Taking Evidence-based Prevention to Scale:
Impact, Cost-effectiveness, and Lessons Learned

Brian K. Bumbarger
Family Impact Seminar
North Carolina Legislature
February, 2009
It is not enough to be busy. So are the ants. The question is: What are we busy about?

Henry David Thoreau
Right now, in communities across the country, people are working hard to reduce and prevent youth violence, delinquency, drug use, and school failure...

Hundreds of millions of taxpayer dollars and countless hours are being invested...

Much of this effort and investment will have absolutely no impact
...some of it will even be harmful
Why don’t communities see greater success in prevention?

- Chasing money rather than outcomes
- No single guiding philosophy (many separate but disconnected efforts)
- The lack of good data to drive decision-making and resource allocation
- Reliance on untested (or ineffective) programs
- Poor implementation quality
- Inability to sustain programs
- Little accountability
There are a number of proven-effective delinquency prevention programs

- Effectiveness demonstrated in rigorous scientific evaluations (randomized controlled trials)
- Large longitudinal studies or multiple replications (results that are generalizable)
- Significant effects on aggression, youth violence, delinquency, substance use, school failure

*These evidence-based programs give us great confidence that if implemented well they will be effective at promoting better youth outcomes*
The challenges

• Increase (carefully planned) adoption of EBPs by more communities
• Ensure high quality implementation
• Sustain programs long-term
Pennsylvania’s EBP Initiative

• Follows from earlier CTC initiative that promotes community coalitions, risk & resource assessment

• Nearly 200 EBP’s funded since 1998

• Strong emphasis on implementation quality & fidelity, impact assessment, and sustainability planning
A unique partnership between policymakers, researchers, and communities to bring science to bear on issues of public health and public safety.
Resource Center for Evidence-based Prevention and Intervention Programs and Practices

CJJT&R Support to CTC Coalitions

• Conduct Outreach and Advocacy
• Strengthen the tie to local coalitions
• Provide Proactive Technical Assistance
• Develop and Provide Training and Resources
• Facilitate better data collection and reporting
• Create and Facilitate Peer Networks
• Conduct Translational Research

NCJJ Local Innovative Programs and Practices
The EPISCenter currently supports 10 EBPs

- Big Brothers/Sisters
- PATHS
- LifeSkills Training
- Project TND
- Strengthening Families 10-14
- MST
- FFT
- MTFC
- Incredible Years
- Olweus Bullying Prevention

Other Commonwealth agencies also support some of these and other EPBs
Evidence-based Programs Funded Throughout Pennsylvania*

*programs funded under the EBP initiative since 1998
Creating Fertile Ground for EBPs
Risk-focused Prevention Planning
(the Communities That Care model)

- Form local coalition of key stakeholders
- Collect local data on risk and protective factors
- Use data to identify priorities
- Select and implement evidence-based program that targets those factors
- Re-assess risk and protective factors
- Leads to community synergy and focused resource allocation
- Use data to identify priorities
Graph 7: Risk Factor Scores for Centre County: Community, Family, and School Domains.
Community Prevention Planning and Evidence-based Programs are wise investments of taxpayer resources

• Communities with EBPs embedded in the context of community mobilization/readiness have lower levels of delinquency and youth drug use*

• EBPs produce an overall return of $5 for every $1 invested – a return measured in hundreds of millions**


Determining Program Cost-Benefit

Program Benefits

$ Crime Reduction
$ Drug Use
$ School Dropout
$ Child Abuse and Neglect
$ Welfare and Social Services, etc.

(adjusted for strength of evidence and timing of program)

— Program Costs
An Example: Strengthening Families Program

<table>
<thead>
<tr>
<th>Example site:</th>
<th>McKean County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number served:</td>
<td>410 families</td>
</tr>
<tr>
<td>Benefit minus costs per family:</td>
<td>$6,541</td>
</tr>
<tr>
<td>Per dollar return on investment:</td>
<td>$7.82</td>
</tr>
<tr>
<td>Total economic benefit resulting</td>
<td></td>
</tr>
<tr>
<td>from McKean County implementation:</td>
<td>$2,950,180</td>
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<tr>
<td>Estimated number of SFP programs</td>
<td>15</td>
</tr>
<tr>
<td>statewide:</td>
<td></td>
</tr>
<tr>
<td>Estimated number of families being</td>
<td>2,000</td>
</tr>
<tr>
<td>served statewide:</td>
<td></td>
</tr>
<tr>
<td>Total potential economic benefit</td>
<td>$13,082,000</td>
</tr>
<tr>
<td>statewide:</td>
<td></td>
</tr>
</tbody>
</table>
Strengthening Families 10-14
Percent economic benefit by outcome

- 3.4% Illicit drug use*
- 23.7% Alcohol use*
- 21.4% Tobacco use*
- 51.6% Crime

*probability of use based on age of initiation

Approximately half of the economic benefits from Strengthening Families are based on crime outcomes; the remaining benefit is related to substance abuse outcomes.
The Cost-effectiveness of Evidence-based Prevention in Pennsylvania
(measured benefits and cost per youth)

<table>
<thead>
<tr>
<th>Program</th>
<th>Cost</th>
<th>Benefits</th>
<th>Benefit – cost, per youth</th>
<th>Return per Dollar Invested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Brothers/Sisters</td>
<td>$4,519</td>
<td>$4,573</td>
<td>$54</td>
<td>$1.01</td>
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<tr>
<td>LifeSkills Training</td>
<td>$33</td>
<td>$841</td>
<td>$808</td>
<td>$25.72</td>
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<td>Multi. Treatment Foster Care</td>
<td>$7,826</td>
<td>$87,157</td>
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<tr>
<td>Multisystemic Therapy</td>
<td>$6,402</td>
<td>$23,117</td>
<td>$16,716</td>
<td>$3.61</td>
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<tr>
<td>Functional Family Therapy</td>
<td>$2,411</td>
<td>$35,119</td>
<td>$32,707</td>
<td>$14.56</td>
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<tr>
<td>Nurse-Family Partnership</td>
<td>$10,411</td>
<td>$47,289</td>
<td>$36,878</td>
<td>$3.59</td>
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<tr>
<td>Strengthening Families</td>
<td>$959</td>
<td>$7,500</td>
<td>$6,541</td>
<td>$7.82</td>
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</table>
The Cost-effectiveness of Evidence-based Prevention in Pennsylvania
(measured benefits and costs per community and statewide)

<table>
<thead>
<tr>
<th>Program</th>
<th>B-C per youth</th>
<th>Avg. Return/Community</th>
<th># Programs Statewide</th>
<th>Est. Total PA Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Brothers/Sisters</td>
<td>$54</td>
<td>$13,500</td>
<td>28</td>
<td>$378,000</td>
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<tr>
<td>LifeSkills Training</td>
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<td>$161,600</td>
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<td>Nurse-Family Partnership</td>
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<tr>
<td>Strength. Families</td>
<td>$6,541</td>
<td>$872,133</td>
<td>15</td>
<td>$13,082,000</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td></td>
<td></td>
<td><strong>$317,066,641</strong></td>
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Some Lessons Learned

• Focus on risk and protective factors rather than problems

• Good community-specific data to drive decision making and resource allocation
  
  • Single state epidemiological survey
  
  • Becomes community needs assessment tied to multiple agency RFPs

• Community needs assessment and mobilization, as well as EBP implementation, requires proactive Technical Assistance
Some Lessons Learned (cont.)

- Fix community readiness and infrastructure issues first
- Find a small number of things that work, and do them well
- Multi-year funding is necessary to get to stable effective services
- Tie funding to quality implementation and outcomes
  - objective criteria de-politicizes the process
- Build in evaluation for continuous quality improvement
Thank You!

For more information on our research, contact:

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