incentive arrangements were commensurate with the complexities of the problem, and to explore how far local partnerships contributed to better outcomes for individuals and populations.

Leak, R. and Fritzler, P. *Comprehensive Organizational Health Assessment*. Butler Institute for Families (May, 2012). PowerPoint. (<http://muskie.usm.maine.edu/helpkids/telefiles/051712tele/NRCOI%20COHA%20webinar.pdf>)

Research points to the link between organizational culture and climate and the ability of organizations to implement evidence based practices and to improve outcomes. This PowerPoint presentation discusses why it is important to assess and improve organizational culture and climate, and introduces a tool for child welfare agencies can use to conduct these assessments – the Comprehensive Organizational Health Assessment (COHA).

Lehman, W. E., Greener, J. M., & Simpson, D. D. (2002). Assessing organizational readiness for change. *Journal of Substance Abuse Treatment*, 22(4), 197-209.

A comprehensive assessment of organizational functioning and readiness for change (ORC) was developed based on a conceptual model and previous findings on transferring research to practice. It focuses on motivation and personality attributes of program leaders and staff, institutional resources, and organizational climate as an important first step in understanding organizational factors related to implementing new technologies into a program. This article

describes the rationale and structure of the ORC and shows it has acceptable psychometric properties. Results of surveys of over 500 treatment personnel from more than 100 treatment units support its construct validity on the basis of agreement between management and staff on several ORC dimensions, relationships between staff organizational climate dimensions and patient engagement in treatment, and associations of agency resources and climate with organizational stability. Overall, these results indicate the ORC can contribute to the study of organizational change and technology transfer by identifying functional barriers involved.

Palinkas, L., Holloway, I., Rice, E., Fuentes, D., Wu, Q., & Chamberlain, P. (2011). Social networks and implementation of evidence-based practices in public youth-serving systems: a mixed-methods study. *Implementation Science*, 6(113). Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3216853/pdf/1748-5908-6-113.pdf>

The study examines the structure and operation of social networks of information and advice and their role in making decisions as to whether to adopt new EBPs among agency directors and other program professionals in 12 California counties participating in a large randomized controlled trial. Interviews were conducted with 38 directors, assistant directors, and program managers of county probation, mental health, and child welfare departments. Grounded-theory analytic methods were used to identify themes related to EBP adoption and network influences. The results showed that systems leaders develop and maintain networks of information and advice based on roles, responsibility, geography, and friendship ties. Networks expose leaders to information about EBPs and opportunities to adopt EBPs; they also influence decisions to adopt EBPs. Individuals in counties at the same stage of implementation accounted for 83 percent of all network ties. Networks in counties that decided not to implement a specific EBP had no extra-county ties. Implementation of EBPs at the 2-year follow up was associated with the size of county, urban versus rural counties, and in-degree centrality. Collaboration was viewed as critical to implementing EBPs, especially in small, rural counties where agencies have limited resources on their own. Successful implementation of EBP requires consideration and use of existing social networks of high-status systems leaders that often cut across service organizations and their geographic jurisdictions.

Prochaska, J. M., Prochaska, J. O., & Levesque, D. A. (2001). A transtheoretical approach to changing organizations. *Administration and Policy in Mental Health and Mental Health Services Research*, 28(4), 247-261.

Several authors have reflected on the underdeveloped state of organizational change theory, research, and practice. An integrative framework is needed to synthesize major approaches to change. The Transtheoretical Model has the potential to do for organizational change what it has done for individual behavior change. Conceptually the stages-of-change dimension can be used to integrate principles and processes of change from divergent models of change. Practically, the stages-of-change dimension can be applied by leaders to reduce resistance, increase participation, reduce dropout, and increase change progress among employees.

Prochaska, J. O., & DiClemente, C. C. (1982). Transtheoretical therapy: Toward a more integrative model of change. *Psychotherapy: Theory, Research and Practice*, 19, 276-287.

This article offers transtheoretical therapy as one alternative when seeking a synthesis for the increasing proliferation of therapeutic systems. From a comparative analysis of 18 leading systems, 5 basic processes of change were identified by the present first author (1979). They are consciousness raising (feedback, education), conditional stimuli (counterconditioning, stimulus control), catharsis (corrective emotional experiences, dramatic relief), choosing (self-

liberation, social liberation), and contingency control (reevaluation, contingency management). Each process can be applied at the level of either the individual's experience or environment. The present authors have identified the following stages of change: contemplation, termination, action, and maintenance. The verbal processes of change—consciousness raising, catharsis, and choosing—are most important during the first two stages, while behavior therapies (conditional stimuli and contingency control) are needed once a commitment is made. It is suggested that, in the transtheoretical model, cognitive restructuring is seen as the result of the individual effectively applying the appropriate processes of change during each of the appropriate stages of change.

Scaccia, J. P., Cook, B. S., Lamont, A., Wandersman, A., Castellow, J., Katz, J., & Beidas, R. S. (2015). A practical implementation science heuristic for organizational readiness: R=MC2. *Journal of Community Psychology*, 43(4), 484-501. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4676714/>

There are many challenges when an innovation (i.e., a program, process, or policy that is new to an organization) is actively introduced into an organization. One critical component for successful implementation is the organization's readiness for the innovation. In this article, we propose a practical implementation science heuristic, abbreviated as R = MC2. We propose that organizational readiness involves (a) the motivation to implement an innovation, (b) the general capacities of an organization, and (c) the innovation-specific capacities needed for a particular innovation. Each of these components can be assessed independently and be used formatively. The heuristic can be used by organizations to assess readiness to implement and by training and technical assistance providers to help build organizational readiness. We present an illustration of the heuristic by showing how behavioral health organizations differ in readiness to implement a peer specialist initiative. Implications for research and practice of organizational readiness are discussed.

Simpson, D.D. (2009). Organizational readiness for stage-based dynamics of innovation implementation. *Research on Social Work Practice*, 19(5), 541-551.

Implementing innovations in social and health-related service programs is a dynamic stage-based process. This article discusses training, adoption, implementation, and practice as sequential elements of a conceptual framework for effective preparation and implementation of evidence-based innovations. However, systems need to be prepared for change in terms of organizational readiness and functioning as well as their service delivery infrastructure. The author emphasizes practical methods for advancing innovation implementation through collection and applications of better information about staff perceptions of need, organizational climate and resources, leadership commitments to change, and anticipated barriers. The author further presents measurement tools for these constructs, along with evidence of their applications in field studies.

Simpson, D.D. (2002). A conceptual framework for transferring research to practice. *Journal of Substance Abuse Treatment*, 22(4), 171-182.

Systematic evaluations of efforts to transfer research-based interventions and procedures into general practice at community drug treatment programs have been limited. However, practical experiences as well as results from studies of technology transfer and organizational behavior in related fields provide a basis for proposing a heuristic model of key factors that influence this process. The successful completion of four stages of activity typically involved in program change (exposure, adoption, implementation, and practice of new interventions) appears to be influenced by several organizational considerations (e.g., institutional readiness for change,

resources, and climate) as well as staff attributes. This article introduces assessment instruments for measuring organizational functioning (based on ratings aggregated for staff and patients in a program), along with preliminary evidence for their validity. The author argues that a better conceptual understanding of the process of program change and common barriers that may be encountered is needed for effectively transferring research to practice.

Simpson, D.D., & Dansereau, D. F. (2007). Assessing organizational functioning as a step toward innovation. *Science & Practice Perspectives*, 3(2), 20-28. Retrieved from <http://archives.drugabuse.gov/pdf/Perspectives/vol3no2/Assessing.pdf>

Innovate and adapt are watchwords for substance abuse treatment programs in today's environment of legislative mandates, effective new interventions, and competition. Organizations are forced to evolve—ready or not—and those that are ready have superior chances for success and survival. The Texas Christian University Organizational Readiness for Change (ORC) survey is a free instrument, with supporting materials, that substance abuse treatment programs use to assess organizational traits that can facilitate or hinder efforts at transition. This article presents organizational change as a three-stage process of adopting, implementing, and routinizing new procedures; describes the use of the ORC; and outlines a step-by-step procedure for clearing away potential obstacles before setting forth on the road to improved practices and outcomes.

Simpson, D.D., Lehman, W.E.K., and Flynn, P.M. Overview of Evidence: Organizational readiness for change. (2011). Institute of Behavioral Research, Texas Christian University.

Findings from clinical and natural evaluations for the effectiveness of treatment interventions—especially cognitive and behavioral strategies—have led to renewed calls for transferring these “evidence-based” techniques into practice. This is a complicated task, however, which is itself in need of systematic study. Organizational climate and readiness for change are especially important, and the Texas Christian University Program Change Model provides a conceptual framework to summarize these and other sources of influence on this stage-based process. New analytic strategies and assessment instruments for studying organizational functioning have been developed at the Institute of Behavioral Research for this work.

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE). (2014). *The importance of contextual fit when implementing evidence-based interventions*. ASPE Issue Brief. Retrieved from http://aspe.hhs.gov/hsp/14/IWW/ib_Readiness.pdf

Contextual fit is a construct that has gained increased attention from those who implement evidence-based interventions across education and human services domains. Contextual fit is based on the premise that the match between an intervention and local context affects both the quality of the intervention implemented and whether the intervention actually produces the outcomes desired for the children and families receiving the intervention. This brief argues that an operational definition, formal measures, and systematic research that guides both policy and practice are needed before assessing the fit of evidence-based interventions for a particular context can become common practice. It encourages current implementers to incorporate efforts to assess and adapt contextual fit into the interventions they intend to adopt. It also encourages the formal development of measurement technology and experimental studies that can further define the role of contextual fit in implementation science.

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE). (2014). *Willing, able, ready: Basics and policy implications of readiness as a key component for implementation of evidence-based interventions*. ASPE Issue Brief. Retrieved from http://aspe.hhs.gov/hsp/14/IWW/ib_Readiness.pdf

An emerging body of scholarly work identifies three components of readiness that organizations should address when implementing new EBIs: (a) *motivation* of people within the organization to adopt new EBIs; (b) *general organizational capacities*; and (c) *intervention-specific capacities*. Although a scientific body of knowledge about readiness already exists, there is a need to develop more concrete recommendations for federal agencies and practitioners to use when implementing EBIs. This brief establishes the basics of readiness using the $R=MC^2$ (Readiness = Motivation \times General Capacity and Intervention-Specific Capacity) heuristic, examines some of the policy implications of readiness, and identifies directions for future research.

Walker, S.C., Bumbarger, B.K., Phillippi, S.W. (2015). Achieving successful evidence-based practice implementation in juvenile justice: The importance of diagnostic and evaluative capacity. *Evaluation and program planning*, 52, 189-197. Retrieved from http://128.118.26.88/sites/default/files/Articles/Achieving-successful-evidence-based-practice-implementation-in-juvenile-justice-The-importance-of-diagnostic-and-evaluative-capacity_2015_Evaluation-a.pdf

Evidence-based programs (EBPs) are an increasingly visible aspect of the treatment landscape in juvenile justice. Research demonstrates that such programs yield positive returns on investment and are replacing more expensive, less effective options. However, programs are unlikely to produce expected benefits when they are not well-matched to community needs, not sustained and do not reach sufficient reach and scale. We argue that achieving these benchmarks for successful implementation will require states and county governments to invest in data-driven decision infrastructure in order to respond in a rigorous and flexible way to shifting political and funding climates. We conceptualize this infrastructure as diagnostic capacity and evaluative capacity: Diagnostic capacity is defined as the process of selecting appropriate programming and evaluative capacity is defined as the ability to monitor and evaluate progress. Policy analyses of Washington State, Pennsylvania, and Louisiana's program implementation successes are used to illustrate the benefits of diagnostic and evaluate capacity as a critical element of EBP implementation.

Weiner, B. J. (2009). A theory of organizational readiness for change. *Implementation Science*, 4(1), 67. Retrieved from <http://www.biomedcentral.com/content/pdf/1748-5908-4-67.pdf>

This article describes a theory that treats organizational readiness as a shared psychological state in which organizational members feel committed to implementing an organizational change and confident in their collective abilities to do so. This way of thinking about organizational readiness is best suited for examining organizational changes where collective behavior change is necessary in order to implement the change effectively and, in some instances, for the change to produce anticipated benefits. Testing the theory would require further measurement development and careful sampling decisions. The theory offers a means to reconcile the structural and psychological views of organizational readiness found in the literature. Further, the theory suggests the possibility that the strategies that change management experts recommend may have the same end result. That is, there is no "one best way" to increase organizational readiness for change.

Yoo, J., Brooks, D., & Patti, R. (2007). Organizational constructs as predictors of effectiveness in child welfare interventions. *Child Welfare*, 86(1), 53-78.

Organizational context, including line worker characteristics and service settings, may help explain the equivocal findings of intervention studies in the field of child welfare. Yet organizational context has been largely ignored in studies of child welfare interventions. The purpose of this article is to expound upon the likely role of the organizational context in explaining service effectiveness in child welfare. The authors review and synthesize several bodies of literature within child welfare and human service organization and administration. A conceptual framework that can be used to guide future child welfare research is then proposed.

2. Installation

Operationalize the Innovation

The documents in this section address the development of both organizational- and system-level support needed for successful implementation of an intervention.

Recruitment and Selection of Staff

Aarons, G. A. (2004). Mental health provider attitudes toward adoption of evidence-based practice: The Evidence-Based Practice Attitude Scale (EBPAS). *Mental Health Services Research*, 6(2), 61-74. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1564126/>

See abstract in Section 2: Exploration, Assess Organizational and System Capacity.

Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology*, 41(3-4), 327-350.

See abstract in Section 1: Implementation Frameworks.

Faller, K. C., Masternak, M., Grinnell-Davis, C., Grabarek, M., Sieffert, J., & Bernatovicz, F. (2009). Realistic job previews in child welfare: State of innovation and practice. *Child Welfare*, 88(5), 23.

The authors review the uses of realistic job previews (RJPs) for recruitment, selection, and retention of child welfare employees. They describe the history of development of RJPs in child welfare, summarize the contents of 10 RJPs, and report on interviews with human resources personnel and other key informants about how RJPs were developed and are used in child welfare recruitment and selection. Outcome data on the effectiveness of RJPs were available from one state, Michigan, and are reported.

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network. (FMHI Publication No. 231).

See abstract in Section 1: Implementation Frameworks.

Wanberg, C. R., & Banas, J. T. (2000). Predictors and outcomes of openness to changes in a reorganizing workplace. *Journal of Applied Psychology*, 85(1), 132. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.500.9342&rep=rep1&type=pdf>

It is becoming increasingly important for employees to be able to cope with change in the workplace. This longitudinal study examined a set of individual differences and context-specific predictors of employee openness (i.e., change acceptance and positive view of changes) toward a set of workplace changes. Personal resilience (a composite of self-esteem, optimism, and perceived control) was related to higher levels of change acceptance. Three context-specific variables (information received about the changes, self-efficacy for coping with the changes, and participation in the change decision process) were predictive of higher levels of employee openness to the changes. Lower levels of change acceptance were associated with less job satisfaction, more work irritation, and stronger intentions to quit.

Zlotnik, J. L., Strand, V. C., & Anderson, G. R. (2009). Introduction: Achieving positive outcomes for children and families: Recruiting and retaining a competent child welfare workforce. *Child Welfare, 88*(5), 7.

The authors state that the child welfare workforce is the backbone of child welfare service delivery. However, there are longstanding concerns about the recruitment and retention of child welfare staff, particularly in public child welfare agencies. Worker turnover has significant impacts on interventions and relationships with children and families, costs, and workloads. In this article, the authors introduce a special journal issue on strengthening the child welfare workforce. The issue presents a number of strategies to address recruitment, selection, and retention of a competent and caring child welfare workforce. Several of the articles focus on the experiences of federally funded projects, while others introduce and describe a range of strategies employed in other projects and states. An overarching theme emerging from all of the articles is the importance of organizational culture and climate to recruitment and retention. The literature indicates that no single intervention will affect recruitment and retention and that a multipronged approach addressing recruitment, selection, training, professional development, and support is necessary.

Training Staff

Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology, 41*(3-4), 327-350.

See abstract in Section I: Implementation Frameworks.

Kerns, S. U., Pullmann, M. D., Negrete, A., Uomoto, J. A., Berliner, L., Shogren, D., & Putnam, B. (2016). Development and implementation of a child welfare workforce strategy to build a trauma-informed system of support for foster care. *Child Maltreatment, 21*(2), 135-146. doi:10.1177/1077559516633307

Effective strategies that increase the extent to which child welfare professionals engage in trauma-informed case planning are needed. This study evaluated two approaches to increase trauma-symptom identification and use of screening results to inform case planning. The first study evaluated the impact of training on trauma-informed screening tools for 44 child welfare professionals who screen all children upon placement into foster care. The second study evaluated a two-stage approach to training child welfare workers on case planning for children's mental health. Participants included 71 newly hired child welfare professionals, who received a 3-hr training, and 55 child welfare professionals, who participated in a full-day training. Results from the first study indicate that training effectively increased knowledge and skills in administering screening tools, though there was variability in comfort with screening. In the second study, participants self-reported significant gains in their competency in identifying

mental health needs (including traumatic stress) and linking children with evidence-based services. These findings provide preliminary evidence for the viability of this approach to increase the extent to which child welfare professionals are trauma informed, aware of symptoms, and able to link children and youth with effective services designed to meet their specific needs.

Wandersman, A., Duffy, J., Flaspohler, P., Noonan, R., Lubell, K., Stillman, L., & Saul, J. (2008). Bridging the gap between prevention research and practice: The interactive systems framework for dissemination and implementation. *American Journal of Community Psychology*, 41(3-4), 171-181.

See abstract in Section 1: Implementation Frameworks.

Coaching

Akin, B. A. (2016). Practitioner views on the core functions of coaching in the implementation of an evidence-based intervention in child welfare. *Children and Youth Services Review*, 68, 159-168.

Despite coaching being identified as an important implementation strategy, scant information is available on the core functions of coaching, and few empirical studies are specific to coaching in the child welfare setting. This study explored practitioners' perceptions of the core functions of coaching by using semistructured focus groups with coaches (n=13) and interviews with coaches (n=11) who were delivering the Parent Management Training, Oregon (PMTO) model to families of children in foster care. Four themes were identified as the core functions of coaching: (1) supporting practitioners via strengths-oriented feedback, (2) promoting skill-building via collaboration and active learning strategies, (3) problem solving for appropriate use and adaptation of the EBI with real-world cases, and (4) providing an accountability mechanism for high-fidelity implementation. Collectively, this study's findings build knowledge on the core functions of coaching, which may be a critical strategy for integrating evidence-based interventions (EBI) into usual practice in child welfare settings. The findings suggest that this implementation strategy is more than a simple extension of training. Coaching was viewed as vital for supporting practitioners full adoption of the intervention in their day-to-day practice, fitting an EBI to the complex needs of child welfare families, and ensuring high-quality implementation. Also identified were some unique aspects of PMTO coaching, such as a strict strengths-orientation and observation-based feedback via mandatory video recordings of client sessions. Further research is needed to explore different coaching techniques, protocols, and formats to examine whether certain features promote a more effective path to implementation and, ultimately, client outcomes.

Beasley, K.L. (2012). Central California Training Academy Coaching Implementation Literature Review. Retrieved from <https://www.fresnostate.edu/chhs/ccta/documents/cctacoachinglitreview.pdf>

The purpose of this literature review is to define and clarify the terms associated with the coaching and mentoring processes, to provide a detailed description of the purpose of coaching and the coaching process, and to discuss key elements of coaching. Key elements include investing time, understanding roles and challenges, observing people as they work, providing feedback and support, and empowering staff members. This document will also outline the critical components necessary to support teaming and describe the limitations of and barriers to CCTA/Coaching Implementation effective coaching and teaming, including dysfunctional teams and problematic mindsets. Finally, it will identify the critical components necessary to support

the transfer of learning and the practical applications of implementation science as it relates to the Child Welfare.

Fixsen, D. L., Naoom, S. F., Blase, K. A., Friedman, R. M., & Wallace, F. (2005). *Implementation research: A synthesis of the literature*. Tampa, FL: University of South Florida, Louis de la Parte Florida Mental Health Institute, National Implementation Research Network. (FMHI Publication No. 231).

See abstract in Section 1: Implementation Frameworks.

Horner, Rob. *The importance of coaching in implementation of evidence-based practices*. University of Oregon. Retrieved from http://www.pbis.org/common/cms/files/pbisresources/ImportanceOfCoaching_ImplementationOfEvidenceBased_030509.ppt

This presentation defines coaching, highlights the benefits of implementing a coaching system, and offers guiding principles for effective coaching.

National Resource Center for Organizational Improvement. *Child welfare matters*. Summer 2012. Retrieved from <http://muskie.usm.maine.edu/helpkids/rcpdfs/cwmatters12.pdf>

This issue provides information on a growing trend in child welfare – using managers, supervisors, peers, trainers, and others to coach staff. It offers a brief definition of coaching and the coaching process, and a discussion of the seven critical components of coaching programs, all illustrated with real world examples of programs already underway. It also highlights the experience of one participant in the Leadership Academy for Middle Managers coaching program, and provides some resources.

Develop or Adapt Implementation Supports

The documents in this section address the development of both organizational- and system-level support needed for successful implementation of an intervention.

Aarons, G. A., & Palinkas, L. A. (2007). Implementation of evidence-based practice in child welfare: Service provider perspectives. *Administration and Policy in Mental Health and Mental Health Services Research*, 34(4), 411-419. Retrieved from http://www.seattleimplementation.org/wp-content/uploads/2011/10/A_Aarons_Palinkas_self_structured_acceptability_2007.pdf

Implementation of EBP in child welfare is a complex process that is often fraught with unanticipated events, conflicts, and resolutions. To some extent, the nature of the process, problems, and solutions may be dependent on the perspectives and experiences of a given stakeholder group. In order to better understand the implementation process in the child-welfare system, the authors interviewed comprehensive home-based services case managers who were actively engaged in implementing an EBP to reduce child neglect in a state youth services system. Six primary factors were identified as critical determinants of EBP implementation: (1) acceptability of the EBP to the caseworker and to the family, (2) suitability of the EBP to the needs of the family, (3) caseworker motivations for using the EBP, (4) experiences with being trained in the EBP, (5) extent of organizational support for EBP implementation, and (6) impact of EBP on process and outcome of services. These factors reflect two broader themes of attitudes toward or assessments of the EBP itself and experiences with learning and delivering

the EBP. Eventual implementation is viewed as the consequence of perseverance, experience, and flexibility.

Aarons, G., Sommerfeld, D. H., & Walrath-Greene, C. (2009). Evidence-based practice implementation: The impact of public versus private sector organization type on organizational support, provider attitudes, and adoption of evidence-based practice. *Implementation Science*, 4(83). Retrieved from <http://www.implementationscience.com/content/pdf/1748-5908-4-83.pdf>

The goal of this study is to extend research on EBP implementation by examining the impact of organizational type (public versus private) and organizational support for EBP on provider attitudes toward EBP and EBP use. Both organization theory and theory of innovation uptake and individual adoption of EBP guide the approach and analyses in this study. Private agencies provided greater support for EBP implementation, and staff working for private agencies reported more positive attitudes toward adopting EBP. Organizational support for EBP partially mediated the association of organization type on provider attitudes toward EBP. Organizational support was significantly positively associated with attitudes toward EBP and EBP use in practice. This study offers further support for the importance of organizational context as an influence on organizational support for EBP and provider attitudes toward adopting EBP. The study demonstrates the role organizational support in provider use of EBP in practice. This study also suggests that organizational support for innovation is a malleable factor in supporting use of EBP. Greater attention should be paid to organizational influences that can facilitate the dissemination and implementation of EBPs in community settings.

Aarons, G., Green, E., Palinkas, L., Self-Brown, S., Whitaker, D., Lutzker, J., Silovsky, J., Hecht, D., & Chaffin, M. (2012). Dynamic adaptation process to implement an evidence-based child maltreatment intervention. *Implementation Science*, 7(32). Retrieved from <http://rd.springer.com/article/10.1186/1748-5908-7-32/fulltext.html>

Adaptations are often made to EBPs by systems, organizations, and/or service providers in the implementation process. The degree to which core elements of an EBP can be maintained while allowing for local adaptation is unclear. In addition, adaptations may also be needed at the system, policy, or organizational levels to facilitate EBP implementation and sustainment. This paper describes a study of the feasibility and acceptability of an implementation approach, the Dynamic Adaptation Process (DAP), designed to allow for EBP adaptation and system and organizational adaptations in a planned and considered, rather than ad hoc, way. The DAP involves identifying core elements and adaptable characteristics of an EBP, then supporting implementation with specific training on allowable adaptations to the model, fidelity monitoring and support, and identifying the need for and solutions to system and organizational adaptations. In addition, this study addresses a secondary concern, that of improving EBP model fidelity assessment and feedback in real-world settings.

Dusenbury, L., Brannigan, R., Falco, M., & Hansen, W. B. (2003). A review of research on fidelity of implementation: Implications for drug abuse prevention in school settings. *Health Education Research*, 18(2), 237-256.

To help inform drug abuse prevention research in school settings about the issues surrounding implementation, the authors conducted a review of the fidelity of implementation research literature spanning a 25-year period. Fidelity has been measured in five ways: (1) adherence, (2) dose, (3) quality of program delivery, (4) participant responsiveness, and (5) program differentiation. Definitions and measures of fidelity were found not to be consistent across studies, and new definitions are proposed. While there has been limited research on fidelity of

implementation in the social sciences, research in drug abuse prevention provides evidence that poor implementation is likely to result in a loss of program effectiveness. Studies indicate that most teachers do not cover everything in a curriculum; they are likely to teach less over time; and training alone is not sufficient to ensure fidelity of implementation. Key elements of high fidelity include teacher training and program, teacher, and organizational characteristics. The review concludes with a discussion of the tension between fidelity and reinvention/adaptation, and ways of resolving this tension.

Forman, S. G., Olin, S., Hoagwood, K., Crowe, M., & Saka, N. (2009). Evidence-based intervention in schools: Developers' views of implementation barriers and facilitators. *School Mental Health*, 1(1), 26-36. Retrieved from <http://www.seattleimplementation.org/wp-content/uploads/2011/12/Forman-et-al.-2009-School-Mental-Health1.pdf>

This study examined the factors that are important to successful implementation and sustainability of evidence-based interventions in school settings. Developers of interventions that have been designated as “evidence-based” in multiple vetted lists and registries available to schools participated in a structured interview. The interview focused on potential facilitators and barriers to implementation and sustainability of their intervention. The interviews were transcribed and coded to identify similarities and differences among the responses, as well as themes that cut across participants. Results indicated that those concerned with effective implementation and sustainability need to address several areas: (a) development of principal and other administrator support; (b) development of teacher support; (c) development of financial resources to sustain practice; (d) provision of high-quality training and consultation to ensure fidelity; (e) alignment of the intervention with school philosophy, goals, policies, and programs; (f) ensuring that program outcomes and impact are visible to key stakeholders; and (g) development of methods for addressing turnover in school staff and administrators.

Kmieliauskaite, R., & Valanciene, L. (2013). Peculiarities of performance measurement in municipalities. *Social Research*, 1(30), 44-51.

The purpose of this paper is to characterize the performance measurement system by identifying its cornerstone peculiarities in municipalities. Analysis revealed that performance measurement is an inevitable tool for municipalities to improve public services. However, due to its complexity, the biggest attention should be paid to the organizational structure, actors who perform their roles, different objectives, their versatility, and the environment. In addition, this system is inconceivable without engaged leadership, learning, and culture. Interpretations of these results highlighted the peculiarities to be considered when creating, developing, and implementing performance measurement in municipalities. The primary research question answered in this paper is: How is the performance measurement system diverse in municipalities?

Lee, S.J., Altschul, I., & Mowbray, C.T. (2008). Using planned adaptation to implement evidence-based programs with new populations. *American Journal of Community Psychology*, 41(3/4), 290-303. Retrieved from <http://deepblue.lib.umich.edu/bitstream/handle/2027.42/106177/2008-Lee-Altschul-Mowbray-AJCP.pdf?sequence=1>

Wandersman's Interactive Systems Framework for Dissemination and Implementation elaborates on the functions and structures that move EBPs from research to practice. Inherent in that process is the tension between implementing programs with fidelity and the need to tailor programs to fit the target population. The authors propose Planned Adaptation as one approach

to resolve this tension, with the goal of guiding practitioners in adapting EBPs so that they maintain core components of program theory while taking into account the needs of particular populations. Planned Adaptation is a form of capacity building within the Prevention Support System that provides a framework to guide practitioners in adapting programs while encouraging researchers to provide information relevant to adaptation as a critical aspect of dissemination research, with the goal of promoting wider dissemination and better implementation of EBPs.

Lorentson, J., Oh, Y.J., and LaBanca, F. (2015). STEM21 digital academy fidelity of implementation: Valuation and assessment of program components and implementation. In C. Meyers & W. C. Brant (Eds.) *Implementation Fidelity in Education Research: Designer and Evaluator Considerations* (pp. 184-185). New York, NY: Routledge Press, Taylor & Francis Group.

This article initially provides an overview of the authors' conceptualization of fidelity of implementation in the context of this development evaluation. Then they address related evaluative challenges, including initial ones such as defining roles and developing partnerships, before turning their attention to subsequent programmatic concerns, including shifting Education Connection's organizational mindset to increase focus on fidelity measurement while simultaneously recognizing that core aspects of the program were not completely finalized (meaning that implementation fidelity measurement was not completely established). Thus, program developers and evaluators, both internal and external, had to determine what to measure, figure out how to measure, and create fidelity cookbooks to aid developers, evaluators, practitioners, and others in understanding this relatively new world of fidelity implementation.

Plath, D. (2013). Organizational processes supporting evidence-based practice. *Administration in Social Work*, 37(2), 171–188.

This paper reports on case study research examining organizational processes that support and facilitate an EBP approach in a large, nongovernmental Australian human service organization. A case study is used to illustrate the implementation of EBP as an organizational change process. EBP implementation is presented as a systemic process reliant on executive leadership and organizational culture. Qualitative findings suggest that effective EBP implementation requires engagement of staff across the organization. Strategies for staff engagement are identified, including the development of communities of practice. A model for organizational analysis is presented to assist preparation for EBP implementation.

Primavera, J. (2004). You can't get there from here: Identifying process routes to replication. *American Journal of Community Psychology*, 33(3/4), 181-192.

All too often the reports of community research and action are presented in an historical and decontextualized fashion focused more on the content of what was done than on the process of how the work was done and why. The story of the university-community partnership and the family literacy intervention that was developed illustrates the importance of several key process variables in project development and implementation. More specifically, the role of the social-ecological context, prehistory, personality, self-correction, and unexpected serendipitous events are discussed. The authors state that to conduct work in the most efficient and effective manner possible, make it available for replication, and develop standards of "best practice" that are meaningful, then communication regarding process must shift from the anecdotal to a position of central importance.

Ransford, C. R., Greenberg, M. T., Domitrovich, C. E., Small, M., & Jacobson, L. (2009). The role of teachers' psychological experiences and perceptions of curriculum supports on the implementation of a social and emotional learning curriculum. *School Psychology Review*, 38(4), 510-532.

The study examined how teachers' psychological experiences of burnout and efficacy, as well as perceptions of curriculum supports (e.g., coaching), were associated with their implementation dosage and quality of Promoting Alternative Thinking Strategies, a social-emotional curriculum. Results revealed that teachers' psychological experiences and perceptions of curriculum supports were associated with implementation. Teacher burnout was negatively associated, and efficacy was positively associated with implementation dosage. Teachers who perceived their school administration as more supportive reported higher implementation quality, and positive perceptions of training and coaching were associated with higher levels of implementation dosage and quality. Teachers who reported the highest levels of burnout and the most negative perceptions of curriculum supports reported the lowest levels of implementation dosage and quality. The findings suggest that both individual and organizational factors are related to self-reported implementation and may be important to address in order to maximize the effectiveness of school-based curricula.

Reynolds, H., & Sutherland, E. (2013). A systematic approach to the planning, implementation, monitoring, and evaluation of integrated health services. *BMC Health Services Research*, 13, 168. Retrieved from <http://www.biomedcentral.com/1472-6963/13/168>

This paper focuses on integrated health services but also takes into account how health services are influenced by the health system, managed by programs, and made up of interventions. Applied are principles in existing comprehensive monitoring and evaluation (M&E) frameworks in order to outline a systematic approach to the M&E of integration for the country level. The approach is grounded by first defining the country-specific health challenges that integration is intended to affect. Finally, the paper recommends improvements to the health information system and in data use to ensure that data are available to inform decisions, because changes in the M&E function to make it more integrated will also facilitate integration in the service delivery, planning, and governance components.

Saldana, L., & Chamberlain, P. (2012). Supporting implementation: The role of community development teams to build infrastructure. *American Journal of Community Psychology*, 50(3-4), 334-346. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3397152/>

Evidence-based methods for assisting consumers, such as counties, in successfully implementing practices are lacking in the field of implementation science. To fill this gap, the Community Development Teams (CDT) approach was developed to assist counties in developing peer networks focused on problem solving and resource sharing to enhance their possibility of successful implementation. CDT is an interactive, solution-focused approach that shares many elements of the Interactive Systems Framework for Dissemination and Implementation. An ongoing randomized implementation trial of Multidimensional Treatment Foster Care (MTFC) was designed to test the hypothesis that such interactive implementation methods are more successful at helping counties achieve successful and sustainable MTFC programs than standard, individualized implementation methods. Using the Stages of Implementation Completion measure, developed for this study, the potential benefit of these interactive methods is examined at different stages of the implementation process, ranging from initial engagement to program competency.

Shields, J., Milstein, M., & Robinson, C. (2012). Creating the infrastructure for organizational change with rap. *Reclaiming Journal*, 21(1).

Response Ability Pathways (RAP) training was provided for all staff working with emotionally challenged students in a large, county-wide school setting. To generalize these new skills and imbed them in the school culture, specific strategies were used to engage parents, students, and staff in building a climate of respect. This report covers the challenges of making RAP a reality; a description of the students, parents, and staff of the program; and other key training methods.

Topitzes, J., Mersky, J. P., & McNeil, C. B. (2015). Implementation of parent–child interaction therapy within foster care: An attempt to translate an evidence-based program within a local child welfare agency. *Journal of Public Child Welfare*, 9(1), 22-41. doi:10.1080/15548732.2014.983288

This article describes an implementation project in which parent–child interaction therapy was adapted for and tested within foster parent training services. The authors recount multiple steps involved in translating an evidence-based intervention to child welfare services: (1) specifying the child welfare context for implementation and testing purposes, choosing an intervention model that responded to child welfare service needs, and tailoring the model for the child welfare setting; (2) securing external funding and initiating sustainability plans; and (3) forging a university–community partnership. The article concludes with a discussion of promising preliminary study results, future implementation plans, and lessons learned.

University of California – Los Angeles, Center for Mental Health in Schools. (2006). *Systemic change and empirically-supported practices: The implementation problem*. Retrieved from <http://smhp.psych.ucla.edu/pdfdocs/systemic/implementation%20problem.pdf>

Early research on moving empirically-supported practices into common use has tended to analyze and approach the matter with too limited a procedural framework and with too little attention to context. This document highlights information that can help advance work on what is widely called the "implementation problem." Specifically, it frames the process in terms of the diffusion of innovations. The authors stress that such diffusion is being carried out in organized settings that have well-established institutional cultures and infrastructures that must change if effective widespread application is to occur. From this perspective, the implementation problem becomes one of diffusing innovation through major systemic change. It encompasses facilitating organizational changes that lead to effective adoption/adaptation of a prototype at a particular site and the added complexities of system-wide replication-to-scale.

Wandersman, A., Chien, V.H., & Katz, J. (2012). Toward an evidence-based system for innovation support for implementing innovations with quality: Tools, training, technical assistance, and quality assurance/quality improvement. *American Journal of Community Psychology*, 50(3-4), 445-459. Retrieved from http://calswec.berkeley.edu/files/uploads/pdf/CalSWEC/1_3c_2011_NHSTES_Keynote_manuscript.pdf

An individual or organization that sets out to implement an innovation (e.g., a new technology, program, or policy) generally requires support. In the Interactive Systems Framework for Dissemination and Implementation, a Support System should work with Delivery Systems (national, state and/or local entities, such as health and human service organizations, community-based organizations, or schools) to enhance their capacity for quality implementation of innovations. The literature on the Support System has been under-

researched and underdeveloped. This article begins to conceptualize theory, research, and action for an evidence-based system for innovation support (EBSIS). EBSIS describes key priorities for strengthening the science and practice of support. The major goal of EBSIS is to enhance the research and practice of support in order to build capacity in the Delivery System for implementing innovations with quality, and thereby, help the Delivery System achieve outcomes. EBSIS is guided by a logic model that includes four key support components: tools, training, T/A, and quality assurance/quality improvement. EBSIS uses the Getting To Outcomes approach to accountability to aid the identification and synthesis of concepts, tools, and evidence for support. The article concludes with some discussion of the current status of EBSIS and possible next steps, including the development of collaborative, researcher-practitioner-funder-consumer partnerships to accelerate accumulation of knowledge on the Support System

Fidelity Assessment

Borrelli, B. (2011). The assessment, monitoring, and enhancement of treatment fidelity in public health clinical trials. *Journal of Public Health Dentistry*, 71(s1), S52-S63. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3074245/>

This article discusses methods of preservation of treatment fidelity in health behavior change trials conducted in public health contexts. The treatment fidelity framework provided by the National Institutes of Health's Behavioral Change Consortium includes five domains of treatment fidelity: Study Design, Training, Delivery, Receipt, and Enactment). A measure of treatment fidelity was previously developed and validated using these categories. Strategies for assessment, monitoring, and enhancing treatment fidelity within each of the five treatment fidelity domains are discussed. The previously created measure of treatment fidelity is updated to include additional items on selecting providers, additional confounders, theory testing, and multicultural considerations. The article concludes that implementation of a treatment fidelity plan may require extra staff time and costs. However, the economic and scientific costs of lack of attention to treatment fidelity are far greater than the costs of treatment fidelity implementation. Maintaining high levels of treatment fidelity, with flexible adaptation according to setting, provider, and patient, is the goal for public health trials.

Cross, W. F., & West, J. C. (2011). Examining implementer fidelity: Conceptualizing and measuring adherence and competence, *Journal of Children's Services*, 6(1), 18-33. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3171488/>

The large gap between intervention outcomes demonstrated in efficacy trials and the apparent ineffectiveness of these same programs in community settings has prompted investigators and practitioners to look closely at implementation fidelity. Critically important, but often overlooked, are the implementers who deliver EBPs—the effectiveness of programs cannot surpass the skill levels of the people implementing them. This article distinguishes fidelity at the programmatic level from implementer fidelity. Two components of implementer fidelity are defined. Implementer adherence and competence are proposed to be related but unique constructs that can be reliably measured for training, monitoring, and outcomes research. The article provides observational measures from a school-based, preventive intervention and illustrates the unique contributions of implementer adherence and competence. Distinguishing implementer adherence to the manual and competence in program delivery is a critical next step in child mental health program implementation research.

Dane, A. V., & Schneider, B. H. (1998). Program integrity in primary and early secondary prevention: are implementation effects out of control? *Clinical Psychology Review*, 18(1), 23-45.

The authors examined the extent to which program integrity (i.e., the degree to which programs were implemented as planned) was verified and promoted in evaluations of primary and early secondary prevention programs published between 1980 and 1994. Only 39 of 162 outcome studies featured specified procedures for the documentation of fidelity. Of these, only 13 considered variations in integrity in analyzing the effects of the program. Lowered adherence to protocol was often associated with poorer outcome. There was mixed evidence of dosage effects. The omission of integrity data, particularly measures of adherence, may compromise the internal validity of outcome studies in the prevention literature. The authors do not view procedures for integrity verification as inconsistent with the adaptation of interventions to the needs of receiving communities.

Durlak, J. A., & DuPre, E. P. (2008). Implementation matters: A review of research on the influence of implementation on program outcomes and the factors affecting implementation. *American Journal of Community Psychology*, 41(3-4), 327-350.

See abstract in Section I: Implementation Frameworks.

Forgatch, M. S., Patterson, G. R., & DeGarmo, D. S. (2005). Evaluating fidelity: Predictive validity for a measure of competent adherence to the Oregon model of parent management training. *Behavior Therapy*, 36(1): 3-13. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1464400/>

When effective interventions are implemented in real-world conditions, it is important to evaluate whether the programs are practiced as intended. This article presents the Fidelity of Implementation Rating System (FIMP), an observation-based measure assessing competent adherence to the Oregon model of Parent Management Training (PMTO). FIMP evaluates five dimensions of competent adherence to PMTO (i.e., knowledge, structure, teaching skill, clinical skill, and overall effectiveness) specified in the intervention model. Predictive validity for FIMP was evaluated with a subsample of stepfamilies participating in a preventive PMTO intervention. As hypothesized, high FIMP ratings predicted change in observed parenting practices from baseline to 12 months. The rigor and scope of adherence measures are discussed.

Knoche, L.L., Sheridan, S.M., Edwards, C.P., & Osborn, A.Q. (2010). Implementation of a relationship-based school readiness intervention: A multidimensional approach to fidelity measurement for early childhood. *Early Childhood Research Quarterly*, 25(3), 299- 313.

The implementation efforts of 65 early childhood professionals involved in the Getting Ready project, an integrated, multisystemic intervention that promotes school readiness through parent engagement for children from birth to age 5, were investigated. Digital videotaped records of professionals engaged in home visits with families across both treatment and comparison conditions were coded objectively using a partial-interval recording system to identify and record early childhood professionals' implementation of intervention strategies and their effectiveness in promoting parent engagement and interest in their child. Adherence, quality of intervention delivery, differentiation between groups, and participant responsiveness were assessed as multiple dimensions of fidelity. Early childhood professionals in the treatment group relative to the comparison group demonstrated greater frequency of adherence to some intervention strategies, as well as higher rates of total strategy use. In addition, significant positive relationships were found between years of experience, education and quality of intervention delivery. Quality of intervention delivery was different by program type (Early Head Start versus Head Start). Adherence in the treatment group was correlated with the rate of contact between parent and early childhood professional during the home visit.

Mihalik, S. (2004). The importance of implementation fidelity. *Emotional & Behavioral Disorders in Youth*, 25(4), 83-105. Retrieved from http://www.blueprintsprograms.com/publications/EBDY_4-4--Mihalic.pdf

The author defines fidelity and its components, looks at the factors influencing it, examines profidelity versus adaption, and describes studies examining fidelity.

Mowbray, C. T., Holter, M. C., Teague, G. B., & Bybee, D. (2003). Fidelity criteria: Development, measurement and validation. *American Journal of Evaluation*, 24(3), 315-340. Retrieved from http://www.stes-apes.med.ulg.ac.be/Documents_electroniques/EVA/EVA-GEN/ELE%20EVA-GEN%207386.pdf

Fidelity may be defined as the extent to which delivery of an intervention adheres to the protocol or program model originally developed. Fidelity measurement has increasing significance for evaluation, treatment effectiveness research, and service administration. Yet few published studies using fidelity criteria provide details on the construction of a valid fidelity index. The purpose of this review article is to outline steps in the development, measurement, and validation of fidelity criteria, providing examples from health and education literatures. The authors further identify important issues in conducting each step. Finally, the authors raise questions about the dynamic nature of fidelity criteria, appropriate validation and statistical analysis methods, the inclusion of structure and process criteria in fidelity assessment, and the role of program theory in deciding on the balance between adaptation versus exact replication of model programs. Further attention to the use and refinement of fidelity criteria is important to evaluation practice.

Orwin, R. G. (2000). Assessing program fidelity in substance abuse health services research. *Addiction*, 95, (S3), 309-327.

This paper addresses how treatment fidelity and related constructs (e.g., program implementation) can be assessed in alcohol, drug abuse, and mental health services research. First, it introduces definitions of fidelity and related concepts and then describes various concepts and tools from program evaluation that have proven useful for assessing fidelity. Next, several of these are illustrated in detail through a case study of a multisite fidelity assessment in substance abuse services research, the process evaluation of the NIAAA Homeless Cooperative Agreement Program. This evaluation included analysis of implementation at the program- and participant-level; the development of scales from the individual services data to estimate intervention strength, fidelity, and "leakage" (i.e., the degree to which services intended exclusively for intervention groups were inadvertently delivered to comparison groups); and the methods with which these data were used to assess whether programs were implemented as planned.

Ringwalt, C. L., Pankratz, M. M., Jackson-Newsom, J., Gottfredson, N. C., Hansen, W. B., Giles, S. M., & Dusenbury, L. (2010). Three year trajectory of teachers: Fidelity to a drug prevention curriculum. *Prevention Science*, 11(1), 67-76. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3086525/>

Little is known about the trajectories over time of classroom teachers' fidelity to drug prevention curricula. Using the "Concerns-Based Adoption Model" (C-BAM) as a theoretical framework, the authors hypothesized that teachers' fidelity would improve with repetition. Participants comprised 23 middle school teachers who videotaped their administration of 3 entire iterations of the All Stars curriculum. Investigators coded two key curriculum lessons, specifically assessing the proportion of activities of each lesson teachers attempted and whether they

omitted, added, or changed prescribed content, or delivered it using new methods. Study findings provided only partial support for the C-BAM model. Considerable variability in teachers' performance over time was noted suggesting that their progression over time may be nonlinear and dynamic and, quite possibly, a function of their classroom and school contexts. There was also evidence that, by their third iteration of All Stars, teachers tended to regress toward the baseline mean. That is, the implementation quality of those that started out with high levels of fidelity tended to degrade, while those that started out with very low fidelity to the curriculum tended to improve. Study findings suggest the need for ongoing T/TA, as well as "just in time" messages delivered electronically; but it is also possible that some prevention curricula may impose unrealistic expectations or burdens on teachers' abilities and classroom time.

Schoenwald, S.K., & Garland, A.F. (2013). A review of treatment adherence measurement methods. *Psychological Assessment*, 25(1), 146-156.

Fidelity measurement is critical for testing the effectiveness and implementation in practice of psychosocial interventions. Adherence is a critical component of fidelity. The purposes of this review were to catalogue adherence measurement methods and to assess existing evidence for the valid and reliable use of the scores that they generate and the feasibility of their use in routine care settings. A systematic literature search identified articles published between 1980-2008 reporting studies of evidence-based psychosocial treatments for child or adult mental health problems, including mention of adherence or fidelity assessment. Coders abstracted data on the measurement methods and clinical contexts of their use. Three hundred forty-one articles were reviewed, in which 249 unique adherence measurement methods were identified. These methods assessed many treatment models, although more than half (59 percent) assessed cognitive behavioral treatments. The measurement methods were used in studies with diverse clientele and clinicians. The majority (71.5 percent) of methods were observational. Information about psychometric properties was reported for 35 percent of the measurement methods, but adherence-outcomes relationships were reported for only 10 percent. Approximately one-third of the measures were used in community-based settings. Many adherence measurement methods have been used in treatment research; however, little reliability and validity evidence exists for the use of these methods. That some methods were used in routine care settings suggests the feasibility of their use in practice; however, information about the operational details of measurement, scoring, and reporting is sorely needed to inform and evaluate strategies to embed fidelity measurement in implementation support and monitoring systems.

Schoenwald, S. K., Garland, A. F., Chapman, J. E., Frazier, S. L., Sheidow, A. J., & Southam-Gerow, M. A. (2011). Toward the effective and efficient measurement of implementation fidelity. *Administration and Policy in Mental Health and Mental Health Services Research*. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3045964/pdf/nihms-264572.pdf>

Implementation science in mental health is informed by other academic disciplines and industries. Conceptual and methodological territory charted in psychotherapy research is pertinent to two elements of the conceptual model of implementation posited by Aarons and colleagues (2010), implementation fidelity and innovation feedback systems. Key characteristics of scientifically validated fidelity instruments and of the feasibility of their use in routine care are presented. The challenges of ensuring fidelity measurement methods that are both effective (scientifically validated) and efficient (feasible and useful in routine care) are identified, as are examples of implementation research attempting to balance these attributes of fidelity measurement.

Stuczynski, A., & Kimmich, M. H. (2010). Challenges in measuring the fidelity of a child welfare service intervention. *Journal of Public Child Welfare*, 4(4), 406–426.

This article is a case study of an effort to implement and measure the fidelity of a child welfare intervention, family team meetings (FTMs). It describes the challenges practitioners faced in implementing FTMs and discusses the evaluation challenges encountered in specifying, measuring, and reporting on model fidelity. It presents the findings of an interim fidelity assessment and the implications for next steps in the program evaluation. The authors reach a three-fold conclusion: (a) The use of fidelity assessment can aid practitioners to focus on the specifics of their implementation; (b) Qualitative factors related to program implementation and local context are critically important to evaluation efforts; and (c) Fidelity criteria can provide the basis for targeted outcome measurement.

Identification and Use of Data

Bright, C., Steward, R., Fitzgerald, M. & Arena, C. (2014). *Making data meaningful: Using data to support implementation in child welfare*. Baltimore, MD: University of Maryland School of Social Work, Ruth H. Young Center for Families and Children. Retrieved from <http://socialwork.umaryland.edu/cwa/RWC/assets/ACCWIC-2014-Making Data Meaningful Brief.pdf>

This report is designed to help systems make smart decisions about using data effectively and efficiently. It may be particularly useful for child welfare administrators, quality improvement staff, and evaluators, but it is intended for a broad audience, including anyone with an interest in using child welfare data in useful, relevant ways. In this report, readers will gain insights to maximize the value of their data collection efforts, integrate findings from their data with ongoing planning and decision-making, and sustain data collection to support ongoing change and implementation efforts.

Hodges, K., & Wotring, J. (2012). Outcomes management: Incorporating and sustaining processes critical to using outcome data to guide practice improvement. *Journal of Behavioral Health Services & Research*, 39(2), 130-143. Retrieved from <http://gucchdtacenter.georgetown.edu/resources/Webinar%20and%20Audio%20Files/Outcomes%20Hodges%20and%20Wotring-2.pdf>

An outcomes management system (OMS) greatly facilitates an organization or state achieving requirements regarding accountability and use of empirically-based interventions. A case example of the authors' experience with a successful and enduring OMS is presented, followed by a review of the literature and a proposed model delineating the key components and benefits of an OMS. Building capacity to measure performance requires embedding utilization of youth-specific, clinically meaningful outcome data into the organization's processes and structures. An OMS measures outcomes associated with services, facilitates implementation of evidence-based practices, informs case decision-making, enables better and more efficient clinical management, and provides aggregated information used to improve services. A case-specific supervisory model based on instantaneously available information, including progress to date, helps maximize consumer outcomes. CQI activities, which are data based and goal oriented, become a positive change management tool. This paper describes organizational processes that facilitate the development of a highly functional OMS.

Leadership

Aarons, G.A., Ehrhart, M.G., & Farahnak, L.R. (2014). The Implementation Leadership Scale (ILS): development of a brief measure of unit level implementation leadership. *Implementation Science*, 9(1), 45. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/24731295>

In healthcare and allied healthcare settings, leadership that supports effective implementation of evidenced-based practices (EBPs) is a critical concern. However, there are no empirically validated measures to assess implementation leadership. This paper describes the development, factor structure, and initial reliability and convergent and discriminant validity of a very brief measure of implementation leadership: the Implementation Leadership Scale (ILS).

Aarons, G.A., Ehrhart, M.G., Farahnak, L.R., & Hurlburt, M.S. (2015). Leadership and organizational change for implementation (LOCI): a randomized mixed method pilot study of a leadership and organization development intervention for evidence-based practice implementation. *Implementation Science* : IS, 10, 11. doi:10.1186/s13012-014-0192-y. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4310135/pdf/13012_2014_Article_192.pdf

See abstract in Section 2: Exploration, Assess Organizational and System Capacity.

Aarons, G.A., Farahnak, L.R., Ehrhart, M.G., & Sklar, M. (2014). Aligning leadership across systems and organizations to develop strategic climate for evidence-based practice implementation. *Annual Review of Public Health*, 35, 255. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4348088/>

See abstract in Section 2: Exploration, Assess Organizational and System Capacity.

Aarons, G. A., & Sommerfeld, D. H. (2012). Leadership, innovation climate, and attitudes toward evidence-based practice during a statewide implementation. *Journal of the American Academy of Child and Adolescent Psychiatry*, 51(4), 423-431.

Leadership is important in practice change, yet there are few studies addressing this issue in mental health and social services. This study examined the differential roles of transformational (i.e., charismatic) leadership and leader-member exchange (i.e., the relationship between supervisors and their direct service providers) on team innovation climate (i.e., openness to new innovations) and provider attitudes toward EBP during a statewide, evidence-based practice implementation (EBPI) of an intervention to reduce child neglect. Multiple group path analysis was used to examine associations of transformational leadership and leader-member exchange with innovation climate and attitudes toward adoption and use of EBP. The authors concluded that strategies designed to enhance supervisor transformational leadership have the potential to facilitate implementation efforts by promoting a strong climate for EBPI and positive provider attitudes toward adoption and use of EBP.

Aarons, G.A., Sommerfeld, D.H., & Willging, C.E. (2011). The soft underbelly of system change: The role of leadership and organizational climate in turnover during statewide behavioral health reform. *Psychological Services*, 8(4), 269-281. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3252234/pdf/nihms337228.pdf>

This study examined leadership, organizational climate, staff turnover intentions, and voluntary turnover during a large-scale statewide behavioral health system reform. The initial data

collection occurred 9 months after initiation of the reform, with a follow-up round of data collected 18 months later. A self-administered structured assessment was completed by 190 participants (administrators, support staff, providers) employed by 14 agencies. Key variables included leadership, organizational climate, turnover intentions, turnover, and reform-related financial stress (“low” versus “high”) experienced by the agencies. Analyses revealed that positive leadership was related to a stronger empowering climate in both high- and low-stress agencies. However, the association between more positive leadership and lower demoralizing climate was evident only in high-stress agencies. For both types of agencies, empowering climate was negatively associated with turnover intentions, and demoralizing climate was associated with stronger turnover intentions. Turnover intentions were positively associated with voluntary turnover. Results suggest that strong leadership is particularly important in times of system and organizational change and may reduce poor climate associated with turnover intentions and turnover. Leadership and organizational context should be addressed to retain staff during these periods of systemic change.

American Public Human Services Association (2010). *Positioning public child welfare guidance: Leadership guidance*. Retrieved from https://ncwwi.org/files/Leadership_and_Management/PPCW_Leadership_Guidance.pdf

This guidance is addressed specifically to public child welfare directors and their immediate executive teams. It offers guidance on where leaders and their teams should spend their time and energy, how to assess and align critical key processes (e.g., human resources) to support the strategy of the agency, and how leadership is embedded and experienced throughout an agency.

Bernotavicz, F., McDaniel, N.C., Brittain, C., & Dickinson, N.S. (2013). Leadership in a changing environment: A leadership model for child welfare. *Administration in Social Work*, 37(4), 401-417.

Numerous studies have shown that a comprehensive and unifying leadership model, with an associated defined set of leadership competencies, has largely been absent from the field of human services. In the complex and turbulent field of child welfare, leadership skills are necessary at all levels of the agency. The purpose of this article is to describe a leadership model specific to child welfare developed by the National Child Welfare Workforce Institute and to provide examples of how its application in a national training and capacity-building program has led to personal leadership development and systems change.

Brenowitz, R.S. & Manning, M. (2003). How leaders get buy-in. *Innovative Leader*, 12(2). Retrieved from http://brenowitzconsulting.com/pub/article_10.html

As the global marketplace becomes more dynamic and competitive, organizations must become more efficient, effective, and productive. To do this they need to move away from a “command and control” leadership style. The role of the manager is shifting to that of a team leader and team builder. New leaders must have buy-in to the decisions being made rather than simply relying on their position in the hierarchy to get results.

Geijssel, F., Sleegers, P., & van den Berg, R. (1999). Transformational leadership and the implementation of large-scale innovation programs. *Journal of Educational Administration*, 37(4), 309-328.

This paper examines the nature of transformational leadership and its relation to teachers’ changed practices within the context of a Dutch, large-scale innovation. It presents two

qualitative studies and a survey. The qualitative studies produced three dimensions of transformational leadership: vision, individual consideration, and intellectual stimulation. Within the framework of the survey, these dimensions were further operationalized and exploratively related to teachers' concerns, learning activities, and changed practices. The results indicate the significance of the dimensions of transformational leadership in relation to changed teacher practices. The results also suggest the significance of intervening constructs for future research into the impact of leadership on changed teacher practices.

Gerber, N., Kelley, K., Norwood, J., & Urzi, M. (2013). Transforming agency culture through values-driven leadership. *Policy & Practice (19426828)*, 71(1), 14.

The article focuses on work conducted by Merced County Human Service Agency (HSA) in California. HSA has been involved in several programs and has initiated several new employee orientations to help new employees get accustomed to their work environment. HSA provides several education programs and certificates in social work and, in collaboration with University of California - Merced, initiated a program for foster care and for improving father-child relations.

Heifetz, R. A., Grashow, A., & Linsky, M. (2009). *The practice of adaptive leadership*. Boston: Harvard Business Press.

So many of the world's problems, and the issues that businesses and people face every day, can seem intractable and unsolvable. The authors propose a new way to lead the charge to change: "Adaptive leadership" calls for shedding outdated approaches and embracing new skills and attitudes to guide organizations in the 21st century. At the heart of adaptive leadership practice is the idea that, if a system is broken, it must be diagnosed and remedied by taking risks and challenging the status quo in order to provoke change. The authors' counsel combines wisdom from psychology, biology, language, and business with self-assessment to help readers face ongoing challenges. Filled with useful exercises, real-life examples, and thoughtful asides, their book can help companies make difficult decisions about change.

Lavertu, S., & Moynihan, D. P. (2013). The empirical implications of theoretical models: A description of the method and an application to the study of performance management implementation. *Journal of Public Administration Research and Theory*, 23(2), 333-360.

The Empirical Implications of Theoretical Models (EITM) initiative in political science aims to improve empirical inquiry by strengthening its theoretical foundations. This article reviews the central features of the initiative, especially its emphasis on the development of empirically useful formal theory and the establishment of a direct link between theory and statistical estimation. The article then illustrates the EITM method with an application to a public administration topic. Specifically, the authors develop a game-theoretic model of policy implementation in order to examine the role of leadership commitment to reform in a staff's decision to use performance information. The article then discusses some of the empirical implications of the theoretical model and examines a couple of them by analyzing data from a 2007 Government Accountability Office survey of federal agency managers. Consistent with the theoretical model, the statistical analysis reveals that leadership commitment is not positively related to performance information use when one focuses on low-to-moderate levels of commitment. The authors conclude with a discussion of this example and the potential benefits of using the EITM method in public administration research.

Maciolek, S. & Fisher, C. (2014). *Leading the way: The child welfare director's role in implementation*. Baltimore, MD: University of Maryland School of Social Work, Ruth H. Young Center for Families and Children. Retrieved from http://socialwork.umaryland.edu/cwa/RYC/assets/ACCWIC-2014-Leading_The_Way_Brief.pdf

Leading implementation in child welfare agencies and systems is exciting and challenging work. Leaders must have a clear and consistent vision, be able to marshal organizational supports, and inspire their staff to undertake the hard, sometimes risky work of changing practice. Leadership vision is a more effective catalyst for organizational change when a framework that supports others in operationalizing the vision guides it. The Atlantic Coast Child Welfare Implementation Center (ACCWIC) drew from the National Implementation Research Network's implementation science framework to guide its work with agency leaders and their implementation teams in planning and implementing practice changes and achieving desired outcomes. The following lessons come from five years of implementation work in six states, which included intensive collaboration with the state agencies' child welfare directors. Some of these lessons surfaced at the outset, while others became apparent after significant trial and error.

Mant, A. (2010). Why "leadership" is so difficult - and elusive. *International Journal of Leadership in Public Services*, 6(1), 18-24.

This paper suggests that, as the focus on "leadership" has intensified over recent years, the quality of management in both public and private sectors has diminished. The two phenomena may be linked. The capacity to run things properly and to manage people in a dignified and productive way has been trammled by an over-emphasis on the behavioral and a consequent under-emphasis on authority, role clarity, and task. The managerial vacuum thus created has been filled, imperfectly, by executive coaching and a range of other "learning and development" stratagems. In the real world of complex systems, management and leadership are merely opposite sides of the same coin.

Marsick, V.J., & Watkins, K.E. (2003). Demonstrating the value of an organization's learning culture: The dimensions of the learning organization questionnaire. *Advances in Developing Human Resources*, 5(2), 132–151.

Some organizations seek to become learning organizations. Yet implementation is elusive and is not often based on research about what constitutes a learning culture. Over the past 16 years, a model of a learning organization was developed that draws on both the literature and organizational case studies. However, organizations wanted a way to diagnose their current status and guide change, and scholars wanted better measures of learning to compare organizations and to explore links between organizational learning and the performance of the firm. The solution was to develop and validate an instrument that addresses these needs.

Marzano, R. J., Waters, T., McNulty, B. A. (2005). *School leadership that works: From research to results*. Alexandria, VA: Association for Supervision and Curriculum Development.

What can school leaders really do to increase student achievement, and which leadership practices have the biggest impact on school effectiveness? For the first time in the history of leadership research in the United States, here is a book that answers these questions definitively and gives a list of leadership competencies that are research based. Drawing from 35 years of studies, the authors explain critical leadership principles that every administrator needs to know: (1) 21 leadership responsibilities that have a significant effect on student

learning and the correlation of each responsibility to academic achievement gains; (2) the difference between first-order and second-order change and the leadership responsibilities, in rank order, that are most important for each; (3) How to choose the right work to focus on to improve student achievement; (4) the advantages and disadvantages of comprehensive school reform models for improving student achievement; (5) 11 factors and 39 actions that help take a site-specific approach to improving student achievement; and (6) a 5-step plan for effective school leadership that includes a strong team, distributed responsibilities, and 31 team action steps.

National Child Welfare Workforce Institute (2010). *Leadership Competency Framework*. Retrieved from <https://ncwwi.org/files/LeaderCompFrame5-31-2011.pdf>

The Interactive Systems Framework for Dissemination and Implementation (NCWWI) recognizes that child welfare leaders are change agents and must possess certain competencies in order to do their jobs effectively and to lead child welfare agencies into the future. Competencies are the knowledge, skills, and abilities that leaders acquire, which are necessary to achieve job performance and to attain agency goals. To guide its work, the NCWWI explored multiple competency models of leadership and adopted a competency framework that reflects the multidimensional nature of the child welfare field and the corresponding complex and diverse body of knowledge and skills. The document describes its approach and resource documents used as the basis for the competency framework.

Panzano, P.C., Seffrin, B., Chaney-Jones, S., Roth, D., Crane-Ross, D., Massatti, R., et al. (2004). The innovation diffusion and adoption research project (IDARP). In D. Roth & W. Lutz (Eds.), *New research in mental health* (Vol. 16, pp. 78-89). Columbus, OH: Ohio Department of Mental Health Office of Program Evaluation and Research.

Panzano and colleagues found that second-order leadership is important in the early stages of implementation of an effective innovation, and later on first-order leadership is essential to embedding implementation functions and roles into organization and system structures.

Reed, D. M., Cahn, K., & Leake, R. (2011). Training in child welfare leadership for turbulent times. *Policy & Practice* 69(3), 26-27. Retrieved from https://ncwwi.org/files/FieldWorksTraininginChildWelfare_June2011PolicyandPractice.pdf

The article discusses the enhancement of child welfare provided by the Leadership Academy for Middle Managers (LAMM), which has aimed to serve close to 500 leaders by the end of September 2013 in the U.S. It notes that LAMM will offer a comprehensive and evidence-based learning platform for managers to lead sustainable development in child welfare agencies. The authors cite that improvements in coaching, TA, and peer networking support are identified through preliminary evaluation.

Saldana, L., Chamberlain, P., & Chapman, J. (2016). A supervisor-targeted implementation approach to promote system change: The R3 Model. *Administration and Policy in Mental Health and Mental Health Services Research*. Retrieved from https://www.researchgate.net/publication/299386201_A_Supervisor-Targeted_Implementation_Approach_to_Promote_System_Change_The_R3_Model

Opportunities to evaluate strategies to create systemwide change in the child welfare system (CWS) and the resulting public health impact are rare. Leveraging a real-world, system-initiated effort to infuse the use of evidence-based principles throughout a CWS workforce, a pilot of the

R3 model and supervisor-targeted implementation approach, is described. The development of R3 and its associated fidelity monitoring was a collaboration between the CWS and model developers. Outcomes demonstrate implementation feasibility, strong fidelity scale measurement properties, improved supervisor fidelity over time, and the acceptability and perception of positive change by agency leadership. The value of system-initiated collaborations is discussed.

Torrey, W.C., Bond, G.R., McHugo, G.J., and Swain, K. (2012). Evidence-based practice implementation in community mental health settings: the relative importance of key domains of implementation activity. *Administration and Policy in Mental Health*. 39(5):353-64. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/21574016>

Implementation research has examined practice prioritization, implementation leadership, workforce development, workflow re-engineering, and practice reinforcement, but not addressed their relative importance as implementation drivers. This study investigated domains of implementation activities and correlated them to implementation success during a large national evidence-based practice implementation project. Implementation success was correlated with active leadership strategically devoted to redesigning the flow of work and reinforcing implementation through measurement and feedback. Relative attention to workforce development was negatively correlated with implementation. Active leaders should focus on redesigning the flow of work to support the implementation and on reinforcing program improvements.

Tropman, J., & Wooten, L. (2013). The 7C approach to conceptualizing administration: Executive leadership in the 21st century. *Administration in Social Work*, 37(4), 325-328. Retrieved from <http://www.tandfonline.com/doi/pdf/10.1080/03643107.2013.831714>

This editorial presents the 7Cs approach to conceptualizing administration. The concept of "administration" is made up of two parts: executiveship, the tactical-management part, and leadership, the strategic-visioning and strategic part. The 7Cs is a series of buckets that organize content of the executive leadership field. It serves to reflect large areas of research and writing and provides bases for important variables. One constant, however, is the tension between the managerial and the leadership mind-skill sets. Executive leaders are constantly invoking one or the other as need demands. The 7Cs is a way of organizing the areas of executive leadership and calling attention to its several dimensions. It makes no argument that one or another is more important; importance is local involving particular executive leaders and agencies/organizations at particular times. The idea of administration comprising leadership and managerial elements is important to keep in mind, especially because the skills of leadership often involve disruption, and those of management involve routinization.

U.S. Department of Health and Human Services, Administration for Children and Families (ACF). (2010). Leadership in the *Improving Child Welfare Outcomes through Systems of Care Initiative*. Retrieved from <https://www.childwelfare.gov/management/reform/soc/communicate/initiative/evalreports/reports/LeadershipBrief.pdf>

The *Improving Child Welfare Outcomes through Systems of Care* (SOC) demonstration initiative was designed to promote systems and organizational change through SOC-guided efforts and activities and the realignment of collaborative partnerships between agencies and children and families involved in the child welfare system. Bringing about systemic change within a child welfare-led SOC is challenging; therefore, it is important to study the processes leaders followed to achieve the systems and organizational changes required for integrating a SOC principle-

driven approach into child welfare and other child- and family-serving agencies. These processes hold promise for other systems change efforts. This brief is designed to enhance understanding of the role of leadership in bringing about systems change. Drawing on qualitative data collected during interviews with key stakeholders, the brief highlights the experiences of seven of the nine grant communities as their leaders planned and carried out strategies and approaches to effectively implement the SOC initiative.

Willing, C.E., Green, A.E., Gunderson, L., Chaffin, M., & Aarons, G.A. (2015). From a “perfect storm” to “smooth sailing” policymaker perspectives on implementation and sustainment of an evidence-based practice in two states. *Child Maltreatment*, 20(1), 24-36.

Policymakers shape implementation and sustainment of EBPs, whether they are developing or responding to legislation and policies or negotiating public sector resource constraints. As part of a large mixed-method study, the authors conducted qualitative interviews with 24 policymakers involved in delivery of the same EBP in two U.S. states. The authors analyzed transcripts via open and focused coding techniques to identify the commonality, diversity, and complexity of implementation challenges; approaches to overcoming those challenges; and the importance of system-level contextual factors in ensuring successful implementation. Key findings centered on building support and leadership for EBPs; funding and contractual strategies; partnering with stakeholders; tackling challenges via proactive planning and problem solving; and the political, legal, and systemic pressures affecting EBP longevity. The policymaker perspectives offer guidance on nurturing system and organizational practice environments to achieve positive outcomes and for optimally addressing macro-level influences that bear upon the instantiation of EBPs in public sector child welfare systems.

3. Initial and Full Implementation

This section is divided by Initial and Full Implementation topics and activities outlined in the Introduction. The Approach includes an Initial and a Full Implementation stage. For the purposes of this bibliography, we have combined them.

Implement and Test the Innovation

The articles below are relevant to the Initial and Full Implementation activity of implementing and testing the Innovation.

Akin, B. A., Bryson, S. A., Testa, M. F., Blase, K. A., McDonald, T., & Melz, H. (2013). Usability testing, initial implementation, and formative evaluation of an evidence-based intervention: Lessons from a demonstration project to reduce long-term foster care. *Evaluation and Program Planning*, 41, 19-30. doi:10.1016/j.evalprogplan.2013.06.003

The field of child welfare faces an undersupply of evidence-based interventions to address long-term foster care. The Permanency Innovations Initiative (PII) is a 5-year, federal demonstration project intended to generate evidence to reduce long stays in foster care for those youth who encounter the most substantial barriers to permanency. This article describes a systematic and staged approach to implementation and evaluation of a PII project that included usability testing as one of its key activities. Usability testing is an industry-derived practice which analyzes early implementation processes and evaluation procedures before they are finalized. This article describes the iterative selection, testing, and analysis of nine usability metrics that were designed to assess three important constructs of the project's initial implementation and evaluation: intervening early, obtaining consent, and engaging parents. Results showed that seven of nine metrics met a predetermined target. This study demonstrates how findings from

usability testing influenced the initial implementation and formative evaluation of an evidence-supported intervention. Implications are discussed for usability testing as a quality improvement cycle that may contribute to better operationalized interventions and more reliable, valid, and replicable evidence.

Sandars, J., & Lafferty, N. (2010). Twelve tips on usability testing to develop effective e-learning in medical education. *Medical Teacher*, 32(12), 956-960.

Usability testing is widely used in the commercial world during the process of developing new products, especially software and websites. However, it appears to be rarely used to develop e-learning in medical education. The focus of usability testing is the user of the particular product, and it informs product development by using a systematic process to identify usability problems at an early stage during product development so that these problems can be rectified. Usability testing of e-learning considers the characteristics of the learner, the technological aspects, the interaction and instructional design, and, finally, the context. Testing under the conditions that the e-learning intervention will typically be used is the preferred method, but more extreme situations can provide useful information. Product development should be iterative, and rapid cycles of testing and refinement are essential to produce an effective e-learning intervention.

Sexton, T. L., Chamberlin, P., Landsverk, J., Ortiz, A., & Schoenwald, S. K. (2010). Action brief: Future directions in the implementation of evidence based treatment and practices in child and adolescent mental health. *Administration and Policy in Mental Health and Mental Health Services Research*, 37(1-2), 132-134.

Although there has been an increased interest in recent years in understanding how to implement evidence-based practices/treatments (EBP/T) in community settings, there still remains significant progress to be made in understanding this process of “transporting EBP into community settings.” Furthermore, there exists a considerable gap between the real practice of community mental health and the use of these effective programs. Over time, the studies and experiences of transporting will yield invaluable information, which in turn will increase understanding and improve the implementation of effective practices into the community setting. However, these studies are unlikely to overcome the philosophical barriers to the implementation of effective programs. The article’s focus here is threefold: to define the more “actionable” challenges and steps that will add to implementation studies, to further the improvement of effective practices, and to identify some of the potential action steps and possible solutions that will facilitate the implementation of EBP into community settings.

U.S. Department of Health and Human Services, ACF(2010). *Implementation resource guide for social service programs: An introduction to evidence-based programming*.

This report focuses on factors that lead to the success or failure of an EBP aside from actual participant-staff interactions. It discusses on how existing research literature and current research can improve the efficacy of implemented programs.

Monitor and Assess the Innovation

The articles below are relevant to the Initial and Full Implementation activity of effective monitoring and assessment of the innovation and the implementation supports through the use of data.

Arnold-Williams, R. (2005). Leveraging data to enhance management outcome. *Policy & Practice*, 63(1), 15-17.

This article discusses the Utah Department of Human Services' investment in information technology to improve data generation and analysis, which led to enhanced management outcome. It describes the integration of data to allow for workload management and forecasting, fiscal forecasting, and outcome tracking and reporting; the implementation of a State Automated Child Welfare Information System; and the Department's investment in a comprehensive data warehouse capacity.

Bruns, E. J., Rast, J., Peterson, C., Walker, J., & Bosworth, J. (2006). Spreadsheets, service providers, and the statehouse: Using data and the wraparound process to reform systems for children and families. *American Journal of Community Psychology*, 38(3/4), 201-212.

Evaluation descriptions in the research literature tend to ignore the full context of the community change efforts from which they emerged. This paper describes a range of evaluation studies and data collection activities conducted over the course of one state's effort to reform its child welfare system on behalf of families with children experiencing serious mental health problems. Initial activities included studies of the prevalence of unmet mental health need in children and youth in the state. As these needs were addressed, evaluation activities examined the impact of a pilot wraparound program that became a major part of systems reform. Later efforts included implementation analysis of wraparound programs and assessment of priorities for continued systems reform. Describing this set of evaluation activities, the authors discuss how data collection evolved to meet the needs of stakeholders over time and consider lessons learned about the roles of research and information sharing in shaping community change efforts.

Chamberlain, P., Snowden, L. R., Padgett, C., Saldana, L., Roles, J., Holmes, L., & Landsverk, J. (2011). A strategy for assessing costs of implementing new practices in the child welfare system: Adapting the English cost calculator in the United States. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(1), 24-31. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4312008/>

In decisions to adopt and implement new practices or innovations in child welfare, costs are often a bottom-line consideration. The cost calculator, a method developed in England that can be used to calculate unit costs of core case work activities and associated administrative costs, is described as a potentially helpful tool for assisting child welfare administrators to evaluate the costs of current practices relative to their outcomes and could affect decisions about whether to implement new practices. The article describes the process by which the cost calculator is being adapted for use in child welfare systems in two states and provides an illustration of using the method to compare two intervention approaches.

Collins-Camargo, C., Shackelford, K., Kelly, M., & Martin-Galijatovic, R. (2011). Collaborative research in child welfare: A rationale for rigorous participatory evaluation designs to promote sustained systems change. *Child Welfare*, 90(2), 69-85.

Expansion of the child welfare evidence base is a major challenge. The field must establish how organizational systems and practice techniques yield outcomes for children and families. Needed research must be grounded in practice and must engage practitioners and administrators via participatory evaluation. The extent to which successful practices are transferable is also challenged by the diversity of child welfare systems. The Children's Bureau funded Quality Improvement Centers (QICs), which were designed to promote collaborative, multisite research to address these evaluation needs. This article, based on the findings of a regional and a national QIC, describes the challenges facing research collaboration and the strategies for achieving success.

Duncan, D. F., Kum, H., Weigensberg, E., Flair, K. A., & Stewart, C. (2008). Informing child welfare policy and practice: Using knowledge discovery and data mining technology via a dynamic web site. *Child Maltreatment*, 13(4), 383-391.

See abstract in Section 2: Exploration, Identify the Problem, Population(s), and Root Causes.

Feil, E., Sprengelmeyer, P., Davis, B., & Chamberlain, P. (2012). Development and testing of a multimedia internet-based system for fidelity and monitoring of multidimensional treatment foster care. *Journal of Medical Internet Research*, 14(5), 139. Retrieved from <http://www.jmir.org/2012/5/e139/>

The use of the Internet offers a potential solution in that existing reporting and data collection by clinicians can be subject to remote supervision. Such a system would have the potential to provide dissemination teams with more direct access to higher-quality data and would make adopters more likely to be able to implement services at the highest possible conformity to research protocols. This paper describes efforts to create and test such an innovative system for use with the Multidimensional Treatment Foster Care (MTFC) program, which is an in-home treatment (alternative to a residential- or group-home setting) for antisocial youths. The fidelity system was tested and rated by the participants. The methods to develop the program and results of the study are discussed.

Fixsen, D. L., Blase, K. A., Naoom, S. F., & Wallace, F. (2009). Core implementation components. *Research on Social Work Practice*, 19(5), 531-540.

The failure of better science to readily produce better services has led to increasing interest in the science and practice of implementation. The results of recent reviews of implementation literature and best practices are summarized in this article. Two frameworks related to implementation stages and core implementation components are described and presented as critical links in the science to service chain. It is posited that careful attention to these frameworks can more rapidly advance research and practice in this complex and fascinating area.

Helitzer, D., Hollis, C., de Hernandez, B., Sanders, M., Roybal, S., & Van Deusen, I. (2010). Evaluation for community-based programs: The integration of logic models and factor analysis. *Evaluation and Program Planning*, 33(3), 223-233.

The article discusses the utility and value of the use of logic models for program evaluation of community-based programs and, more specifically, the integration of logic models and factor analysis to develop and revise a survey as part of an effective evaluation plan. Its major conclusions were that a logic model is a tool that engages stakeholders to link evaluation instruments more closely to specific program objectives. Thus, stakeholders can more closely assess the extent to which project outcomes have been achieved. In addition, use of factor analysis in the evaluation process can help the stakeholders better understand whether evaluation instruments such as a survey adequately assess program effectiveness. Lastly, a logic model process can help to achieve consensus among diverse stakeholders by allowing them to focus on objectives that are concrete, measurable, and mutually acceptable.

Hodges, K., & Wotring, J. (2012). Outcomes management: Incorporating and sustaining processes critical to using outcome data to guide practice improvement. *Journal of Behavioral Health Services and Research*, 39(2), 130-143. Retrieved from <http://gucchdtacenter.georgetown.edu/resources/Webinar%20and%20Audio%20Files/Outcomes%20Hodges%20and%20Wotring-2.pdf>

See abstract in Section 2: Installation, Develop or Adapt Implementation Supports.

Kmieliauskaite, R., & Valanciene, L. (2013). Peculiarities of performance measurement in municipalities. *Social Research*, 1(30), 44-51.

See abstract in Section 2: Installation, Develop or Adapt Implementation Supports.

Moore, T. (2010). Results-oriented management: Using evidence for quality improvement. In M. F. Testa and J. Poertner (Eds.), *Fostering accountability: Using evidence to guide and improve child welfare policy* (pp. 231-268). New York: Oxford University Press.

The main objective of public child welfare policy and practice is to promote the achievement of safety, permanency, and well-being for the children and families that come to the attention of child protective agents. The essence of a case or program manager's job is to secure and direct resources, together with other child welfare agents, to optimize positive outcomes for children and families. Quality improvement is one aspect of managing, at whatever organizational level, which involves the use of data on current operations to inform managerial decision-making. These efforts initially proceed along the single-loop track of more timely, efficient, and accurate implementation of existing practices and policies. However, if these incremental adjustments prove inadequate or contrary to other general end-values, quality improvement then needs to proceed along the double-loop track of developing a different model of quality improvement or forging a new consensus on alternative goals. The purpose of this chapter is to provide practical methods for improving the construct validity of quality improvement by tracking performance data, acting on the feedback to inform managerial action, and developing new strategies to improve agency performance. These methods extend beyond the single-loop refinements for fine-tuning performance to the shaping of an organizational culture that encourages double-loop learning and reflexivity, so that existing practices are regularly critiqued and innovative solutions for achieving desired outcomes are continuously tried and routinely evaluated.

Reynolds, H., & Sutherland, E. (2013). A systematic approach to the planning, implementation, monitoring, and evaluation of integrated health services. *BMC Health Services Research*, 13, 168.

See abstract in Section 2: Installation, Develop or Adapt Implementation Supports.

Saldana, L., Chamberlain, P., Wang, W., & Brown, H. C. (2011). Predicting program start-up using the stages of implementation measure. *Administration and Policy in Mental Health and Mental Health Services*, 39(6), 419-425. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3212640/>

Recent efforts to better understand the process of implementation have been hampered by a lack of tools available to define and measure implementation progress. The Stages of Implementation Completion (SIC) was developed as part of an implementation trial of MTFC in 53 sites and identifies the duration of time spent on implementation activities and the proportion of activities completed. This article examines the ability of the first three stages of the SIC (Engagement, Consideration of Feasibility, and Readiness Planning) to predict successful program start up. Results suggest that completing SIC stages completely, yet relatively quickly, predicts the likelihood of successful implementation.

Shackelford, K. K., Harper, M., Sullivan, K., & Edwards, T. (2007). Systematic case review data and child protective services outcomes: The development of a model in Mississippi. *Journal of Evidence-Based Social Work*, 4(3/4), 117-131.

Child welfare agencies have recognized the need for accountability and the value of using data for decision-making. However, there are few indicators that child welfare supervisors are using outcome data to make decisions affecting the performance of child welfare workers and/or client outcomes. Child welfare supervisors who are participating in the Mississippi QIC learning labs are using case review data summaries to compare outcomes for project evaluation purposes and to facilitate changes in supervisory practices. The supervisors' review of case review data and their discussion of the meaning of these data enable and encourage supervisors to use data driven supervisory techniques to improve outcomes.

Adjust the Innovation

The articles below address the implementation activities of Adjusting the Change/Intervention (to improve quality and fidelity).

Aarons, G. A., Sommerfeld, D. H., Hecht, D. B., Silovsky, J. F., & Chaffin, M. J. (2009). The impact of evidence-based practice implementation and fidelity monitoring on staff turnover: Evidence for a protective effect. *Journal of Consulting and Clinical Psychology*, 77(2), 270-280. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2742697/pdf/nihms59509.pdf>

Staff retention is an ongoing challenge in mental health and community-based service organizations. Little is known about the impact of EBP implementation on the mental health and social service workforce. The study examined the effect of EBP implementation and ongoing fidelity monitoring on staff retention in a children's services system. The study took place in the context of a statewide, regionally randomized effectiveness trial of an evidence-based intervention designed to reduce child neglect. In the study, researchers followed 21 teams consisting of 153 home-based service providers over a 29-month period. Survival analyses revealed greater staff retention in the condition where the EBP was implemented along with ongoing fidelity monitoring presented to staff as supportive consultation. These results should help to allay concerns about staff retention when implementing EBPs where there is good values/innovation fit and when fidelity monitoring is designed as an aid and support to service providers in providing a high standard of care for children and families.

Bond, G. R., Drake, R. E., McHugo, G. J., Rapp, C. A., & Whitley, R. (2009). Strategies for improving fidelity in the National Evidence-Based Practices Project. *Research on Social Work Practice*, 19(5), 569-581. Retrieved from http://tapartnership.org/enterprise/docs/RESOURCE%20BANK/RB-QUALITY%20IMPROVEMENT,%20PERFORMANCE%20MEASUREMENT/General%20Resources/Strategies_for_Improving_Fidelity_Bond_et_al_2009.pdf

The National Evidence-Based Practices Project developed and tested a model for facilitating the implementation of five psychosocial EBPs for adults with severe mental illness in the U.S. Researchers tested the implementation model at 53 sites in 8 states. At each site, 1 of the 5 EBPs was adopted for implementation and then studied for a 2-year period using a combination of qualitative and quantitative methods. At baseline, none of the sites had programs attaining high fidelity. Four factors were identified as influencing fidelity: (1) EBP-specific factors, (2) governmental factors, (3) leadership factors, and (4) fidelity review factors. The authors concluded that a multipronged implementation strategy was effective in achieving high fidelity in over half of the sites seeking to implement a new EBP.

Quinby, R. K., Hanson, K., Brooke-Weiss, B., Arthur, M. W., Hawkins, J., & Fagan, A. A. (2008). Installing the communities that care prevention system: implementation progress and fidelity in a randomized controlled trial. *Journal of Community Psychology*, 36(3), 313-332. Retrieved from <http://onlinelibrary.wiley.com/doi/10.1002/jcop.20194/epdf>

This article describes the degree to which high-fidelity implementation of the Communities That Care (CTC) prevention operating system was reached during the first 18 months of intervention in 12 communities in the Community Youth Development Study, a 5-year group randomized controlled trial designed to test the efficacy of the CTC system. CTC installation in these communities included the delivery of six CTC trainings from certified CTC trainers at each site, the active involvement of locally selected and community-based CTC community coordinators, ongoing monitoring of progress using the CTC milestones and benchmarks, and proactive TA and coaching. CTC implementation fidelity ratings averaged across 3 groups of raters show that between 89 percent and 100 percent of the CTC milestones in the first 4 phases of CTC implementation were “completely met” or “majority met” in the 12 intervention communities, indicating that the first 4 phases of the CTC system have been well implemented in the communities in this trial.

Sloboda, Z., Stephens, P., Pyakuryal, A., Teasdale, B., Stephens, R. C., Hawthorne, R. D., & Williams, J. E. (2009). Implementation fidelity: The experience of the Adolescent Substance Abuse Prevention Study. *Health Education Research*, 24(3), 394-406. Retrieved from <http://her.oxfordjournals.org/content/24/3/394.full.pdf+html>

While researchers have developed more effective programs and strategies to prevent the initiation of substance use, and increasingly communities are delivering these interventions, determining the degree to which they are delivered as they were designed remains a significant research challenge. In the past several years, more attention has been given to implementation issues during the various stages of program development and diffusion. This paper presents the findings from a sub study of an evaluation of a newly designed middle and high school substance abuse prevention program, Take Charge of Your Life, delivered by local Drug Abuse Resistance Education officer instructors. An important aspect of the study was to determine the extent to which implementation fidelity, using the measures of content coverage and appropriate instructional strategy, was associated with improvement in the program mediators of realistic normative beliefs, understanding the harmful effects of substance use and the acquisition of decision-making and resistance skills. Although researchers found that higher fidelity was associated with better scores on some of the mediators, the finding was not consistent. The authors discuss the mixed results within the context of the lesson activities themselves.

Plan for Sustaining the Change

The articles below address planning to provide what is needed so the innovation can continue to function effectively.

Adelman, H. S., & Taylor, L. (2003). On sustainability of project innovations as systemic change. *Journal of Educational and Psychological Consultation*, 14(1), 1-25. Retrieved from <http://smhp.psych.ucla.edu/publications/45%20on%20sustainability%20of%20project%20innovations%20as%20systemic%20change.pdf>

Too many promising innovations disappear when project funding ends. As a result, interest in the problem of sustainability has increased markedly in recent years. This article explores this problem in terms of systemic change. Highlighted are basic ideas, phases, stages, steps, and lessons learned related to the planning, implementation, maintenance, and scale-up of school-

based innovations. A particular emphasis is on efforts designed to enhance how schools address barriers to learning and teaching. The discussion is framed around the idea that the likelihood of sustaining any new approach is increased if it is integrated into the fabric of existing school improvement efforts.

Bierman, K. L., Coie, J. D., Dodge, K. A., Greenberg, M. T., Lochman, J. E., McMahon, R. J., & Pinderhughes, E. (2002). The implementation of the Fast Track Program: An example of a large-scale prevention science efficacy trial. *Journal of Abnormal Child Psychology*, 30(1), 1-17. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2756657/>

In 1990, the Fast Track project was initiated to evaluate the feasibility and effectiveness of a comprehensive, multicomponent prevention program targeting children at risk for conduct disorders in four demographically diverse American communities. Representing a prevention-science approach toward community-based preventive intervention, the Fast Track intervention design was based upon the available data base elucidating the epidemiology of risk for conduct disorder and suggesting key causal developmental influences (Weissberg & Greenberg, 1998). Critical questions about this approach to prevention center around the extent to which such a science-based program can be effective at (1) engaging community members and stakeholders, (2) maintaining intervention fidelity while responding appropriately to the local norms and needs of communities that vary widely in their demographic and cultural/ethnic composition, and (3) maintaining community engagement in the long term to support effective and sustainable intervention dissemination. This paper discusses these issues, providing examples from the Fast Track project to illustrate the process of program implementation and the evidence available regarding the success of this science-based program at engaging communities in sustainable and effective ways as partners in prevention programming.

Bond, G. R., Drake, R. E., McHugo, G. J., Peterson, A.E, Jones, A.M. et al. (2014) Long-term sustainability of evidence-based practices in community mental health settings. *Administration and Policy in Mental Health and Mental Health Services Research*, 41: 228-236.

Unlike many studies that follow-up at the conclusion of research studies, here the authors explore barrier and facilitating factors related to long-term sustainability (6+ years) of EBPs implemented under real-world conditions. Sustainability factor domains included: (1) financial, (2) leadership, (3) prioritization (active support by administration), (4) reinforcement (monitoring and feedback of fidelity and other data), (5) workflow (practices), (6) workforce (training, coaching), and (7) client compatibility. While adequate funding is a necessary condition for sustainability, the authors report that funding is insufficient for long-term continuation. Ongoing supervision, fidelity, and outcome monitoring appear critical for long-term sustainability.

Buteau, E., Bushanan, P., Bolanos, C., Brock, A., & Chang, K. (2008). *More than money: Making a difference with assistance beyond the grant*. Retrieved from <http://www.wallacefoundation.org/knowledge-center/advancing-philanthropy/Documents/Making-a-Difference-with-Assistance-Beyond-the-Grant.pdf>

This study analyzes the provision of assistance beyond the grant by foundational staff and consultants. It provides statistical information about the different kinds of benefits that grantees report given different kinds of assistance (e.g., comprehensive versus field-focused). Its focus is primarily from a foundation perspective and the relationship with its grantees, such as quality of interactions with foundation staff and clarity of communication of a foundation's goals and strategies. Key findings include: (1) Assistance beyond the grant is seen as key to creating impact; foundations know little about actual results; (2) The majority of grantees of a typical,

large foundation receive no assistance beyond the grant, and those that do generally receive just two or three types; (3) Providing just two or three types of assistance to grantees appears to be ineffective; (4) Program staff at foundations that provide assistance in these ways to more of their grantees tend to manage fewer active grants and give larger grants.

Calhoun, A., Mainor, A., Moreland-Russell, S., Maier, R. C., Brossart, L., & Luke, D. A. (2014). Peer reviewed: Using the Program Sustainability Assessment Tool to assess and plan for sustainability. *Preventing Chronic Disease*, 11, 11. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3900327/>

Implementing and growing a public health program that benefits society takes considerable time and effort. To ensure that positive outcomes are maintained over time, program managers and stakeholders should plan and implement activities to build sustainability capacity within their programs. The article describes a three-part sustainability planning process that programs can follow to build their sustainability capacity. First, program staff and stakeholders take the Program Sustainability Assessment Tool to measure their program's sustainability across eight domains. Next, managers and stakeholders use results from the assessment to inform and prioritize sustainability action planning. Lastly, staff members implement the plan and keep track of progress toward their sustainability goals. Through this process, staff can more holistically address the internal and external challenges and pressures associated with sustaining a program. The article includes a case example of a chronic disease program that completed the Program Sustainability Assessment Tool and engaged in program sustainability planning.

Chamberlain, P., Snowden, L. R., Padgett, C., Saldana, L., Roles, J., Holmes, L., & Landsverk, J. (2011). A strategy for assessing costs of implementing new practices in the child welfare system: Adapting the English cost calculator in the United States. *Administration and Policy in Mental Health and Mental Health Services Research*, 38(1), 24-31.

See abstract in Section 2: Initial and Full Implementation, Monitor and Assess the Innovation.

Chambers, D. A., Glasgow, R. E., Stange, K. C. (2013). The dynamic sustainability framework: Addressing the paradox of sustainment amid ongoing change. *Implementation Science*. 8(1), 117. Retrieved from <http://www.implementationscience.com/content/8/1/117>

Shifts in recent sustainability approaches locate sustainability not at the end of the translational research process, as has been the trend, but in the implementation phase of knowledge transfer, and they do not address intervention improvement as a central theme. This article argues for understanding the changing context of sustainability to continually refine and improve interventions and asserts that continuous exposure to new populations, contexts, and innovations can result in improved outcomes. The Dynamic Sustainability Framework (DSF) emphasizes that “change exists in the use of interventions over time, the characteristics of practice settings, and the broader system that establishes the context for how care is delivered.” It focuses on managing the fit between three levels: (1) the characteristics of the intervention, (2) the practice settings of its context, and (3) the “ecological system” (additional practice settings, as well as legislative environments and characteristics of markets and the broad population). The framework assumes that change is constant at each of these levels and that a successful intervention is optimized through consistent tracking of these three levels and through reliable measures of improvement to best meet the needs of the target populations.

Culter, I. (2002). *End games: The challenge of sustainability*. Retrieved from <http://www.aecf.org/resources/end-games-the-challenge-of-sustainability/>

This report focuses on foundation comprehensive community-based initiatives (CCI) in impoverished neighborhoods and the question of how to realistically assess the ability of neighborhood-based groups and agencies to replace initiative funding. The article emphasizes the difficulties that community-based initiatives face in raising funds to sustain initiatives after foundation support ends and provides suggestions for how foundations could change or modify their efforts to assist with sustainability efforts rather than on what sustainability initiatives can do to plan for sustainability. One section of the report discusses how best to support promising projects so they do not fade away, concentrating on what parts should be sustained if the entire initiative cannot be continued. A compilation of interview responses of two dozen foundation staff and grantees, the article paints a bleak picture for CCI sustainability beyond foundation grants. Summarizing responses to the question, “How do the few succeed,” the authors write that respondents spoke of strong leadership, careful planning, and the luck of being in the right place at the right time. Some also cited that a carefully constructed evaluation, designed to show continuing progress, is important.

Doyle, C., Howe, C., Woodcock, T., Myron, R., Phekoo, K., McNicholas, C., Saffer, J., & Bell, D. (2013). Making change last: Applying the NHS institute for innovation and improvement sustainability model to health care improvement. *Implementation Science*, 8, 127. Retrieved from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3827618/>

This article describes a formative evaluation of the application of the National Health Service Institute for Innovation and Improvement Sustainability Model (SM) and suggests improvements resulting from the evaluation. The SM is a self-assessment tool that details 10 key factors (grouped into three domains: process, staff, and organization) that increase the likelihood of sustainability and continuous improvement. The variables it includes are consistent with other models, including an intervention’s evidence base, fit with the host organization’s mission and operating routines, internal champions, and leadership effectiveness. The authors, however, advocate for a revised SM with stronger emphasis on political and economic environment as the context for long-term sustainability. They changed the approach to facilitating the SM from a “didactic” approach to one that uses peer exemplars and teams to brainstorm issues and map discussions to the SM to illustrate its relevance to the teams. With these evaluation findings, the SM can be used to support teams to systematically consider key determinants of sustainability in their organization environment, provide timely data to assess progress, and prompt action to create conditions for sustained practice. (For the NHS Institute for Innovation and Improvement Sustainability Model and Guide, go to http://www.qihub.scot.nhs.uk/media/162236/sustainability_model.pdf)

Luke D. A., Calhoun A., Robichaux C. B., Elliott M. B., & Moreland-Russell S. (2014). The Program Sustainability Assessment Tool: A new instrument for public health programs. *Preventing Chronic Disease*, 11, 130184. Retrieved from http://www.cdc.gov/pcd/issues/2014/13_0184.htm

The Program Sustainability Assessment Tool (PSAT) is a new instrument for assessing the capacity for program sustainability of various public health and other programs. It is designed to be used by researchers, evaluators, program managers, and staff for large and small public health programs. A measurement development study was conducted to assess the reliability of the PSAT. Program managers and staff (n = 592) representing 252 public health programs used the PSAT to rate the sustainability of their program. State- and community-level programs participated, representing four types of chronic disease programs: tobacco control, diabetes, obesity prevention, and oral health. It was concluded that the PSAT is a new and reliable assessment instrument that can be used to measure a public health program’s capacity for sustainability.

National Center for Mental Health Promotion and Youth Violence Prevention. (2011). *School Mental Health Sustainability Guide for SS/HS project directors: Strategies to build sustainable school mental health programs*. Retrieved from <http://www.promoteprevent.org/sites/www.promoteprevent.org/files/resources/School%20Mental%20health%20sustainability.pdf>

This guide provides Safe Schools/Health Schools (SS/HS) project directors (PDs) with information on developing sustainable school mental health (SMH) programs. It presents strategies to consider when working with public and private community mental health agencies to implement SMH programs and provides step-by-step guidelines for creating long-lasting SMH programs. Beyond obtaining funds, the guide focuses sustainability efforts on developing relationships among community entities, increasing community awareness of relevant issues, creating leadership across and within systems, using evaluation data in decision-making, and capitalizing on staff competencies and expertise and other program capacities. Topics include overcoming challenges in partnering, building a continuum of services, and engaging partners in data collection.

Sacks, V.H., Beltz, M., Beckwith, S., & Moore, K.A. (2015). How to scale up effective programs serving children, youth, and families. *Child Trends Research Brief, November 2015*. Retrieved from https://ncwwi.org/files/Evidence_Based_and_Trauma-Informed_Practice/How_to_Scale_Up_Effective_Programs_Serving_Children_Youth_and_Families.pdf

Scaling up evidence-based programs is not easy, and it is something that program developers and distributors approach in many different ways. This brief reviews the best practices for scale up of effective programs from across the literature and describes the experiences of several effective programs that are at varying levels of scale across the country and internationally.

Schell, S.F., Luke, D. A., Schooley, M. W., Elliott, M. B., Herbers, S .H., Mueller, N. B., & Bunker, A. C. (2013). Public health program capacity for sustainability: A new framework. *Implementation Science*, 8(15). Retrieved from <http://www.implementationscience.com/content/8/1/15>

This article presents a new conceptual framework for program sustainability in public health, focusing on sustainability capacity as it identifies organizational and contextual characteristics that are necessary for successfully sustaining programs over time. The framework is applicable for community-level, as well as state- or national-level programs and is meant to establish the basis for instrument development so that a program's capacity for sustainability can be better assessed in real-world public health settings. Using a literature review and concept mapping, the authors identify nine core domains that affect a program's capacity for sustainability: political support, funding stability, partnerships, organizational capacity, program evaluation, program adaptation, communications, public health impacts, and strategic planning. Previous publications on the conceptualization of sustainability address its definition and framing, exploring, for example, whether sustainability is a process or an outcome and how to determine the point at which a program is sustained. This article posits that determining whether a program is sustained depends on a program's size, fidelity, and stage in the life cycle. In addition to tracking sustained elements of a program (i.e., sustainability outcomes), the characteristics of a program must also be assessed, as well as its parent organization and its place in the larger service system context (i.e., capacity for sustainability).

Stirman, S. W., Kimberly, J., Cook, N., Calloway, A., Castro, F., & Charns, M. (2012). The sustainability of new programs and innovations: A review of the empirical literature and recommendations for future research. *Implementation Science*, 7(17). Retrieved from <http://www.implementationscience.com/content/pdf/1748-5908-7-17.pdf>

An exhaustive review of current research literature on sustainability in medicine, mental health, and education revealed that few studies report long-term implementation outcomes or identify potential influences on the sustained use of new practices, programs, or interventions. Studies that investigated sustainability outcomes report few that employed rigorous methods of evaluation, and, among those that did, only a small number reported high fidelity or full sustainment, even when full implementation was initially achieved. Little research has examined the extent, nature, or impact of adaptations to the interventions or programs once implemented. Recommendations for future research include clearer definitions and further efforts to characterize sustainability and the factors that influence it (including organizational context, capacity, processes, and factors related to the new program or practice). More analysis of interactions among influences at multiple levels would enhance understanding of the phenomenon, as would further consideration of issues such as fidelity, modification, and changes in implementation over time. The article reports almost no studies that focus primarily on the sustainability of complex service innovations.

U.S. Department of Health and Human Services, Centers for Disease Control (CDC). (n.d.) *A sustainability planning guide for healthy communities*. Retrieved from http://www.cdc.gov/nccdphp/dch/programs/healthycommunitiesprogram/pdf/sustainability_guide.pdf

This CDC guide asserts that sustainability involves maintaining community-wide change, maximizing community assets and resources, and institutionalizing community policies. This guide provides a succinct list of rationales for a sustainability plan and core elements of sustainability planning success. It offers a blueprint for sustaining efforts and promising policy strategies that can be used as a step-by-step guide through 10 sustainability steps, beginning with creating a shared understanding of sustainability and ending with evaluating outcomes and revising the plan as needed. The guide includes sustainability stories from the field, a sample sustainability plan outline, and a sample matrix for evaluating and revising the plan. It discusses six sustainability approaches, including developing communication and social marketing strategies, and provides detailed modules for better understanding of how the approaches work and why they are important. It also includes an appendix with activities, evaluation questions, a lists of sustainability factors, a criteria grid for analyzing a sustainability team's efforts, an example of an action plan with SMART objectives, an example of membership guidelines, a training needs assessment survey, a press release, a glossary, online resources, and print references.

U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE). (2010). *Developing a conceptual framework to assess the sustainability of community coalitions post-Federal funding*. Retrieved from <https://aspe.hhs.gov/pdf-report/developing-conceptual-framework-assess-sustainability-community-coalitions-post-federal-funding>

This literature review explores the constructs of community coalitions, their impacts, and sustainability. It also identifies how researchers, policymakers, and practitioners have defined and measured sustainability for community coalitions. This report is part of a larger study that is funded by ASPE. This literature review includes a conceptual framework that can be used to assess the sustainability of community coalitions. The conceptual framework will guide the

ASPE study, which uses the experiences of the community coalitions funded by the Community Access Program/Healthy Communities Access Program to explore sustainability after federal funding.

U.S. Department of Health and Human Services, SAMHSA. (2006). *Prevention training and technical assistance: Planning for sustainability*. Retrieved from <http://captus.samhsa.gov/access-resources/planning-sustainability>

As part of SAMHSA's prevention T/TA website, this tool focuses on building and sustaining a prevention system for reducing consumption and consequences of alcohol, tobacco, and drugs, and on building the capacities required at each level of scale to embed a strategy to ensure that desired outcomes are achieved and sustained. To build these capacities, communities (through coalitions) must have the ability to assure effectiveness and alignment of the prevention system, assure organizations' ability to support the community prevention system through a strategic planning process, and cultivate community support for the prevention system and its outcomes.

U.S. Department of Health and Human Services, SAMHSA, National Council on Aging (NCOA). (2011). *Lessons Learned on sustainability of older adult community behavioral health services*. Retrieved from https://www.ncoa.org/wp-content/uploads/NCOA-Sustainability-Rpt-1_12-web.pdf

This draft guide prepared by SAMHSA and NCOA offers a sustainability framework that identifies 17 key factors (grouped as program, organizational, and community factors) known to influence sustainability that service providers and funders can apply to their work. The factors are integral to PII work (e.g., demonstrated effectiveness, program champions, availability of resources). Each factor is discussed in a paragraph and includes recommendations to organizations or funders. The document does not shed light on PII practices, but could provide a useful model for disseminating high-level information to grantees.

U.S. Environmental Protection Agency. (n.d.). *Measurement tips and resources for community Projects*. Retrieved from http://www.epa.gov/care/library/CARE_Measurement_Tips.pdf

This document is an introductory resource for new and seasoned Community Action for a Renewed Environment communities looking for ways to measure progress made by their community projects. It provides information about how to measure what an organization expects to achieve through funded activities, including basic measurement principles, tips, and guides on measurement. It also provides online resources for creating logic models, including an example of a logic model for grantees.

University of California - Los Angeles, Center for Mental Health in Schools. (2008 Update). *New initiatives: Considerations related to planning, implementing, sustaining, and going-to-scale*. Retrieved from <http://smhp.psych.ucla.edu/pdfdocs/briefs/sustainbrief.pdf>

This brief is designed to provide a quick overview of basic ideas, phases, stages, and steps related to the planning, implementation, maintenance, and scale-up of valuable new initiatives. There is a particular emphasis on sustainability.

U.S. Department of Labor, Employment and Training Administration. (n.d.) *Moving forward: A sustainability planning guide*. Retrieved from <http://www.doleta.gov/business/PDF/SustainGuide.pdf>

This sustainability planning guide is designed to help grantees work through the key steps in the process of planning for the sustainability of their High Growth Job Training Initiative and Community-Based Job Training grants. The guide is intended to assist grantees with sustainability planning on an ongoing basis. It provides basic information on the six key steps in the sustainability planning process: (1) clarify vision, (2) determine what to sustain, (3) build collaboration, (4) choose sustainability strategies and methods, (5) develop action steps for sustainability, and (6) document and communicate sustainability success. It offers web resources for logic models, assessment tools, and sustainability funding and training resources. The guide also provides checklists for each of the six key steps.

Wiltsey Stirman, S., Kimberly, J., Cook, N., Calloway, A., Castro, F., & Charns, M. (2012). The sustainability of new programs and innovations: A review of the empirical literature and recommendations for future research. *Implementation Science* 7(17).

The introduction of EBP into health care settings has been the subject of an increasing amount of research in recent years. While a number of studies have examined initial implementation efforts, less research has been conducted to determine what happens beyond that point. There is increasing recognition that the extent to which new programs are sustained is influenced by many different factors and that more needs to be known about just what these factors are and how they interact. To understand the current state of the research literature on sustainability, the authors reviewed what is currently known in this area and identified areas in which further research would be particularly helpful. This paper reviews the methods that have been used, the types of outcomes that have been measured and reported, findings from studies that reported long-term implementation outcomes, and factors that have been identified as potential influences on the sustained use of new practices, programs, or interventions. The authors conclude with recommendations and considerations for future research.

York, P. (2009). *The sustainability formula: How nonprofit organizations can thrive in the emerging economy*. Retrieved from <http://www.tccgrp.com/pdfs/SustainabilityFormula.pdf>

Through a statistical analysis of over 700 organizations, TCC Group found that the key ingredients for nonprofit sustainability are decisive, strategic, and accountable leadership; financial and programmatic adaptability; and the resources to deliver core programs. This executive summary focuses on these four key ingredients, providing examples throughout.