Harnessing Prevention to Address the Opioid Epidemic: Why, How and Where to From Here

Congressional Briefing

July 25, 2017

Richard Spoth, Director
Partnerships in Prevention Science Institute, Iowa State University

Reported research has been funded by grants from the National Institute on Drug Abuse (DA013709, 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.
Topics

1. **Why**: Evidence on Reduced Prescription Drug Misuse and Economic Benefits

2. **How**: Evidence of Effective Community Systems to Support Proven Prevention

3. **Where to**: Scale Up of Community Systems & Related Workforce Development
WHY?

It works and saves money!
Long-Term Impacts of Primary Prevention in Three Studies Conducted Over Past Two Decades

- Three longitudinal, randomized, controlled trials – data collected up to 14 years past baseline
- School districts assigned to study conditions
- Emerging data on Prescription Drug Misuse (PDM) warranted adding measures of those outcomes
- Examined whether comparable or greater benefit for higher-risk youth (risk-related moderation)
Example from “Project Family”– Young Adult Outcomes of 6th Grade Program

Lifetime Prescription Drug Misuse (PDM)

1.2**
0.6***
5.4**
4.7**
9.3
8.7
15.5
13.5

0.0%
2.0%
4.0%
6.0%
8.0%
10.0%
12.0%
14.0%
16.0%
18.0%

Age 21 General Age 21 Narcotics Age 25 General Age 25 Narcotics

**p<.01; ***p<.001; RRRs = 65-93%


Notes: General=Misuse of narcotics or CNS depressants or stimulants.
PROSPER vs. control differences are practically significant: For every 100 misusers in non-PROSPER communities, there would be about 20-26 fewer in PROSPER communities.

Note: *p<.05, RRRs=20-26%
PROSPER Study: Cost Effectiveness

• Each youth engaging in nonmedical prescription opioid use costs society an estimated $8,965/year.

• Study evaluated most effective combinations of universal family and school programs.

• Cost effectiveness ranged from $613 to $4,923 (cost to prevent one youth from misusing opioids before 12th grade), at least $4,042 less than societal cost per case.

• Life Skills Training & the Strengthening Families Program: 10-14 was most cost efficient combination.

“Universal” primary prevention programs address common risk/protective factors for all types of use; don’t need to target PDM specifically

Common sources of prescription drugs are friends and relatives—potential participants in universal prevention

2011 Surgeon General Expert Panel—recommended that consider primary universal intervention as part of strategy

2016 Surgeon General Report—critically important to invest in spreading of proven prevention
How?

Community Systems for Quality, Sustainable Delivery of Evidence-Based Prevention in Our Communities!
Types of Universal Interventions Proven Effective

• Target modifiable risk and protective factors in family and school environments

• Build youth skills and competencies, like problem solving
Example of Program Reducing PDM: Iowa Strengthening Families Program (Project Family Study)

• Objectives
  – Enhance family protective factors
  – Reduce family-based risk factors for child problem behaviors

• Administration/Program Length
  – 7 weekly two-hour sessions
  – Sessions include one hour for separate parent and child training and one hour for family training

• Parent and Child Involvement
  – Children and parents attend all sessions
Example of Program Reducing PDM: Life Skills Training*

• Objectives
  – Enhance social and psychological competencies
  – Increase knowledge of substance use consequences

• Administration/Program Length
  – 15 sessions, plus boosters
  – Taught in school classrooms
  – Typically, one or two sessions per week

*The ISFP intervention summarized above was later updated and renamed the Strengthening Families Program: For Parents and Youth 10-14; its summary description is the same as the ISFP.
Example of Community Prevention Delivery System: PROSPER

PROSPER Partnership Network
(Network of State Prevention Systems)

PROSPER State Partnership
(State Prevention System)

Community Teams
(Implement and Sustain Programs in the Community)

Prevention Coordinator Team
(Link Community to the Extension system and provide Technical Assistance)

State Management Team
(Coordinate TA, Provide Guidance and on-going support)
PROSPER is a Model for a Community-Based Delivery System!

It uses existing community infrastructures.
PROSPER Community Teams

• Plan, coordinate family programs, including recruitment and monitoring for quality

• Work with the school to coordinate a school program, including monitoring for quality

• Generate resources for ongoing programming, with
  – Local mental health/public health representatives
  – Substance abuse agency
  – Law Enforcement
  – Ministry/Clergy Representative
  – Parents
  – Youth who have been through family program
  – Representative from local youth programs/service
3. Where to?

Spread Proven Prevention Thru Expanded Community Systems & Workforce Development!
2016 Surgeon General Report Recommendation

• Apply proven Community-Based Delivery Systems (e.g., Communities That Care, PROSPER, and others)
Universal Prevention Curriculum (UPC) to Develop Prevention Workforce*

• Comprehensive, prevention science-based trainings
• Includes community systems training, with introduction to CTC and PROSPER
• Designed for both Prevention Coordinators and Community Implementers
• Has professional network and credentialing system
• Has emerging consortium of universities to support dissemination

*Supported through the U.S. Department of State & The Colombo Plan; developed through the Applied Prevention Systems International. North American Coordinating Center located at PPSI, Iowa State University.
Workforces to Prevent Opioid Misuse: The Plan for a PROSPERing Communities Project

• **Purpose**
  – Community prevention workforce development in that expands the number of communities showing reductions in opioid misuse

• **Goals**
  – Organize state-based steering committees
  – Initiate Nationwide Prevention Workforce Development Partnership Network Organization
  – Develop multi-year plan for pilot dissemination projects, a controlled study & scale up
Workforces to Prevent Opioid Misuse: The PROSPERing Communities Project

- **Demonstration Phase**
  - Groundwork in 5 states—20 trainees for Universal Prevention Curriculum
  - States select 6 of the trained individuals for Emerging Leadership Workshop

- **Controlled Study Phase**
  - A controlled study in 22 states (including the initial implement preventive interventions), in at least 4 communities

- **Sustainability and Scale Up Phase**
  - Train for sustainability and develop “Training of Trainers” (Emerging Leadership)
Conclusions and Implications

- Pattern of long-term positive findings across 3 controlled studies, up to 14 years past baseline, even without content specific to the prevention of PDM
- Proven interventions are cost effective
- Positive PROSPER findings on PDM show how real-world systems for proven prevention can work
- Overall, primary prevention have potential public health impact and economic benefits
- This public health impact could be enhanced through community prevention systems and workforce development!
Recommended Next Steps

• Like teaching people (whole communities) to fish!
• Three Steps:
  1. Train prevention workforce on a state-by-state basis, building on existing workforce, collaborating with stakeholder state/federal agencies
  2. Train workforce to apply proven community systems for delivering evidence-based prevention programs
  3. Build on existing state infrastructures (Education Systems); and “build them out” by growing an emerging leadership, trainer-of-trainers program
• Support projects like PROSPERing Communities (for $10M over 5 years, with a high ROI).
THANK YOU from PPSI and The PROSPER Partnership Group

Iowa State University
Partnership in Prevention Science Institute
Richard Spoth, Director

PPSI Scientists:
Cleve Redmond
Lisa Schainker
Linda Trudeau

Pennsylvania State University
Prevention Research Center

PRC Scientists:
Chungyeol Shin
Hsiu-Chen Yeh
Janet Welsh
Sarah Meyer Chilenski

Human Interaction Research Institute
Tom Backer, Director

Funded by
The Centers for Disease Control and Prevention
The Annie E. Casey Foundation
The National Institute on Drug Abuse
Please visit our website...
www.prosper.ppsi.iastate.edu