

2013

Leadership Symposium on  
Evidence-Based Practice

Implementation Science:  
Closing the Gap Between  
Innovation and Practice



# Resource Guide

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Presented with collaboration among





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### Notes:

- ▶ “Open Access” denotes that the article or resource is freely available without a journal subscription.
- ▶ Subsequent versions of this Resource Guide may be available on the CaISWEC website: <http://calswec.berkeley.edu/2013-implementation-science-closing-gap-between-innovation-and-practice>

# IMPLEMENTATION SCIENCE: CLOSING THE GAP BETWEEN INNOVATION AND PRACTICE

## Resource Guide

### INTRODUCTION

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Any innovative, promising or evidence-based practice needs a reliable, supportive, and sustainable delivery system—whether it is an educational intervention to help raise the achievement of students, a safety intervention to protect children from abuse or neglect, or a medication to conquer a deadly disease. In the human services fields, the failure to implement empirically supported practices effectively has cost billions of dollars of scarce public and private funds, has failed to resolve pressing social problems, and has led to great disillusionment among practitioners and the public. The fault may not be with the practices or approach—though clearly the field needs to build evidence. Rather, there has been a gap between the actual program, intervention, innovation, or project and how it is implemented in the field. We are studying implementation science as a way to consider and deliver promising and evidence-based practices (EBPs) that leads to benefits for those we serve.

There are a number of emerging models and frameworks that provide guidance on implementation. Research indicates that guidance from the science of implementation can help lead to faithful and sustained delivery of EBPs and other practices. We now know that delivery systems must be multifaceted and complex, and that the active engagement of multiple stakeholders plays a pivotal role in juggling competing priorities. These implementation systems must take into account the policy and organizational climate, the context, the populations to be served, the varying health conditions or problems to be addressed, and the types of interventions that could be provided. They must be systems that, themselves, make use of evidence-based structures, procedures, and trained professionals to ensure intervention delivery with fidelity.

The aim of this Resource Guide is to provide an accessible means for decision makers, leaders, and practitioners in various fields to connect with implementation science, and, ultimately, to make more effective and sustained use of specific evidence-based practices.<sup>1</sup> The guide contains a selected bibliography on implementation science, with

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<sup>1</sup> The authors recognize the importance of both specific evidence-based practices (i.e., interventions with empirical evidence that supports their effectiveness) and evidence-based

brief annotations. It addresses the question of the scientific basis of this emerging field, then provides items that describe some of the main implementation models and frameworks. It continues with a few items on research methods, and closes with citations of works that apply and test implementation science in real world settings. In addition, online links to groups, periodicals and websites explain and illustrate the uses of implementation science. A preliminary glossary of terms widely used in the literature is included.<sup>2</sup> The California Implementation Science Collaborative<sup>3</sup> hopes that readers will explore this guide and use the concepts, tools and practices as they apply in the real world.

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practice (i.e., an overall approach to practice that systematically and critically considers research as well as client-based and other factors). For definitions of Evidence-Based Practice (EBP) and other key terms, please refer to the Glossary beginning on page 13.

<sup>2</sup> A word of caution to the reader: This Resource Guide is a work in progress. Please forward comments, suggestions, and references that can be considered for its refinement to the **California Implementation Science Collaborative**, c/o: Sevaughn Banks, [sevaughn@berkeley.edu](mailto:sevaughn@berkeley.edu).

<sup>3</sup> The **California Implementation Science Collaborative** is comprised of representatives from various human services practice areas. The mission of the **Collaborative** is to audaciously drive change within the larger human services field and promote aligned, systematic implementation to increase effective outcomes for diverse populations served in areas such as health care, older adults, corrections, children, and adolescents. For more information, contact Stuart Oppenheim at the Child and Family Policy Institute of California: [stuart.oppenheim@cfpic.org](mailto:stuart.oppenheim@cfpic.org).

## I. IS IMPLEMENTATION REALLY A SCIENCE?

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This section provides illustrations of Implementation Science theories, frameworks, and key constructs that define implementation as a science.

1. R.C. Brownson, G.A. Colditz, & E.K. Proctor, eds. (2012). **Dissemination and Implementation Research in Health: Translating Science to Practice**. New York: Oxford University Press.

This book brings together authors in health professions who share concerns that large investments of public funds have been paid for many new discoveries, yet these have not been translated into better patient care, public policy, and public health programs. It emphasizes the need to invest in dissemination and implementation research—Implementation Science—to begin to solve problems of the lack of translating science into practice. Section One of the book contains an overview/rationale; Section Two covers theory and approaches to implementation; Section Three looks at research design and analysis approaches; and Section Four covers setting- and population-specific dissemination and implementation examples.

2. B. Kelly & D.F. Perkins, eds. (2012). **Handbook of Implementation Science for Psychology in Education**. New York: Cambridge University Press.

This book is an evidence-based resource aimed at using implementation research findings in psychology to improve all aspects of education, from individual teaching programs to organizational development. It addresses the widespread confusion and disappointment about the lack of effectiveness of real-world psychology and provides 27 chapters offering proven policies, strategies, and approaches for designing, supporting, and improving interventions in schools. Part I (Chapters 1 and 2) answers the question: “What is Implementation Science?” Other major sections cover statistical problems and solutions, frameworks and approaches, successful implementation of specific programs, and case studies of improvements in the implementation of evidence-based programs and interventions.

3. Proctor, E., Landsverk, J., Aarons, G.A., Chambers, D. Glisson, C. A., & Mittman, B. (2009). **Implementation Research in Mental Health Services: an Emerging Science with Conceptual, Methodological, and Training Challenges**. *Administration and Policy in Mental Health and Mental Health Services Research*, 46, 24–34.

This article addresses the research and practice challenges of the burgeoning implementation science field in the context of mental health service systems.

The authors demystify the inconsistent definitions, terminology, and conceptual models that have been applied to implementing evidence-based practices across many different disciplines. This article is useful because it distills key constructs from three conventional implementation models (*unilateral, multi-level, and quality care improvement*) and makes recommendations for implementation research and practice.

## II. IMPLEMENTATION SCIENCE MODELS AND FRAMEWORKS

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This section provides illustrations of some implementation models and frameworks that seek to identify key factors and approaches to move evidence-based interventions into practice.

1. 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.

This article presents a multi-level, four-phase model (*Exploration, Preparation, Implementation, and Sustainment*) of the implementation and sustainment process for public service sectors including mental health, substance abuse, and child welfare. The framework identifies the internal and external contextual factors that most significantly impact public sector services. The authors emphasize the need to consider outer context (i.e., policy, funding, interorganizational networks) and inner context (i.e., organizational leadership, culture, climate, and provider and client characteristics), and accounts for the timing of the varying contextual factors during the implementation process. This is essential for targeting implementation and intervention strategies that address changing needs and challenges throughout the implementation process. (*Open Access*)

2. Damschroder, L., Aron, D., Keith, R., Kirsh, S., Alexander, J., & Lowery, J. (2009). **Fostering implementation of health services research findings into practice: A consolidated framework for advancing implementation science.** *Implementation Science, 4*:50.

This article reviews and consolidates a number of current implementation frameworks and distills common elements and factors across the multiple approaches. The *Consolidated Framework for Implementation Research* (CFIR) model provides a guide for structured evaluations of interventions, while

offering organizations a conceptual framework to establish learning environments that support the implementation process. (*Open Access*)

3. Fixsen, D.L., Naoom, S.F., Blasé, K.A., Friedman, R.M., & Wallace, F. (2005). ***Implementation research: A synthesis of the literature***. Tampa: University of South Florida, Louis de la Parte Florida Mental Health Institute, the National Implementation Research Network.

This monograph provides a broad-based multidisciplinary literature review, unified conceptual framework, and implementation strategies for practitioners, researchers, and policy-makers. The authors define the *Stages of Implementation*, as a process of change, within the contextual relationships of the consumer, practitioner, organization as a whole, community, and several external factors. As part of the *NIRN model*, *core implementation components* are identified as key elements in measuring the effectiveness of evidence-based interventions and the implementation processes used to achieve improved client and service outcomes. <http://nirn.fpg.unc.edu/resources/implementation-research-synthesis-literature>

4. Fixsen, D., Blasé, K., Naoom, S., & Wallace, F. (2009). **Core implementation components**. *Research on Social Work Practice*, 19: 531–540.

This article provides a summary of IS literature and best practices in the context of two theoretical frameworks (*Stages of Implementation; and Core Implementation Components*). The authors contend the stages and core components are an integral part of the implementation process that actively link science to service. This publication discusses the integrated and compensatory nature of the proposed model in which its interactive processes may provide for a vigorous and flexible approach to ensuring the high fidelity of evidence-based interventions. The authors refer to this model as the “Active Implementation Frameworks” in later publications (Fixsen, D., Blasé, K., Metz, A., & Van Dyke, M. (in press). **Statewide implementation of evidence-based programs**. *Exceptional Children (Special Issue)*).

5. Greenhalgh, T., Robert, G., Macfarlane, F., Bate, P., & Kyriakidou, O. (2004). **Diffusion of innovations in service organizations: Systematic review and recommendations**. *Milbank Quarterly*, 82:581–629.

This article provides a comprehensive interdisciplinary review of the contextual factors related to implementation science. The authors present a unified conceptual model with empirically supported detailed descriptions of key components for considering the determinants of diffusion, dissemination, and



implementation of innovations in health and allied health service delivery settings. The article also provides recommendations for future research.

6. Mendel, P., Meredith, L., Schoenbaum, M., Sherbourne, C., Wells, K. (2008). **Interventions in organizational and community context: A framework for building evidence on dissemination and implementation in health services research.** *Administration and Policy in Mental Health and Mental Health Services Research*, 35:21–37.

This article integrates factors at multiple system and organizational levels likely to be important in effective evidence-based practice implementation in health services. The authors provide a multilevel framework that addresses quality improvement from the most complex healthcare systems to grass-roots efforts of local communities. The proposed *community-partnered* conceptual model attempts to integrate a range of multilevel approaches by combining strategies and negotiating priorities among multiple research perspectives in effort to identify key implementation processes.

7. Powell, B.J., McMillen, J.C., Proctor, E.K., Carpenter, C.R., Griffey, R.T., Bunger, A.C., Glass, J.E., & York, J.L. (2012). **A Compilation of Strategies for Implementing Clinical Innovations in Health and Mental Health.** *Medical Care Research and Review* 69(2) 123–157.

This article brings depth and clarity to implementation research and practice by presenting a consolidated compilation of discrete implementation strategies, based on a review of 205 implementation strategies and definitions, which are grouped according to six key implementation processes: planning, educating, financing, restructuring, managing quality, and attending to the policy context.

### III. RESEARCH METHODS

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This section illustrates a variety of research methods being applied in the research designs of interventions across disciplines.

1. Palinkas, L.A., Arons, G.A., Horwitz, S., Chamberlain, P., Hurlburt, M., & Landsverk, J. (2011). **Mixed method designs in implementation research.** *Administration and Policy in Mental Health and Mental Health Services Research*, 38(1), 44–53.

This article describes the application of mixed method designs in implementation research in 22 research studies published in peer-reviewed journals over the last five years. There were 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. The authors provide suggestions for the use of mixed method designs in implementation research.

2. Palinkas, L.A., & Soydan, H. (2012). **Translation and Implementation of Evidence-Based Practice**. New York: Oxford University Press.

This book is about conducting research on the process and outcomes of the translation and implementation of evidence-based practices in social work. Its aim is to outline a strategy for conducting such research and identify the infrastructure and resources necessary to support such research within the field of social work.

3. Proctor, E.K., Landsverk, J., Aarons, G., Chambers, D., Glisson, C., & Mittman, B. (2009). **Implementation research in mental health services: An emerging science with conceptual, methodological, and training challenges**. *Administration and Policy in Mental Health and Mental Health Services Research*, 36(1), 24–34. doi:10.1007/s10488-008-0197-4.

This article addresses the research and practice challenges of the burgeoning implementation science field in the context of the mental health service system. The authors demystify the inconsistent definitions, terminology, and conceptual models that have been applied to implementing evidence-based practices across many different disciplines. This article distills key constructs from three conventional implementation models (*unilateral, multi-level, and quality care improvement*) to present a comprehensive heuristic framework for targeting implementation and intervention strategies.

4. 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. doi:10.1007/s10488-010-0319-7.

This article underscores the importance of conceptualizing and measuring implementation outcomes as distinct from clinical outcomes in order to better achieve an empirical understanding of the implementation process. The authors contend that reliable, valid measures will lay the groundwork for *comparative effectiveness research* on implementation strategies. The authors present a taxonomy of eight distinctive, yet interrelated, implementation outcomes and clarify definitions of outcomes for implementation science. The article also provides direction for future research by highlighting the existing measurement

challenges, and presents researchers with a theory-building agenda for evaluating implementation outcomes.

#### IV. APPLYING AND TESTING IMPLEMENTATION SCIENCE IN THE REAL WORLD

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This section provides examples of studies that are being conducted to address implementation at particular system and organizational levels.

1. Aarons G.A., Green, A.E., Palinkas, L.A., Self-Brown, S.R., Whitaker, D.J., Lutzker, J.R., Silovsky, J.F., Hecht, D.B., & Chaffin, M.J. (2012). **Dynamic Adaptation Process to Implement an Evidence-Based Child Maltreatment Intervention.** *Implementation Science*, 7:32.

This study protocol presents a randomized controlled design using the *Dynamic Adaptation Process* (DAP) to examine the implementation of an evidence-based child maltreatment intervention. The authors developed the DAP model based on existing literature and to provide practical application of their EPIS (*Exploration, Preparation, Implementation, and Sustainment*) implementation framework. The article describes the design of a feasibility and acceptability study of the DAP model, which has been designed to address concerns over adherence to strict fidelity measures and the potential need for community-specific adaptations of the service system, the community-based organizations, and the intervention during implementation. The authors present a multi-level approach to account for different contextual needs at the system, organizational, provider, and client levels, which they contend will facilitate effective implementation. The DAP framework is significant because it focuses on practical strategies to support appropriate adaption of system, organization, and EBP in a collaborative way that engages multiple stakeholders.

2. Barwick, M.A., Peters J., Boydell, K. **Getting to uptake: Do communities of practice support the implementation of evidence-based practice?** *Journal of the Canadian Academy of Child and Adolescent Psychiatry*. 2009;18(1):16–29. [PMC free article] [PubMed].

This randomized controlled study evaluates whether the Communities of Practice (CoP) model supports the uptake of an evidence-based mental health assessment tool. The authors contend that CoPs are a useful strategy for promoting the implementation of evidence-based practices. The findings demonstrated an increased use of evidence-based practices, enhanced

knowledge of the EBP (assessment tool), and improved satisfaction with the CoP implementation supports.

3. Bennett, G.G., & Glasgow, R.E. (2009). **The delivery of public health interventions via the internet: Actualizing their potential.** *Annual Review of Public Health, 30*, 273-292. doi:10.1146/annurev.publhealth.031308.100235.

This article studies the effectiveness of Internet-based public health interventions. The authors apply the *RE-AIM (Reach, Effectiveness, Adoption, Implementation, Maintenance)* model to identify factors related to the diffusion potential of Internet interventions. The article provides creative information technology implementation strategies to aid in the dissemination of Internet-delivered interventions.

4. Chamberlain, P., Roberts, R., Jones, H., Marsenich, L., Sosna, T., & Price, J.M. (2012). **Three collaborative models for scaling up evidence-based practices.** *Administration and Policy in Mental Health and Mental Health Services Research, (39)*, 278–290.

This paper describes three implementation models for scaling up evidence-based practices, of which community development teams are one example. It presents an overview of the model, the policy framework in which it is embedded, the system challenges encountered during scale-up, and lessons learned.

5. Glisson, C., Schoenwald, S.K., Hemmelgran, A., Green, P., Dukes, D., Armstrong K. S., & Chapman, J.E. (2010). **Randomized trial of MST and ARC in a two-level evidence-based treatment implementation strategy.** *Journal of Consulting and Clinical Psychology, 78(4)*, 537–550. doi: 10.1037/a0019160.

This article describes a randomized controlled study of the individual and combined impacts of the *ARC organizational intervention* on implementation and clinical outcomes with Multi-systemic Therapy. It provides evidence that the ARC model in conjunction with EBPs aid community stakeholders in recognizing and eliminating service barriers to improve client and systemic outcomes. The research underscores the need for further investigation into implementation strategies within organizational and community contexts.

6. Higgins, M., Weiner, J., & Young, L. (2012). **Implementation teams: a new lever for organizational change.** *Journal of Organizational Behavior, 33*, 366–388.

This article examines implementation teams as an active agent of change, an intervention instrument to facilitate organizational transformation in the context of public school systems. The study's purpose is to evaluate team composition in an effort to further understand the engagement and long-term commitment of

implementation teams. The authors' findings support a *role-focused socialization process* linking the interdependence, boundedness, and stability to team members' roles. In conclusion, the article suggests researchers examine this team structure and further expound upon their real teams concept.

7. Ondersma, S.J., Grekin, E.R., & Svikis, D. (2011). **The potential for technology in brief interventions for substance use, and during-session prediction of computer-delivered brief intervention response.** *Substance use & Misuse*, 46(1), 77–86. doi:10.3109/10826084.2011.52137.

This article highlights the potential effects of technology through a brief computer-delivered intervention for substance abuse treatment. The authors evaluated changes in the client state of mind that occur during treatment sessions. The findings provide evidence that during-session changes can predict future behavioral outcomes. The article is useful because it emphasizes the significance of applying interactive technology as an implementation approach to improve intervention outcomes.

8. Ondersma, S.J., Svikis, D.S., Lam, P.K., Connors-Burge, V.S., Ledgerwood, D.M., & Hopper, J.A. (2012). **A randomized trial of computer-delivered brief intervention and low-intensity contingency management for smoking during pregnancy.** *Nicotine & Tobacco Research*, 14(3), 351–360. doi:10.1093/ntr/ntr221.

This randomized clinical trial examines the application of a computer-delivered intervention to facilitate the implementation of an evidence supported smoking cessation program. The authors contend that the use of technology will improve intervention and implementation outcomes, and aid in adopting evidence-based practices. The mixed findings partially supported brief computer-delivered interventions as an effective approach for improving the treatment acceptability and efficacy. However, the authors conclude implementation efforts should not exclusively involve brief interventions to maximize reach, but rather, multiple strategies to achieve a higher penetration rate of implementing EBPs in to community settings.

9. Weisz, J.R., Chorpita, B.F., Palinkas, L.A., Schoenwald, S.K., Miranda, J., Bearman, S.K., et al. (2012). **Testing standard and modular designs for psychotherapy treating depression, anxiety, and conduct problems in youth: A randomized effectiveness trial.** *Archives of General Psychiatry*, 69(3), 274-282. doi:10.1001/archgenpsychiatry.2011.147.

This randomized controlled study compares a strict manualized evidence-based practice implementation approach to a flexible modular design using separate,

but integrated elements of evidence-based treatments. The findings point to effective outcomes using the modular approach, which account for improved clinical outcomes (e.g., fewer post treatment diagnoses and reduced treatment duration) and patient-reported satisfaction. The authors contend that greater flexibility of the modular design enhances the effectiveness of implementing a variety of evidence-based practices.

## V. RESOURCES

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### 1. California Evidence-Based Clearinghouse for Child Welfare (CEBC)

<http://www.cebc4cw.org/>

This website offers the child welfare community access to leading evidence-based interventions, programs, implementation tools, and online trainings being considered, used, or marketed in California.

### 2. California Institute for Mental Health (CiMH)—Implementation Networks

<http://www.cimh.org/Services/MHSA/Implementation-Networks.aspx>

This organization provides technical assistance and resources to county mental health departments, other public agencies, and community mental health providers to support the implementation and sustainment of evidence-based interventions through a number of different initiatives.

### 3. California Social Work Education Center (CalSWEC)—Toolkits

<http://calswec.berkeley.edu/toolkits>

CalSWEC is the nation's largest statewide coalition of social work educators and practitioners. Implementation toolkits may be of particular interest because they can be used as templates for designing and organizing the implementation of an evidence-based intervention or program.

### 4. CalSWEC (CalSWEC) Research and Training Network (RTN)

<http://calswec.berkeley.edu/research-and-training-network-rtn>

The RTN is a collaborative network of California University and Human Services Agency representatives, which promotes the sharing of resources and other research-related materials. Participation provides access to the statewide and regional research agendas that have been developed to guide practice-oriented research in human services throughout California.

### 5. Center for Social Services Research (CSSR)

<http://cssr.berkeley.edu/>

CSSR conducts research, policy analysis and program planning, and evaluation directed toward improving the public social services.

**6. Global Implementation Conference (GIC)**

<http://www.implementationconference.org/>

The GIC provides a forum for reporting research and evaluation of implementation, sharing implementation best practices, and establishing public policies to support implementation research and practice. The website provided offers more information on the upcoming conference scheduled for August 19–21, 2013.

**7. Implementation Science Online Journal**

<http://www.implementationscience.com/>

Implementation Science is an open access, peer-reviewed online journal that aims to publish research relevant to the scientific study of methods to promote the uptake of research findings into routine healthcare in clinical, organizational, or policy contexts.

**8. Implementation Science—Certificate program and Master’s degree**

<http://accelerate.ucsf.edu/training/ids>

University of California, San Francisco offers a certificate program in Implementation science. The website provided offers complete program information.

**9. National Implementation Science Network (NIRN)**

<http://nirn.fpg.unc.edu/>

NIRN’s mission is to contribute to the best practices and science of implementation, organization change, and system reinvention to improve outcomes across the spectrum of human services. This website provides an overview of the NIRN model and access to their latest publications, presentations, newsletter, and other resources.

**10. Practice and Research Together (PART)**

<http://www.partontario.org/>

PART is a Canadian membership-based organization responsible for linking advanced research to child welfare practice. This website offers to access to journal articles and resource guides.

**11. State Implementation and Scaling-up of Evidence-Based Practices (SISEP)**

<http://sisep.fpg.unc.edu/>

The SISEP Center supports states and education systems in creating implementation capacity for evidence-based practices benefitting students with disabilities. This website provides free learning materials to assist localities in the taking the next step. The site also offers free publications.

## VI. POWERPOINT PRESENTATIONS

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This section provides links to PowerPoint presentations about implementation science and related topics by various authors.

Damschroder, L., & Damush, T. (2011). **The Role and Selection of Theoretical Frameworks in Implementation Research**. Quality Enhancement Research Initiative (QUERI).

<http://www.queri.research.va.gov/meetings/eis/2011/Novice-Theory-Damschroder-Damush.pdf>

Walters. R. (2011). **Advancing Implementation Science in Child Welfare**. 14th Annual Title IV-E Child Welfare Demonstration Projects Meeting.

<http://www.jbassoc.com/reports/documents/advancing%20implementation%20science%20in%20cw.pdf>

**National Implementation Research Network**. A series of 10 presentations on the topic of implementation science and related areas.

<http://nirn.fpg.unc.edu/category/resource-type/presentations>

## VII. GLOSSARY

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This glossary consists of frequently used key terms referenced from the articles cited in the annotated bibliography.

**Accommodation**—*expected changes, resources, and competencies necessary to adapt an intervention during implementation*

**Administrative intensity**—*the ratio of managers to total employees positively associated with innovation*

**Adoption**—*the decision to commit to and initiate an evidence-based intervention*



**Adaptability**—*the degree to which an intervention can be adapted, adjusted, refined, or renewed to meet organizational or provider needs or to improve the fit with community needs*

**Centralization**—*a structural characteristic (of the inner setting or an organization) that refers to the concentration of decision-making within an organization*

**Champions**—*implementation leaders and other supporters who defend the implementation of evidence-based interventions*

These are individuals who generate and maintain support for change and propose solutions to problems.

**Climate**—*the shared perceptions of individuals within an organization*

This is related to organizational policies, practices, and procedures that suggest what is valued and of importance in the organization.

**Compatibility**—*how an intervention fits within the existing operations and culture of an organization.*

The more aligned the intervention and setting, the more successful the implementation will be.

**Contextual factors**—*a collection of unique features consisting of political, social, and organizational influences that impact implementation, such as community support, social networks, regulations, norms, and culture*

**Core components**—*refers to the most essential and indispensable elements of an intervention practice or implementation approach*

**Culture**—*norms, values, and basic assumptions of an organization*

**Diffusion**—*the process of spreading information about evidence-based inventions*

The process may be both formal and informal, planned, or unplanned.

**Drivers**—*agents or features of change that help to initiate the implementation of an innovation*

**Empirically Supported Interventions (also referred to as Evidence-Based Practices)** — *programs or courses of action that have been reviewed and rated for evidence*

These programs have been proven to be effective with certain populations of children, clients, families, and communities. The use of these programs can be generalized and applied to a wider audience.

**Evidence-Based Practice (EBP)**—*an approach to practice that includes the process of combining research knowledge, professional/clinical expertise, and client and community values, preferences, and circumstances*

It is a dynamic process whereby practitioners continually seek, interpret, use, and evaluate the best available information in an effort to make the best practice decisions in various human services fields. Valuable evidence may be derived from many sources—ranging from systematic reviews and meta-analyses (highest level of evidence) to less rigorous research designs (lower level of evidence).

**Evidence-Informed Practice**—*this process, like EBP, involves questioning and assessing the way that work is currently done*

It includes seeking additional research, information, resources, and interventions to guide practice that is ethically appropriate. It seeks to produce the same level of stringency as EBP. However, because EBP research is not readily available, other valuable resources (including authority based) may be used as part of the evidence based movement.

**Execution**—*carrying out or accomplishing the implementation according to plan*

The effectiveness of executing plans for implementation is measured by the degree of fidelity, quality of implementation strategies, timeliness, and the amount of individual involvement.

**External change agent**—*individuals with field expertise affiliated with an outside entity*  
Their role is to introduce or facilitate decisions that influence implementation.

**Flexibility**—*the latitude provided to local sites in adapting interventions as required, accounting for different community needs.*

The term *adaptability* is used interchangeably with *flexibility* throughout the Implementation Science literature. Authors of various models urge that flexibility or adaptation be used with caution to avoid altering the essential (core) implementation components of an EBP. The core components are those validated by the most rigorous research.

**Fidelity**—*the extent to which an intervention has been put into action as it was originally intended to be—in design, protocol, and execution*

**Implementation**—*a specific set of activities designed to put in place a practice or activity of known dimensions, i.e., it is the mechanism used to integrate interventions into an organization*

**Implementation Drift**—*unwarranted variations in the implementation of an intervention that negatively impact designed goals and objectives*

Implementation drift poses a threat to the fidelity of an intervention.

**Inner setting**—*structural, political, and cultural contexts through which the implementation process will proceed*

It may be comprised of tightly or loosely coupled entities (e.g., a loosely affiliated medical center and outlying contracted clinics or tightly integrated service lines within a health system); tangible and intangible manifestation of structural characteristics, networks and communications, culture, climate, and readiness all interrelate and influence implementation.

**Innovation**—*the act or process of inventing or introducing something new; the innovation itself*

**Institutionalization**—*assesses the degree to which an evidence-based intervention is integrated within the culture of an organization or community through policies and practice*

**Leadership engagement**—*the dedication, participation, and commitment of leaders to influence implementation*

They provide the context for establishing priorities, generating consensus, providing incentives, and managing the implementation process.

**Learning climate**—*an environment in which leaders express their own fallibility and need for team members' assistance and input*

In a learning climate, team members recognize their commitment as essential and are valued participants in the implementation process.

**Measurement**—*the methods and processes for operationalizing and assessing theoretical constructs and characteristics of systems, organizations, and individuals and the use of effective assessment strategies to evaluate implementation processes and outcomes*

Examples of different measurement techniques include, but are not limited to: direct observations, surveys, questionnaires, checklists, interviews, case audits, and focus groups.

**Opinion leaders** (expert and/or peer)—*individuals in an organization who have formal or informal influence on the attitudes, beliefs, and behaviors of their colleagues with respect to implementing interventions*

**Outer setting**—*the economic, political, and social context within which an organization resides*

The line between inner and outer is not always clear, and the interface is dynamic and sometimes precarious. The specific factors considered “in” or “out” will depend on the context of the implementation effort.

**Purveyor**—*a person or group of people responsible for supporting the implementation of an intervention with fidelity*

**Relative priority**—*professionals’ collective awareness of the significance of an implementation*

**Setting**—*the multilevel ecological contexts in which implementation occurs; this can include country and/or state, service system, and organization*

**Sustainability**—*the characteristics of an evidence-based intervention that support its continued use in practice over an extended period of time*

**Sustainment**—*the extent to which an evidence-based intervention continues to be utilized with fidelity to provide its intended benefits over an extended period to time*

**Tension for change**—*the extent to which stakeholders recognize the existing circumstances as intolerable or requiring change*

## VIII. REFERENCE LIST

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