



Applied Implementation Science

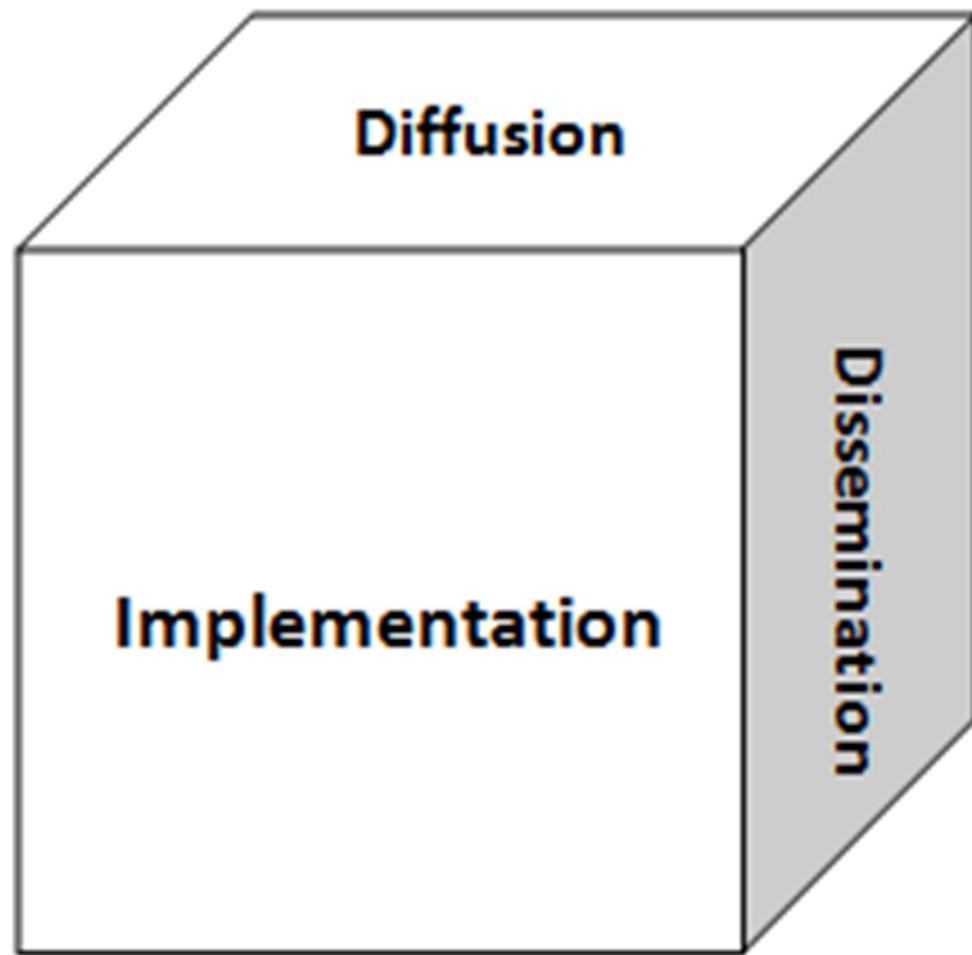
Canberra
Conference on
Research
Integration and
Implementation

 UNC
FPG CHILD DEVELOPMENT INSTITUTE

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 **nirn**
National
Implementation
Research Network

Implementation Science



Implementation Science

- Letting it happen
 - Diffusion; networking; communication
- Helping it happen
 - Dissemination; manuals; websites
- Making it happen
 - Purposeful and proactive use of implementation practice and science

Based on Hall & Hord (1987); Greenhalgh, Robert, MacFarlane, Bate, & Kyriakidou (2004); Fixsen, Blase, Duda, Naoom, & Van Dyke (2010)

Basic Research

Applied Research

Interest-Driven

Mission-Driven

Internal Validity
(Rigor)

External Validity
(Relevance)

Eventually Useful

Immediately Useful

Contribute to Knowledge Base and
Theory

Implementation Science

- **Fairweather, Sanders, & Tornatzky (1974)**
 - Purposeful approaches to use of Lodges in random samples of hospitals
 - Dissemination of manuals plus telephone consultation produced little impact
 - Face-to-face “action consultation” was more effective – lots of communication to resolve conceptual, structural, and policy issues *en route* to using the Lodges

Implementation Science

- Fairweather, G. W., Sanders, D., Maynard, H., & Cressler, D. (1969). *Community life for the mentally ill*. Chicago: Aldine Publishing.
- Tornatzky, L. G., Fergus, E. O., Avellar, J. W., Fairweather, G. W., & Fleischer, M. (1980). *Innovation and social process: A national experiment in implementing social technology*. New York: Pergamon Press.
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- Propst, R. (1992). Standards for clubhouse programs: Why and how they were developed. *Psychosocial Rehabilitation Journal*, 16, 25-30.
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- Lucca, A. M. (2000). A Clubhouse **Fidelity Index** Preliminary Reliability and Validity Results. *Mental Health Services Research*, 2(2), 89-94.
- Macias, C., Propst, R., Rodican, C., & Boyd, J. (2001). Strategic Planning for ICCD **Clubhouse Implementation**: Development of the Clubhouse Research and Evaluation Screening Survey (CRESS). *Mental Health Services Research*, 3(3), 155-167.

Mission-Driven process of research and development (30+ Yrs)

Implementation Science

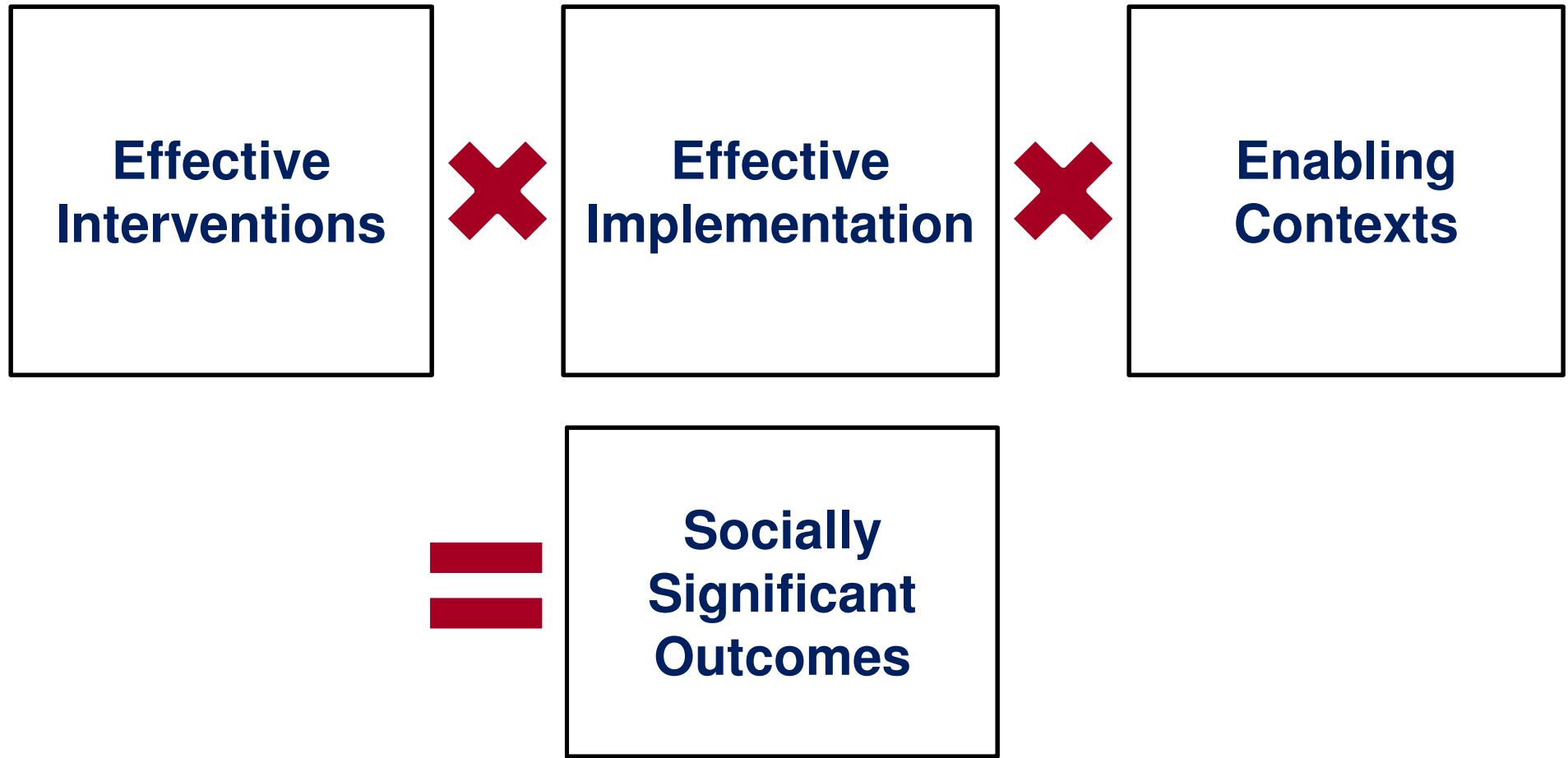
- **Accumulation of data**
- **Summaries of the literature on diffusion and dissemination**
- **Synthesis of the implementation evaluation literature**

**Poised for more evidence-informed
implementation of EBPs and
other innovations**

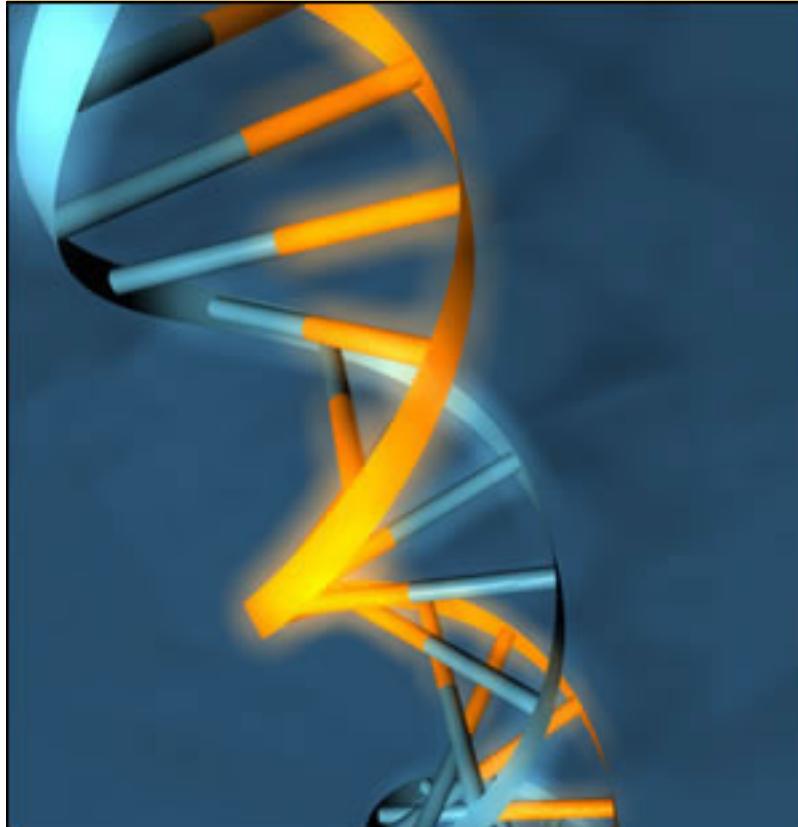
Implementation Science

- Sufficient data to move from making lists (facilitators & barriers) to making sense
 - Frameworks to guide implementation work
 - Meyers, Durlak, and Wandersman (2012) comparison of 25 implementation frameworks
 - Tabak, Khoong, Chambers, & Brownson (2012) reviewed 61 models for diffusion, dissemination, and implementation

Formula: Applied Implementation



APPLIED Implementation Science: Active Implementation Frameworks



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

Applied Implementation

WHAT:
Effective
Interventions

Effective
Implementation

Enabling
Contexts



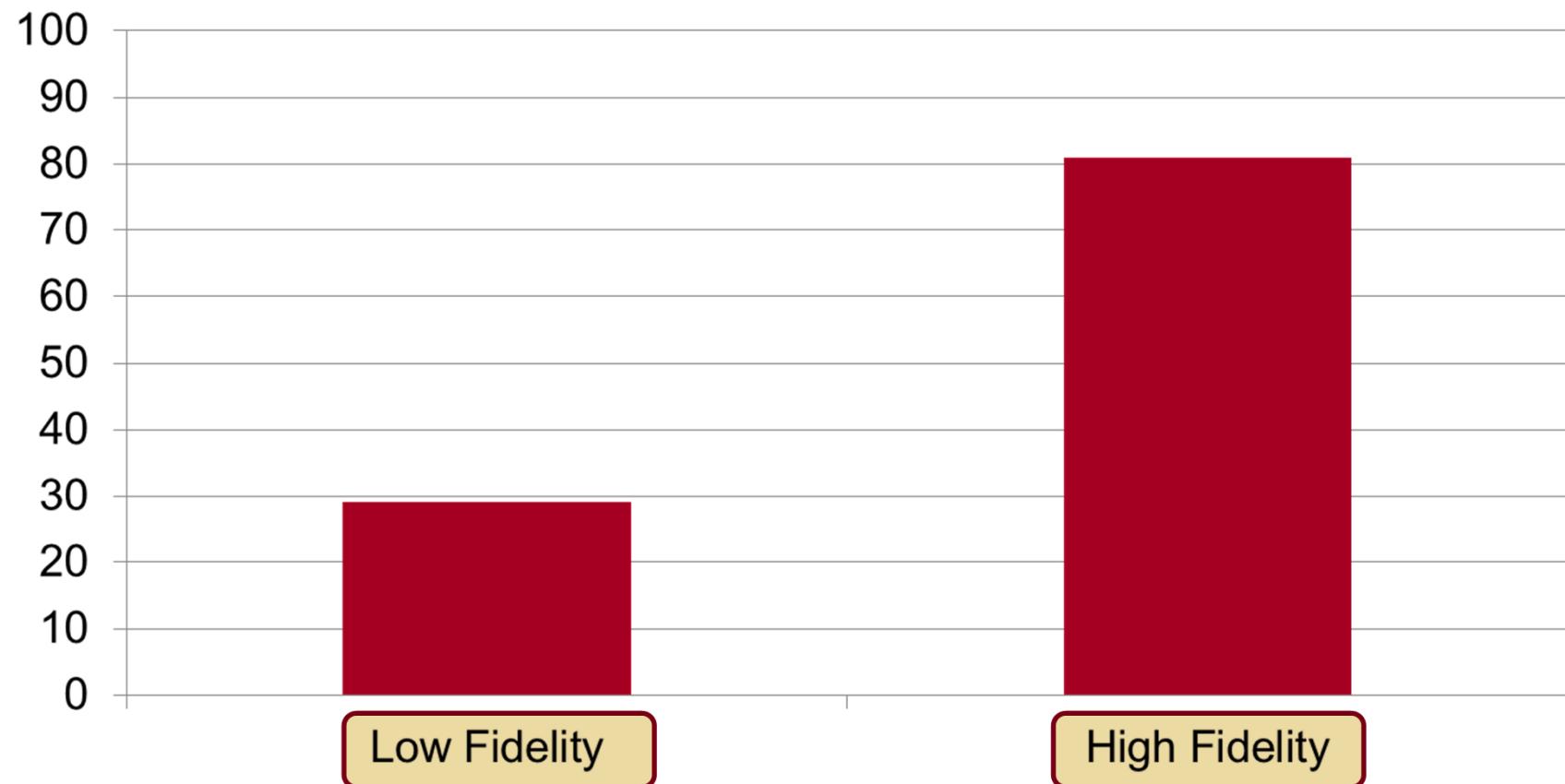
Socially
Significant
Outcomes

Usable Intervention Criteria

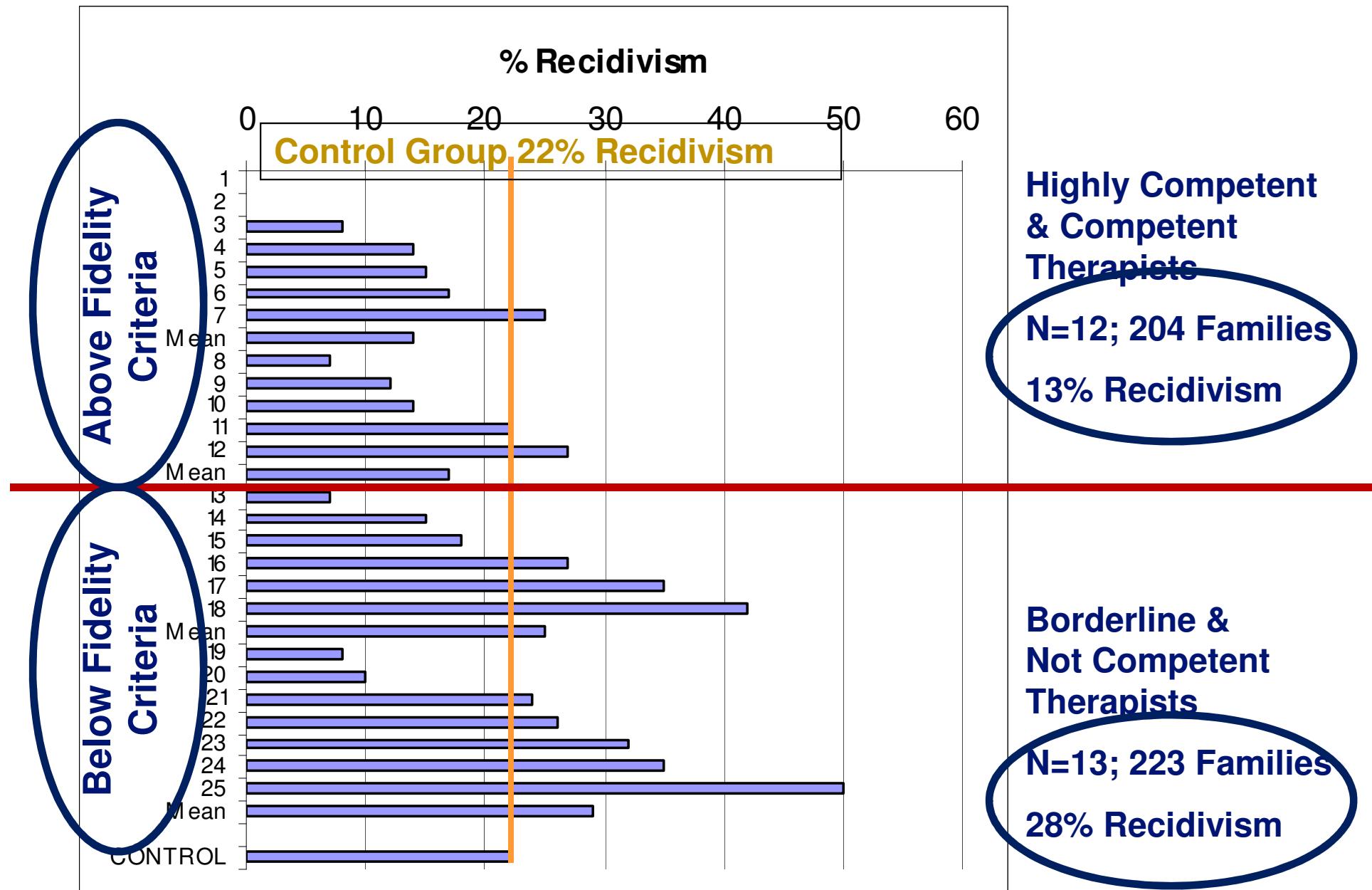
- **Clear description of the program**
 - **Philosophy, values, principles (guidance)**
 - **Inclusion – exclusion criteria (beneficiaries)**
- **Clear essential functions that define the program (core components)**
- **Operational definitions of essential functions (practice profiles; do, say)**
- **Practical performance assessment**
 - **Highly correlated (0.70+) with desired outcomes**



% Clean UAs



Functional Family Therapists (WSIPP)



Applied Implementation

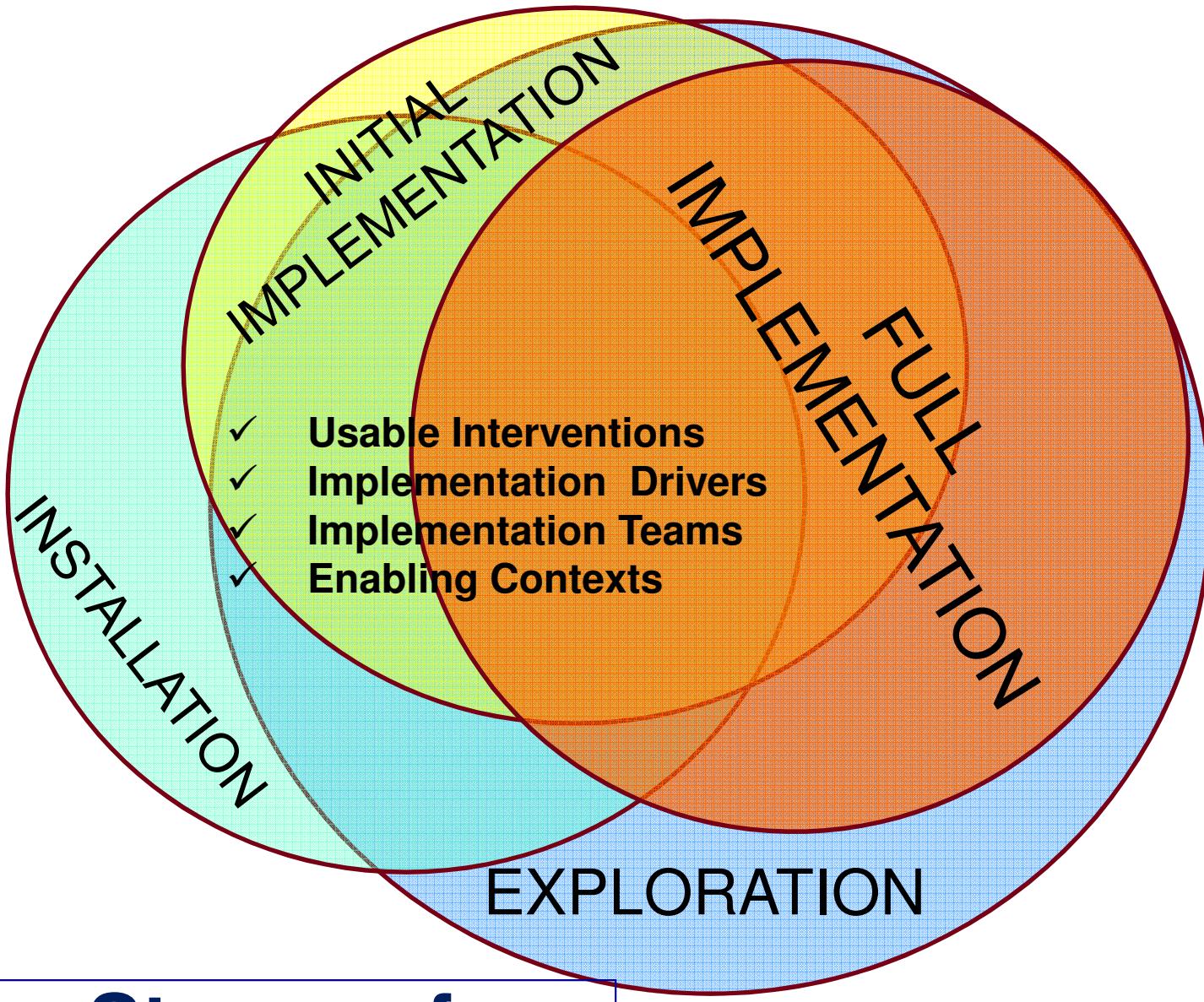
WHAT:
Effective
Interventions

HOW & WHO:
Effective
Implementation

Enabling
Contexts

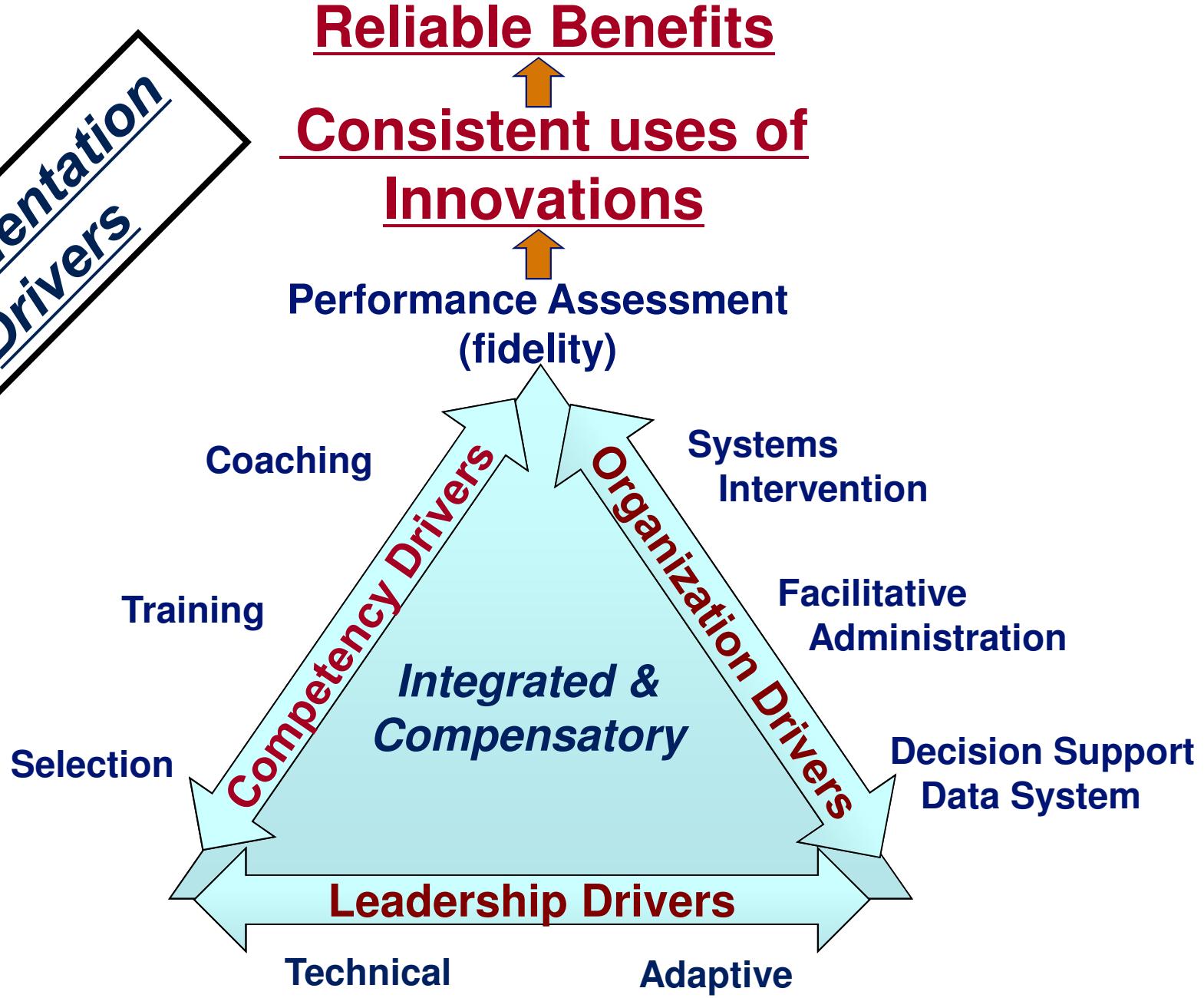
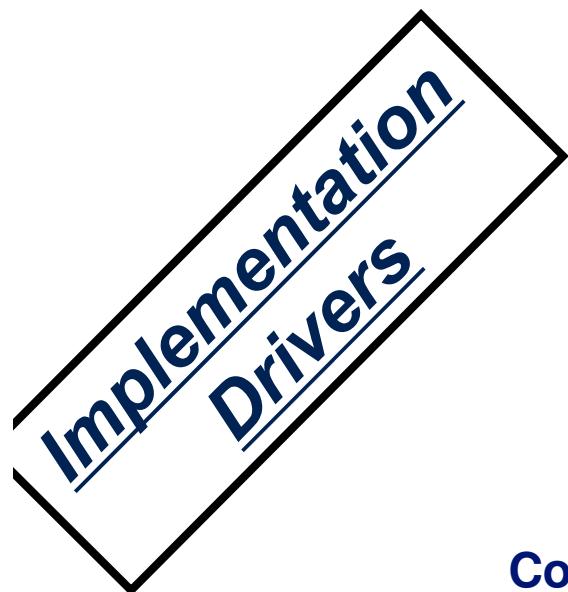


**Socially
Significant
Outcomes**

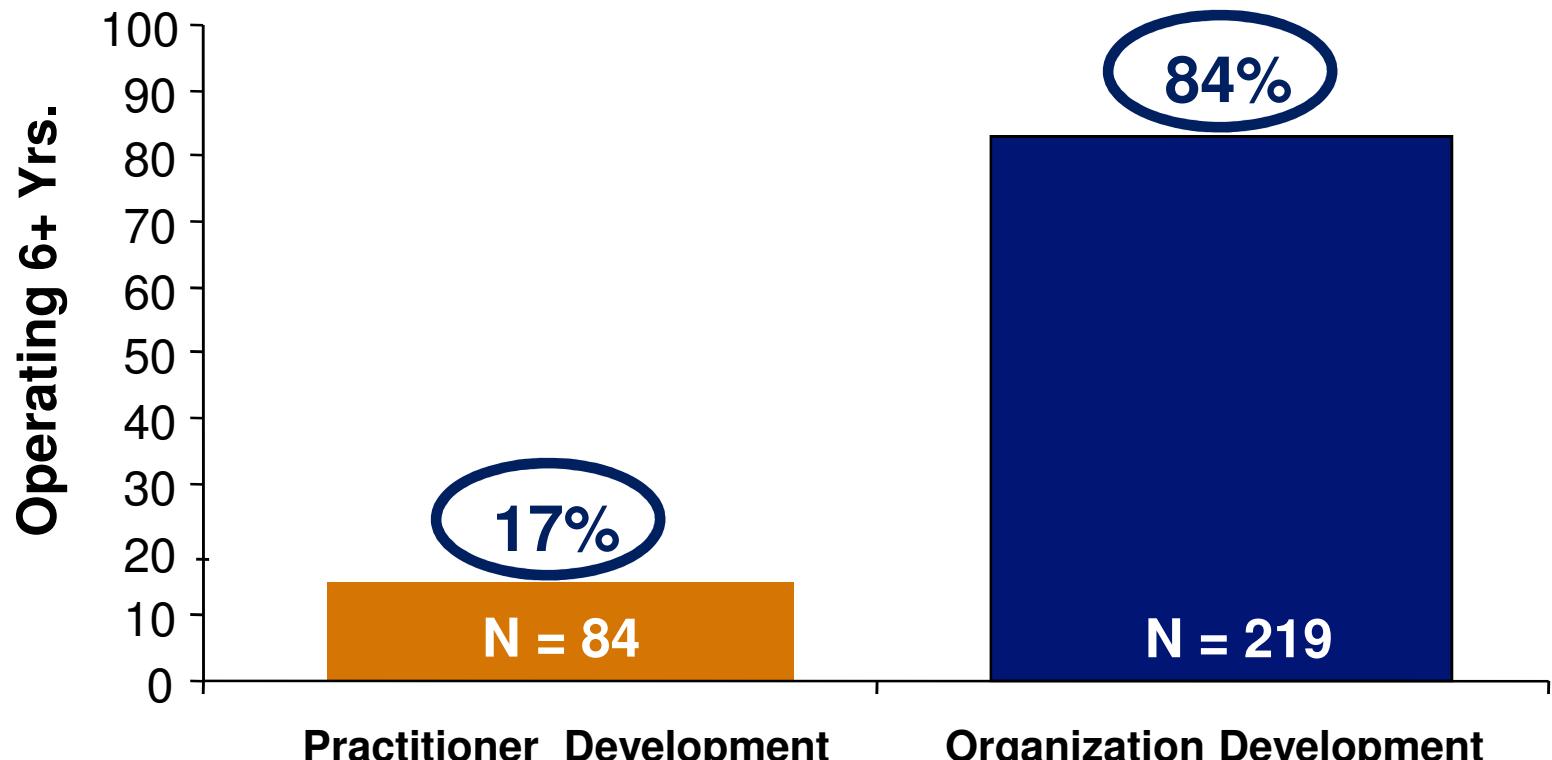


Stages of Implementation

Fixsen, Naoom, Blase, Friedman, & Wallace, 2005



Organization & Leadership Drivers



Fixsen, Blase, Timbers, & Wolf (2001)

Improvement Cycles

- **Rapid cycle (PDSA) problem solving**
 - Shewhart (1931); Deming (1986)
- **Usability testing**
 - Rubin (1994); Nielsen (2000)
- **Practice-policy communication loop**
 - Fixsen, Blase, Metz, & Van Dyke (2013)

Implementation Team

► **Minimum of three people** (four or more preferred) with expertise in:

- **Innovations**
- **Implementation**
- **Organization change**

► **Tolerate turnover; teams are sustainable even when the players come and go (Higgins, Weiner, & Young, 2012; Klest & Patras, 2011)**

Implementation Team

| Implementation Drivers | T1 | T2 | T3 |
|--------------------------------|------|-------|-------|
| 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* |
| <u>Average Composite Score</u> | 1.1 | 1.68* | 1.83* |
| <u>Fidelity (% of cases)</u> | 18% | 83% | 83% |

2 = Fully in Place
 1 = Partially in Place
 0 = Not in Place

Metz et al. (2013)

Implementation Team

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

Fixsen, Blase,
Timbers, & Wolf, 2001

Saldana &
Chamberlain, 2012

Balas & Boren, 2000

Green, 2008

Applied Implementation

WHAT:
Effective
Interventions



HOW/WHO:
Effective
Implementation



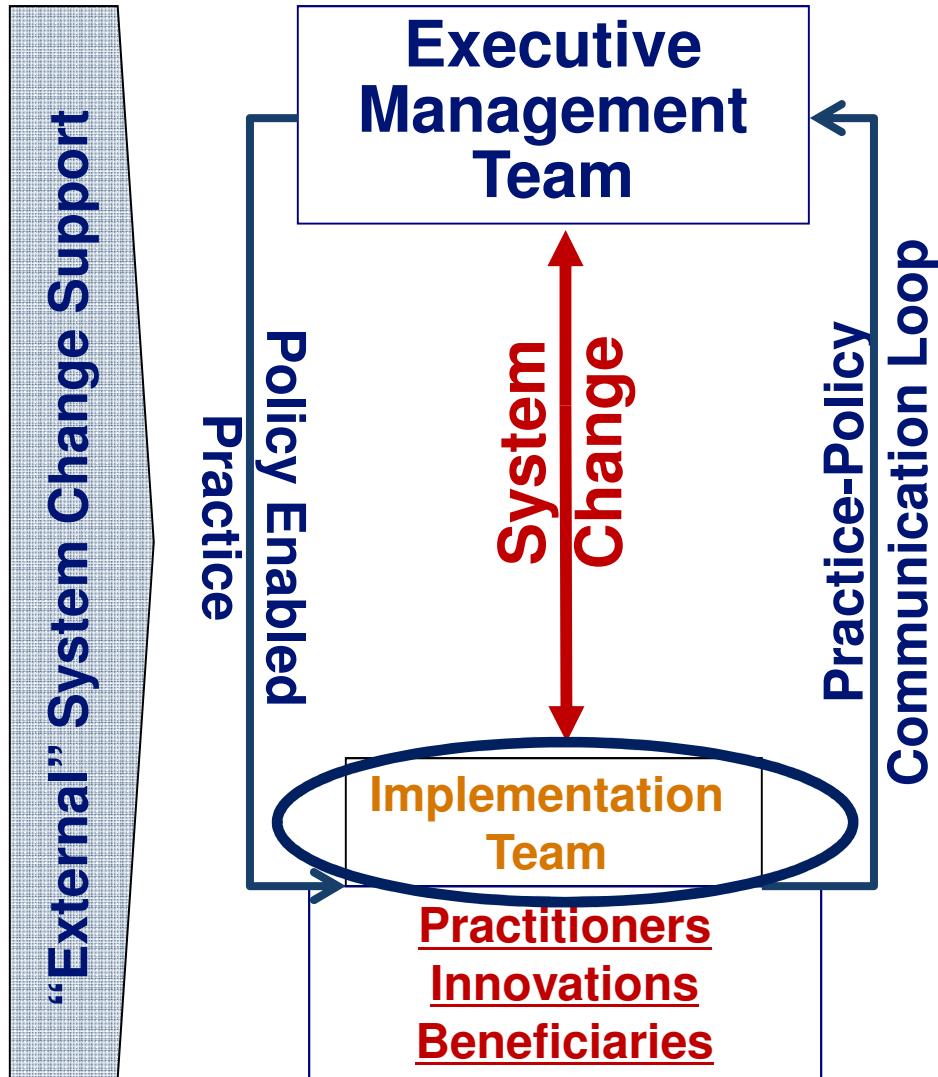
WHERE:
Enabling
Contexts



**Socially
Significant
Outcomes**

Creating Enabling Contexts

“The fault cannot lie in the part responsible for the repair.”
Ashby (1956)



Adaptive Challenges

- Duplication
- Fragmentation
- Hiring criteria
- Salaries
- Credentialing
- Licensing
- Time/ scheduling
- Union contracts
- RFP methods
- Laws & regulations

Implementation Science

A fundamental truth:

- People cannot benefit from innovations they do not experience

Effective Innovations

- If we cannot use them as designed
- They will not produce desired outcomes

APPLIED Implementation Science

Implementation Science

Active implementation is not an end point, but a new beginning for rapid expansion of knowledge related to implementation best practices, science, and policy.

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

For More Information

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www.scalingup.org

www.globalimplementation.org



UNC

FPG CHILD DEVELOPMENT INSTITUTE

Implementation Science

Implementation Research: A Synthesis of the Literature



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, The National Implementation Research Network (FMHI Publication #231).



[HTTP://NIRN.FPG.UNC.EDU](http://NIRN.FPG.UNC.EDU)



Get Connected!

www.scalingup.org



For more on Implementation Science
<http://nirn.fpg.unc.edu>
www.globalimplementation.org

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)
- Duke Endowment (Child Welfare Reform)

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