UC San Diego IN STEP Center Pilot Funding Pre-Application Webinar

Deadline December 2, 2022, at 12:00PM PT

UC San Diego
HEALTH SCIENCES

CASRC
Child and Adolescent Services Research Center

AGENDA

- Welcome and Introduction to the UC San Diego IN STEP Center
- Introduction to Team Effectiveness and D&I Research
- Pilot Grant Aims & Logistics
- Pilot Grant Application Process
- Q&A

Webinar Logistics

- Please share your questions and comments in the chat.
- You may enable live closed captions on your Zoom tool bar.
- We will record the webinar and post it on the Center website and YouTube channel.
  - By attending you are consenting to be recorded in some capacity. Please turn your camera off if this would make you more comfortable.

Introductions: Center Leads

Lauren Brookman-Frazee

- Center Director
- Admin Core Lead

Gregory A. Aarons

- Center Director
- Methods Core Lead

Shawn Burke

- Methods Core Co-Lead

Nicole Stadnick

- Admin Core Co-Lead

Marisa Sklar

- Methods Core Co-Lead

Let's get to know each other! Please share your name and affiliations in the chat.

ImplementatioN Science and Team Effectiveness in Practice (IN STEP) Children's Mental Health Research Center Premise

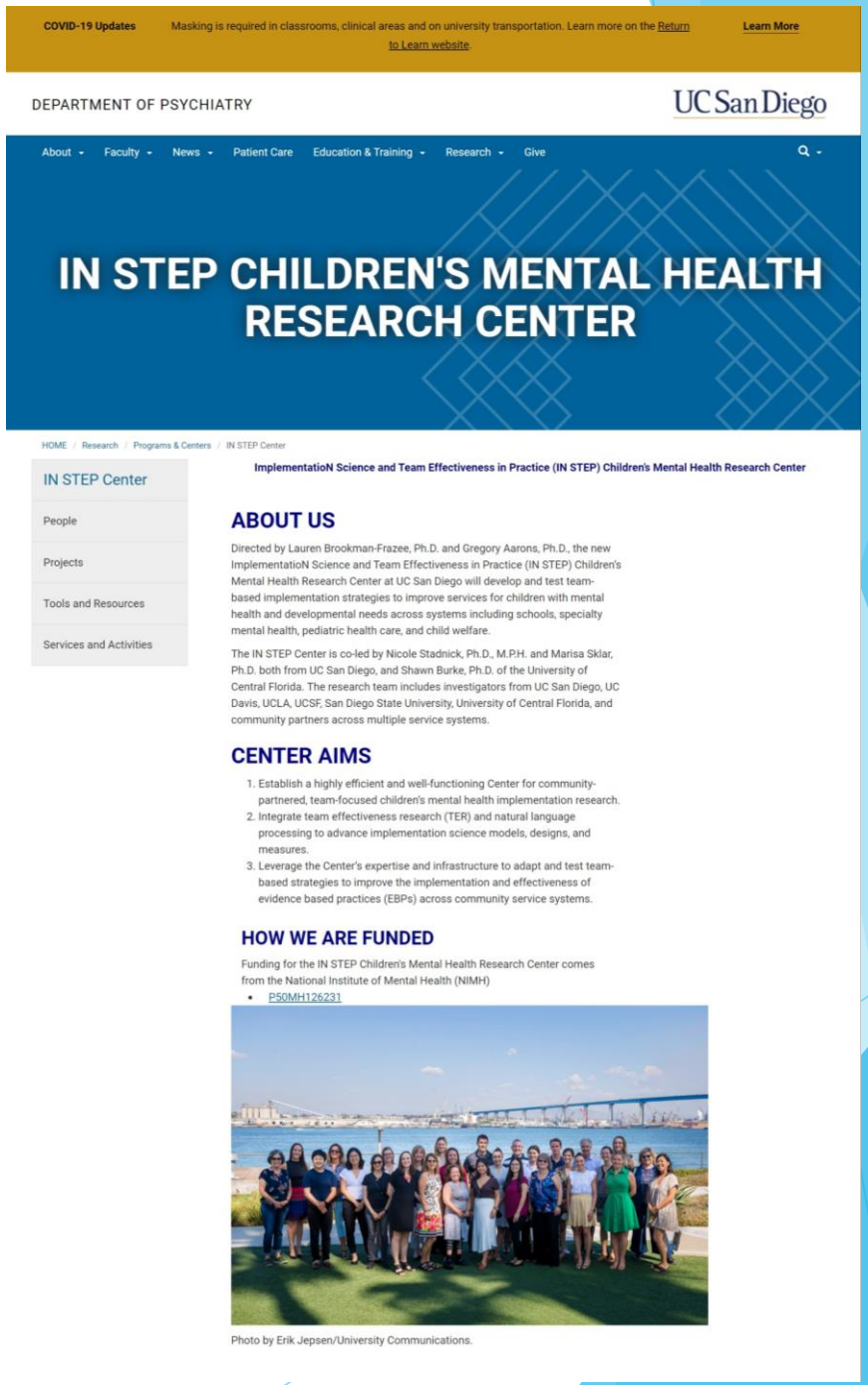
- Children's mental health is a public health priority.
- Multiple public service systems are involved in caring for children with mental health and developmental needs:
  - Schools
  - Outpatient and School-Based Mental Health Services
  - Child welfare services
  - Medical services

ImplementatioN Science and Team Effectiveness in Practice (IN STEP)
Children's Mental Health Research Center Premise

- Multiple evidence-based practices (EBPs) have been identified as effective to addressing needs but aren't routinely used in routine care.
- Teams and teamwork are essential to providing services and implementing EBPs.
- ***Integrating team effectiveness research and implementation science has the potential to accelerate care quality and effectiveness.***

IN STEP Center Website

- instep.ucsd.edu
- Please check out our website for more information and resources!



Request for Applications

- For the full Request for Applications (RFA), please reference the link/QR codes below.
- The RFA is also accessible on our website! instep.ucsd.edu
- https://bit.ly/3W1dHQw

ImplementatioN Science and Team Effectiveness in Practice

(IN STEP)

Children's Mental Health Research Center

RESEARCH PILOT GRANTS

The application period for funding in 2023-2024 is now open.

What is your current level experience with team effectiveness research (TER)?

Please respond to the Zoom poll!

Introduction to Team Effectiveness and Application to Children's Mental Health Implementation

Shawn Burke

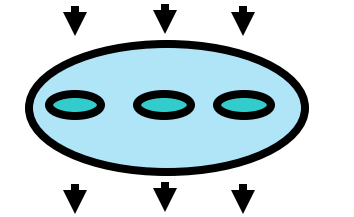
Outline

- Key Developments
- How Teams Function
- Application to the Center
- Team Measurement
- Concluding Thoughts

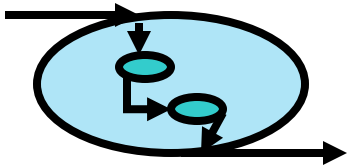
"Collectives who exist to perform organizationally relevant tasks, share one or more *common goals*, interact socially, exhibit *task interdependencies*, maintain and manage *boundaries*, and are embedded in an organizational *context* that sets boundaries, constrains the team, and influences exchanges with other units in the broader entity."

Kozlowsi & Bell (2003)

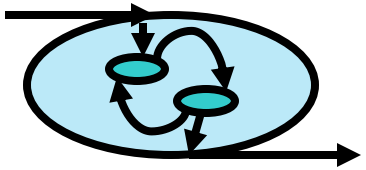
Task Interdependence



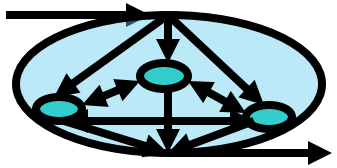
Pooled: Independent workflow



Sequential: One-way workflow



Reciprocal: Two-way workflow



Team/Intensive: Simultaneous, multi-directional workflow

Saavedra, Earley, & VanDyne (1993)

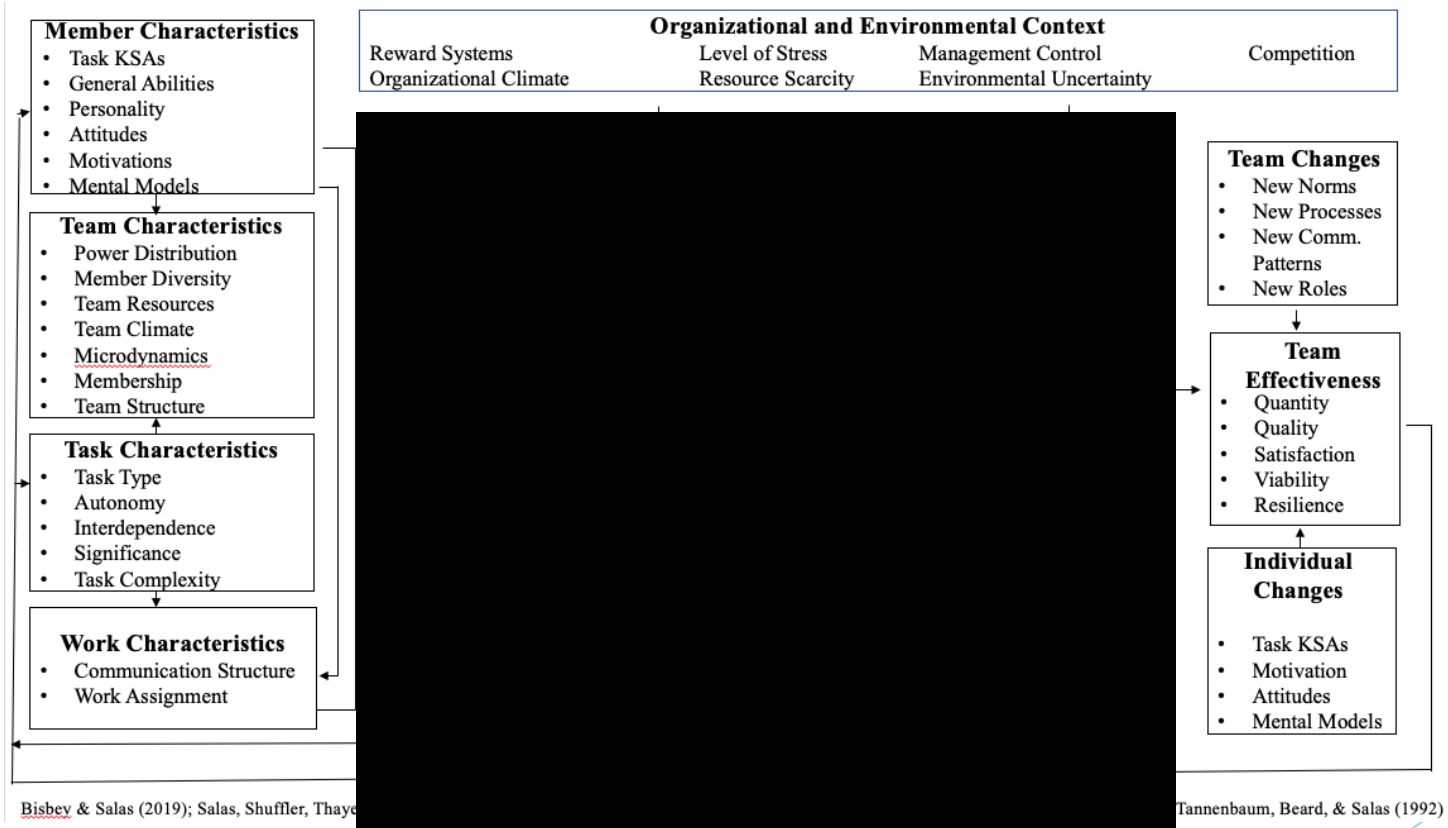
Team Types

Several
describe

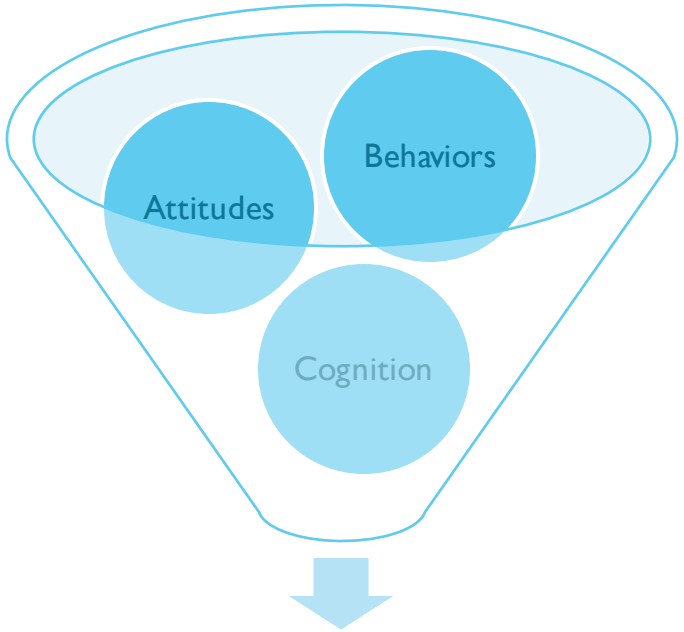
- Su
- D
- W
- H

Hollenbeck, Beersma, & Schouten (2012)

An IPO Model of Team Dynamics



The ABC's of Teamwork



Team Performance

Knowledge Requirements

- Knowledge of team mission, objectives, norms, and resources
- Roles and expectations
- Individual-task proficiency
- Shared mental models
- Transactive memory systems
- Team situational awareness

Shared Mental Models

Mental representations that team members hold about themselves and the task, and how the team works toward the task in their environment.

Credit: Charles Krupa/Associated Press)

Cannon-Bowers et al.(1993); Klimoski & Mohammed (1994)

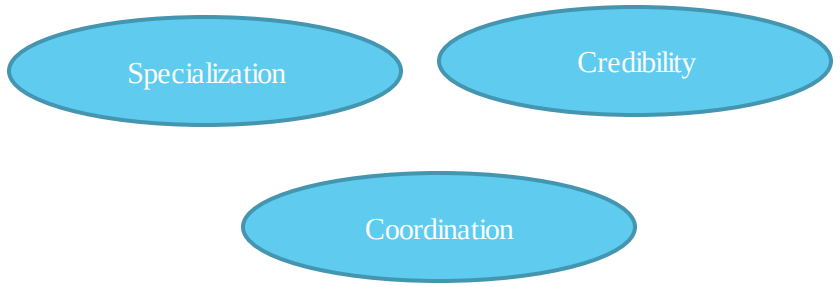
Shared Mental Models
'Why Care'

- Describe, predict, explain the environmental events[1]
- Help explain how teams are able to cope with difficult and changing task conditions[2]
- Allow team members to draw on their own well-structured knowledge to select actions that are consistent and coordinated with those of their teammates[3]

[1]Rouse & Morris (1986); [2]Cannon-Bowers, Salas, & Converse (1993); [3]Mathieu et al. (2000)

Transactive Memory Systems

Mental representations held by members that summarize the unique information possessed by each member and an awareness of others' knowledge in the group.



DeChurch & Mesmer-Magnus (2010); Lewis (2003)

Transactive Memory Systems
'Why Care'

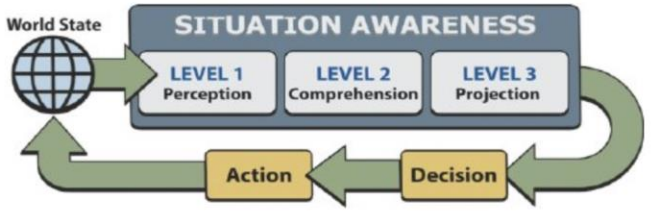
- Members know who knows what and is best at what
- Teams able to assign work to the most qualified member and members know whom to consult for advice about various tasks

- Related to behavioral outcomes (e.g., team learning, team knowledge transfer)
- Related to affective outcomes (e.g., team satisfaction, collective efficacy, team viability)
- Related to performance outcomes (e.g., team effectiveness)

Zhou & Pazos (2020)

Situation Awareness

"the perception of environmental elements and events with respect to time or space, the comprehension of their meaning, and the projection of their future status" (p. 36).



Credit: Mica R. Endsley

Endsley (1995)

Skill Requirements

- Mutual performance monitoring
- Adaptability
- Supporting/Back-up behavior
- Team leadership
- Task-related assertiveness
- Conflict resolution
- Closed-loop communication

Attitudinal Requirements

- Collective efficacy
- *Team cohesion*
- *Mutual trust*
- Collective/team orientation
- *Psychological safety*
- Team identity

Credit: California Health and Human Services

Team Cohesion

"The bonding together of members of a unit in such a way as to sustain their will and commitment to each other, their unit, and the mission"

Johns, Bickel, Blades, Creel, Gatling, Hinkle, Kindrad, & Stocks (1984)

Why Care?

- Positive relationship with performance
- Easier knowledge transfer
- Internal support
- Lower team conflict
- Increased individual satisfaction
- Lower turnover
- Shared values, team loyalty

Tekelab, Quigley, & Tesluk (2009); Evans & Dion (2012); Beal et al. (2003)

Trust

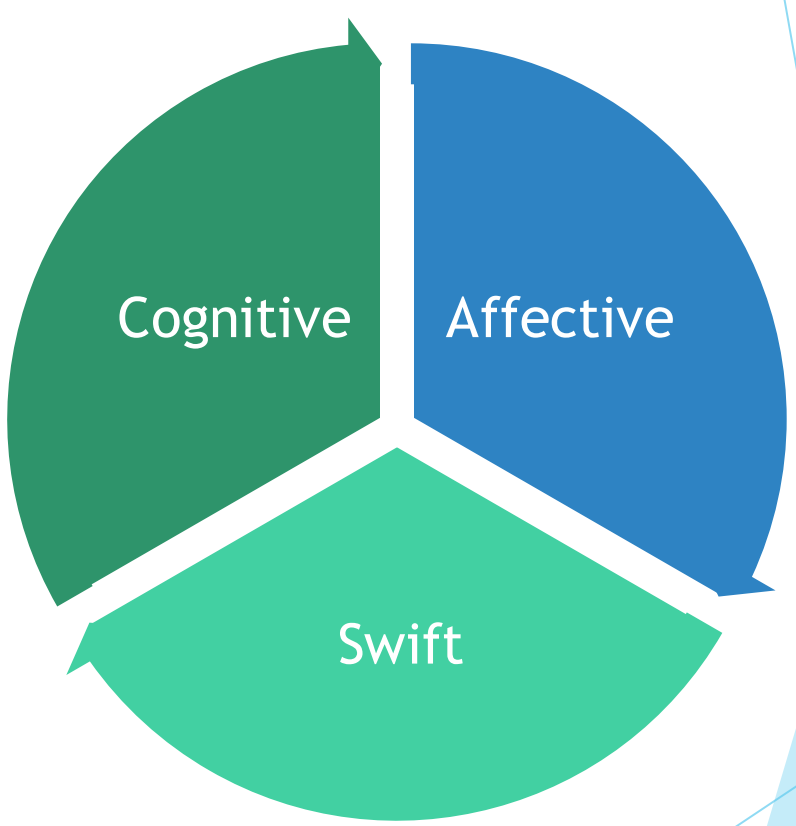
Credit: Getty

The willingness of a party to be *vulnerable* to the actions of another party based on the expectation that the other party will perform a particular *action important to the trustor*, irrespective of the ability to monitor or control the other party.

Meyer et al. (1995)

Trust

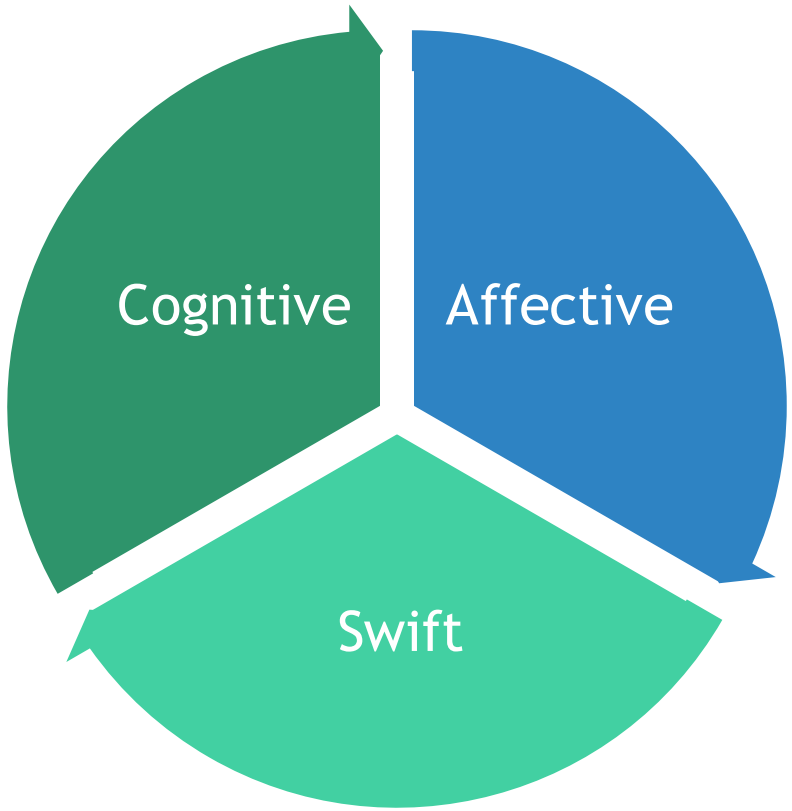
- Trust involves *a willingness to be vulnerable and risk* that the other party may not fulfill the expectations
- Trust in another party reflects an expectation or belief that the other party will *act benevolently*
- Trust involves *some level of dependency* on the other party so that the outcomes of one individual are influenced by the actions of another



Trust Foundations

Whitener et al. (1988)

Trust



Trust Foundations

- Based on available knowledge about the trustee's competence, integrity, reliability and dependability[4]
- Based on emotional investments, genuine care, and concern for the welfare of partners and the belief that these sentiments are reciprocal[5]

[4]Luhmann (1979); [5]Lewis & Weigert (1985)

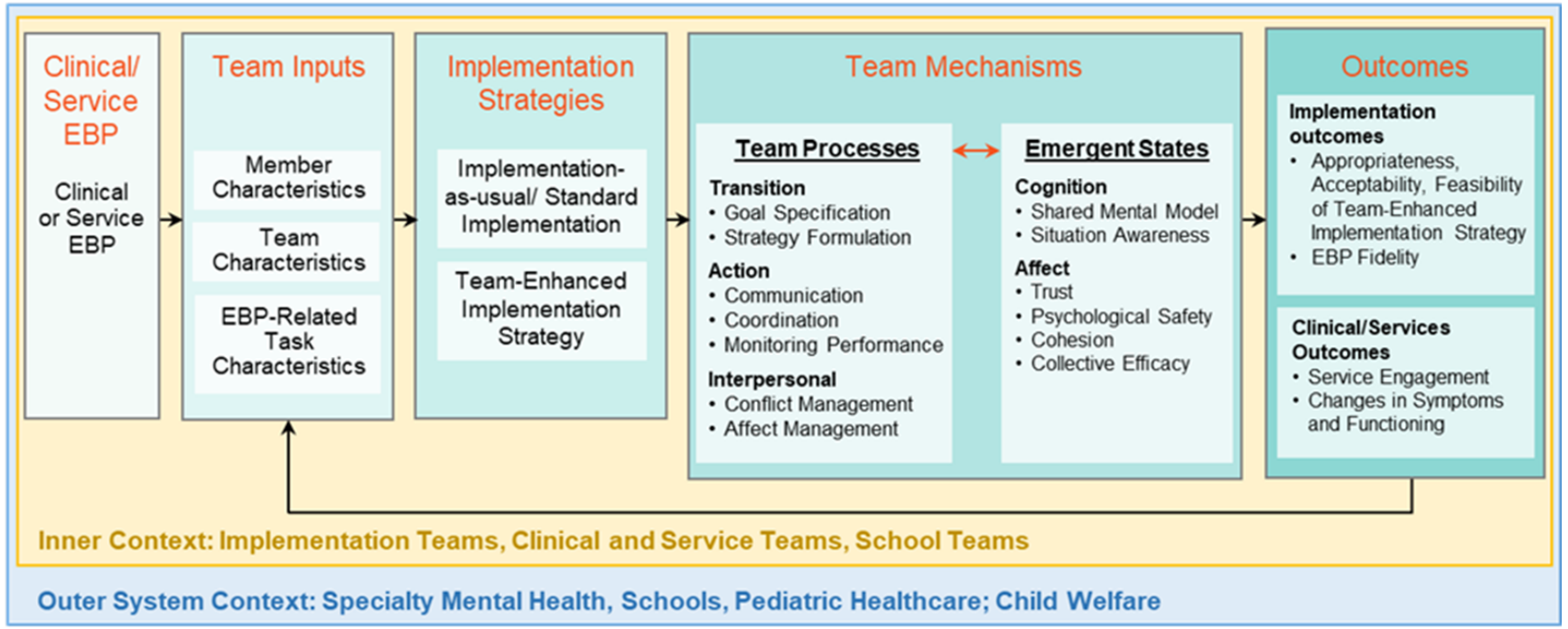
Psychological Safety

- Trust is giving the other person the benefit of the doubt.
- Psychological safety is believing that others will give you the benefit of the doubt!

Google

Linkages to IN STEP Center Research

Figure 1. Conceptual Model of Team Effectiveness for EBP Implementation



Team Measurement

Team Measurement

Process

- Surveys
- Behavioral Observation Scales
- Team Communication

Affect

- Surveys
- Linguistic analysis

Team Measurement

Team Cognition – Shared Mental Models

- Card sorts
- Concept mapping
- Paired comparison
- Survey

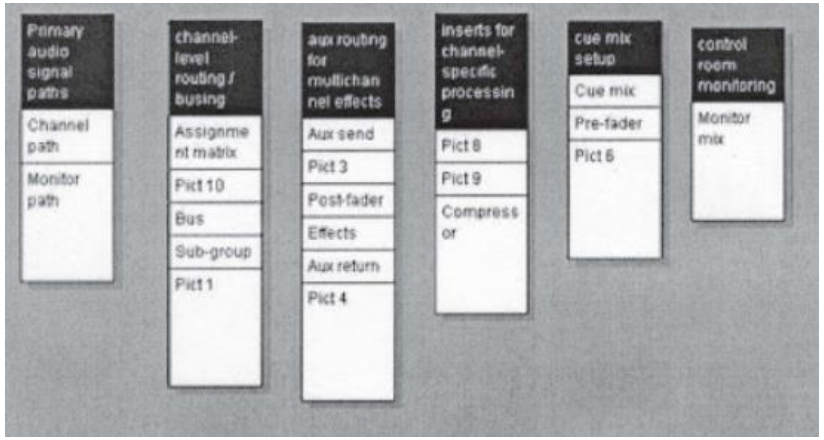
Team Cognition – Situation Awareness

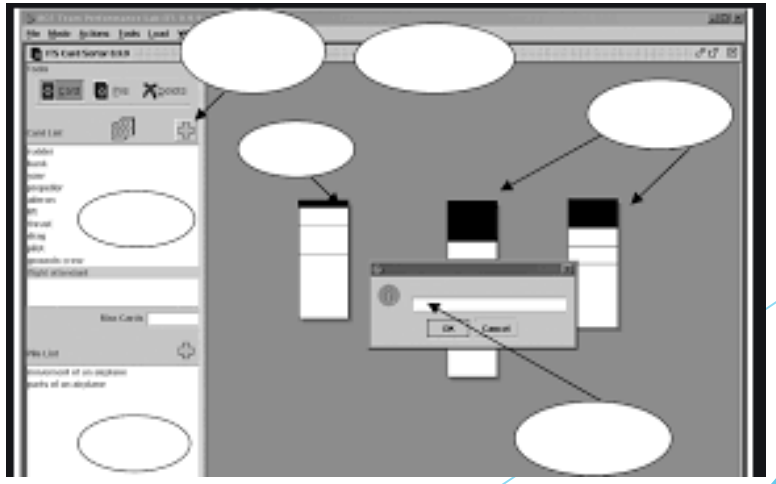
- SAGAT (Freeze technique)[6]
- Surveys
- Physiological
- SART2[7]

[6]Endsley (1995); [7]Taylor (1990)

Card Sorts

- Structured
- Unstructured



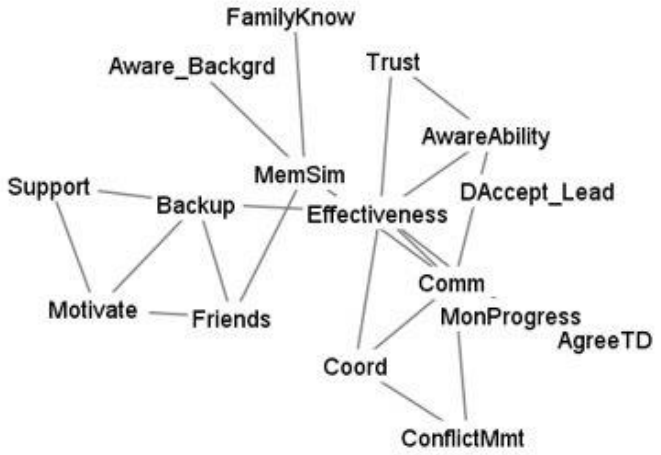


Paired Comparisons

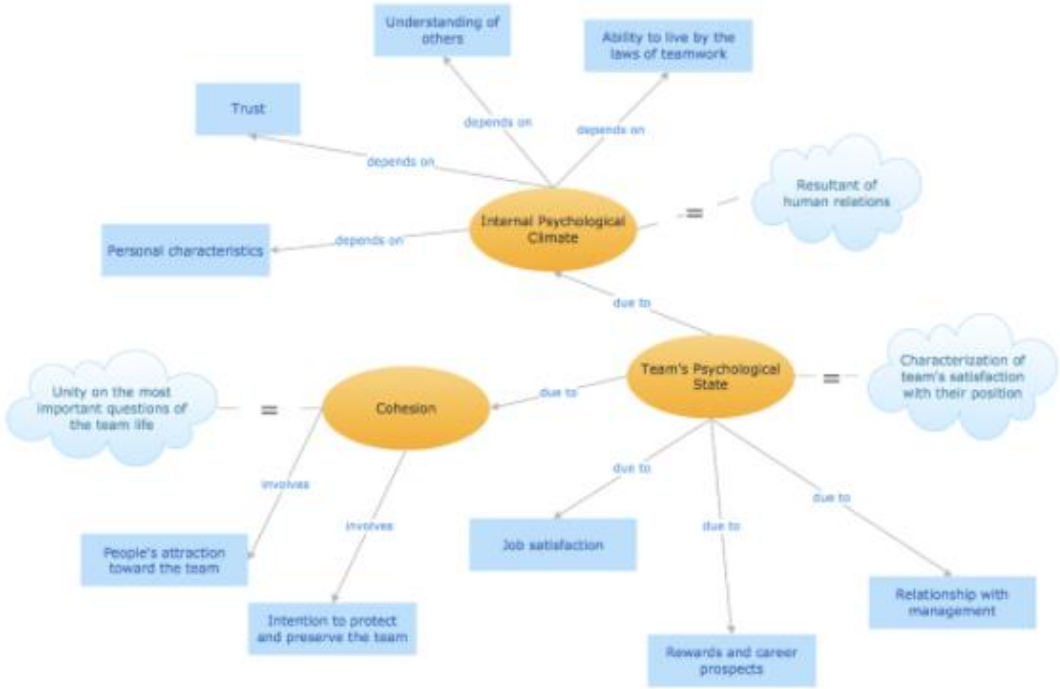
Beng-Chong & Klein (2006)

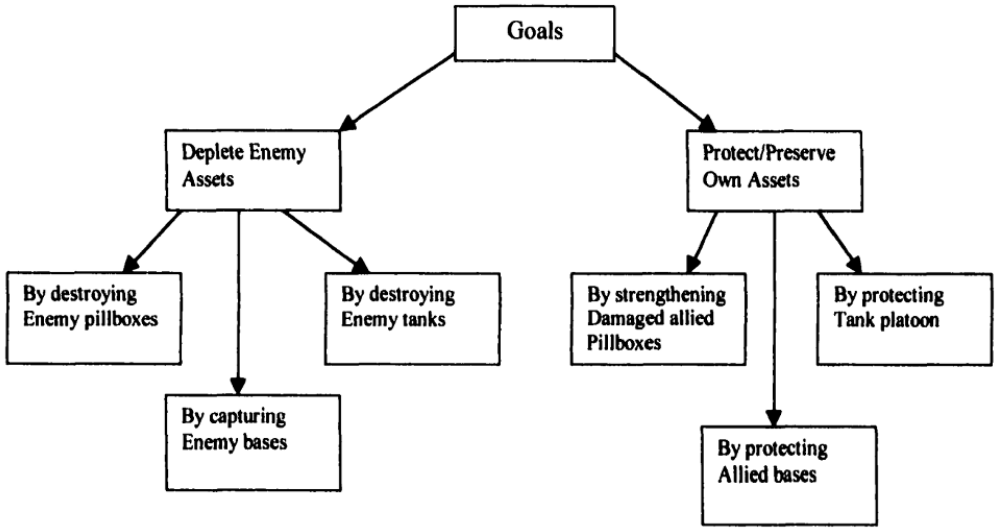
- Taskwork (14 items, team procedures, equipment, and tasks)
- Teamwork mental models (14 items, team interaction processes and team member characteristics)
- Likert scale [1-7]

	Coordination	Communication	Leadership	TMS	SMM
Coordination		5	3	6	7
Communication			7	6	3
Leadership				2	4
TMS					7
SMM					



Concept Mapping





Surveys

- Assessment of SMM (team member roles)
- Developed a list of 22 items related to task roles based on needs analysis
  - Making medical diagnosis, administering medications, etc…
- Respondents directed to rate the professional they believed responsible for a specific task
  - Likert scale [1-7]

McComb, Lemaster, Henneman, & Hinchey (2017)

Concluding Comments

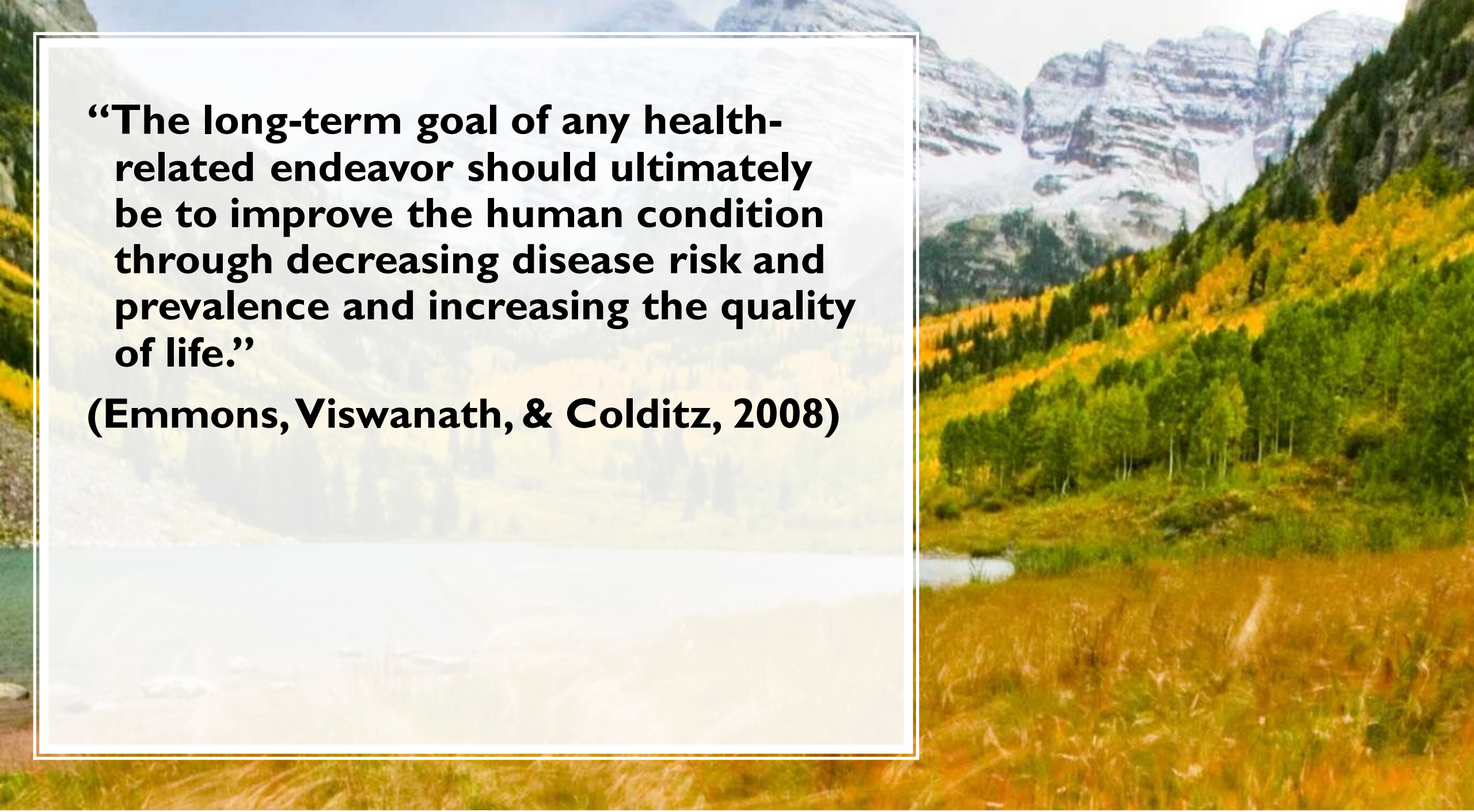
Where We Are…

- Lots of knowledge on what makes effective teams (somewhat less on what breaks them)
- Lots of tools developed
  - Methods of communication analysis
  - Measurement techniques/tools
  - Instructional strategies

Where We Are Going…

- Unobtrusive metrics
- Dynamic assessment (importance of time/context)
- Incorporating tools from other areas
  - Social network analysis
  - Machine learning
  - More advanced statistical procedures

Introduction to D&I Research



"The long-term goal of any health-related endeavor should ultimately be to improve the human condition through decreasing disease risk and prevalence and increasing the quality of life."

(Emmons, Viswanath, & Colditz, 2008)

Definitions

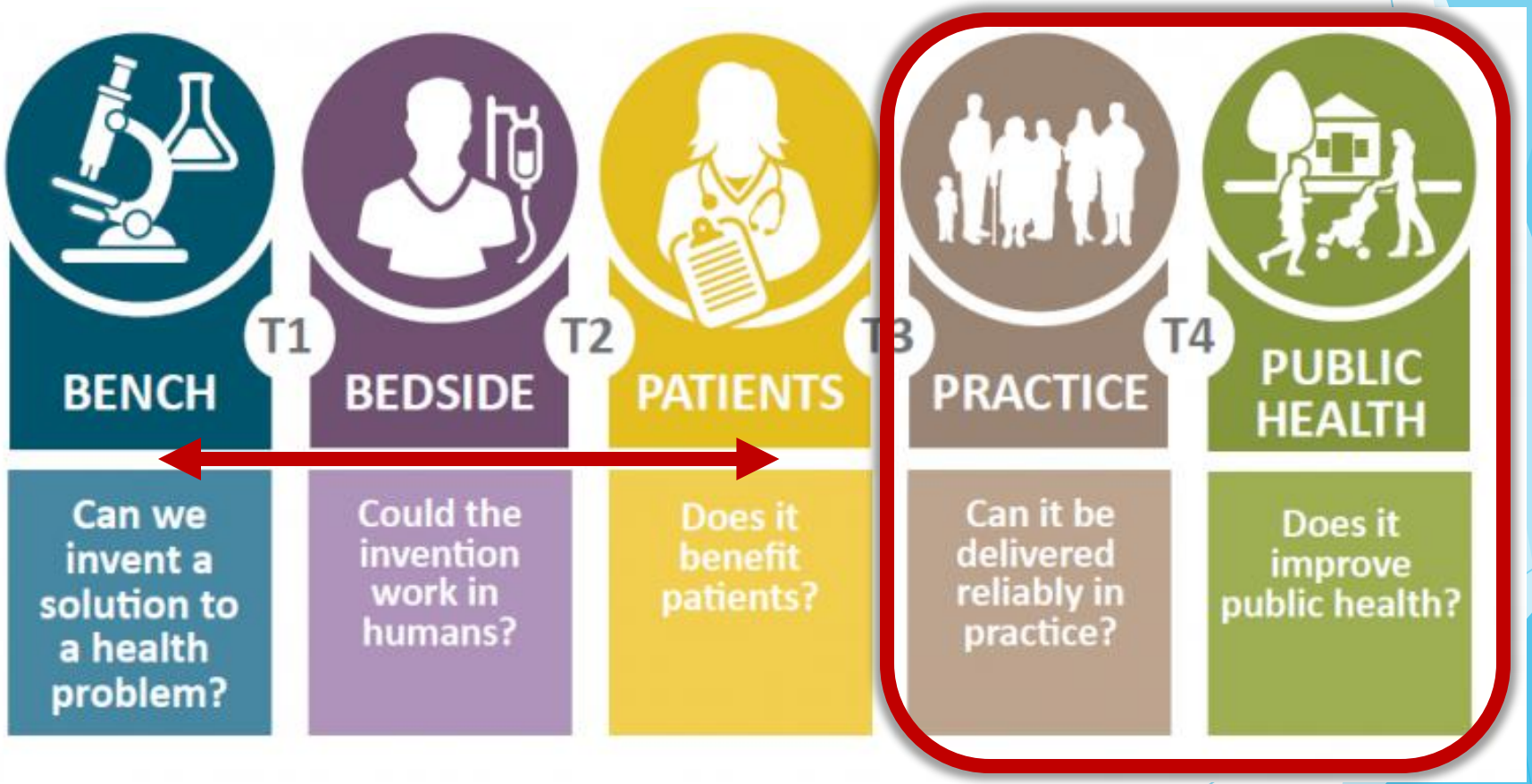
Dissemination research: scientific study of targeted distribution of information and intervention materials to a specific public health or clinical practice audience.

Implementation research: scientific study of the use of strategies to adopt and integrate evidence-based health interventions into clinical and community settings to improve individual outcomes and benefit population health.

Dissemination and Implementation (D&I) Research: Broadly, studies in this field typically involve both interdisciplinary cooperation and transdisciplinary collaboration, utilizing theories, empirical findings, and methods from a variety of scientific disciplines.

PAR-22-105 – Dissemination and Implementation Research in Health

Dissemination and Implementation Science: A Cross-Cutting Translational Science



Efficacy, effectiveness, and D&I research

- Does this intervention* work under optimal conditions?

- Does this intervention work under real-world conditions?

- *When, where, how, with whom, under what circumstances, and why does this intervention work?*

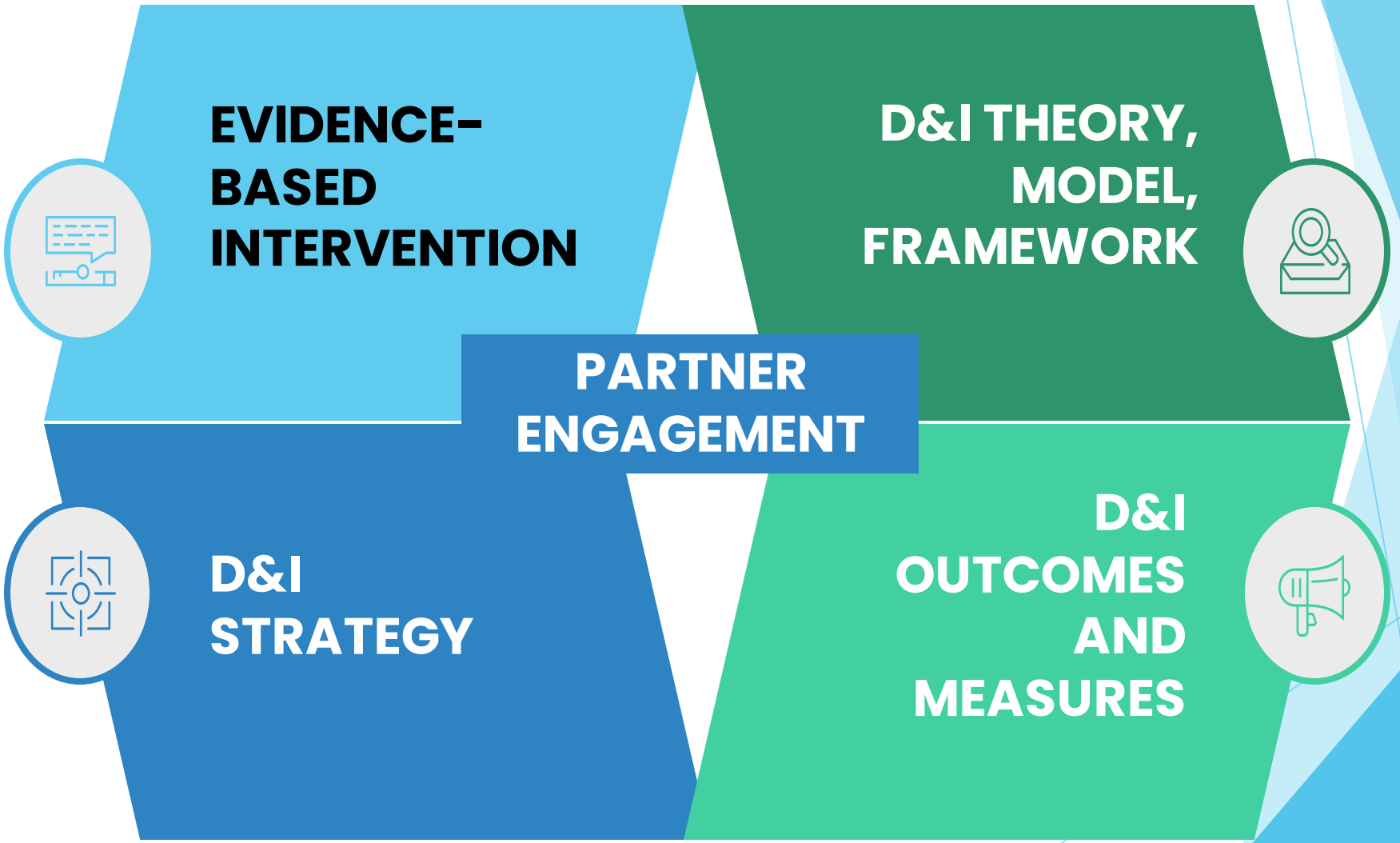
* *Broadly defined*

Key Characteristics of D&I Science

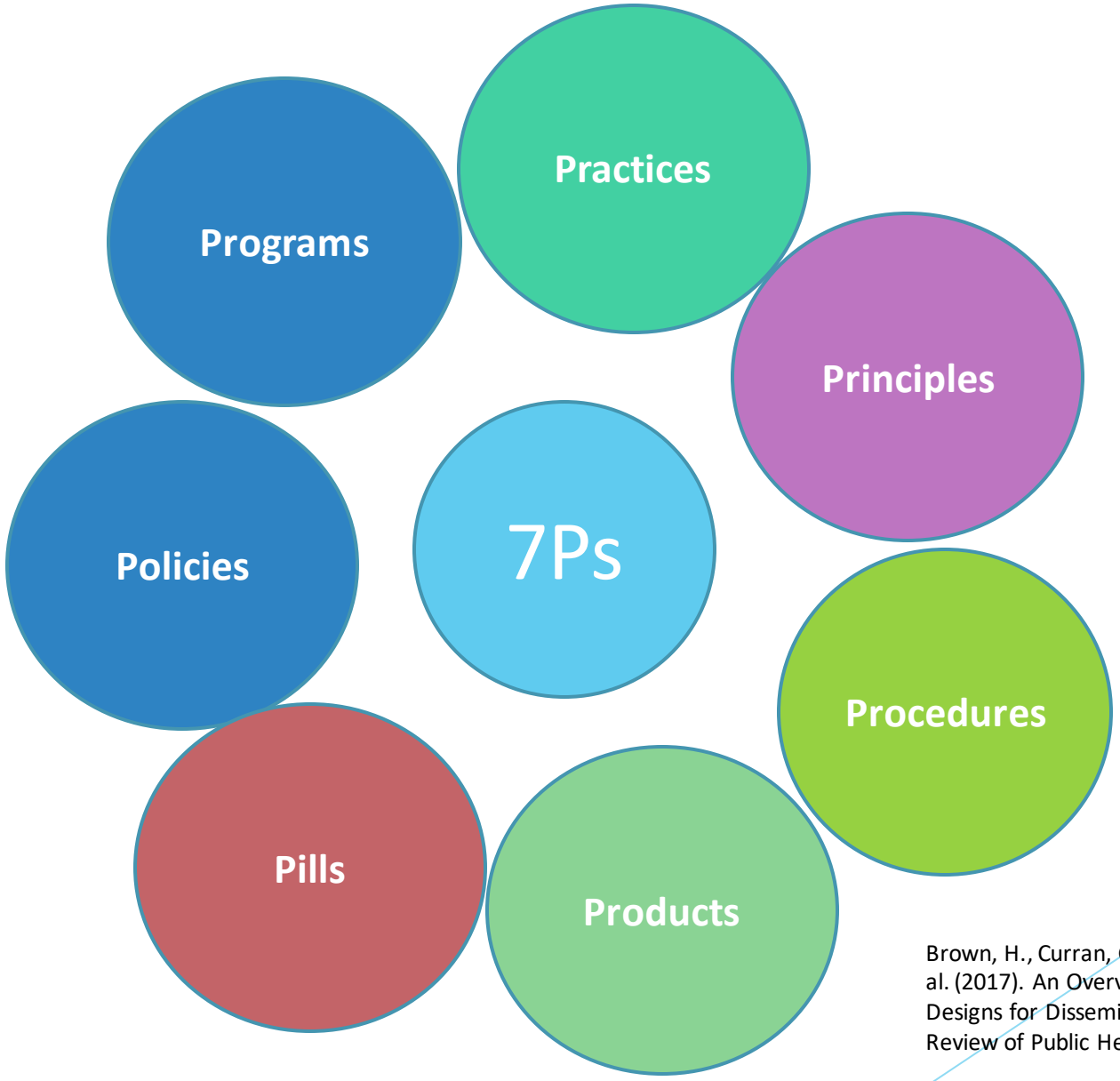
Point #	Characteristic	Implication
Systems Perspective		
1	Context is critical	Research should focus on and describe context
2	Multilevel complexity	Most problems, and interventions are multilevel and complex
3	Focus on systems characteristics	More emphasis needed on interrelationships among system elements and systems rules
Robust, Practical Goals		
4	Representatives and reach	Focus on reaching broader segments of population and those most in need
5	Generalizability	Study generalization (or lack of such) across settings, subgroups, staff, and conditions
6	Pragmatic and practical	Producing answers to specific questions relevant to stakeholders
7	Scalability and sustainability	From outset, greater focus on scale-up potential and likelihood of sustainability
Research Methods to Enhance Relevance		
8	Rigorous	Identify and address plausible threats to validity in context of question. Greater focus on replication
9	Rapid	Approaches that produce faster answers
10	Adaptive	Best solutions usually evolve over time, as a result of informed hypotheses and mini-tests with feedback
11	Integration of methods; triangulation	For greater understanding, integrated Quantitative and Qualitative methods are often required
12	Relevance	Relevance to stakeholders should be top priority
Flexibility		
13	Multiplicity	Encourage and support diverse approaches with the above characteristics (all models are wrong)
14	Respect for diverse approaches; humility	Different perspectives, goals, methods and approaches are needed. Continuing the same existing approaches will produce the same unsatisfactory results

Glasgow RE, Chambers D. Developing robust, sustainable, implementation systems using rigorous, rapid and relevant science. *Clin Transl Sci.* 2012;5(1):48

Key ingredients of D&I research



Evidence-based intervention



Brown, H., Curran, G., Palinkas, L.A., Aarons, G.A. et al. (2017). An Overview of Research and Evaluation Designs for Dissemination and Implementation. Annual Review of Public Health 38;1-22.

D&I strategies

Author and Citation	Term	Definition
Powell et al.[15]	Implementation Strategy	A systematic intervention process to adopt and integrate evidence-based health innovations into usual care.
Curran et al.[16]	Implementation Intervention	A method or technique to enhance adoption of a "clinical" intervention. Examples include an electronic clinical reminder, audit/feedback, and interactive education.
	Implementation Strategy	A "bundle" of implementation interventions. Many implementation research trials test such bundles of implementation interventions.
Mazza et al.[17]	Implementation Strategy	A purposeful procedure to achieve clinical practice compliance with a guideline recommendation.
Proctor et al.[19]	Implementation Strategy	Methods or techniques used to enhance the adoption, implementation, and sustainability of clinical program or practice.

- The intervention/practice/innovation = **THE THING**
- *Implementation strategies* = the stuff we do to try to **help people/places DO THE THING**

Powell, B.J., Garcia, K.G., Fernandez, M.E. Implementation Strategies in *Optimizing the Cancer Control Continuum*, Eds. David Chambers, Cynthia Vinson, and Wynne Norton (2018)
Curran, 2020

D&I strategies continued

The ERIC strategies – a taxonomy for implementation strategies

Expert consensus "on a common nomenclature for implementation strategy terms, definitions, and categories that can be used to guide implementation research and practice in mental health service settings"

Discrete – Single action or process (e.g., reminders, audit and feedback, supervision)
Multifaceted – Combination of multiple discrete strategies (e.g., educational workshops + consultation), some of which have been protocolized and branded (e.g., Glisson's ARC, Aarons' LOCI)

mplementation Science (2015) 10:21
DOI 10.1186/s13012-015-0209-1

RESEARCH Open Access

A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project

Byron J Powell[1*], Thomas J Waltz[2], Matthew J Chinman[3,4], Laura J Damschroder[5], Jeffrey L Smith[6], Monica M Matthieu[6,7], Enola K Proctor[8] and JoAnn E Kirchner[6,9]

Waltz *et al. Implementation Science* (2015) 10:109
DOI 10.1186/s13012-015-0295-0

SHORT REPORT Open Access

Use of concept mapping to characterize relationships among implementation strategies and assess their feasibility and importance: results from the Expert Recommendations for Implementing Change (ERIC) study

Thomas J. Waltz[1,2*], Byron J. Powell[3], Monica M. Matthieu[4,5,10], Laura J. Damschroder[2], Matthew J. Chinman[6,7], Jeffrey L. Smith[5,10], Enola K. Proctor[8] and JoAnn E. Kirchner[5,9,10]

Powell, et al. 2012; Powell, 2015; Waltz

D&I Theories, Models and Frameworks (TMF)

Theories are generally specific and predictive, with directional relationships between concepts making them suitable for hypothesis testing.

Models are specific, more often prescriptive, strategic or action-planning to provide a systematic way to develop, manage, and evaluate interventions.

Frameworks organize, explain, or describe information and the range and relationships between concepts, including some which delineate processes, and therefore are useful for communication.

Tabak RG et al, Bridging Research and Practice: Models for Dissemination and Implementation Research *Am J Prev Med*, 2012, 43: 337-350.

Rycroft-Malone J, Bucknall T. Theory, frameworks, and models: laying down the groundwork. In: Rycroft-Malone J, Bucknall T, editors. Models and frameworks for implementing evidence-based practice: Linking evidence to action. Oxford: Wiley-Blackwell; 2010. p. 23–50.

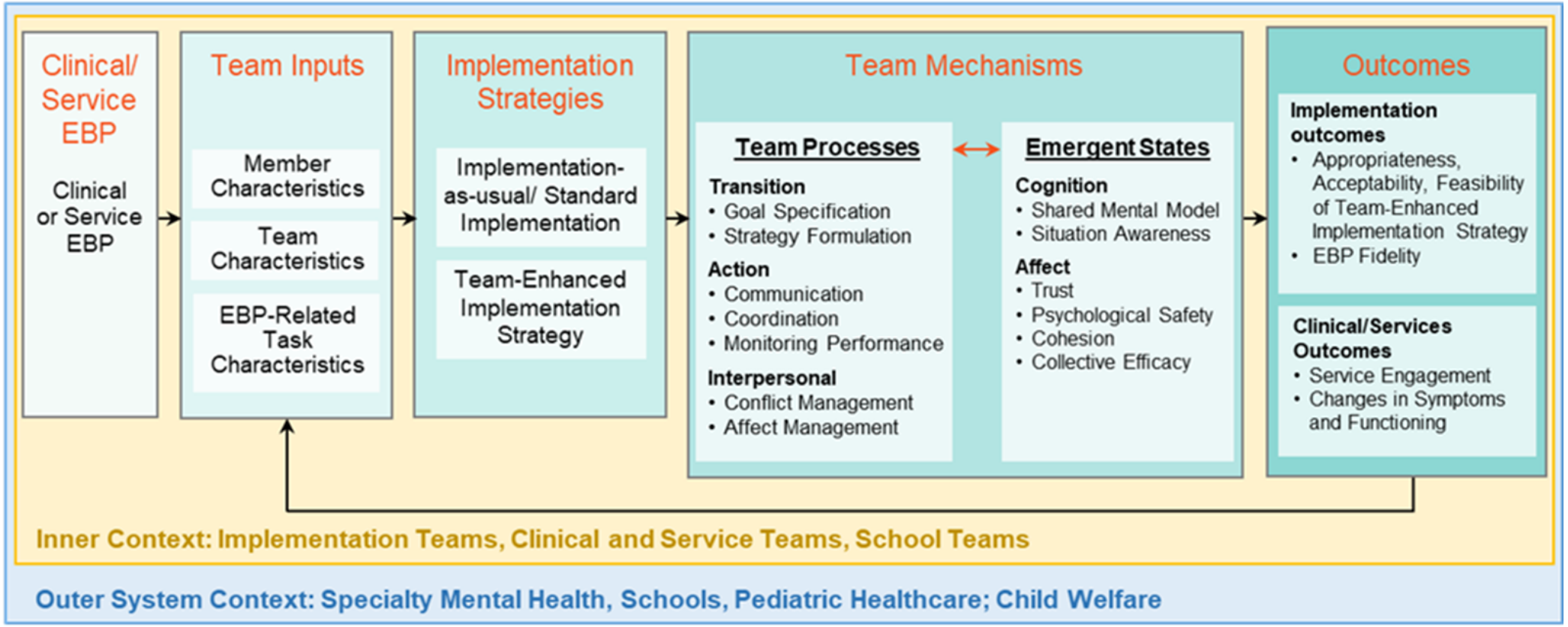
D&I Theories, Models and Frameworks (TMF) What can they do?

- Provide systematic structure for the development, management, and evaluation of interventions/D&I strategies
- Ensure inclusion of essential D&I strategies
- Enhance the interpretability of study findings
- Guide what is important to measure
- Provide explanation why/how an intervention works (or doesn't work)
- Critical ingredient for D&I grant proposals

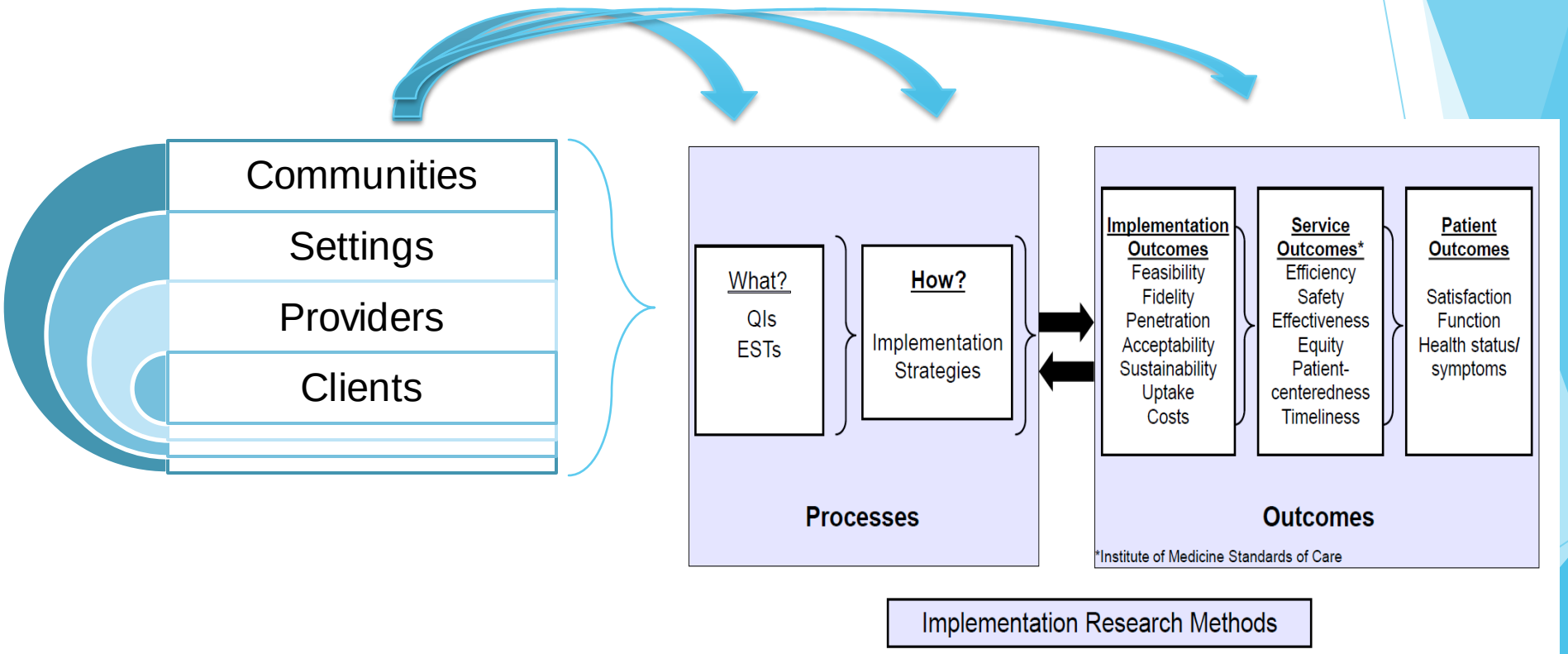
Tabak RG et al, Bridging Research and Practice: Models for Dissemination and Implementation Research *Am J Prev Med*, 2012,43:337-350;

Proctor et al. Implementation Science 2012,7:96

Figure 1. Conceptual Model of Team Effectiveness for EBP Implementation



Partner engagement



Source: Baumann, et al.. (2011). *Family process*, *50*(2), 132-148.

Proposed criteria for rating dissemination and implementation measures for scientific soundness and practicality

GOLD STANDARD MEASURE RATING CRITERIA - For Primary Research Focus	PRACTICAL MEASURE RATING CRITERIA - For Real-World Application[1]
Reliable: Especially test-retest (less emphasis on internal consistency)	**Feasible***: Brief (generally 2 to 5 items or less); easy to administer/score/interpret
Valid: Construct validity, criterion validity, performed well in multiple studies	**Important to Practitioners and Stakeholders*:** Relevant to health issues that are prevalent, costly, challenging; helpful for decision makers or practice
Broadly Applicable: Available in English and Spanish, validated in different cultures and contexts; norms available; no large literacy issues	**Actionable***: Based on information, realistic actions can be taken, e.g., immediate discussion, referral to evidence-based on-line or community resources
Sensitive to Change* (if applicable): Longitudinal use, for performance tracking over time	**User Friendly:** Patient interpretability; face valid; meaningful to clinicians, public health officials, and policy makers
Public Health Relevance: Related to Healthy People 2020 goals, key IOM objectives or national priorities	**Low Cost*:** Publicly available or very low cost to use, administer, score, and interpret
	Enhances Patient Engagement: Having this information is likely to further patient engagement
	Do No Harm: Can likely be collected without interfering with relationships, putting respondents at risk, or creating unintended negative consequences

(Rabin et al. *Implement Sci* 2012 7:119)

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Implementation Science

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Measurement resources for dissemination and implementation research in health

Borsika A. Rabin† ✉, Cara C. Lewis†, Wynne E. Norton, Gila Neta, David Chambers, Jonathan N. Tobin, Ross C. Brownson and Russell E. Glasgow

† Contributed equally

Implementation Science 2016 **11**:42 | **DOI:** 10.1186/s13012-016-0401-y

Received: 31 October 2015 | **Accepted:** 9 March 2016 | **Published:** 22 March 2016

Instrument Review Project

The SIRC Instrument Review Project (IRP):

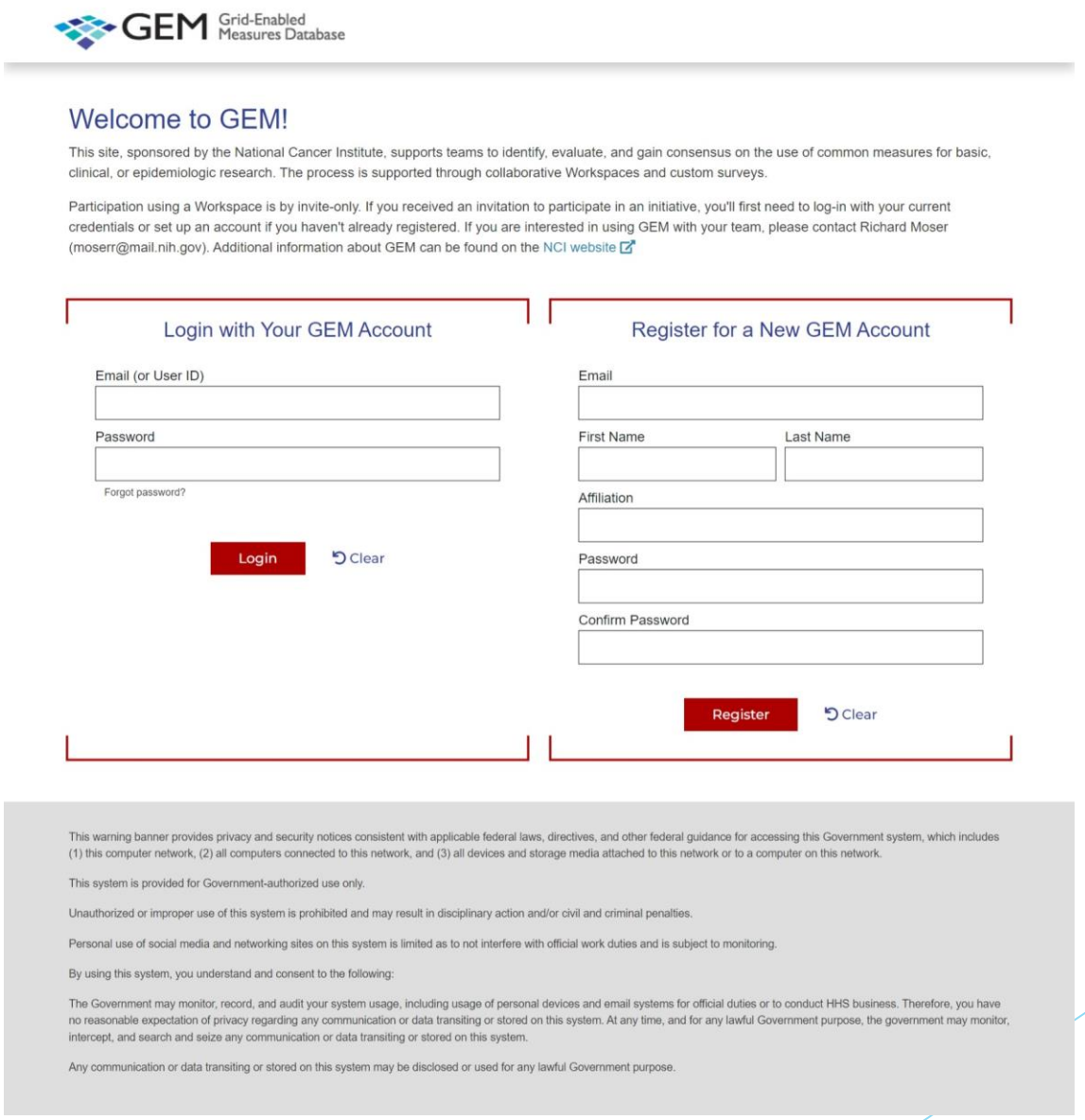
A Systematic Review and Synthesis of Implementation Science Instruments

Instrumentation issues have slowed the progression of the field of D&I (Martinez, Lewis, & Weiner, 2014). SIRC's ***Instrument Review Project (IRP)*** aims to advance implementation science through measure development and evaluation. As a first step, we are conducting an enhanced systematic review and synthesis of D&I instruments (Lewis et al., 2018). Our review centers on the implementation outcomes framework put forth by Proctor and colleagues (2011) and constructs outlined in the Consolidated Framework for Implementation Research (CFIR; Damschroder et al., 2009). This work is funded by NIMH R01MH106510 (Lewis, et al., 2015).

Our first round of 2014 results are available in published form: Outcomes for implementation science: an enhanced systematic review of instruments using evidence-based rating criteria.

Current state of the repository:

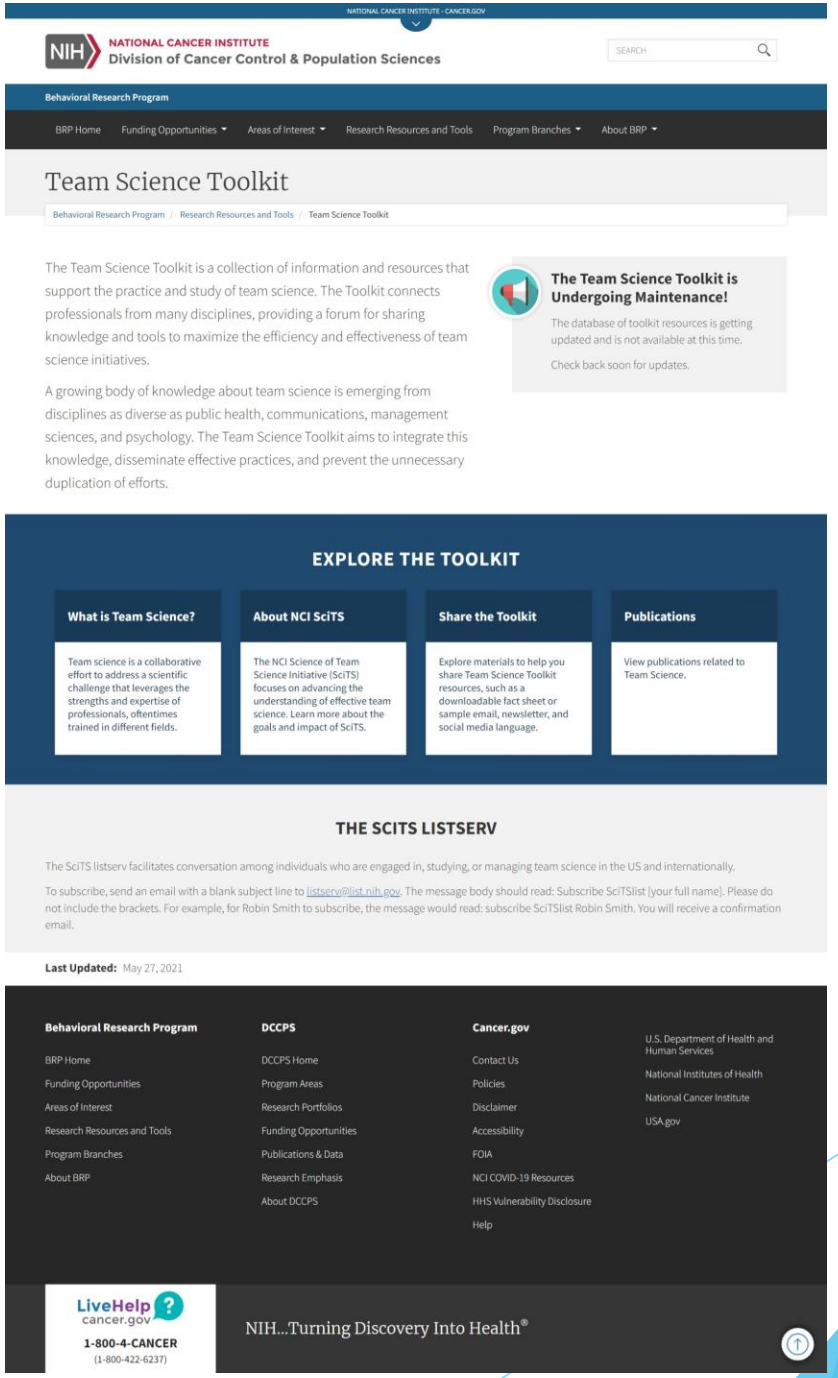
Since our seminal 2014 publication reporting on measures of implementation outcomes, substantial revisions have been made to our evidence-based assessment criteria. First, the rating criteria has a new name: ***Psychometric And Pragmatic Evidence Scale (PAPERS)***. The ***PAPERS*** scale can be found in our revised protocol paper (Lewis et al., 2018). Specifically, current criterion anchors were revised to add a ***(-1)*** rating to reflect poor performance, three new psychometric properties were integrated into the rating scale, and criteria for assessing pragmatic quality were incorporated.



- GEM (gem-measures.org)

NIH Team Science Toolkit

https://bit.ly/3Tk7ayK



DISC Resources

- D&I basics 1 pager:
  https://bit.ly/3DbkLm2

- D&I trainings 1 pager:
  https://bit.ly/3F0Ce2d

UC San Diego DISC D&I Basics

Beginner Dissemination & Implementation Science Tools

Read:

- Implementation Science at a Glance Workbook
- Everything you ever wanted to know about logic models but were afraid to ask!
- Writing IS Grant Proposals: 10 Key Ingredients
- WHO's Implementation Research Toolkit
- Selecting a Logic Model Webtool

Watch:

- Online Training Modules via AI Hub
- Implementation Science Mini Course

Advanced Beginner Dissemination & Implementation Science Tools

Read:

PILOT GRANT AIMS & LOGISTICS

https://bit.ly/3w1dhqw

Aims of Pilot Funding

1. Stimulate D&I research focused on optimizing team effectiveness in the implementation of EBPs in community-based systems serving children with mental health needs;
2. Generate data that will lead to success in garnering major research funding (e.g., NIH, PCORI, IES) or other agencies or foundations that fund implementation science for children's mental health;
3. Support the career development of early career investigators in D&I, particularly among individuals from groups underrepresented in federally funded health services research.
4. Increase the public health impact of EBP implementation efforts in community care settings that serve children with mental health concerns.

Example research questions and topics

- How can we measure team effectiveness in children's mental health services in an unobtrusive and pragmatic way?
- What data are available and/or can be collected to assess team effectiveness in children's mental health services?
- Use secondary data analysis to advance team effectiveness theory and application in children's mental health.
- Select a team intervention and apply it to address an implementation challenge in children's mental health.
- Engage community partners in the development or adaptation of a team effectiveness intervention for a future implementation effort.

Team Development Interventions (TDI) Table Part 1

TDI	Description	IPO	Importance
Team Charter	Structured activity where the team clarifies expectations regarding team functioning (e.g., team purpose, behavioral norms, performance management processes).	I	Builds shared mental models and influences the processes teams engage in.
Team Task Analysis	Method that identifies the tasks a team performs, corresponding teamwork behaviors, and the KSAs linked to coordinative action[17]	I	Serves as a first step to identify gaps in teamwork processes/states and is often seen as a starting point for other TDIs, especially training-related TDIs.
Team Composition	Pertains to the configuration of individual member attributes in team and how they coalesce to impact team functioning	I	Will impact the manner that team processes and emergent states develop in the team.
Team Work Designs	A "definition and structure of a team's tasks, goals, and member's roles; and the creation of organizational support for the team and link to the broader organizational context."[18 p46]	I	Drives the degree to which the work is designed to facilitate team effectiveness.
Team Building	A set of strategies designed to improve interpersonal relations and social interactions. May focus on goal setting, interpersonal relationships, role clarification, or problem solving[16,19]	PO	May impact process or affective outcomes – often interpersonal related.
Feedback	"Actions taken by (an) external agent to provide information regarding some aspect(s) of one's task performance."[20 p 255]	PO	When directed toward task, feedback recipients can direct cognitive resources toward performance improvement

Team Development Interventions (TDI) Table Part 2

TDI	Description	IPO	Importance
Team Training (T2)	"A set of theoretically based strategies… based on the science and practice of designing and delivering instruction to ensure understanding and enactment of appropriate team competencies." Comprised of a variety of potential strategies (see below for examples).	PO	Can be utilized to address breakdowns in team process during as well as emergent states.
T2: Team Performance Monitoring and Assessment	"Involves the capturing of both individual and team levels of processes and performance, preferably from a dynamic lens where continual monitoring is available throughout a performance episode"[26, 17 p699]	P	Team training intervention that may target any team process dependent on need
T2: Cross-Training	"Teaches each team member the duties and responsibilities of his/her teammates."[17 p 369]	P	Team training intervention that targets: the development of shared mental models (facilitating mutual performance monitoring, back-up behaviors, and coordination)
T2: Team Self correction	"Develops team's ability to diagnose teamwork breakdowns… and reach effective solutions internally on a continual basis."[17 p 369]	P	Team training intervention that targets: Mutual Performance Monitoring, Communication, Team Leadership
T2: Team Coordination Training	Targets the improvement of a team's shared mental-model framework (situation, task, team interaction); teaches teams when to switch from explicit to implicit coordination strategies.	P	Team training intervention that targets: Back-Up Behaviors, Mutual Performance Monitoring, Understanding of Teamwork Skills
T2: Crew Resource Management Training	"Designed to improve teamwork by applying well-tested training tools (e.g., simulators, role playing) targeted at specific [team] content."[17 p 369] Originally developed for use in aviation it has now migrated to other high-risk industries.	P	Team training intervention that targets: Communication, Leadership, Decision Making, Team Adaptability, Assertiveness, Briefing, Back-Up Behaviors, Decision Making, Shared Situation Awareness
T2: Leadership Training	Programs that seek to ensure that knowledge and enactment of leadership behaviors that foster effective team functioning. Includes soft skills, leadership styles, skills related to initiating structure	P	Team training intervention that targets: Team Leadership
T2: Communication Training	Training to facilitate clear, concise, and meaningful exchange of timely and relevant information between team members; Can include handoffs	P	Team training intervention that targets: Shared mental model development, Coordination, Decision Making
After-Action Review	A structured intervention which encourages reflection and learning regarding opportunities for improvement in the areas of team inputs, processes, emergent states, and outputs[21]; also known as a debrief	O	Utilized to foster improvements in team processes and/or emergent states.

Proposal Example

- Los Angeles Unified School District (LAUSD) wants to implement Positive Greetings at the Door (PGD) as a district-wide Positive Behavioral Interventions & Supports initiative.
- To inform scaled implementation efforts, one elementary school is piloting the implementation.
- In partnership with LAUSD and this elementary school, your proposal aims to conduct a mixed-methods needs assessment of ***team processes*** and ***emergent states*** impacting PGD ***fidelity***.
- This needs assessment will inform future research wherein the development of a team-based implementation strategy will guide and test district-wide PGD implementation

CRITERIA FOR REVIEW

Proposals will be evaluated by **3 masked reviewers** using the following **3 scoring systems**:

1. **NIH scoring** guidelines with 1 = high impact, & 9 = low impact. (30% of total score)

2. Projects will also be scored with the ImplemeNtation and Improvement Science Proposal Evaluation CriTeria (**INSPECT; Crable et al., 2018**), a tool for evaluation of D&I specific research proposals adapted from Proctor et al., 2012 "10 key ingredients" that constitute a well-crafted implementation science proposal. (40% of total score)

3. The **community-based review** includes three grading criteria centered on community engagement, strength of community partnership, and short- and long-term community outcomes. (30% of total score)

D&I REVIEW CRITERIA: *INSPECT*

- The ImpIme**N**tation and Improvement Science Proposal Evaluation Cri**T**eria (INSPECT)
- 10 Domains
- bit.ly/3S9ZJso

#	*Criterion*	*Score*
1	The care, quality, community gap or need	*0-3*
2	The evidence-based treatment to be implemented	*0-3*
3	*Application of the Team Effectiveness for Implementation Science model*	*0-3*
4	Stakeholder priorities, engagement in change	*0-3*
5	Settings' readiness to adopt new services/treatment/programs	*0-3*
6	D&I strategy/process	*0-3*
7	Team experience with setting, treatment, and D&I process	*0-3*
8	Feasibility of proposed research design and methods	*0-3*
9	Measurement and analysis section	*0-3*
10	Policy/funding environment; leverage of support for sustaining change	*0-3*
	Total Score	**0-30**

EXAMPLE: INSPECT DOMAIN #3

Application of the Team Effectiveness for Implementation Science (TEIS) Model

Score: 0	1	2	3
• The TEIS model is not discussed.	The TEIS model is mentioned, but not linked to the study objectives, hypotheses, and measures.	The TEIS model is linked in some capacity to the study objectives, hypotheses, and measures, but may need additional clarification.	The TEIS model is clearly described, with the operationalization of theoretical constructs explicitly described within the proposed setting and population.
The TEIS model is cited but its application is irrelevant to study objectives and/or the study setting.	The TEIS model may be appropriate for the proposed D&I study/project, but the rationale is not clearly supported with citations from the literature.	The TEIS model is appropriate for the proposed D&I study/project as evidenced by a well-defined rationale with adequate citations from the literature, but would still benefit from further specificity.	The TEIS model is used to frame the proposed study/project in all aspects including the study questions, aims/objectives, hypotheses, process, and outcome measures.
			Some discussion may refer and describe how study findings would build upon or otherwise contribute to theory or the larger D&I fields.

EXAMPLE: INSPECT DOMAIN #9

Measurement and analysis section

Score: 0	1	2	3
• Outcomes described are not implementation or improvement science-related	• Outcomes described are implementation and/or improvement science-related	• Outcomes described are implementation and/or improvement science-related	• Outcomes described are implementation and/or improvement science-related
• Outcomes are not linked to the proposed study aims	• Outcomes are unclearly linked to the proposed study aims	• Outcomes are clearly linked to the proposed study aims	• Outcomes are clearly linked to the proposed study aims
• The unit of analysis is inappropriate for the proposed study	• The unit of analysis is appropriate for the proposed study	• The unit of analysis is appropriate for the proposed study	• The unit of analysis is appropriate for the proposed study

COMMUNITY BASED REVIEW

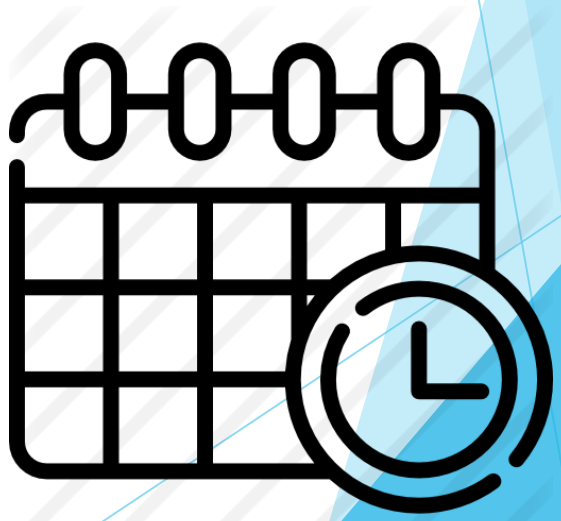
Review Criteria	Considerations	Weight
Strength of Community Engagement	Evaluate the strength and appropriateness of the community partnership and/or community engagement approach. Do community partners share in the design, and conduct of the project? The project oversight? The funding? Will both partners benefit from the work, and from future research, treatments or interventions based on the work? Does the community partner represent, in a meaningful way, the population under study?	33%
Potential Impact on Community	Evaluate the potential for the research to have a significant positive impact on the individuals who are the participants in the community that is the focus of the proposed research. Consider the potential immediate, short-term and long-term impact of the work.	33%
Impact on Human Health	How important is funding this research to improving human health, either in the near future, or distant future?	33%

Rating System

- Independently reviewed by 3 masked reviewers
- 2 research reviewers (averaged) and 1 community reviewer
- 3 scores with weighting as follows
  - NIH – 30%
  - INSPECT – 40%
  - Community – 30%

KEY DATES

- Pre-application Webinar: October 26th, 2022
- Deadline for Applications: December 2nd at 12:00pm PST
- Preliminary notice of award & scheduling of consultation meetings: Early February 2023
- Final funding contingent on successful completion of IRB
- Final Approval and Notice of Award: Late March 2023
- Funding Period: April 1, 2023 to March 31, 2024



IN STEP PILOT AWARD

APPLICATION STEPS

#1: Qualtrics

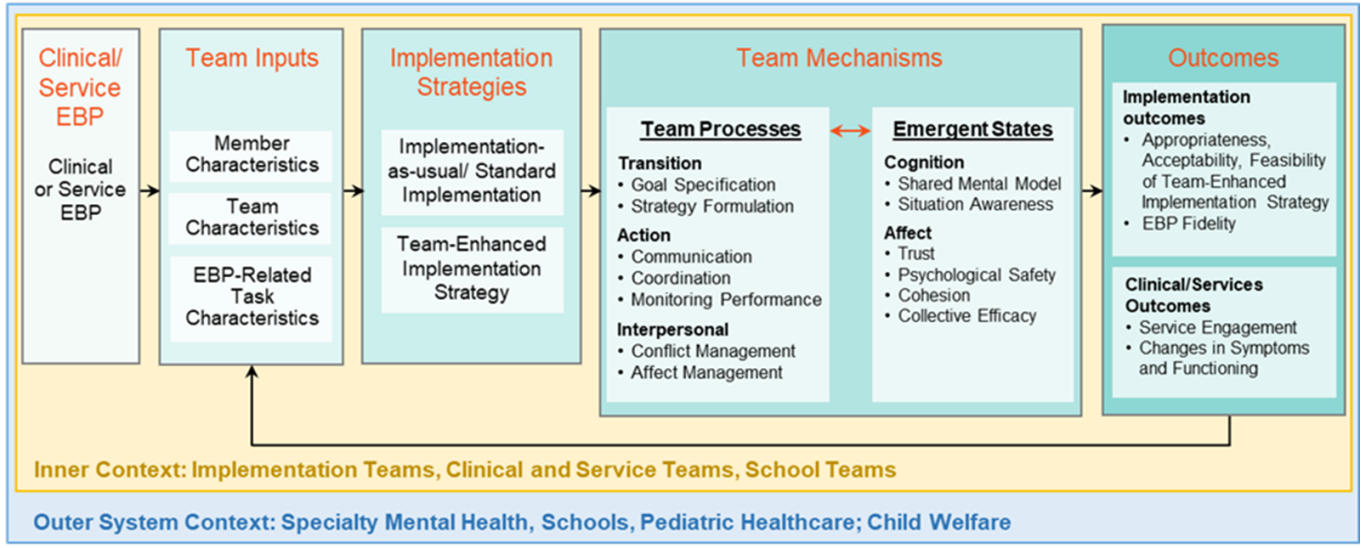
- **Submit application via Qualtrics.**
- https://bit.ly/3VG86yV
- Questions about the application platform and/or technical difficulties may be directed to instep@health.ucsd.edu.

#2: 5-Page Research Application

- Provide a maximum **5-page application** describing the project that includes the following sections (in a combined PDF):
  - Specific Aims (1 page)
  - Background and Significance (~1 page)
  - Preliminary Studies or Data Collection / Analysis (if applicable) (~1 page)
  - Research Design and Methods (~2 pages)
  - References (not included in 5-page limit)

#3:Incorporate Team Effectiveness for EBP Implementation Framework

Figure 1. Conceptual Model of Team Effectiveness for EBP Implementation



It is expected that this framework be used throughout the project to guide the research questions, design, measure selection, analysis, interpretation, and reporting of the research findings.

#4: 1-page Community Impact Statement

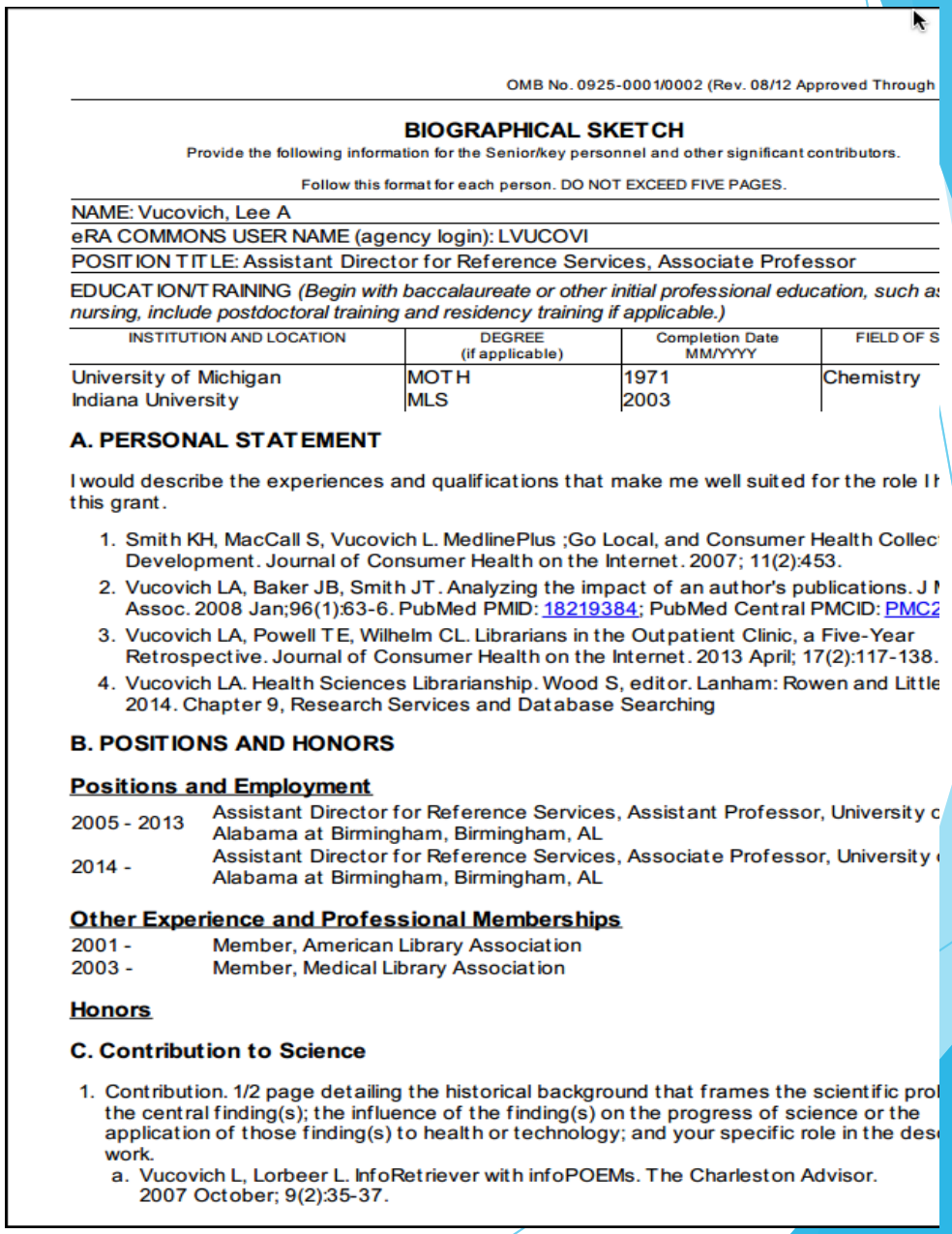
- **Prepare a one-page (maximum) statement articulating the Community Relevance/Impact of your Proposal**
- Include project title, and ensure eighth-grade reading level (non-scientist reviewer). Do not include your name, as this page will get a masked review by an external community reviewer.
- Statement should answer the following questions:
  - How are you engaging and/or partnering with the community to achieve the goals of the project?
  - Will both partners benefit from the work, and from future research, treatments or interventions based on the work?
  - Does the community partner represent, in a meaningful way, the population under study?
  - How does the research impact the individuals/participants in the community that is the focus of the proposed research?
  - How important is funding this research to improving human health overall, either in the near or distant future?

#5: 1-Page Dissemination Plan

- **Prepare a 1-page (maximum) description that outlines your dissemination plan and next steps**
  - Plans for follow-up grants/proposals.
  - Dissemination products like toolkits/playbooks, decision aids, community-facing resources, academic publications. Specify target audience.
  - Plans for sharing relevant information/products with community of focus.

#6: NIH BIOSKETCH

- **Provide NIH biosketch for each of the following**: the principal investigator(s), any co-investigators, and any postdoctoral fellows, residents, graduate or medical students you know will be involved in the proposed project.
- Biosketches need to be compiled into a single combined PDF for upload.



OMB No. 0925-0001/0002 (Rev. 08/12 Approved Through

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.

Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Vucovich, Lee A

eRA COMMONS USER NAME (agency login): LVUCOVI

POSITION TITLE: Assistant Director for Reference Services, Associate Professor

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)*

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF S
University of Michigan	MOTH	1971	Chemistry
Indiana University	MLS	2003	

A. PERSONAL STATEMENT

I would describe the experiences and qualifications that make me well suited for the role I h this grant.

1. Smith KH, MacCall S, Vucovich L. MedlinePlus ;Go Local, and Consumer Health Collec Development. Journal of Consumer Health on the Internet. 2007; 11(2):453.
2. Vucovich LA, Baker JB, Smith JT. Analyzing the impact of an author's publications. J M Assoc. 2008 Jan;96(1):63-6. PubMed PMID: 18219384; PubMed Central PMCID: PMC2
3. Vucovich LA, Powell TE, Wilhelm CL. Librarians in the Outpatient Clinic, a Five-Year Retrospective. Journal of Consumer Health on the Internet. 2013 April; 17(2):117-138.
4. Vucovich LA. Health Sciences Librarianship. Wood S, editor. Lanham: Rowen and Littl 2014. Chapter 9, Research Services and Database Searching

B. POSITIONS AND HONORS

Positions and Employment

2005 - 2013 Assistant Director for Reference Services, Assistant Professor, University o Alabama at Birmingham, Birmingham, AL

2014 - Assistant Director for Reference Services, Associate Professor, University Alabama at Birmingham, Birmingham, AL

Other Experience and Professional Memberships

2001 - Member, American Library Association

2003 - Member, Medical Library Association

Honors

C. Contribution to Science

1. Contribution. 1/2 page detailing the historical background that frames the scientific pro the central finding(s); the influence of the finding(s) on the progress of science or the application of those finding(s) to health or technology; and your specific role in the des work.
   a. Vucovich L, Lorbeer L. InfoRetriever with infoPOEMs. The Charleston Advisor. 2007 October; 9(2):35-37.

#7: BUDGET

- Budget — Provide a detailed budget (using NIH Budget Form "page 4" only)
- https://bit.ly/3TeyfmX

- The funding period is 12 months. Requests for carry forward for up to 6 months will be considered. Any unspent funds will be returned to UC San Diego. Investigators must have IRB approval in place before the beginning of the funding cycle.
- If any funds in the budget are designated for a community agency, provide a letter from that agency, on their letterhead, that describes: (a) the agency's support for the proposed project, (b) the agency's role in the project, (c) the name, address, contact information (e-mail and telephone) of the agency representative who has primary responsibility for that portion of the project.

#8: IRB

- **Submit an IRB application –** We recommend that you submit an IRB application at the same time the pilot application is submitted to UC San Diego IN STEP.
- Final funding is contingent on successful IRB approval.

FREQUENTLY ASKED QUESTIONS

DO I HAVE TO BE AT UCSD TO APPLY?

No! However, please note these eligibility criteria.

Principal Investigators (PIs) on the proposed pilot projects must be Faculty members at research/academic institutions. Community Practitioners in service settings serving youth, Project Scientists, Research Trainees, Postdoctoral Fellows and Scholars may serve as Co-PIs. Although all eligible individuals are encouraged to apply, in instances of evenly scored proposals, funding preference will be given to early career investigators (≤10 years of terminal degree) in research teams that are well positioned to optimize team effectiveness in the context of EBP implementation efforts for children's mental health. PIs can be Center-affiliated or external, but studies must include a community partner.

HOW MUCH FUNDING IS AVAILABLE?

Awards for $25,000 or $50,000, which is to be spent within the designated 12-month award period. The funding period for the 2022 application cycle is April 1, 2023 - March 31, 2024. A total of $100,000 is available for this funding period and the number of awards will depend on the number of appropriately competitive applications.

WHAT IF MY PROJECT IS IN A FORMATIVE PHASE RATHER THAN AN IMPLEMENTATION PHASE?

We will review project proposals at any stage of the research process. Projects in formative and developmental phases are appropriate for D&I study. We also understand that pilot proposals need to have appropriate scope and feasible aims for the 1-year duration.

CAN I ASK FOR A MEETING OR CONSULTATION ABOUT MY PROPOSAL?

Yes! You may request a 30-minute pre-submission consultation. IN STEP Center Methods Core can meet with you to refine your team effectiveness and implementation science methods and ensure your proposal is clear and comprehensive. You may request consultation by visiting the following: **https://bit.ly/3scyN0F**

DO I NEED TO HAVE A TER EXPERT ON MY PROPOSAL TO BE SUCCESSFUL?

You do not need to have a Team Effectiveness Research (TER) expert on your proposal to be successful. Once your proposal is funded, you will obtain support from the IN STEP Center Methods Core to refine your team effectiveness and implementation science methods and ensure your proposal is clear and comprehensive. You may also request a 30-minute pre-submission consultation to ensure that your proposal is responsive to the RFA.

CAN IN STEP CENTER MEMBERS SERVE AS CO-INVESTIGATORS?

Yes! You are welcome to invite IN STEP Center members (Directors, Investigators) to be Co-Is (contributed time) on your proposal. This may be particularly relevant for those proposing secondary data analysis based on existing Center member research.

WHEN IS THE DEADLINE TO SUBMIT?

The deadline for 2022 applications is **December 2nd at 12pm PT.**

Q&A

QUESTIONS? COMMENTS?

- Email: instep@health.ucsd.edu
- Request for Applications
  - https://bit.ly/3W1dHQw
- Web: instep.ucsd.edu
- Twitter: @UCSDALACRITY
- Want to keep up-to-date with the IN STEP Center? Join our email list!

THANK YOU!