



# Ensuring Sustainable, Intended Outcomes at Scale...

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...through the Application of  
Strategies and Frameworks from  
Applied Implementation Science

Dupont Summit 2013 on Science, Technology, and  
Environmental Policy

**December 6, 2013**

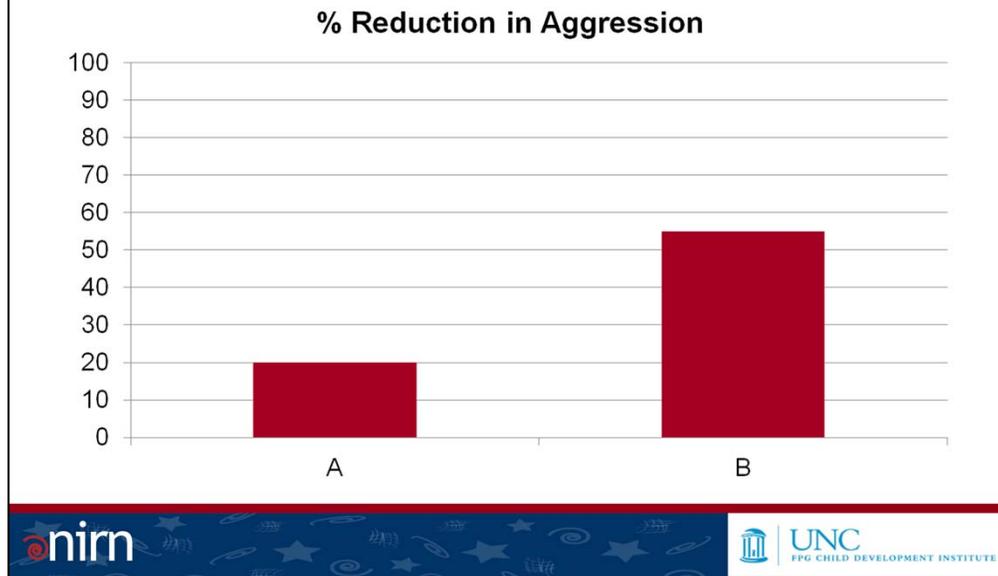


## PROGRAM CHOICES

Which would you want for your family?

*Program A*  
or  
*Program B*

# School Behavioral Health

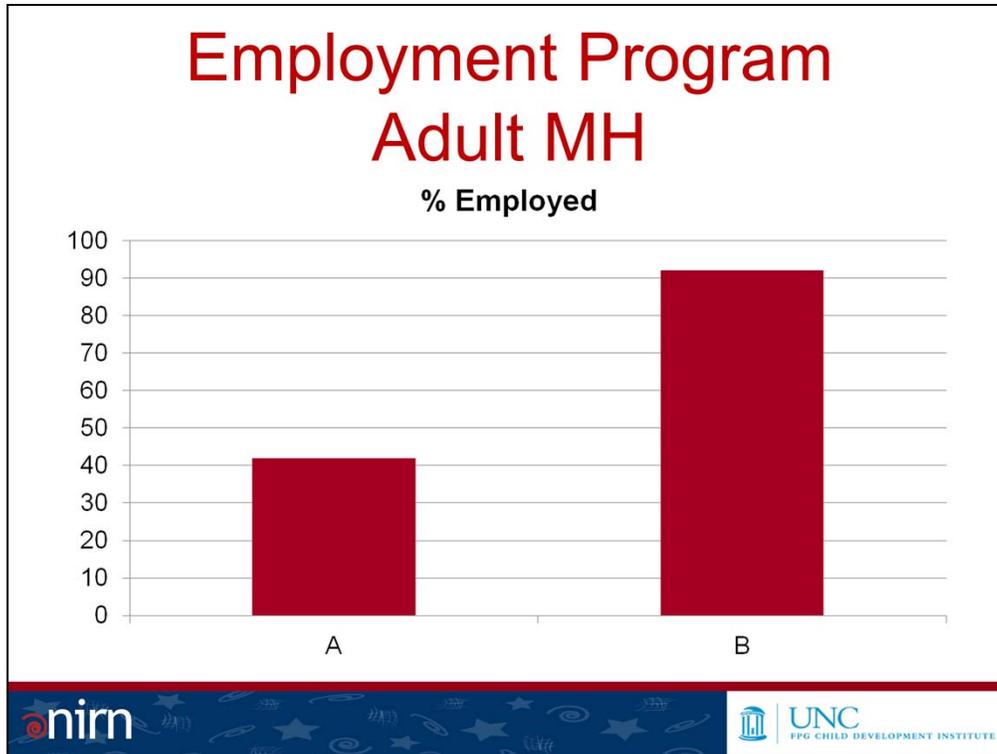


CASELS/PATHS program A = Low Principal Support; B = High Principal Support (proxy for fidelity)

PATHS – Promoting Alternative Thinking Strategies

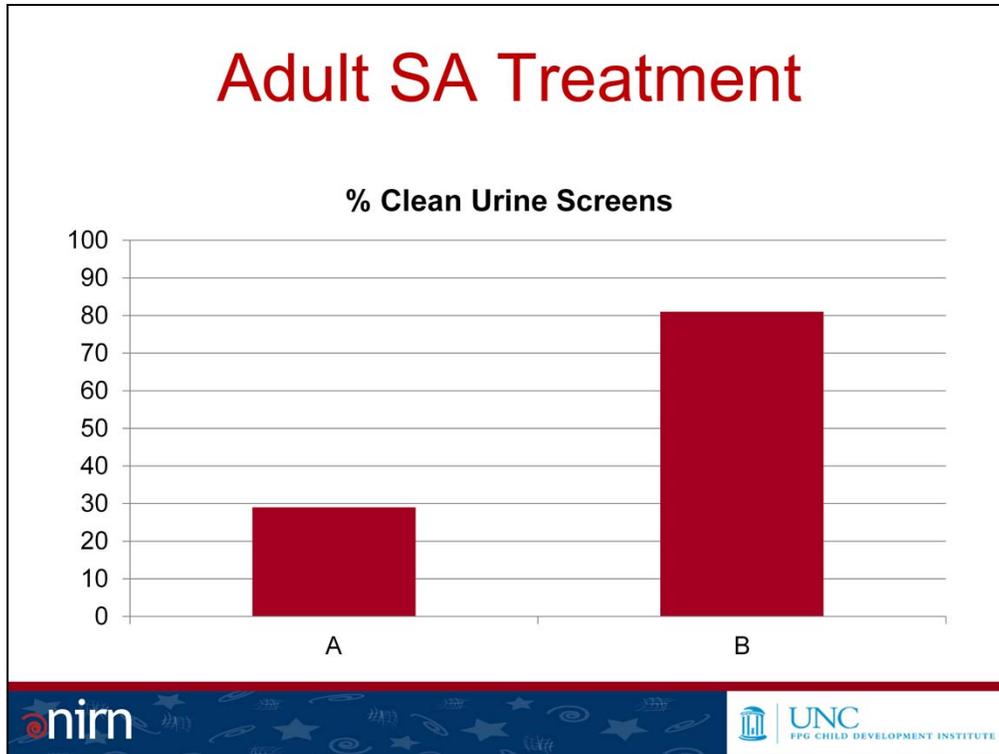
Kam, Greenberg, & Wells, 2004

Riggs, Greenberg, Kusche & Pentz, 2006



Supported Employment A = Low Fidelity; B = High Fidelity

Salyers, MP, Becker, DR, Drake, RE, Torrey, WC, Wyzik, PF. "A ten-year follow-up of a supported employment program." *Psychiatr. Serv.* 55: 302, 2004..



DBT A = Low Fidelity; B = High Fidelity

*Linehan, Dimeff et al., 2002*

# Program Choices

In each chart

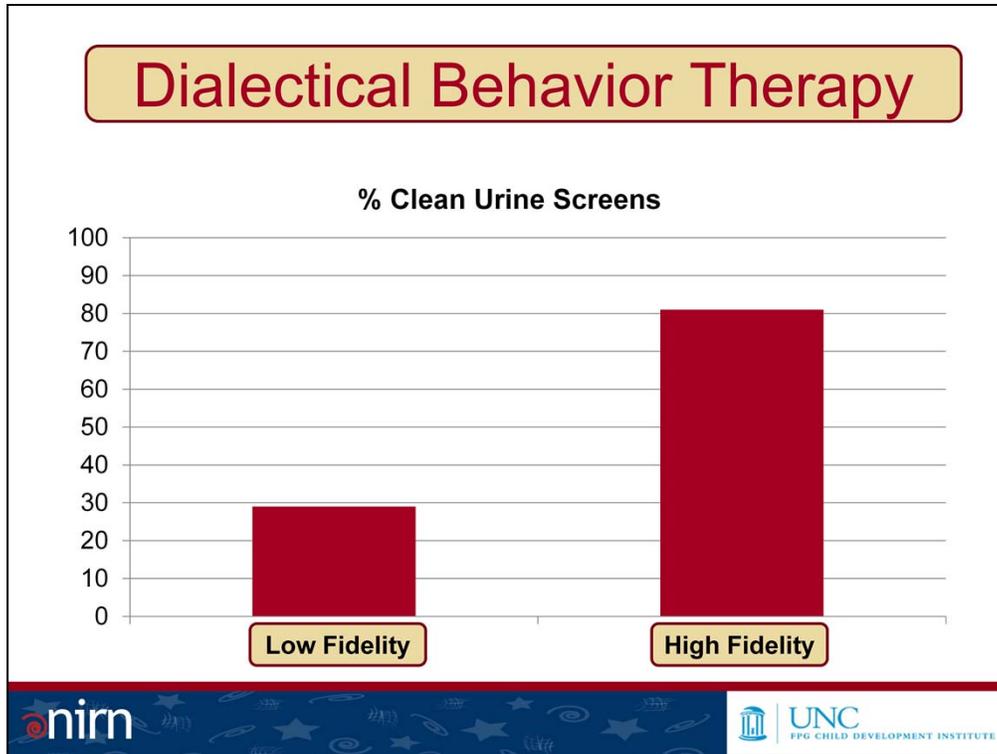
**A and B are the SAME PROGRAM!**

(Evidence-Based Programs = PATHS, SE, DBT)

**A = Low Fidelity use of EBP in practice**

**B = High Fidelity use of EBP in practice**





DBT A = Low Fidelity; B = High Fidelity

*Linehan, Dimeff et al., 2002*

# Fidelity Predicts Outcomes

The lesson is, first do it as intended (if you can!)

Fidelity First  
Achieve Intended Outcomes

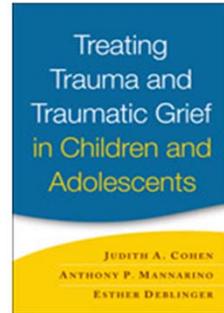
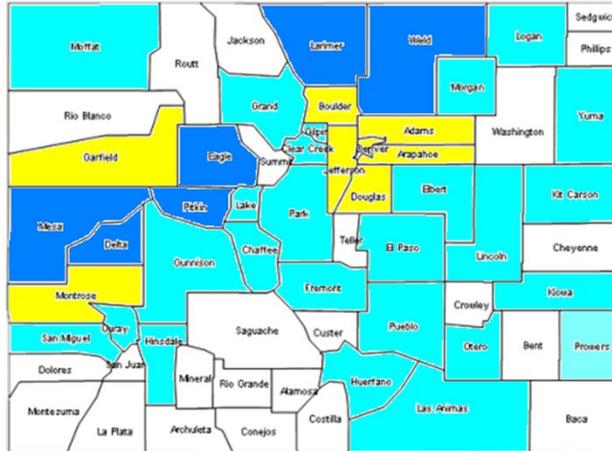


Can evidence-based programs be  
scaled across a population?

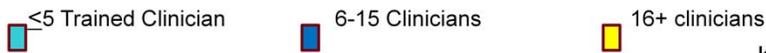
...with some evidence of fidelity?

...and/or impact?

## Trauma Focused – Cognitive Behavioral Therapy (TF-CBT) in Colorado

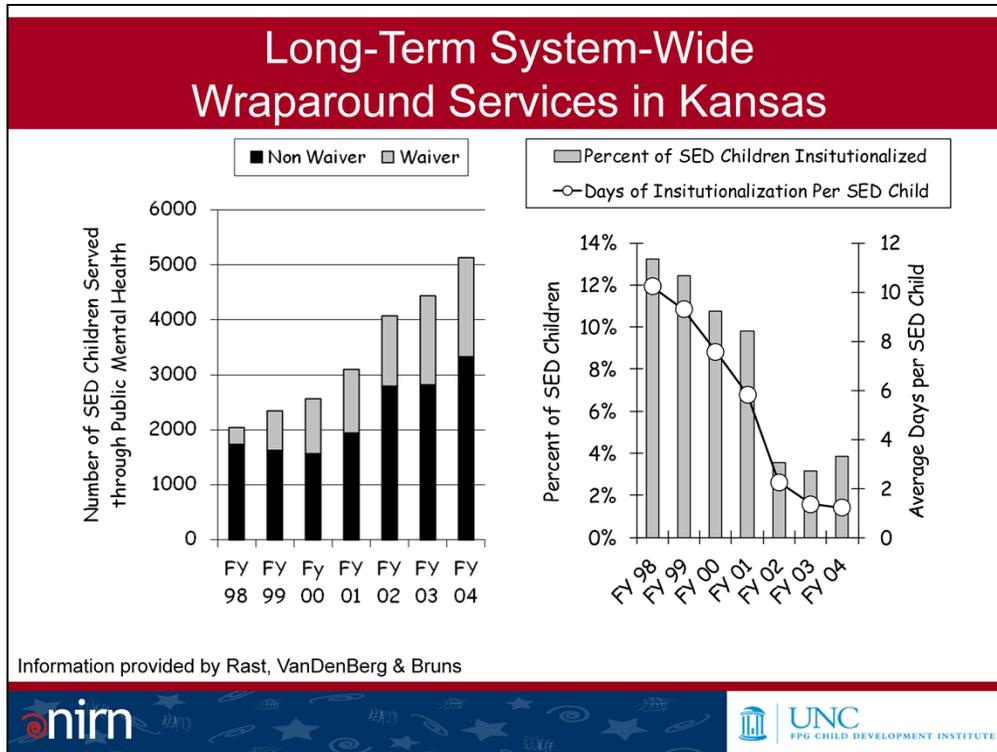


439  
clinicians  
trained



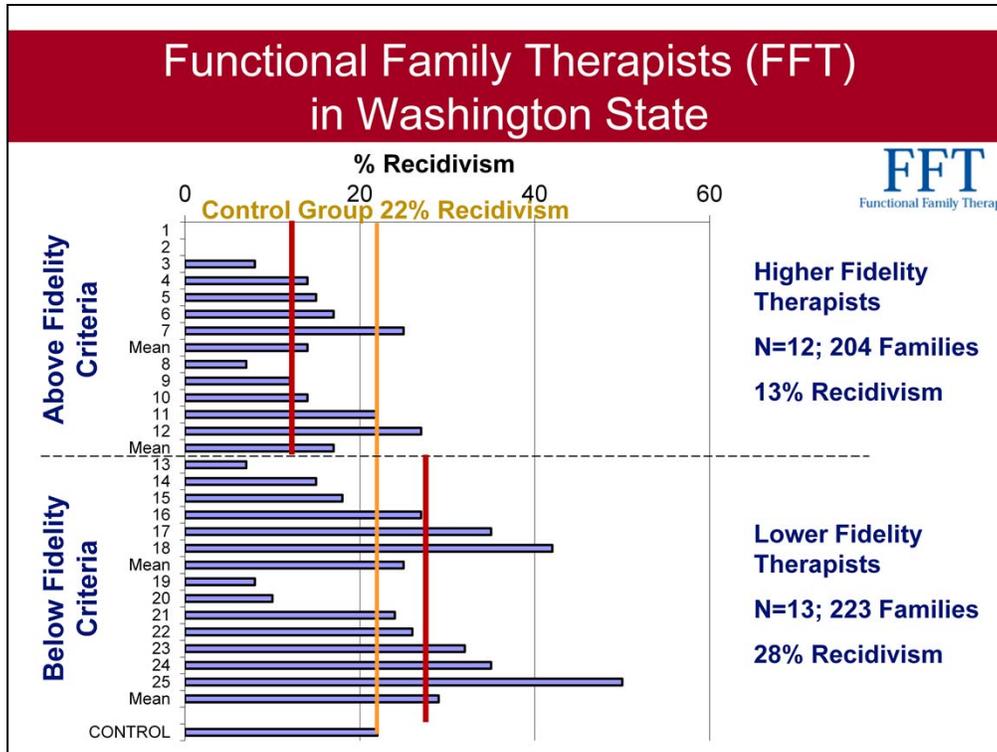
Kempe Center EBTI

Kempe Center EBTI



**Impacts of Long Term and System Wide Implementation of Wraparound.** These data are from the evaluation of the statewide Kansas wraparound initiative that was partially implemented through a 1915-C Home and Community Based Medicaid waiver.

In 1994 Kansas implemented wraparound services coordination through two federally funded pilot projects in urban (Wichita) and rural (13 Southeast) counties. Following the success of these programs Kansas funded statewide implementation in a stepwise fashion beginning in FY 1998 with full implementation in FY 01. Through this process Kansas was able to reduce institutionalization costs by 67% (over \$4.3 million) and use this to leverage over \$10 million in new community-based services. The result was that many more children with SED were served and the rate of institutionalization and length of stays were significantly reduced resulting in positive outcomes in behavior, mental health symptoms and school performance.

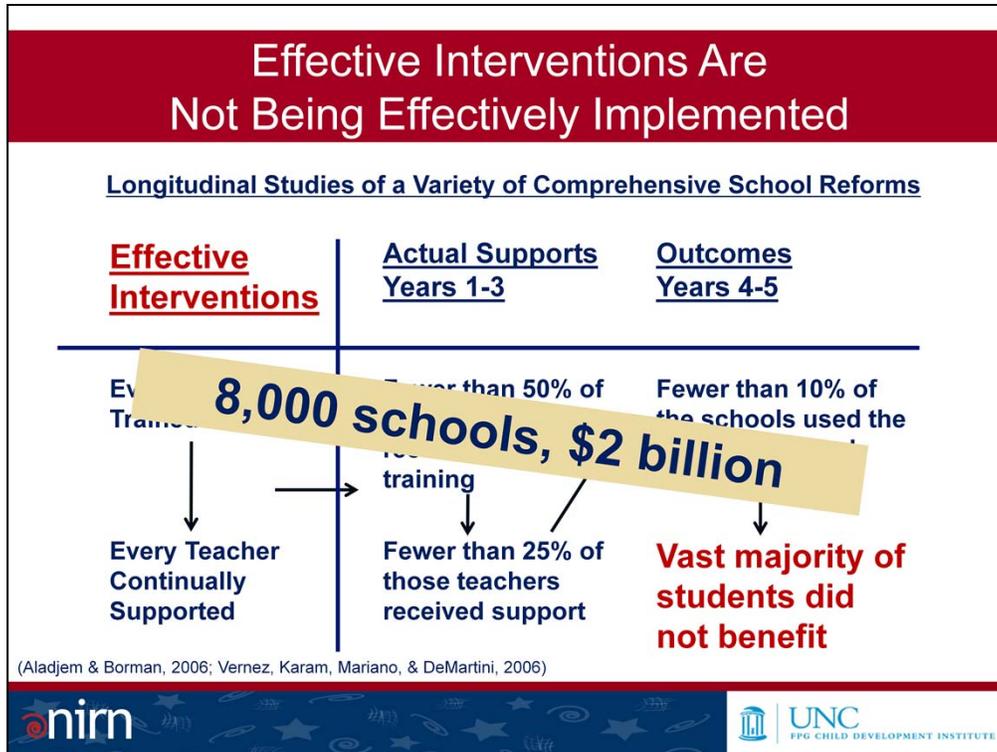


Washington State Institute for Public Policy. (2002). *Washington State's Implementation of Functional Family Therapy for Juvenile Offenders: Preliminary Findings* (No. 02-08-1201). Olympia, WA: Washington State Institute for Public Policy.

<http://www.wsipp.wa.gov/pub.asp?docid=02-08-1201>

“These results highlight the importance of having reliable and valid measures of therapist competence for the evaluation. More importantly, measuring FFT adherence is a critical operational tool to ensure that when the state pays for FFT actually gets FFT. This seems especially significant because the evidence portrayed on Figure 2 indicates that recidivism rates can actually be higher than regular court processing when FFT is delivered by therapists who are not competent. FFT Inc. is a leader in emphasizing the importance of model adherence, and this large scale implementation of the program indicates the value and need of a more sensitive system to measure program adherence.” (p 4)

What's the normal course for  
rolling out evidence-based  
programs at scale?



Aladjem, D. K., & Borman, K. M. (Eds.). (2006). Examining comprehensive school reform. Washington, DC: Urban Institute Press.

Vernez, G., Karam, R., Mariano, L. T., & DeMartini, C. (2006). Evaluating comprehensive school reform models at scale: Focus on implementation. Santa Monica, CA: RAND Corporation.

Four CSR models designed for grades K–8 are included in this study: Accelerated Schools (AS), Core Knowledge (CK), Direct Instruction (DI), and Success for All (SFA).

To date, the nation has more than 20 years of experience with CSR. More than 8,000 elementary and secondary schools (mostly low performing) have adopted a CSR model, and more than \$2 billion of federal funds have been used to implement CSR strategies. Nonetheless, the potential of this school reform to improve student achievement and meet the No Child Left Behind goal of 100 percent proficiency in reading and mathematics by the year 2014 is unknown.

## Across Disciplines...

**Experimental Data Show These Methods, When Used Alone, Are Insufficient:**

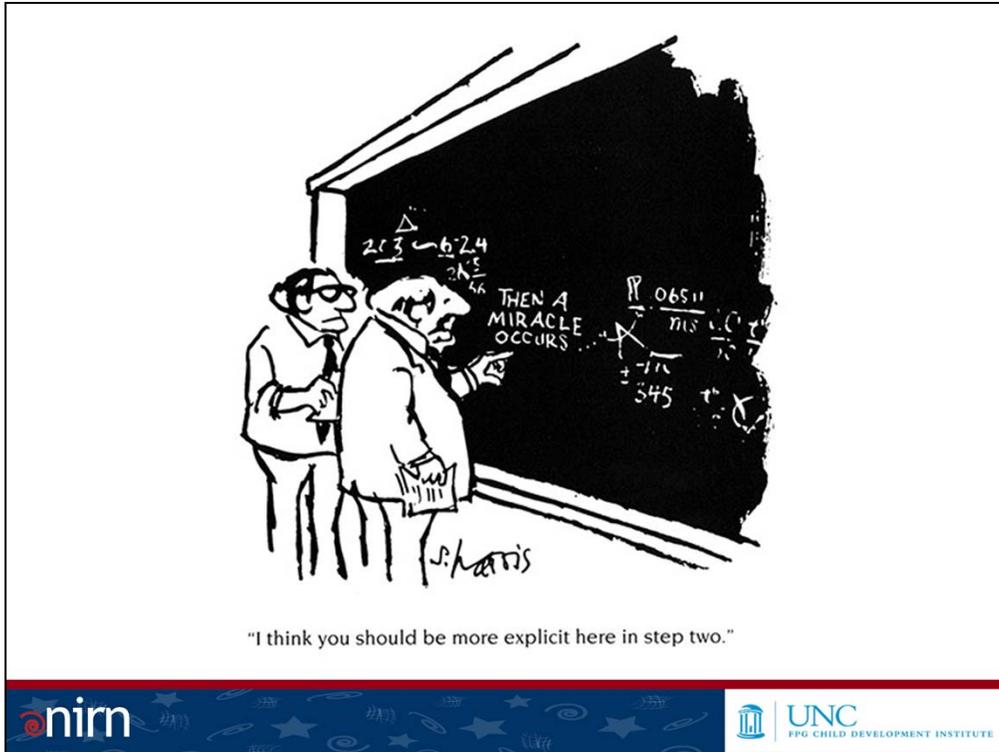
- **Diffusion/ Dissemination of information**
- **Training**
- **Passing laws/ mandates/ regulations**
- **Providing funding/ incentives**
- **Organization change/ reorganization**

**Data: Realize 5% to 15% Intended Outcomes**



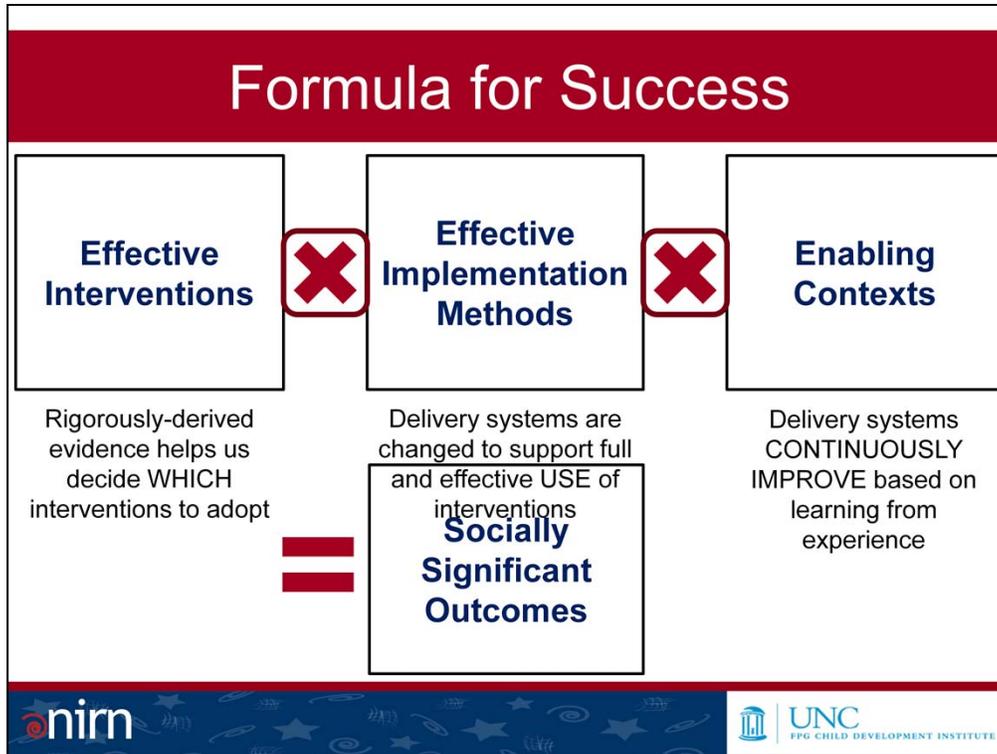
Nutt, P. (2002). *Why Decisions Fail: Avoiding the Blunders and Traps That Lead to Debacles*. San Francisco: Berrett-Koehler Publishers Inc.

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).



Ensuring sustainable, intended  
outcomes at scale...

...through the application of  
strategies and frameworks from  
Applied Implementation Science



Formula for Success: © 2012 Dean Fixsen and Karen Blase, National Implementation Research Network

# Implementation Capacity

*For every increment of performance  
I demand from you, I have an  
equal responsibility to provide you  
with the capacity to meet that  
expectation*

R. Elmore, 2002



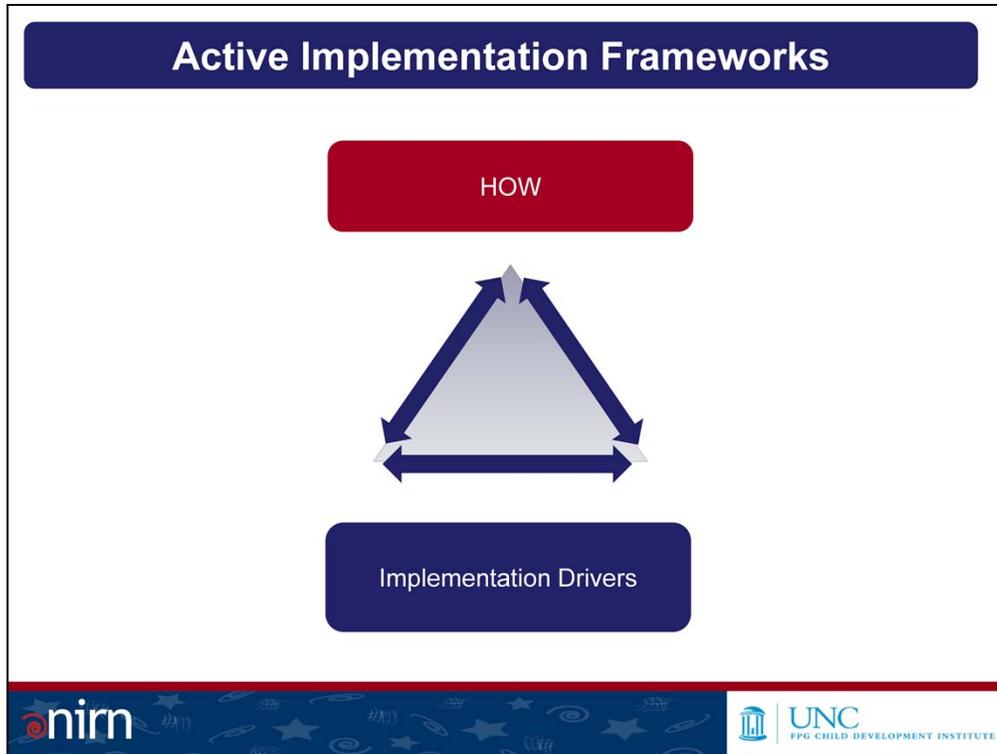
# APPLIED Implementation Science: Active Implementation Frameworks



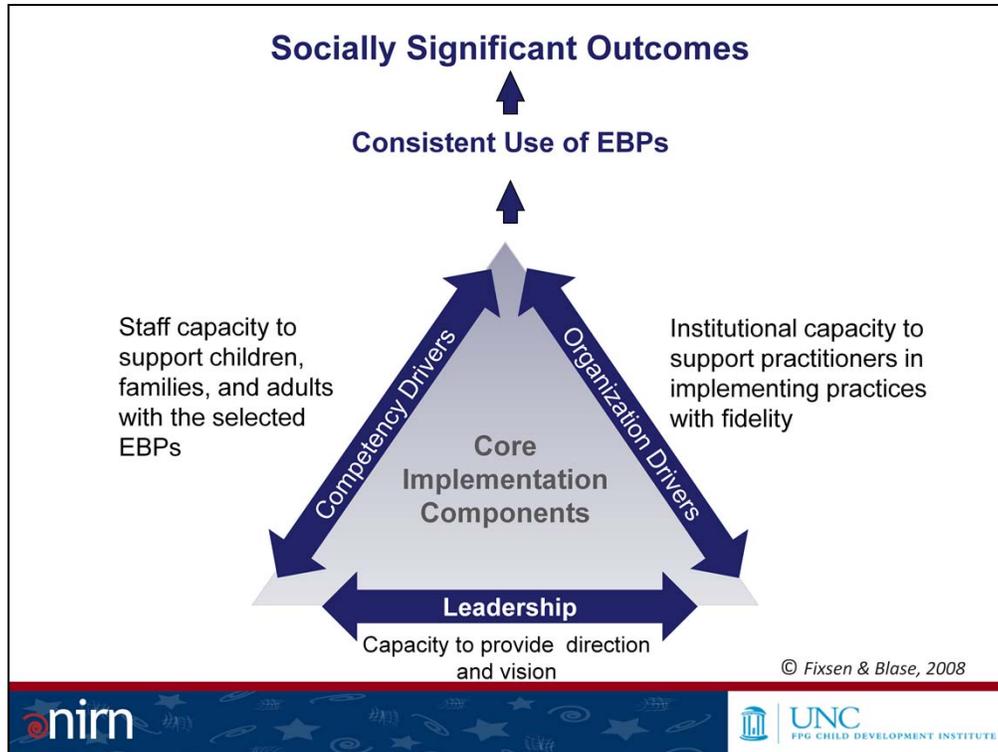
- ✓ Usable Interventions
- ✓ Implementation Stages
- ✓ Implementation Drivers
- ✓ Improvement Cycles
- ✓ Implementation Teams

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

<http://www.all-about-forensic-science.com/dna-pictures.html>



### The “Active Implementation Frameworks”

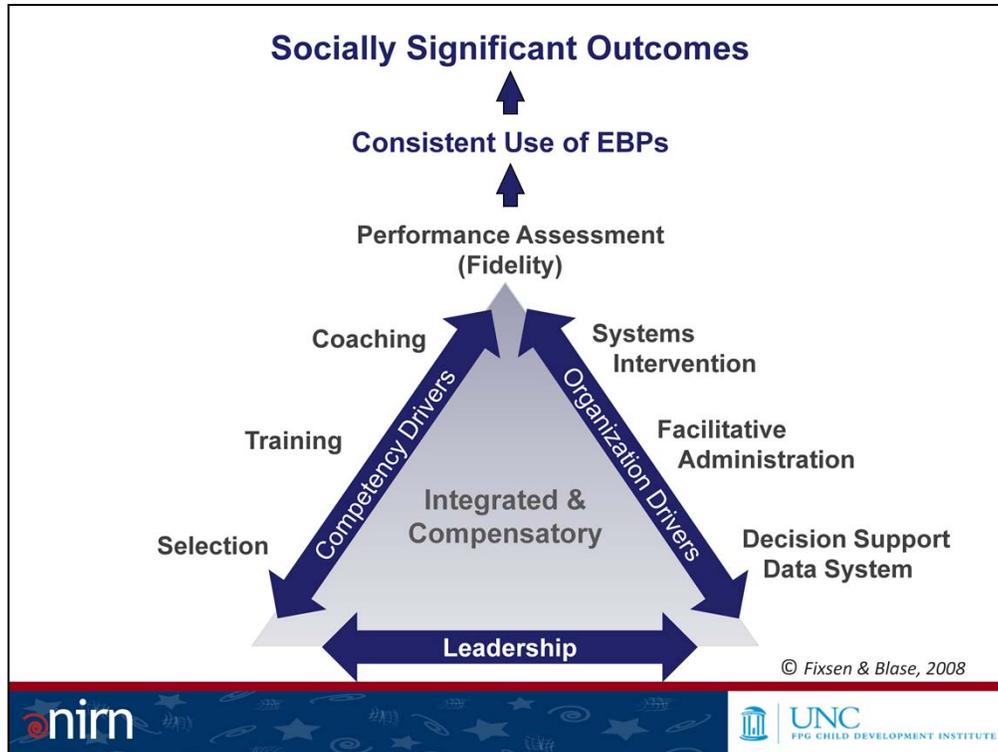


Fixsen, D., Blase, K., Metz, A., & Van Dyke, M. (2013). Statewide implementation of evidence-based programs. *Exceptional Children, 79*, 213-230.

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

Fixsen, D. L., Naom, 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).

Metz, A., & Bartley, L. (2012). Active Implementation Frameworks for Program Success. *Zero to Three, 32*, 11-18.



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

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

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).

Metz, A., & Bartley, L. (2012). Active Implementation Frameworks for Program Success. *Zero to Three, 32*, 11-18.

Case Example: Metz et al.		Results from Child Wellbeing Project		
Imp. Component	Time 1	Time 2	Time 3	
Selection	1.44	2.00	1.89	
Training	1.33	1.50	1.10	
Coaching	1.27	1.73	1.83	
Perf. Assessment	0.78	1.34	2.00	
DSDS	0.18	1.36	2.00	
Fac. Administration	1.38	2.00	2.00	
Systems Intervention	1.29	1.86	2.00	
<b>Average Composite Score</b>	<b>1.1</b>	<b>1.68</b>	<b>1.83</b>	
<b>Fidelity (% of cases)</b>	<b>18%</b>	<b>83%</b>	<b>83%</b>	

Success Coach model involved intense program development of core intervention components and accompanying implementation drivers




**Hypothesis: Is a composite score >1.5 the magic number?**

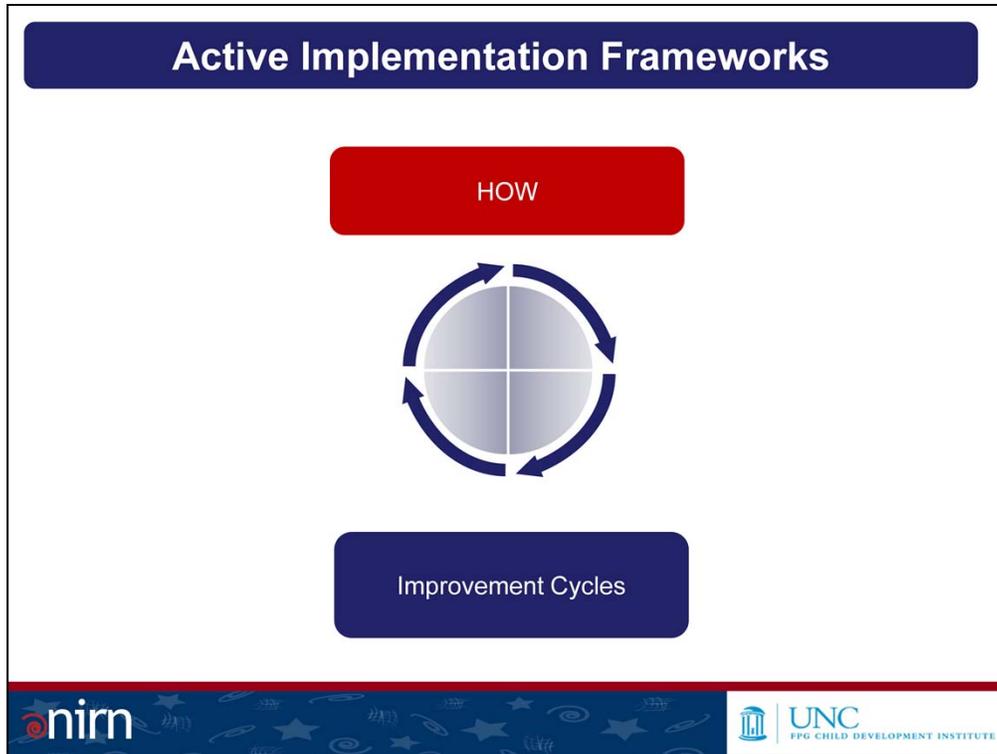
© 2013 Allison Metz, National Implementation Research Network

Different metrics used to measure fidelity.

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At T1, fidelity criteria were not firmly established. An early indicator of fidelity was whether family assessment data MATCHED goals in Success Plan (the creation of change-focused plans). The goodness of fit between assessments and goal planning were used to assess fidelity in T1.

The T2 and T3 fidelity score was derived from matching notes, (notes detailing what clinicians did with families in the field) with the interventions they checked in the database. Did they do the things they were supposed to do with families? This number is based on the SC service through May 2012.



## The “Active Implementation Frameworks”

# Fidelity Predicts Outcomes

The lesson is, first do it as intended (if you can!)...then change it as needed

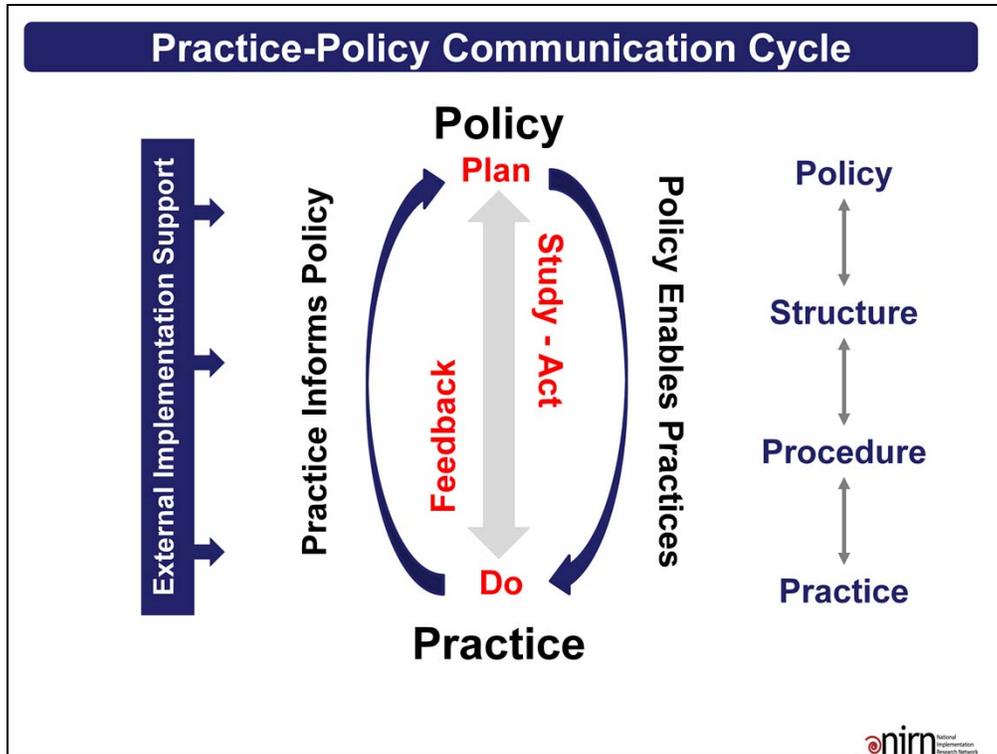
## Fidelity First

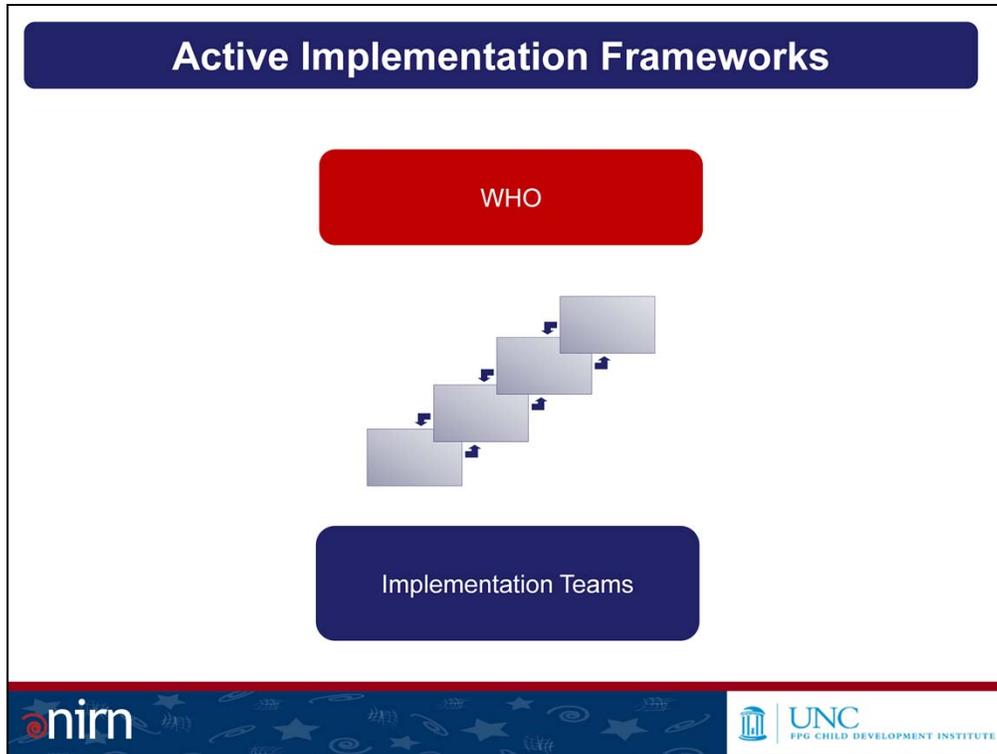
### Achieve Intended Outcomes

### Improve after experience & with data

1. Improve outcomes
2. Make the program more acceptable to the community (e.g., culturally and linguistically appropriate), while maintaining outcomes
3. Reduce burdens of implementation (e.g., cost, other resources), while maintaining outcomes







## The “Active Implementation Frameworks”

## Building Implementation Capacity: Implementation Teams

- Minimum of three people (four or more preferred) with expertise in:
  - Innovations
  - Implementation
  - System change
- Functions
  - Ensure Implementation
  - Engage the Community
  - Create Hospitable Environments
- Part of system leadership office and linked to key system supports for implementation



Higgins, M., Weiner, J., & Young, L. (2012). Implementation teams: A new lever for organizational change. *Journal of Organizational Behavior*. Retrieved from *doi:10.1002/job.1773*

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

Saldana, L., & Chamberlain, P. (2012). Supporting implementation: The role of community development teams to build infrastructure. *American Journal of Community Psychology*. *doi: 10.1007/s10464-012-9503-0*

Aarons, G. A., Green, A. E., Palinkas, L. A., Self-Brown, S., Whitaker, D. J., Lutzker, J. R., . . . Chaffin, M. J. (2012). Dynamic adaptation process to implement an evidence-based child maltreatment intervention. *Implementation Science*, *7*. *doi: 10.1186/1748-5908-7-32*

# Value of Implementation Teams

		IMPLEMENTATION	
		Expert Impl. Team	NO Impl. Team
INTERVENTION	Effective	<b>80%, 3 Yrs</b>	<b>14%, 17 Yrs</b>
		Effective use of Implementation Science & Practice	Letting it Happen Helping it Happen

(Fixsen, Blase, Timbers, & Wolf, 2001)                      (Balas & Boren, 2000; Green, 2008)

**Balas & Boren, 2000**



**It takes an estimated average of 17 years for only 14% of new scientific discoveries to enter day-to-day clinical practice (Balas & Boren, 2000)**

Balas EA, Boren SA. *Yearbook of Medical Informatics: Managing Clinical Knowledge for Health Care Improvement*. Stuttgart, Germany: Schattauer Verlagsgesellschaft mbH; 2000.

Green, L. W. (2008). Making research relevant: if it is an evidence-based practice, where's the practice-based evidence? *Family Practice*, 25, 20-24.

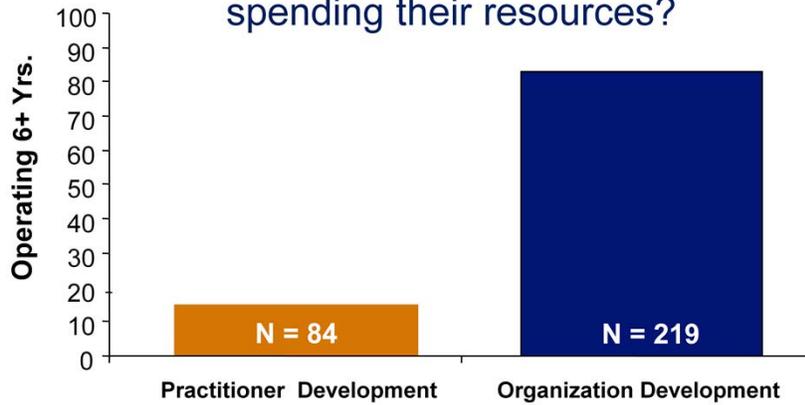
**With the use of competent Implementation Teams, over 80% of the implementation sites were sustained for 6 years or more (up from 30%) and the time for them to achieve Certification was reduced to 3.6 years.**

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.

Does investing in building  
implementation capacity get us  
anywhere with regards to  
sustainability?

# Program Sustainability

Group Homes adopting EBPs: Where are they spending their resources?



Fixsen, Blase, Timbers, & Wolf (2001)



# For More Information

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**Learn More:**

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<http://nirn.fpg.unc.edu/>  
[www.scalingup.org](http://www.scalingup.org)



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# Thank You for Your Support

- **Annie E. Casey Foundation (EBPs and Cultural Competence)**
- **William T. Grant Foundation (Implementation Literature Review)**
- **Substance Abuse and Mental Health Services Administration (Implementation Strategies Grants; National Implementation Awards)**
- **Centers for Disease Control & Prevention (Implementation Research)**
- **National Institute of Mental Health (Research And Training Grants)**
- **Juvenile Justice and Delinquency Prevention (Program Development And Evaluation Grants)**
- **Office of Special Education Programs (Scaling up and Capacity Development Center)**
- **Administration for Children and Families (Child Welfare Leadership; Capacity Development Center)**
- **The Duke Endowment (Child Welfare Reform)**



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