



Implementation Science Session 1

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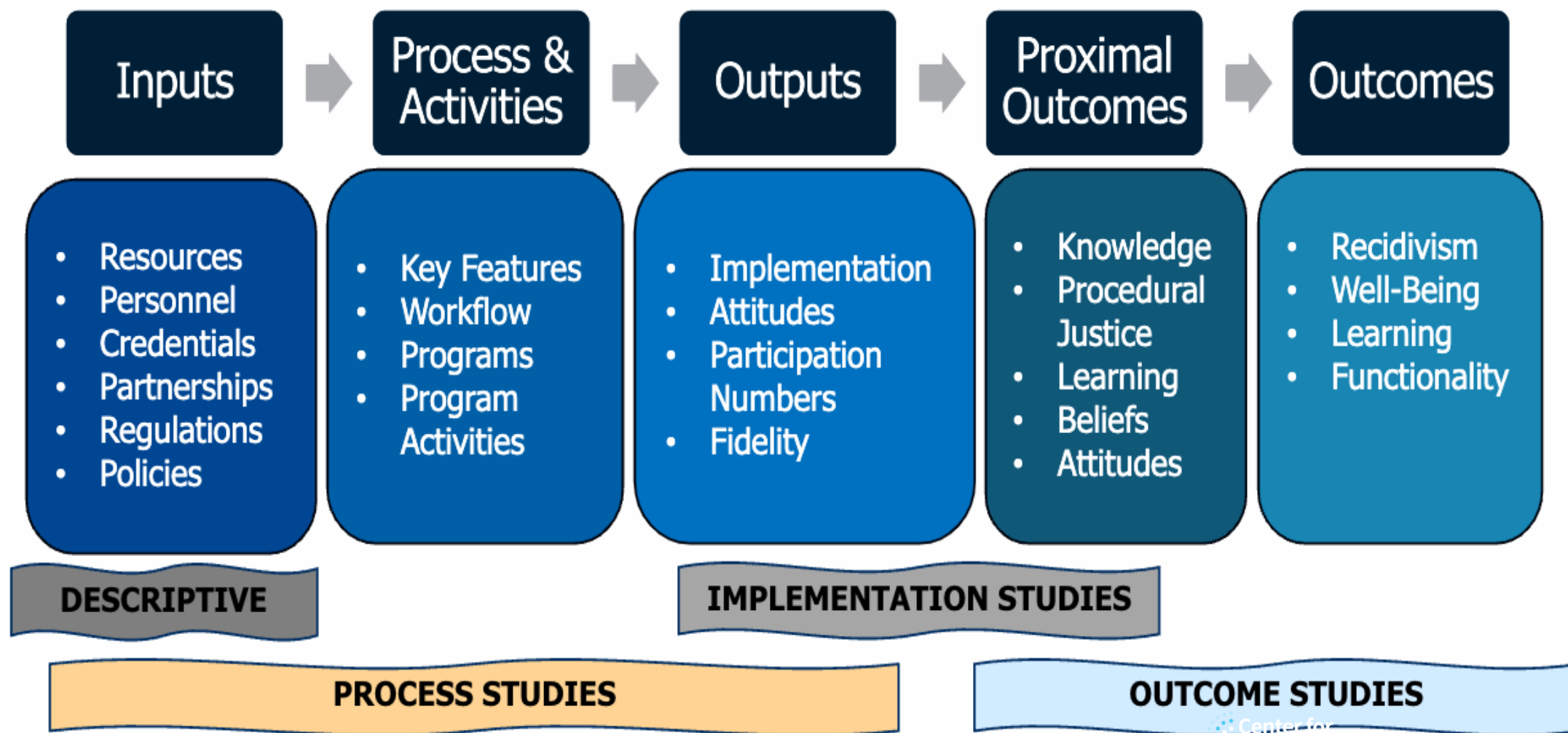
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Goals for the Community of Practice

1. Introduce Implementation Science Concepts and Designs
2. Focus on Implementation Outcomes
3. Pilot an Implementation Outcome Instrument



What do you want to learn?



Implementation science studies how to get (new) practices and innovations **adopted**, **adapted**, & **sustained**.

The focus is on the *organization(s)*:

- 1) Change strategies to implement change (interventions)
- 2) Studies of the change process in terms of processes and outputs (methods)
- 3) Studies that combine implementation (organizational) and effectiveness (client level outcomes)



Consolidated Framework for Implementation Research (CFIR)

- ❖ Innovation Characteristics
- ❖ Inner Setting
- ❖ Outer Setting
- ❖ Change Processes
- ❖ Characteristics of Individual (tailor)

<https://cfirguide.org/>

Exploring Inner & Outer Settings

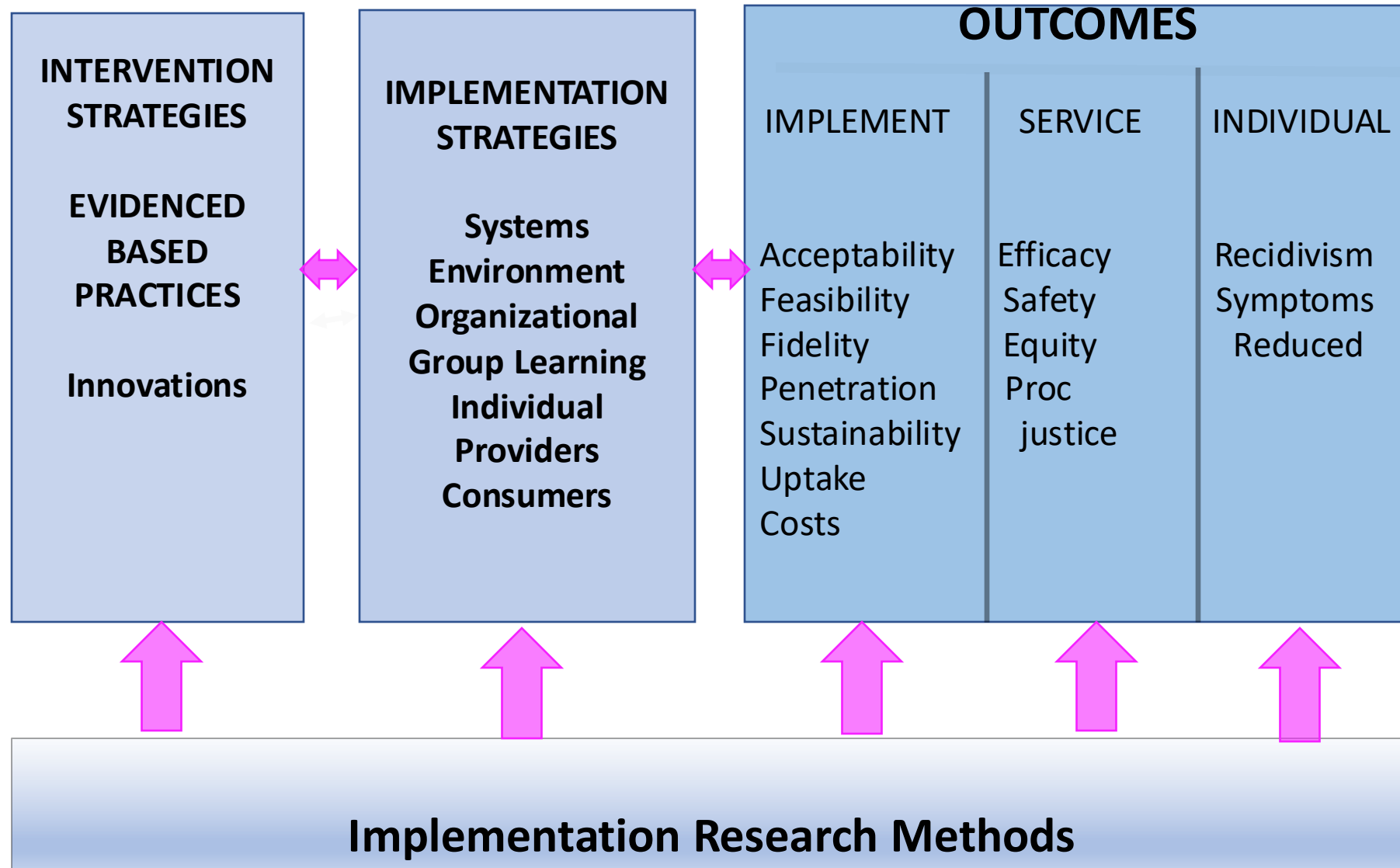
INTERNAL

- Staffing
- Policies
- Procedures
- Organizational Culture
- Relationship between justice staff and other organizations (interagency)

EXTERNAL

- Buy In about need for Services
- Funding
- Contracts & MOUs
- Legislation/Policies
- Commitment to Training and Resources

Implementation Research Framework



EBPs do not appear to deliver results..

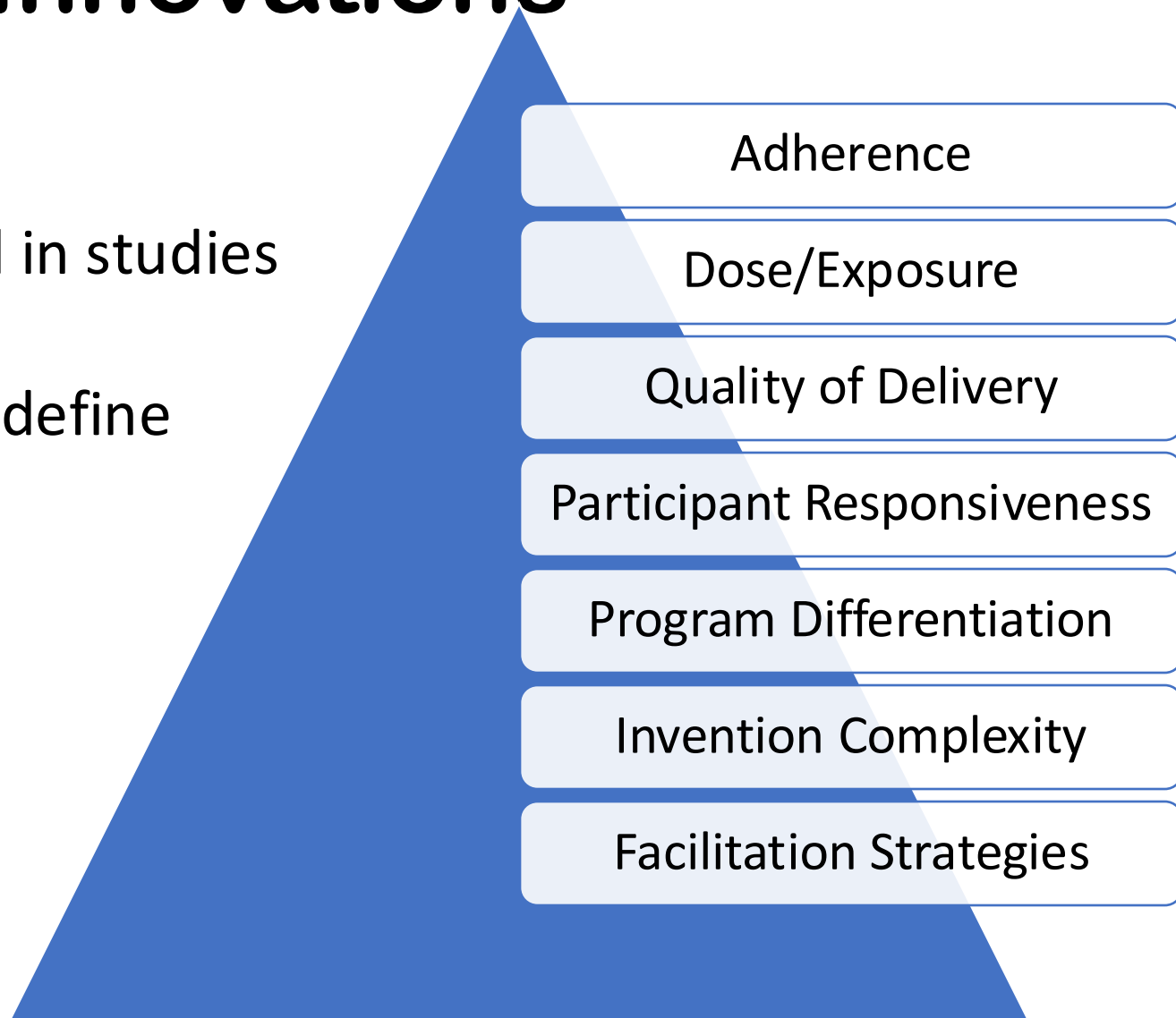
- **Quality (fidelity) is neglected**
 - EBP in “spirit”
 - EBP indistinguishable from normal practice
- **Use of multiple EBPs becomes unmanageable**
- **Management overrides EBPs**
 - feasibility is not considered
 - technology is not adapted
- **Maps poorly to complex & multimorbid conditions**

Step 1: What is the Innovation?

- **Characteristics of the Innovation**
- **Remember Rodgers Five Points of Innovation**
- **The rate at which an initiative is adopted is based on five areas of consideration:**
 - **Relative Advantage**
 - **Compatibility**
 - **Complexity**
 - **Trialability**
 - **Observability**
- **How does “xxxx” compare with what you are currently doing?**

Specificity of Innovations

- ❖ Infrequently addressed in studies
- ❖ Left to practitioners to define



Carroll, C., Patterson, M., Wood, S. *et al.* A conceptual framework for implementation fidelity. *Implementation Sci* 2, 40 (2007). <https://doi.org/10.1186/1748-5908-2-40>

Examples of Innovation Specificity

❖ Describe the innovations in specific terms, which then raises question of adherence or “what is it we are doing”

- Community Policing
- Procedural Justice
- Risk-Need Assessment Tools

❖ Dose/Exposure

- Length of an innovation—T4C is a 22 week program but is it delivered in 11 week program twice a month or 22 weeks?
- Amount of exposure—Is a police patrol that is random the same as directive service? How long between contact?
- What process gives voice?



❖ **Quality of Innovation**

- How is the innovation administered?
- Who delivers the innovation?
- Do the staff follow protocols?

❖ **Participant Responsiveness**

- Are the individuals engaged in the innovation?
- Does the innovation allow individuals to have voice in the process?

❖ **Program Differentiation**

- ❖ How is the innovation different enough from standard practice?
- ❖ Does the innovation embrace the theory and program components of the EBPTs?

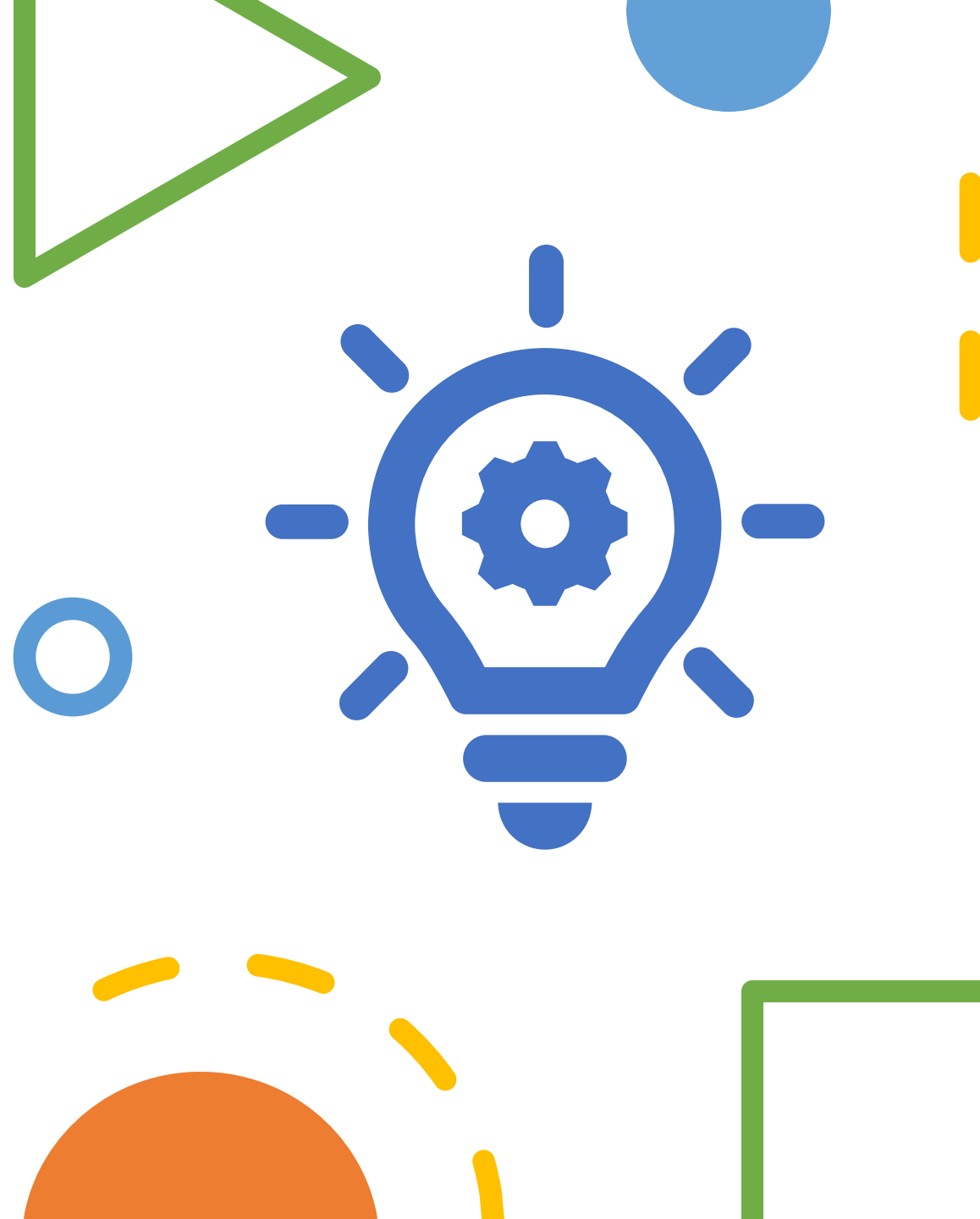


❖ **Invention Complexity**

- Are the parts and phases of the innovation clear?
- Is it compatible with existing practices?

❖ **Facilitation**

- Is the change process clear and directive?
- Is the innovation compatible with the goals and mission of the organization?
- Is there an emphasis on acquiring resources to implement and sustain the initiative?



Step 2: What are the Change Practices(Implementation Strategies?)

- What are you targeting?
 - **Systems**
 - **Environment**
 - **Organizational**
 - **Group Learning**
 - **Individual**
 - **Providers**
 - **Consumers**
- How is it being delivered?
 - Change team (interagency)
 - Performance Metrics
 - Training/Train the Trainer, Booster Sessions
 - Powell, *Expert Recommendations for Implementing Change (ERIC)*, 79 Different Strategies

Powell, B.J., Waltz, T.J., Chinman, M.J. *et al.* A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project. *Implementation Sci* **10**, 21 (2015).

<https://doi.org/10.1186/s13012-015-0209-1>

IMPLEMENTATION SCIENCE

QUALITY IMPROVEMENT MODELS

PDSA



PLAN DO STUDY ACT:

- Small Scale
- Data Drive
- Locally Informed
- Rapid Cycle

Process narrowing your attention to think about how well these current processes are working and what you can do to improve them.

the **process** of PDCA



BEFORE YOU START
Assembling the
Team



PART 1
Brainstorm
the
Problem &
Narrow it



PART 2
Confirm the
Problem
with Data!
Write an
Action
Statement



PART 3
Create the
Solution
and List the
Steps for
Carrying it
Out



DO



STUDY

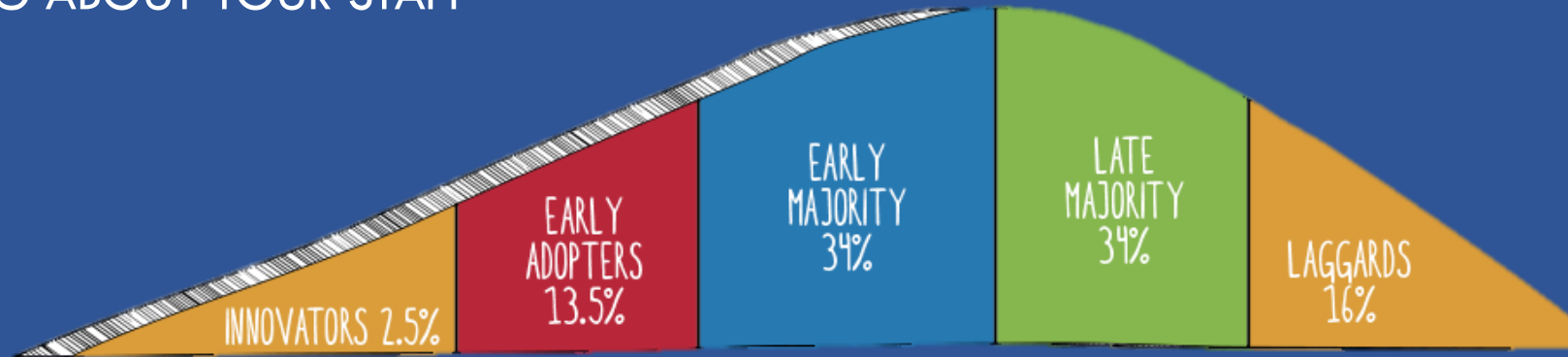


ACT



VERTICAL SLICE

THINKING ABOUT YOUR STAFF



Percentages at which Rogers (2003) suggests staff adopt and implement initiatives.



HIGH PERFORMER



CONSENSUS BUILDER



NAY-SAYER



PLAN

PART 1 | Part 2 | Part 3

PART 1

1. Select a big problem based on data
2. Narrow the problem

PART 2

3. Confirm the problem with data

PART 3

4. Brainstorm solutions
5. Pick a solution
6. Identify all the steps to the solution
7. Identify all the materials for the solution
8. Delegate tasks/clarify roles

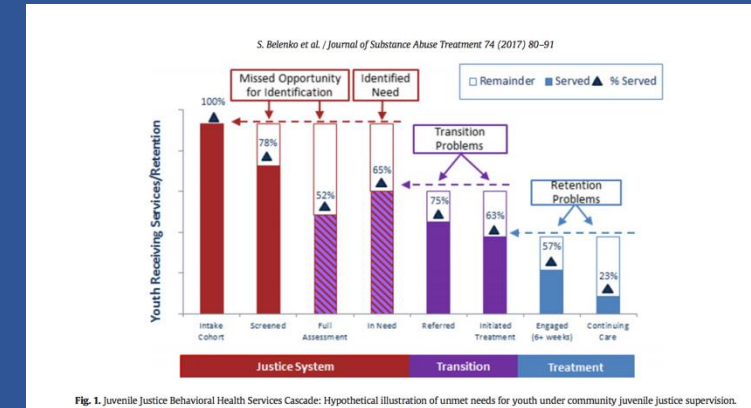
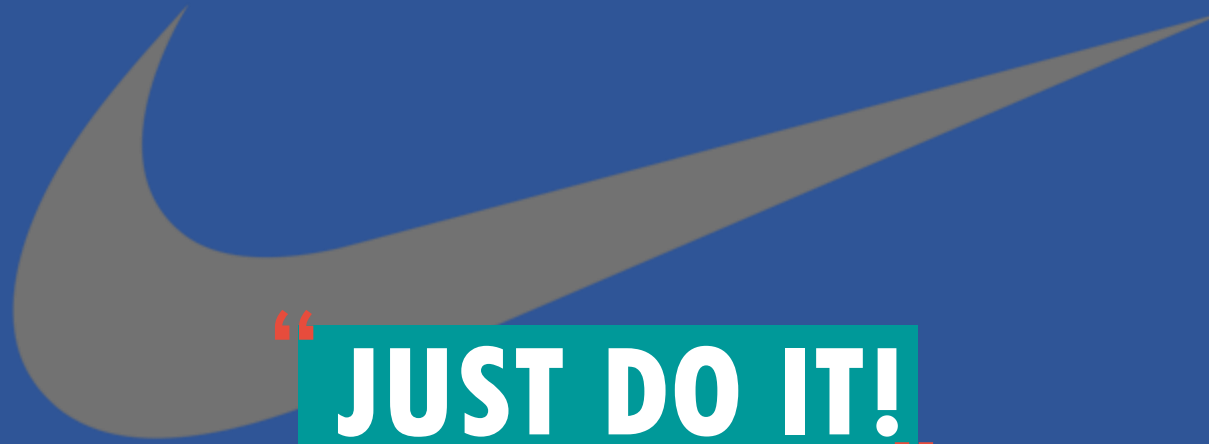


Fig. 1. Juvenile Justice Behavioral Health Services Cascade: Hypothetical illustration of unmet needs for youth under community juvenile justice supervision.

DO



“**JUST DO IT!**”



STUDY

- **Collect the same type of data collected at baseline (post data)**
- **Compare baseline and post data**
- **Consider:**
 - ❖ **What went well? Any unanticipated barriers?**
 - ❖ **What was surprising?**
 - ❖ **Anything worth changing? Improving?**

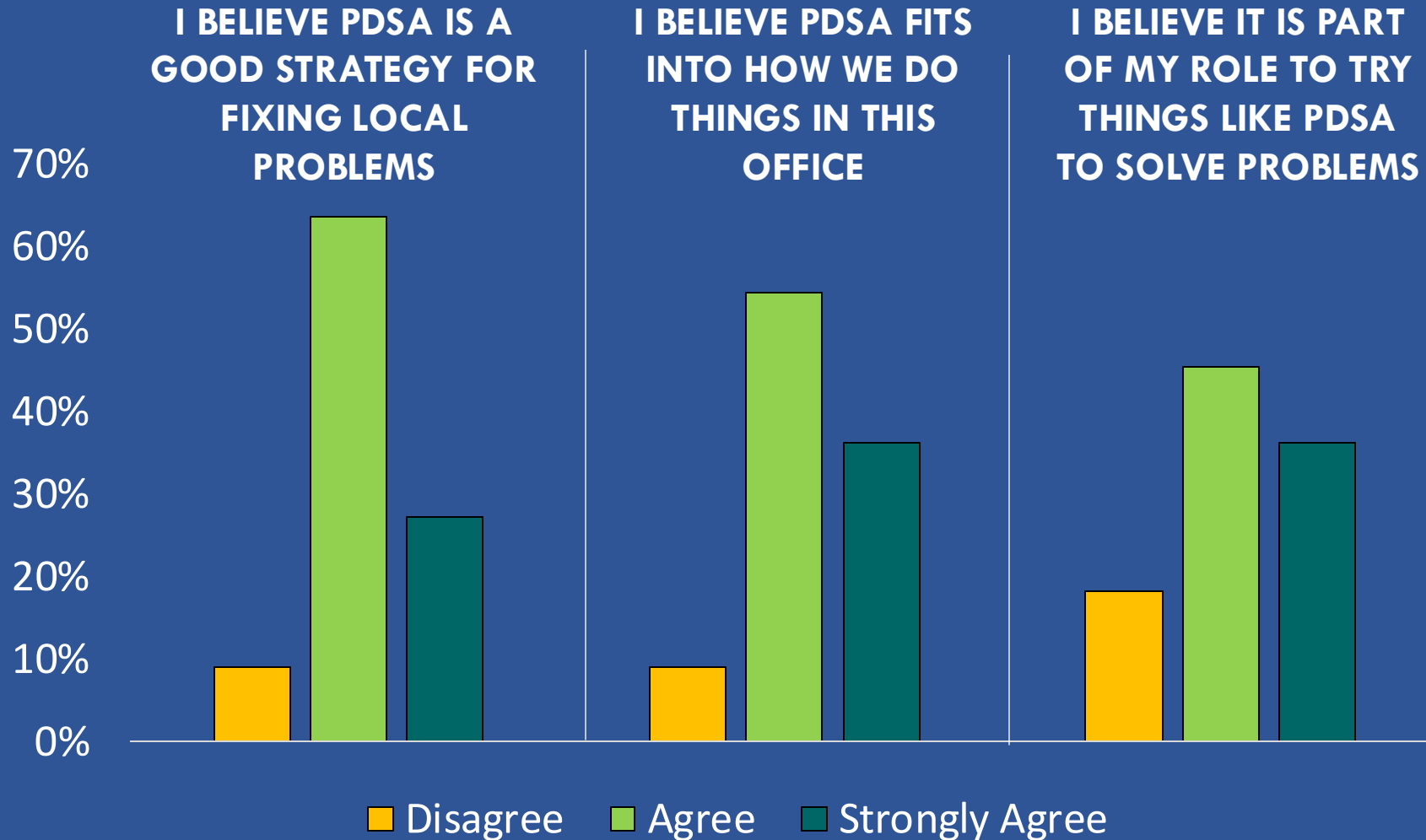
ACT

➤ **Adopt**

➤ **Adapt (PIVOT!)**

➤ ~~Abandon~~... **AHHH, Not That.**

OFFICER PERCEPTIONS OF PDSA



OFFICER PERCEPTIONS OF PDOSA

It gives an honest look at what is working, not working, how it should be changed, what needs to be implemented to make the changes, and whether or not the target changes have been reached.

It was a very focused process.

Structure and data.

Allowing my voice to be heard for a problem.

Step 3: Implementation Outcomes

➤ Staff/Organization

- ❖ Acceptability
- ❖ Appropriateness
- ❖ Feasibility

➤ Innovation

- ❖ Fidelity
- ❖ Cost

➤ System

- ❖ Penetration
- ❖ Sustainability
- ❖ Uptake
- ❖ Costs



[Implement Sci.](#) 2017; 12: 108.

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PMCID: PMC5576104

PMID: [28851459](https://pubmed.ncbi.nlm.nih.gov/28851459/)

Psychometric assessment of three newly developed implementation outcome measures


[Bryan J. Weiner](#),¹ [Cara C. Lewis](#),^{2,3,4} [Cameo Stanick](#),⁵ [Byron J. Powell](#),⁶ [Caitlin N. Dorsey](#),² [Alecia S. Clary](#),⁶
[Marcella H. Boynton](#),⁷ and [Heather Halko](#)⁸

Implementation Measures

ACCEPTABILITY	Perception of the practice as acceptable based on experience with various dimensions of the practices, such as its content, complexity, comfort, comprehension, credibility, and/or delivery of the innovation
APPROPRIATENESS	Perceived fit
FEASIBILITY	The extent to which an innovation can be successfully carried out or is suitable for a given agency or setting
ADOPTION/UPTAKE	The intention or initial decision of an organization to try an innovation or evidence-based practice
PENETRATION	The proportion of users
SUSTAINABILITY	The extent to which an evidence-based intervention can deliver its intended benefits over an extended period of time after external support ceases
FIDELITY  Center for Mental Health Services Research GEORGE WARREN BROWN SCHOOL OF SOCIAL WORK	The degree to which an intervention was implemented as it was prescribed in the original protocol : (1) adherence to the program protocol, (2) dose or amount of program delivered, (3) quality of program delivery, and (4) participant reaction and acceptance  Washington University in St. Louis




Factors Affecting Staff/Organization

- Staffing—Perspectives, Experiences
 - Internal
 - External/Stakeholders
 - Policies
 - Procedures
 - Organizational Culture
 - Agency Collaborations
 - Resources
 - Other inputs
- 



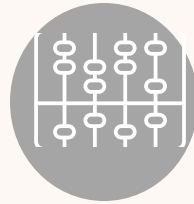
What can you learn?

- Receptivity
 - Feasibility
 - Bottom-Up ideas to align fit
 - Adaptation of innovation to fit population, setting, practices
 - Why an innovation “failed” or did not work or null effects
 - Implementation is a product of the organization
- 

Step 4: Service Related Outcomes



Procedural justice: procedures and processes are clear, transparent with consequences clarified



Distributive justice: procedures and processes apply equally across protected groups



Equity: intervention is available for all groups



Safety: the intervention and procedures are safe, do no harm to individuals, and do not generate harmful effects



**SELDOM
MEASURED**

Step 5: Typical Outcome Measures (Individual)

- Completion of Program
- Arrest
- Reincarceration
- Time varying factors (change) such as SUD, MH status, etc.
- Sometimes, change in functionality
- New emphasis on desistance



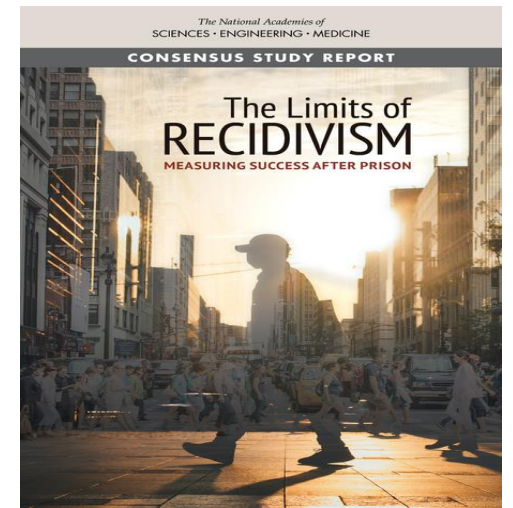
Desistance: Measures

Domains to Consider

- Housing/Homelessness
- Employment
- Education
- Physical/Mental Health
- Social Supports
- Civic Engagement

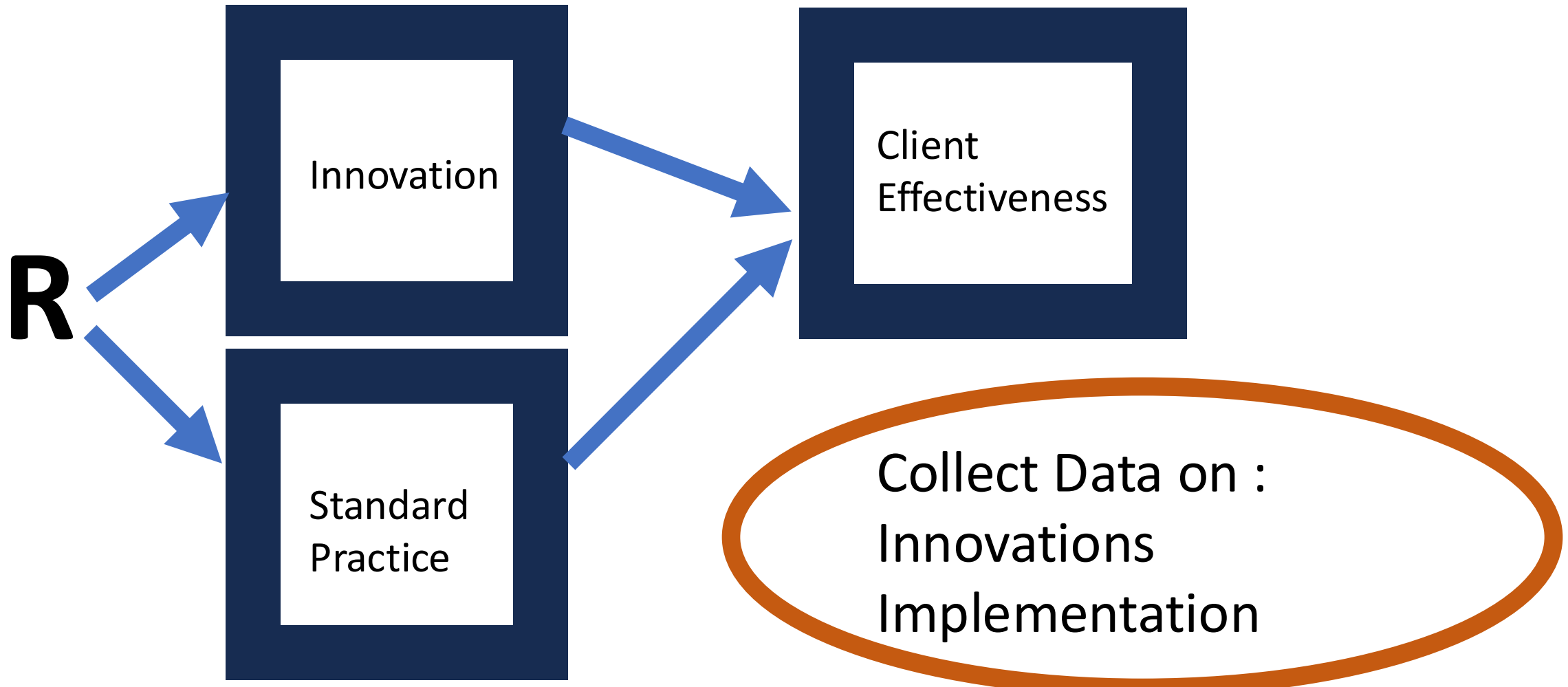
Data Issues

- Recidivism is limited
 - Does not tell us how and why people cease criminal behavior
 - Administrative data reflects system issues
- Need progress measures
- Ignores structural barriers in housing, employment etc.



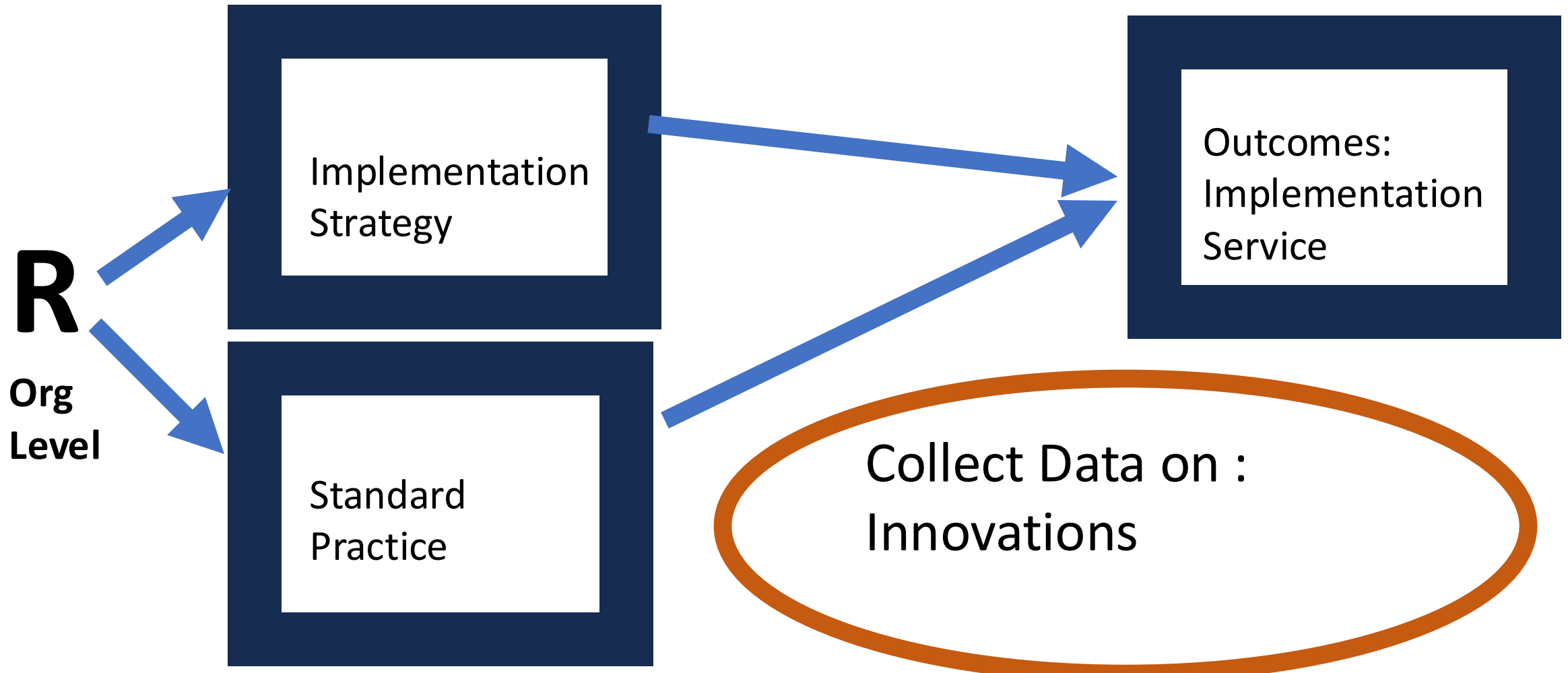
Designs to Bring it Altogether

- Hybrid Effectiveness #1



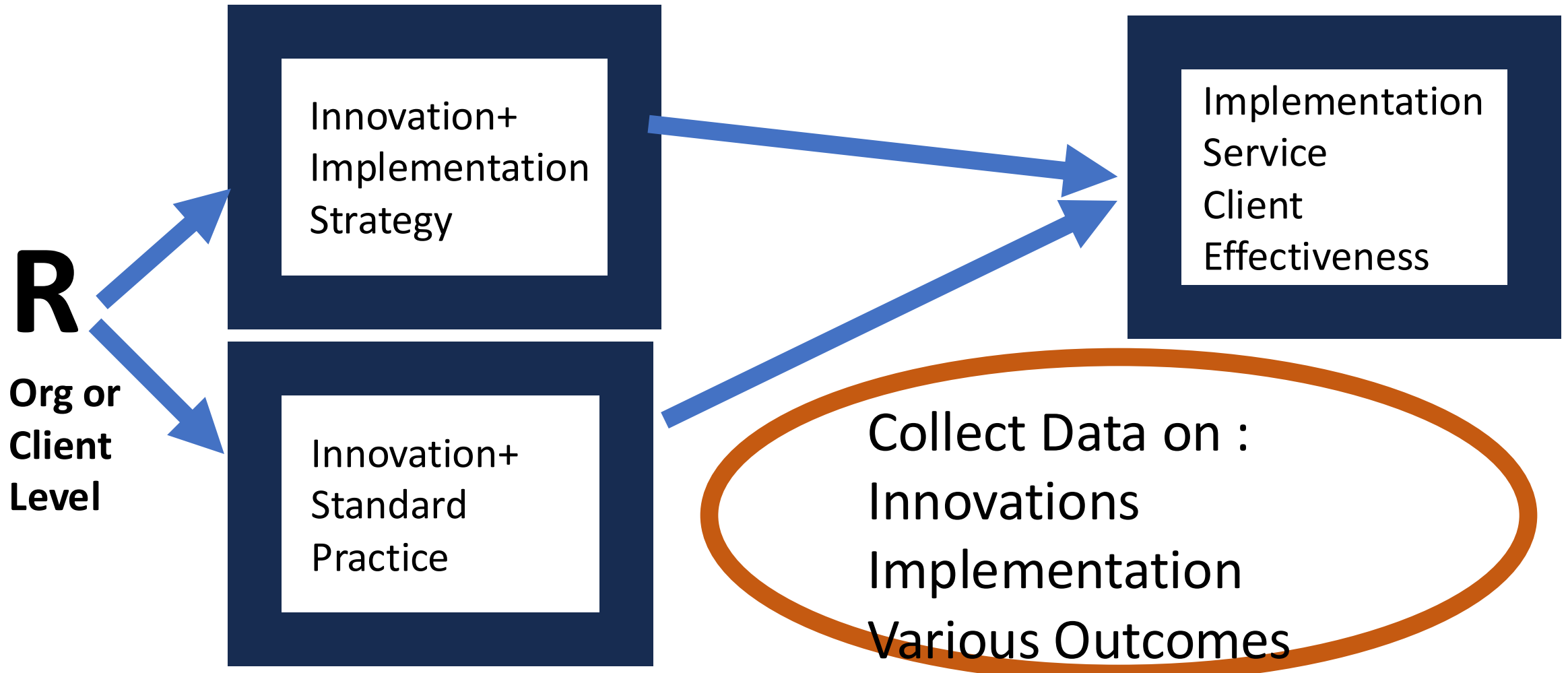
Designs to Bring it Altogether

- Hybrid Effectiveness #2



Designs to Bring it Altogether

- Hybrid Effectiveness #3



Extending Reach

- JCOIN website: www.jcoinctc.org
- www.jcoinctc.org/jtech/implementing.niatx/lessons/niatx.on.a.napkin video
- *JCOIN Career Building: LEAP and J-TEC Platform*
 - *Scholars & Investigators*
- *JCOIN Small grants:*
www.jcoinctc.org due April 1, 2025
- JCOIN Connect:
<https://connect.jcoinctc.org/>

