

Population Impact Challenges and Strategies: Illustrations from PROSPER Universal Prevention Research

Effective Programs and Interventions: The Science of Program Evaluation (Panel 4)

September 17, 2013

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PROSPER research has been funded by grants from the National Institute on Drug Abuse (DA13709, DA028879), the Centers for Disease Control and Prevention (DP002279), and the Annie E. Casey Foundation, with co-funding from the National Institute on Alcohol Abuse and Alcoholism.



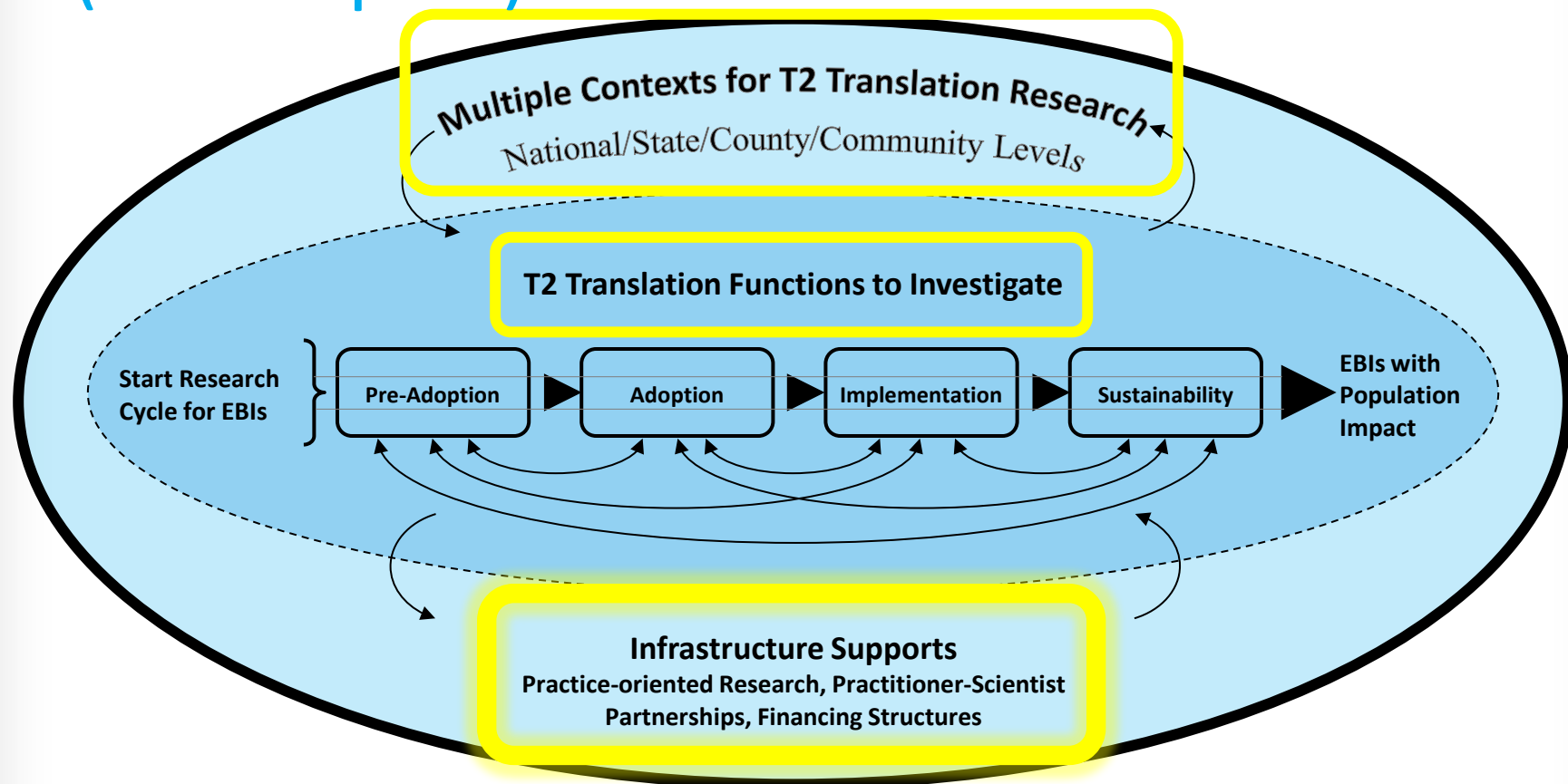
Purpose and Objectives

Some considerations in addressing the “big question” of **how to best achieve impact with military families**, drawing on knowledge about evidence-based, universal preventive interventions and delivery systems.

- I. Context – Translation science and population impact
- II. Illustrations from knowledge base – Evidence-based universal intervention and PROSPER delivery system
- III. Possible future directions – High priority translation science, example of PROSPER for military families



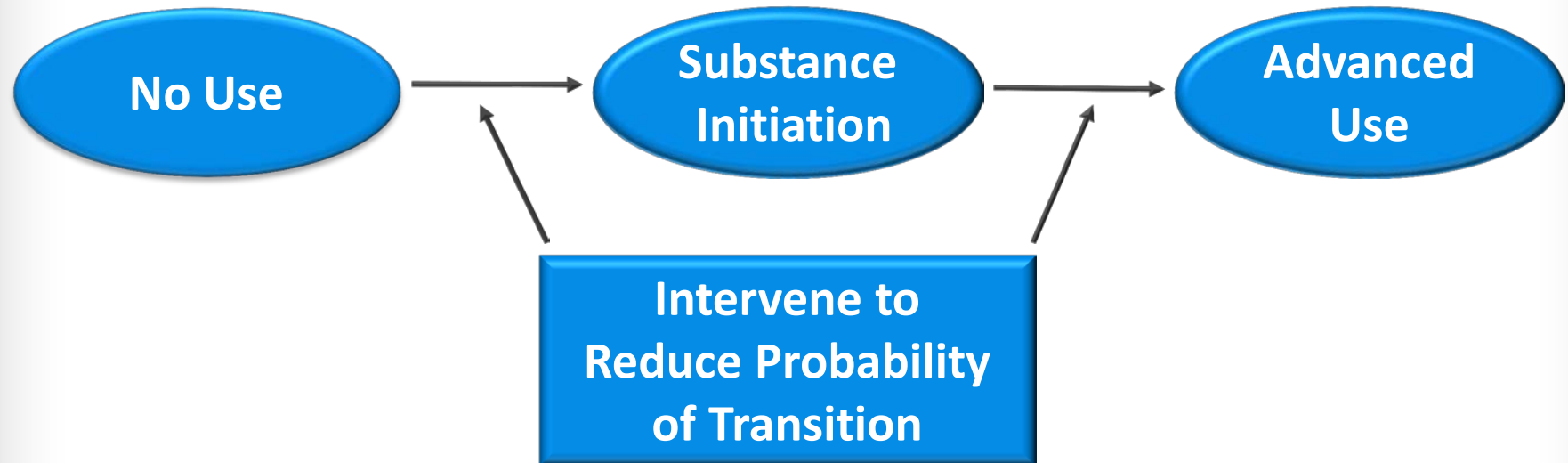
A Framework for Addressing the Question: Translation Science to Population Impact (TSci Impact)



Source: Spoth, Rohrbach, Greenberg, Leaf, Brown, Fagan, Catalano, Pentz, Sloboda, Hawkins (Society for Prevention Research Type 2 Translational Task Force Members and Contributing Authors) (2013). Addressing core challenges for the next generation of Type 2 translation research and systems: The Translation Science to Population Impact (TSci Impact) framework. *Prevention Science* 14(4), 319-351.



Two Windows of Opportunity for Universal Intervention in the Case of Substance Misuse



See Spoth, Reyes, Redmond, & Shin (1999). Assessing a public health approach to delay onset and progression of adolescent substance use: Latent transition and log-linear analyses of longitudinal family preventive intervention outcomes. *Journal of Consulting and Clinical Psychology*, 67, 619-630.



Wide-ranging Substance Misuse Prevention Crossover Effects

Universal Intervention Effects on Young Adolescents/Adults—Up to 14 Years Past Baseline

- Across wide-ranging types of substance use
- Improved parenting skills and family functioning
- Improved youth skills (e.g., peer resistance, social competencies)
- Improved school engagement and grades
- Decreased aggressive/destructive behaviors, conduct problems
- Decreased mental health problems (e.g., depression)
- Decreased health-risking sexual behaviors

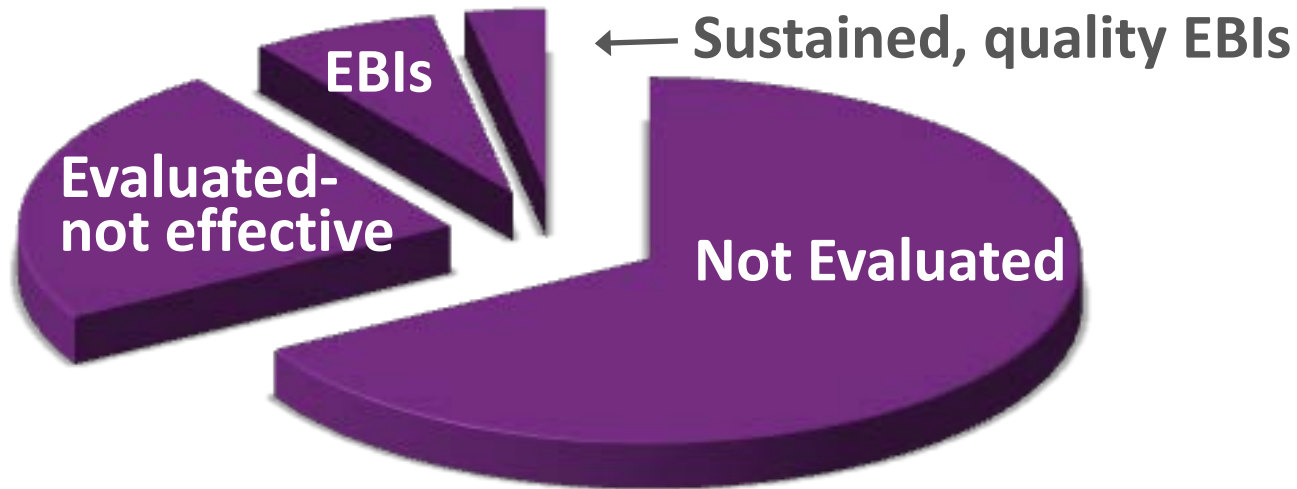
Q: Why?

A: Programs address common R/P factors; have impacts on primary socializing environments (social networks).



Population Impact Requires Effective Intervention Plus Widespread “Community” Delivery

...A larger “piece” of evidence-based interventions (EBIs), with sustained, quality implementation on a larger scale.

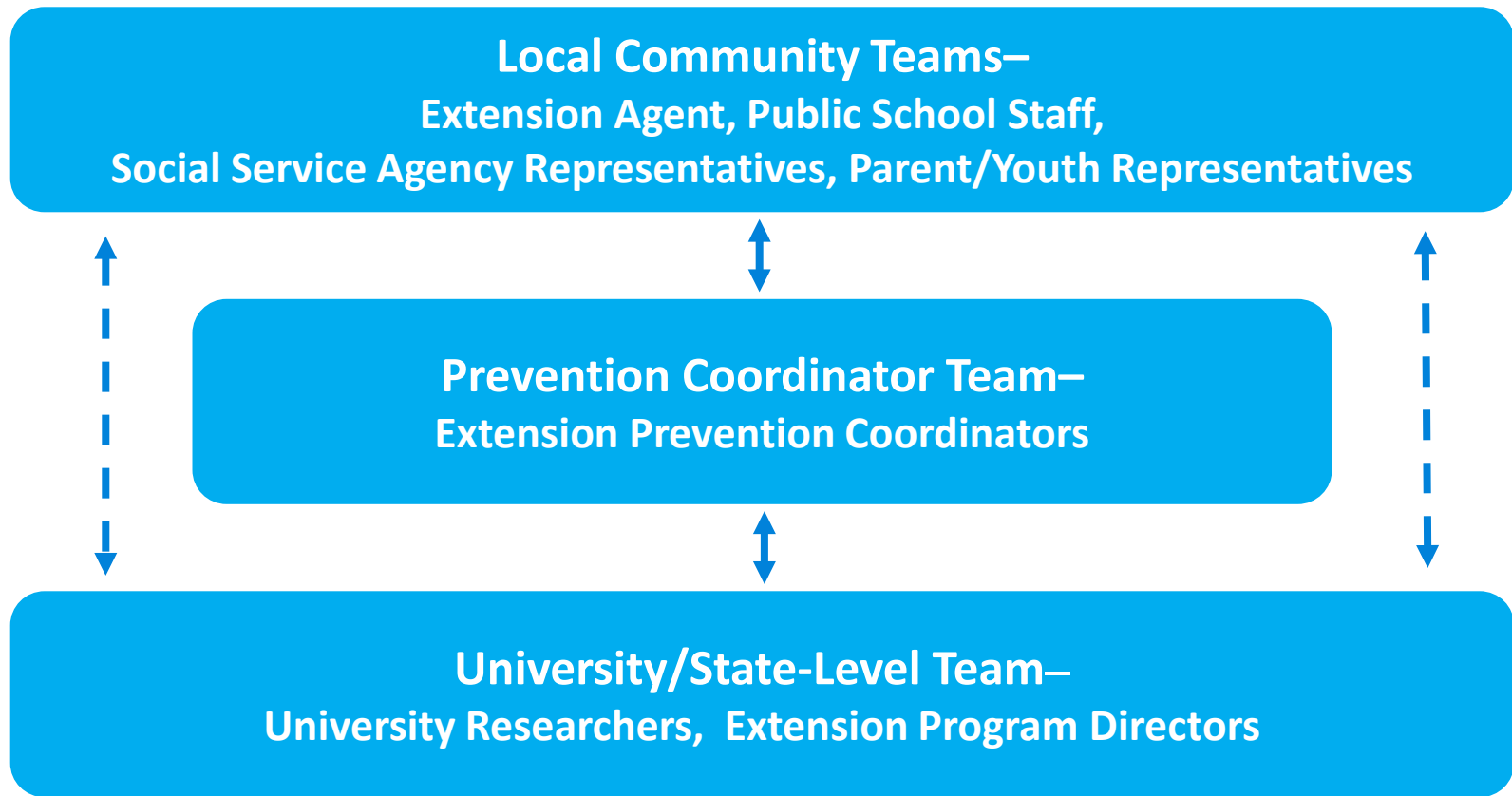


Rigorously demonstrated, long-term EBI impact is very rare (Foxcroft et al., 2003).



Evolving Community-University Partnership Model

PROSPER



PROSPER Outcome Study

- Collaboration with PSU
- Design: RCT of 28 school districts (14 IA, 14 PA)
 - Full partnership with community teams
 - Delayed intervention
- Participants: Two cohorts of 6th grade children ($\approx 6,000$ students per cohort); 2nd cohort has $\approx 1,000$ intensive assessment families
- Multimethod, multi-informant measurement (now at 9th wave of data collection—post high school)

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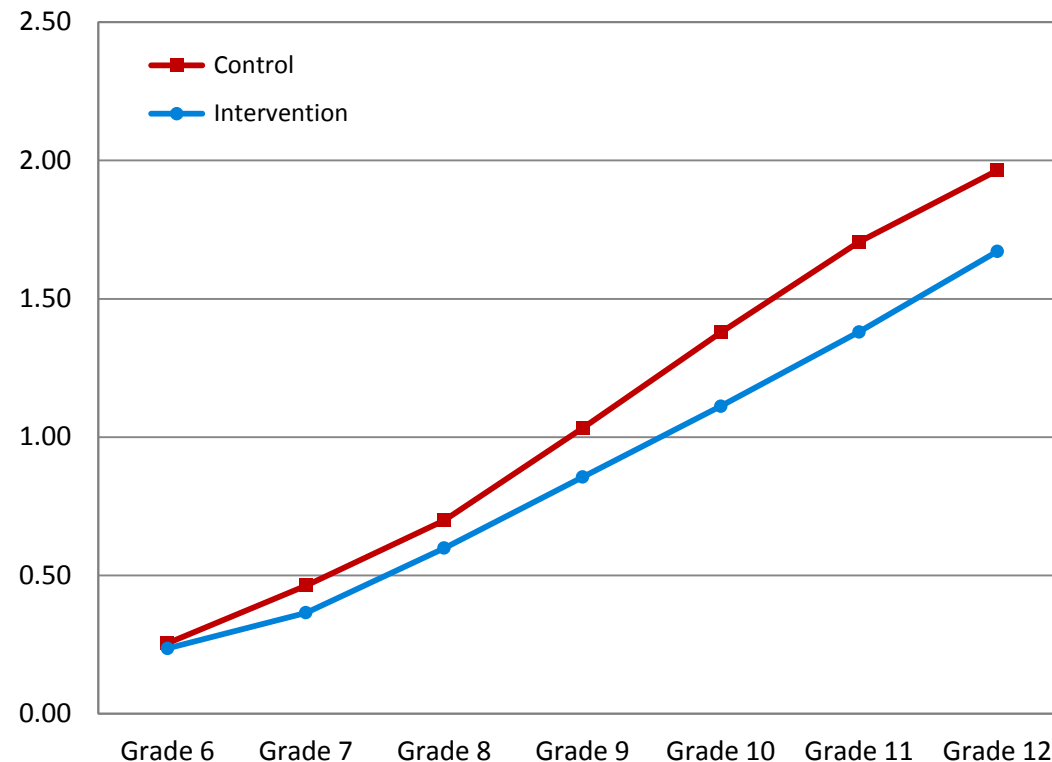
PROSPER is funded by a grant from the National Institute on Drug Abuse #DA013709-R. Spoth (PI, Iowa State University), M. Greenberg (PI on subcontract, Pennsylvania State University), C. Redmond (Co-PI at ISU), M. Feinberg (Co-PI at PSU), with co-funding from the National Institute on Alcohol Abuse and Alcoholism.



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Illustrative Findings: Long-term Impact on Illicit Substance Use Index*

Reduced Growth in Use Through 6½ Years Past Baseline



PROSPER intervention vs. control difference in growth of use is statistically significant, as are differences at multiple time points, including 11th and 12th grades.

Source: Spoth, R., Redmond, C., Shin, C., Greenberg, M., Feinberg, M., Schainker, L. (2013). PROSPER community-university partnership delivery system effects on substance misuse through 6½ years past baseline from a cluster randomized controlled intervention trial. *Preventive Medicine*, 56, 190-196.

* Sum of six lifetime illicit use measures (methamphetamines, Ecstasy, inhalants, Vicodin, prescription drug misuse overall, other illicit drug use).



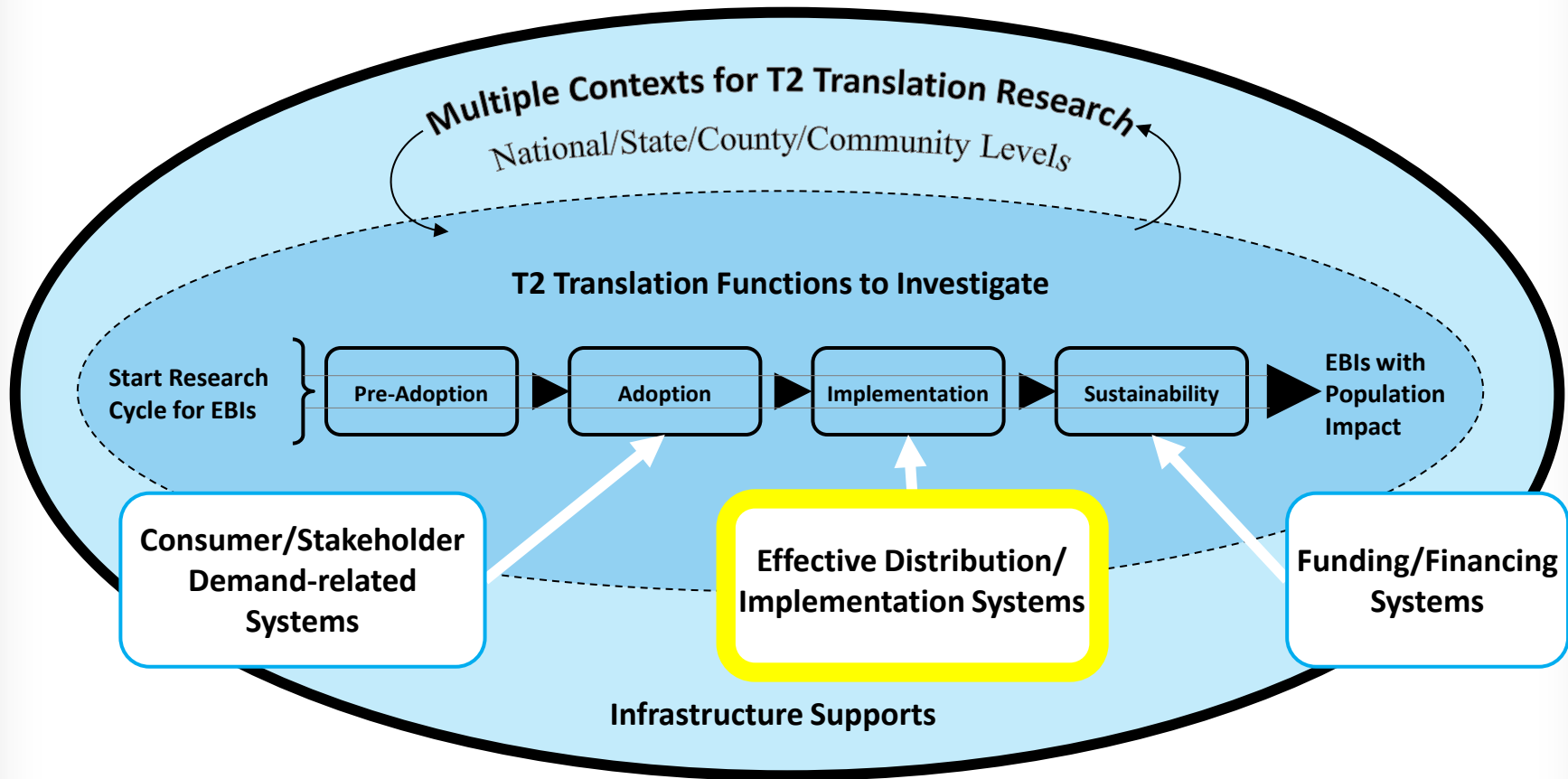
Key PROSPER Partnership Randomized Control Trial Findings from Published Articles

- **Effective mobilization** of community teams
- Community **teams sustained programming** efforts for ten years
- Community teams achieved **high recruitment rates** for family program participation, compared to traditional approaches
- All programs **implemented with high levels of quality**
- Positive effects for **strengthening family relationships, parenting, and youth skill outcomes**
- Youth score significantly lower on a **range of problem behavior outcomes** (both substance misuse and conduct problems)
- Reductions in **negative peer influences** indicated by social network analyses
- Indications that it is **more cost efficient** than regular programming; also, that it is **cost effective and cost beneficial**

Source: Spoth, R. (January 2012). Moving toward population-level impact with community-based prevention: PROSPER project findings, lessons, big questions, future directions. Invited presentation for NIDA DESPR seminar session, Bethesda, MD.



TSci Impact Framework – Overarching and Phase-Specific Priorities for the Future

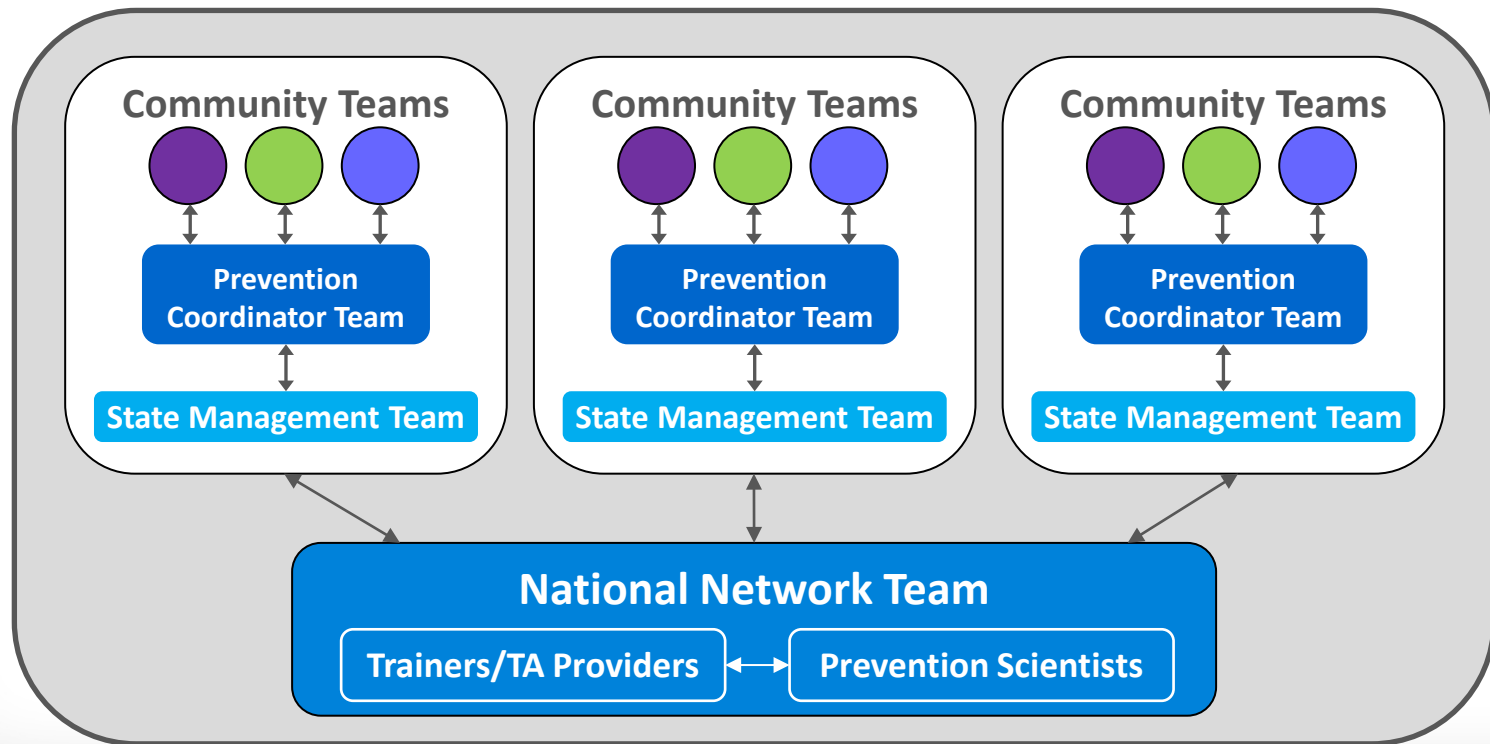


- Overall, conduct priority research re consumer/stakeholder demand, distribution, and sustainable funding within **State Prevention Systems**



Ongoing Scale Up of PROSPER Model Implementation

- PROSPER Network Team formed to support Model adoption in new states
 - Developing funding models
 - Developing systems for military family adaptations



Blending Military and Civilian Support Systems for Effective EBI Delivery: Proposed Adaptation and RCT

PROSPER Model Incorporating Military Stakeholders

North Carolina PROSPER Partnership for Military Families

PROSPER Partnership Network Team

PPSI-Based Project Investigators & Technical Assistance Providers

Local Teams

Military-Connected Team Leader, Military School Liaison Officer, School System's Military Family Counselor, and representatives from Family Readiness Groups/Family Assistance Centers



Prevention Coordinator Team

Military-related Personnel and Extension-based Staff



State Project Management Team

NC National Guard State Youth Coordinator, NC Project Investigators, RTI Field Coordinator, and Extension System Coordinator



The PROSPER Partnership Group

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Funded by
The Centers for Disease Control and Prevention
The Annie E. Casey Foundation
The National Institute on Drug Abuse



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Please visit our websites at...

www.prosper.ppsi.iastate.edu

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*Funded by the National Institute on Drug Abuse
Grant #DA013709-Spoh (PI, Iowa State
University), Greenberg (PI on subcontract,
Pennsylvania State University), Redmond (Co-PI
at ISU), Feinberg (Co-PI at PSU)*



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