



Scaling and Implementation Science

**National
Academy of
Social
Insurance**

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UNC

FPG CHILD DEVELOPMENT INSTITUTE

 **nirn** National
Implementation
Research Network

Social Impact

Big question for policy makers, system administrators, and directors of human service organizations:

What will it take to:

- Purposely and reliably produce,
- Continually improve, and
- Scale up

social impact in complex human services?

Science to Service



Science Implementation Service

“Evidence-based” Health

- Best practices are not yet common practices in human services
- Medical error is the third leading cause of death (after heart disease and cancer)
Greer (1993); IOM (2000); Starfield (2000)
- “[We] identified a tremendous amount of work being done around the world to improve healthcare. ... these initiatives tend to be fragmented from an implementation standpoint.”

Perla, Bradbury, & Gunther-Murphy (2013)

Implementation Science

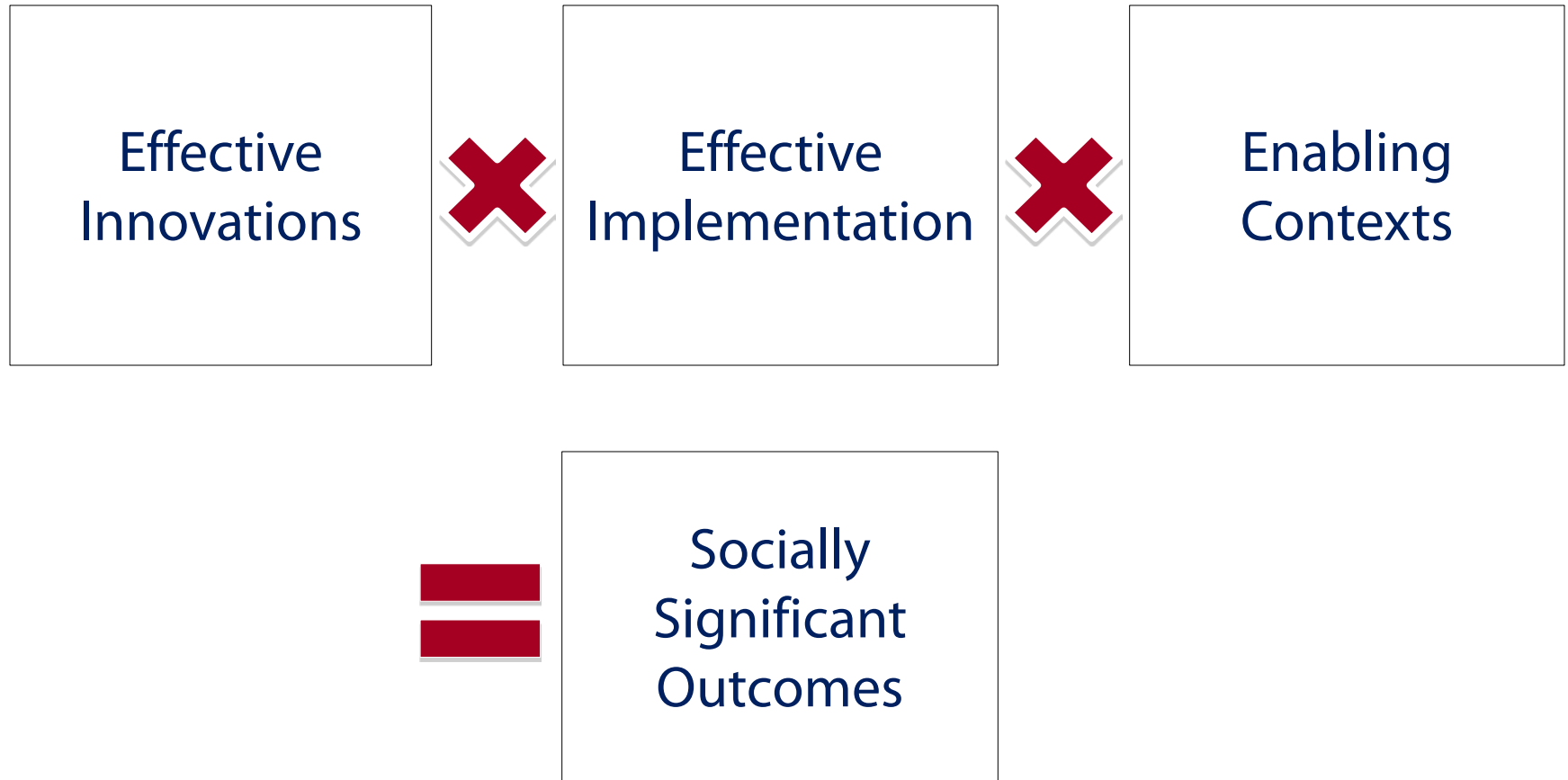
Convergence in the new millennium

1. Innovation science
2. Implementation science
3. Improvement science
4. Complexity theory

Implementation science is universal and applies equally to any human service sector (shared learning!)

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

Formula for Success



Implementation Defined

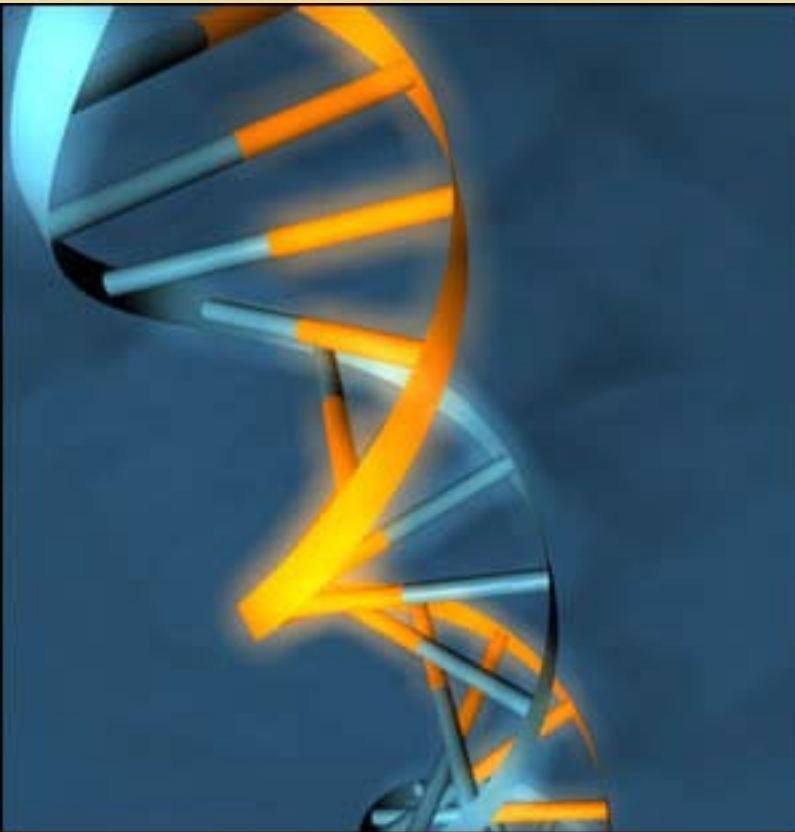
Implement = Use

🚩 Implementation Science = The study of factors that influence the full and effective use of innovations in practice

🚩 The goal is not to answer factual questions about what is, but rather to determine what is required (mission driven)

National Implementation Research Network (2014)

Convergence: Active Implementation Frameworks



- ✓ Usable Innovations
- ✓ Implementation Stages
- ✓ Implementation Drivers
- ✓ Improvement Cycles
- ✓ Implementation Teams
- ✓ Enabling Change

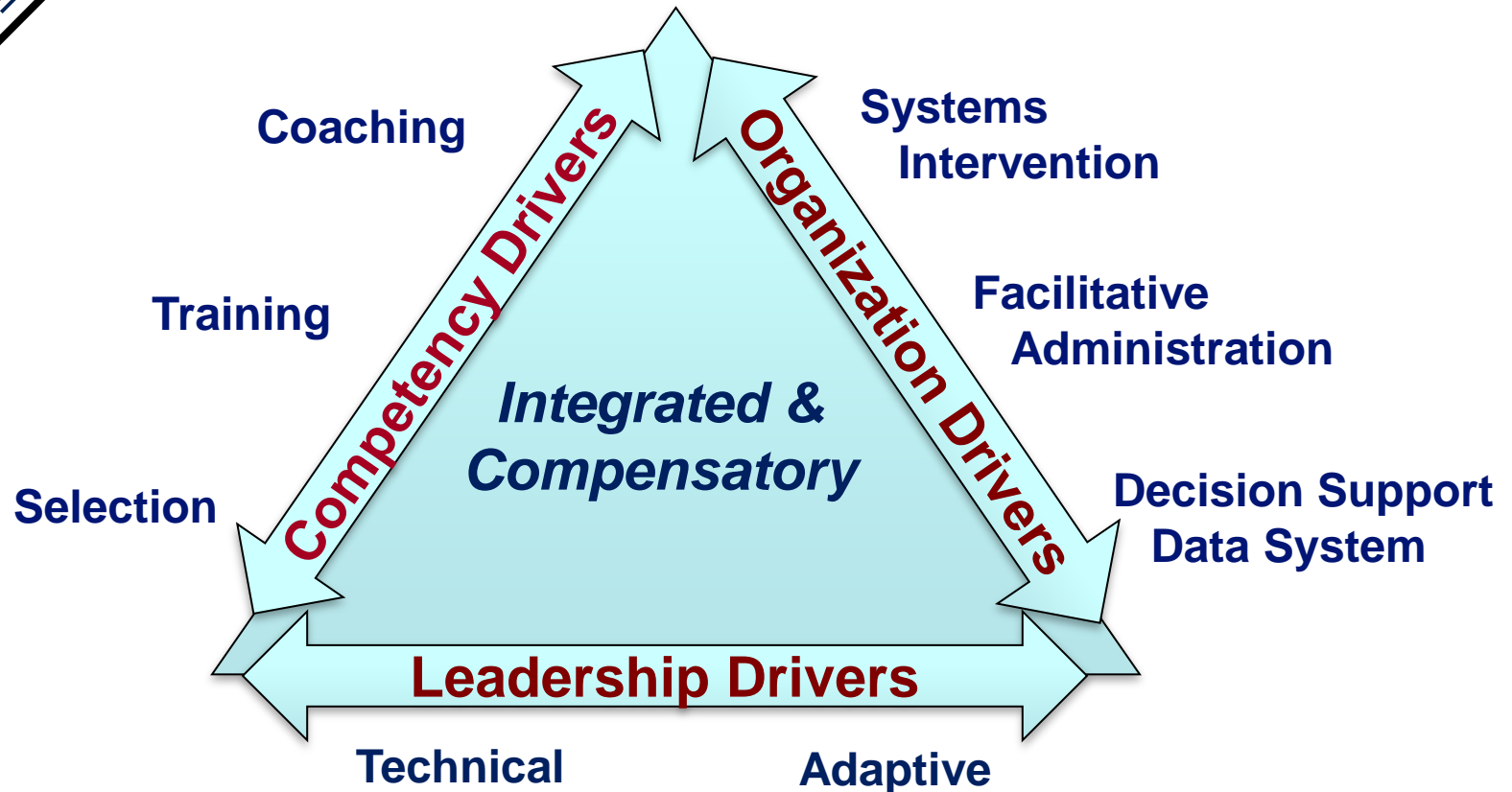
Implementation Drivers

Reliable Benefits

Consistent uses of Innovations



Fidelity



Implementation Teams

		IMPLEMENTATION	
		Expert Impl. Team	NO Impl. Team
INNOVATION	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

Evidence: Quick Summary

		Haphazard Attempts	Implementation On Purpose
Competency Drivers	8 X More	<u>5 - 15%</u> use in practice	<u>80 - 95%</u> use with all Drivers
Fidelity in Practice	3 X More	<u>29%</u> EBP outcomes if low fidelity use	<u>81%</u> EBP outcomes if high fidelity use
Implementation Team	4 X More	<u>18%</u> fidelity with no/poor Drivers	<u>83%</u> fidelity if Drivers at criteria
Training + Coaching + Fidelity	3 X More	<u>22%</u> staff retained 3+ yrs.	<u>58%</u> staff retained 3+ yrs.
Competency + Organization Drivers	5 X More	<u>17%</u> organizations sustain 6+ yrs.	<u>84%</u> organizations sustain 6+ yrs.

Scaling for Social Impact

Social Impact (product)

=

Number Benefiting from an Innovation
(numerator)

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Population of Potential Beneficiaries
(denominator)

Atom-based Scaling

- Atom-based innovations have the essential features built into the pill, software, hardware, other components
- The quality of the numerator is established and tested in ultra-clean and mechanized production facilities
- Post-production industries are available to maintain, repair, and sustain an innovation

Interaction-based Scaling

- Interaction-based innovations are “built into” the skill sets of practitioners
- The quality of the numerator is fragile and must be assessed frequently in messy human service environments
- Post-production Implementation Teams must be available to maintain, sustain, and improve the use of innovations

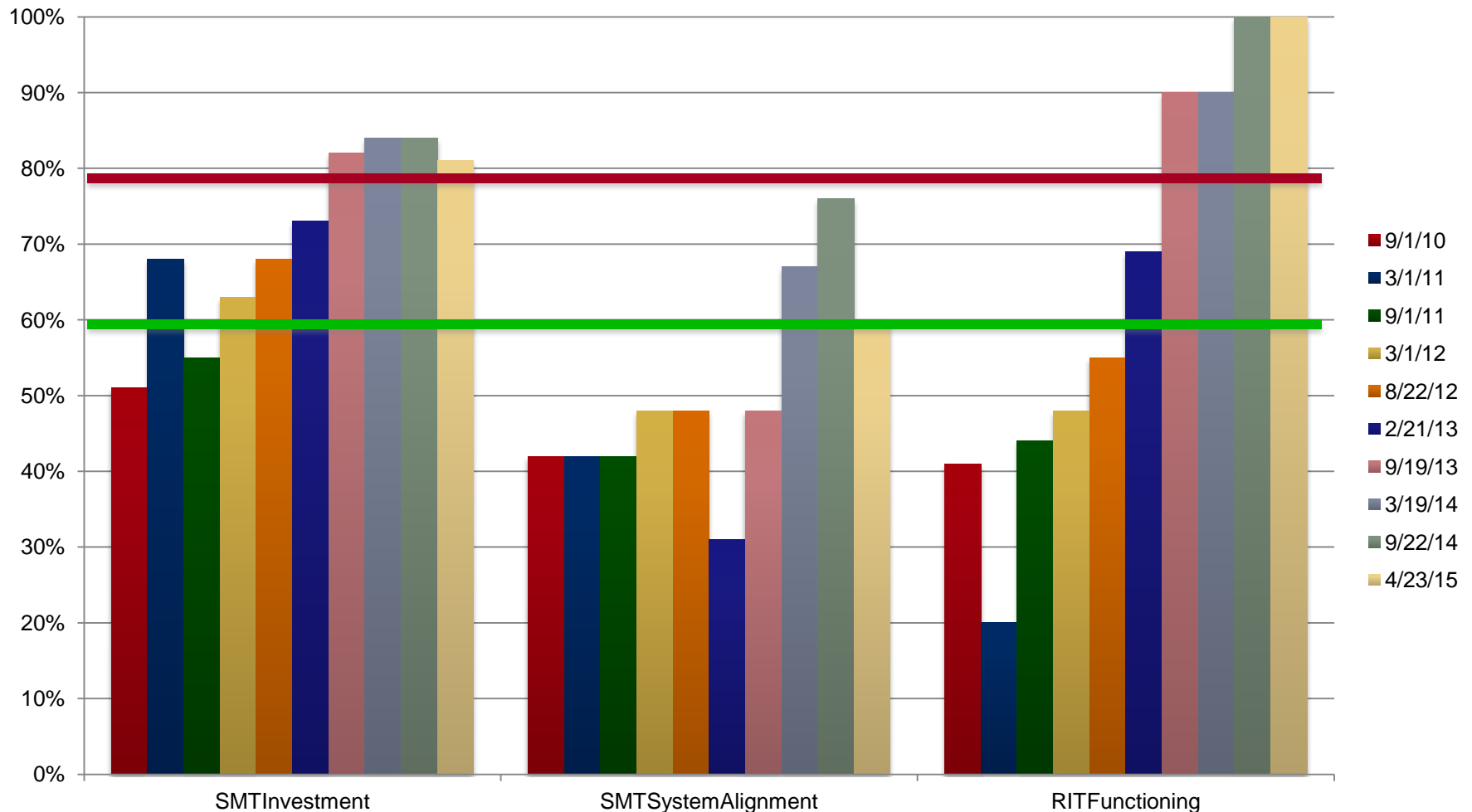
Implementation for a Change

Invent a new future for health services

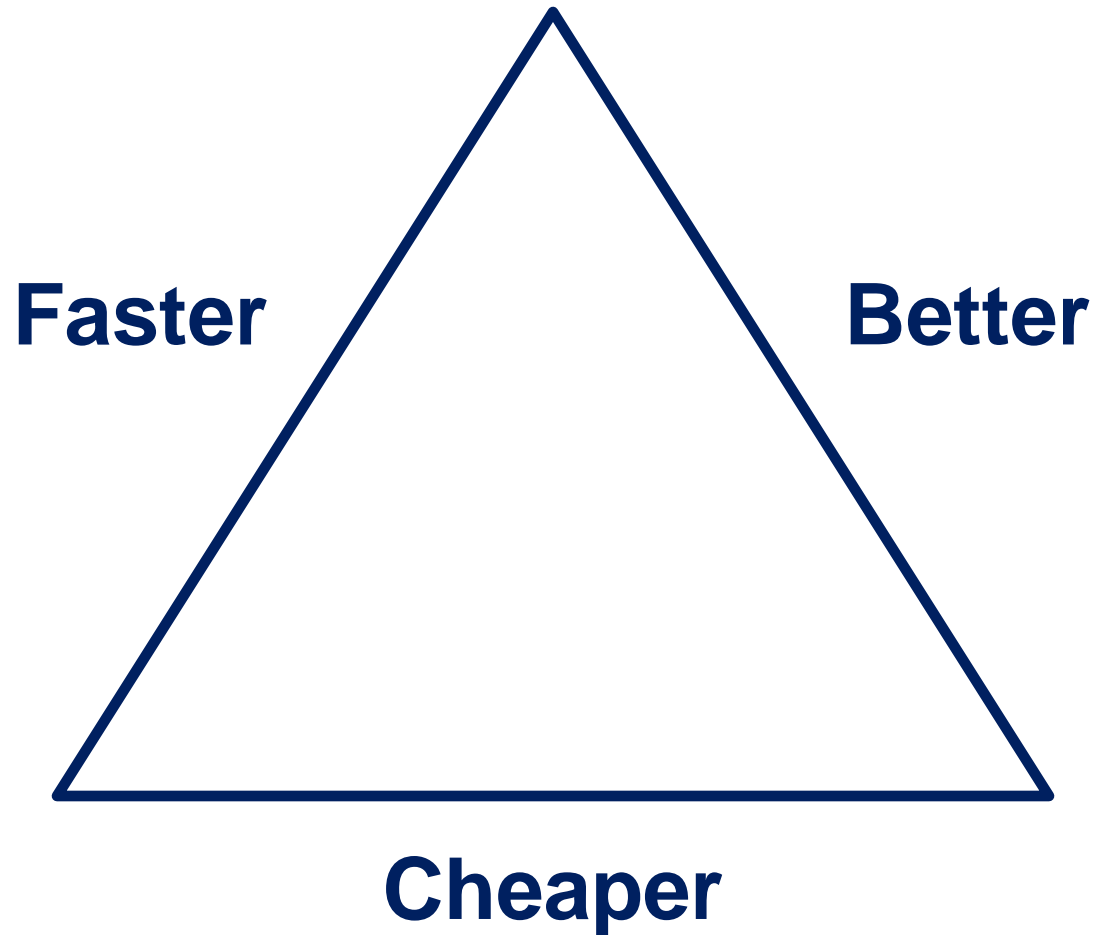
- **Stop wasting time and money on implementation methods that don't work (and never have!)**
 - **Sugai's Law**: For every new initiative, stop two (ineffective; harmful) current ones.
 - **De-scale**: Avoid layering and fragmentation
- **Set aside 20% of funds for implementation**
- **Require regular reports of fidelity data**

Changing State Systems

State Capacity Assessment: Fixsen, Duda, Blase and Horner, 2009



Wexelblatt's Scheduling Algorithm



Pick any two!

Contribute!



GIC

Global Implementation
Conference

GIC 2017

June 19-21 Toronto Canada

www.globalimplementation.org



GII

Global Implementation
Initiative

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www.globalimplementation.org

Implementation Science

Implementation Research: A Synthesis of the Literature



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, The National Implementation Research Network



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



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