Integrating Primary and Behavioral Care Through the Lens of Prevention

November 15, 2019

Unleashing the Power of Prevention in Communities: A Role for Primary Care

Richard F. Catalano, Ph.D.
Co-Founder, Social Development Research Group
Professor, School of Social Work
University of Washington

www.sdrg.org
My 2 Life Partners
My 2 Life Partners
Objectives

- Why should we care about prevention of adolescent behavioral health problems and behavioral health promotion?
- What is the research base for promotion/prevention science?
- What ideas may help us scale effective promotion/prevention programs, policies and practices?
- What roles can primary care play?
Shift in Causes of Mortality in the 21st Century

- The leading causes of mortality have shifted from infectious to non-communicable diseases and conditions.
- Behavioral health problems are and now the leading causes of mortality.
### Leading Causes of Mortality 15-24 Year Olds

<table>
<thead>
<tr>
<th>Cause</th>
<th>Total deaths (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Motor Vehicle Crashes</td>
<td>15.9</td>
</tr>
<tr>
<td>2. Accidents</td>
<td>11.5</td>
</tr>
<tr>
<td>3. Intentional self harm (suicide)</td>
<td>10.7</td>
</tr>
<tr>
<td>4. Assault (homicide)</td>
<td>10.3</td>
</tr>
<tr>
<td>5. Malignant neoplasms</td>
<td>3.7</td>
</tr>
<tr>
<td>6. Diseases of heart</td>
<td>2.2</td>
</tr>
<tr>
<td>7. Congenital malformations, deformations and abnormalities</td>
<td>1.0</td>
</tr>
<tr>
<td>8. Influenza and pneumonia</td>
<td>0.5</td>
</tr>
<tr>
<td>9. Cerebrovascular diseases</td>
<td>0.4</td>
</tr>
<tr>
<td>10. Pregnancy, childbirth and the puerperium</td>
<td>0.4</td>
</tr>
<tr>
<td>-- All other causes (Residual)</td>
<td>11.1</td>
</tr>
</tbody>
</table>

48.8/100,000 or 72% of all deaths

# Leading Causes of Mortality 15-24 Year Olds

**African Americans**

<table>
<thead>
<tr>
<th>Cause</th>
<th>Total deaths (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assault (homicide)</td>
<td>36.3</td>
</tr>
<tr>
<td>2. Accidents</td>
<td>20.7</td>
</tr>
<tr>
<td>3. Intentional self harm (suicide)</td>
<td>7.4</td>
</tr>
<tr>
<td>4. Diseases of heart</td>
<td>3.9</td>
</tr>
<tr>
<td>5. Malignant neoplasms</td>
<td>3.7</td>
</tr>
<tr>
<td>6. HIV</td>
<td>1.7</td>
</tr>
<tr>
<td>7. Chronic low respiratory disease</td>
<td>1.0</td>
</tr>
<tr>
<td>8. Congenital malformations, deformations and abnormalities</td>
<td>0.9</td>
</tr>
<tr>
<td>9. Anemias</td>
<td>0.9</td>
</tr>
<tr>
<td>10. Diabetes Mellitus</td>
<td>0.8</td>
</tr>
<tr>
<td>-- All other causes (Residual)</td>
<td>13.0</td>
</tr>
</tbody>
</table>

**Note:**

- **66.1/100,000 or 74% of all deaths**

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**CDC WISCARS 2014 accessed 4/28/16**
## Leading Causes of Mortality 15-24 Year Olds, American Indians/Alaskan Natives

<table>
<thead>
<tr>
<th>Cause</th>
<th>Total deaths (per 100,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Intentional self harm (suicide)</td>
<td>20.9</td>
</tr>
<tr>
<td>2. Motor Vehicle Crashes</td>
<td>18.0</td>
</tr>
<tr>
<td>3. Accidents</td>
<td>9.9</td>
</tr>
<tr>
<td>4. Assault (homicide)</td>
<td>11.5</td>
</tr>
<tr>
<td>5. Drug-related overdose</td>
<td>3.2</td>
</tr>
<tr>
<td>6. Alcohol-related overdose and disease</td>
<td>2.6</td>
</tr>
<tr>
<td>7. Malignant Neoplasms</td>
<td>2.0</td>
</tr>
<tr>
<td>8. Diseases of Heart</td>
<td>1.9</td>
</tr>
<tr>
<td>9. Pregnancy, childbirth and the puerperium</td>
<td>0.7</td>
</tr>
<tr>
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<td>0.5</td>
</tr>
<tr>
<td>-- All other causes (Residual)</td>
<td>9.7</td>
</tr>
</tbody>
</table>

**66.8/100,000 or 82.6% of all deaths**
Keeping the Population Healthy Will Require Reaching Beyond Medical Care (Hacker & Walker, 2013: AJPH)

- Only 10% of health outcomes are a result of the medical care system.
- 50% to 60% of health outcomes are due to behavioral health problems.
- Preventive activities must reach beyond the clinic and incorporate community and public health.
- We must enhance our capacity to assess, monitor, and prioritize risk factors that impact patient health outcomes in local communities.

Also see http://www.huffingtonpost.com/deborah-klein-walker/the-affordable-care-act-a_3_b_9395240.html
Prevention is Critical for Health and Well-being

• Behavioral health problems cause harm in adolescence
• Behavioral health problems established in adolescence cause harm into adulthood
• Preventing these behavioral health problems during adolescence can reduce mortality and morbidity over the life course
Intervention Spectrum

Fostering Healthy Mental, Emotional, and Behavioral Development in Children and Youth

A NATIONAL AGENDA

PREVENTION
- Universal
- Selective
- Indicated
- Case Identification
- Treatment of Disorders
- Long-term Treatment
- After-care

PROMOTION
- Individual & Family
- Community
- Societal

TREATMENT

MAINTENANCE

The National Academies of Sciences • Engineering • Medicine (2019)
Early Prevention Efforts were Ineffective

Example: Substance Abuse Prevention

- Strategies:
  - Information
  - Fear arousal
  - Just say “no”

- Outcomes:
  - No decreases in drug use
  - Some programs increased drug use (Tobler, 1986)

Lesson: Untested ideas can sometimes make things worse.
Paradigm Shift
A Public Health Life-Course Approach to Prevention

- To prevent a problem before it happens, address its predictors
- Longitudinal research identified predictors
  - Risk factors
  - Protective factors
- Develop, test in controlled trials with long term FU programs and policies that target risk and protective factors for change

(Lu and Halfon, 2003; NASEM, 2019)
40 Years of Prevention Science Advances: From Nothing Works to Effective Prevention/Promotion

- Risk and protective factors that predict behavioral health problems are reliable targets for prevention/promotion
- Over 100 prevention programs and policies have been shown to prevent behavioral health problems in rigorous research
- Public health impact requires building local prevention infrastructure to choose appropriate programs/policies and implement them with fidelity and scale

(Catalano et al., 2012; Surgeon General, 2016; NASEM, 2019)
Much Commonality in Risk Factors for Behavioral Health Problems

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>Substance Abuse</th>
<th>Delinquency</th>
<th>Teen Pregnancy</th>
<th>School Drop-Out</th>
<th>Depression &amp; Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Availability of Drugs</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Availability of Firearms</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Community Laws and Norms Favorable Toward Drug Use, Firearms, and Crime</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Media Portrayals</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Transitions and Mobility</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Low Neighborhood Attachment and Community Disorganization</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Extreme Economic Deprivation</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family History of the Problem Behavior</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Family Management Problems</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Family Conflict</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Favorable Parental Attitudes and Involvement in the Problem Behavior</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>School</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Academic Failure Beginning in Late Elementary School</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Lack of Commitment to School</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Individual/Peer</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Early and Persistent Antisocial Behavior</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Alienation and Rebelliousness</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Friends Who Engage in the Problem Behavior</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Favorable Attitudes Toward the Problem Behavior</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Early Initiation of the Problem Behavior</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Constitutional Factors</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
# Much Commonality in Protective Factors for Behavioral Health Problems

## Protective Factors

### Individual

<table>
<thead>
<tr>
<th>Cognitive Competence</th>
<th>✓</th>
<th>✓</th>
<th>✓</th>
<th>✓</th>
<th>✓</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional Competence</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social/Behavioral Competence</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Self Efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Belief in the Future</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Self-determination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Pro-social Norms</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Spirituality</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Family, School and Community

<table>
<thead>
<tr>
<th>Opportunities for Positive Social Involvement</th>
<th>✓</th>
<th>✓</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognition for Positive Behavior</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Bonding to Prosocial Others</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>
The Challenge for Community Prevention: Different Communities, Different Needs

- Different Norms & Values
- Different levels of risk and protection
- Different youth problem behaviors
- Different resources & capacity
What We Now Know About Risk and Protective Factors

- Both an individual’s level of risk and level of protection influence behavioral health problems
- Common risk and protective factors predict many behavioral health problems
- Risk and protective factors show much consistency in effects across diverse groups
- Different communities/neighborhoods have different levels of risk and protection, thus may need different effective prevention/promotion programs and policies
Science Guided Prevention

Prevention interventions should target malleable risk and protective factors

(Coie et al., 1994; Mrazek and Haggerty, 1984; Woolf, 2008; O’Connell, Boat & Warner, 2009; Surgeon General, 2016; NASEM, 2019)
By addressing risk and protection all these behavioral health problems have been prevented in controlled trials.

- Anxiety
- Depression
- Autistic behaviors
- Alcohol, tobacco, other drug use
- Risky driving
- Aggressive behavior and conduct problems
- Delinquent behavior
- Violence
- Self-inflicted injury
- Risky sexual behavior
- School dropout
### What is an efficacious intervention?

<table>
<thead>
<tr>
<th>Evaluation Quality</th>
<th>Impact</th>
</tr>
</thead>
</table>
| ▪ At least one randomized controlled trial OR a quasi-experimental trial without design flaws | ▪ Impact on adolescent problem behavior  
▪ Absence of any negative effects |

<table>
<thead>
<tr>
<th>Intervention Specificity</th>
<th>Implementation Tools</th>
</tr>
</thead>
</table>
| ▪ Population of focus is clearly defined  
▪ Risk and protective factors that program or policy seeks to change are identifiable | ▪ Training materials are available  
▪ Information on the financial and human resources required  
▪ Benefit-cost information desirable |

Worldwide application of the prevention science research base in adolescent health

Adolescent Health Series Article 3

Illustrates Wide Ranging Tested, Effective Prevention Programs and Policies for Multiple Problems

“Failure to invest in the health of the largest generation of adolescents in the world’s history jeopardises earlier investments in maternal and child health, erodes future quality and length of life, and escalates suffering, inequality, and social instability.”
Unleashing the Power of Prevention
Joint Publication of NAM, AASWSW

J. David Hawkins, Jeffrey M. Jenson, Richard Catalano, Mark W. Fraser, Gilbert J. Botvin, Valerie Shapiro, C. Hendricks Brown, William Beardslee, David Brent, Laurel K. Leslie, Mary Jane Rotheram-Borus, Pat Shea, Andy Shih, Elizabeth Anthony, Kevin P. Haggerty, Kimberly Bender, Deborah Gorman-Smith, Erin Casey, and Susan Stone
The Surgeon General’s Report on Alcohol, Drugs, and Health: Prevention: Chapter 3

NASEM 3rd Consensus Study on Fostering MEB Health (2019)

Committee Members
Thomas F. Boat (Chair)

William A. Aldridge, Anthony Biglan, W. Thomas Boyce, Richard F. Catalano, Frances Champagne, Jennifer Frank, Patricia Jennings, Sheryl Kataoka, Kelly Kelleher, Grace Kolliesuah, Marguerita Lightfoot, Tamar Mendelson, Ricardo F. Muñoz, Myrna M. Weissman
New Research: Expanded Spectrum of Opportunities

• Integrated understanding of influences on MEB health
• Expanded understanding of implementation
Progress in Prevention: 40 Years of Research

Controlled trials have identified over 100 effective policies and programs for preventing these behavioral health problems


- Effective policies: Surgeon General, 2016; Komro et al., 2016; Anderson et al. 2009, Catalano et al. 2012, Vuolo et al., 2015, NASEM 2019

Ok, we have evidence based prevention interventions and can implement with fidelity, but can we afford it?
Example: One urban neighborhood invests nearly $55 million annually on children and families

- Public Elementary and Middle School: 42.5%
- Pre-K/Headstart: 4.7%
- Title I: 2%
- Child Protective Services: 6.7%
- Foster Care: 0.6%
- Medicaid/Peach Care: 10.4%
- Public Health: 0.5%
- Child Care: 1.6%
- Mental Health: 0.8%
- Supplemental Nutrition Assistance: 6.8%
- Other Programs: 2.4%
- Work Assistance: 3.2%
- After School Programs: 1.0%

Population: 15,500
Children: 4,100
Expenditure: $54,890,000
A small percent—1–2% ($549K-1.1M)—of this investment can have a major impact

<table>
<thead>
<tr>
<th>Age Group</th>
<th># Youth</th>
<th>Target Group and Outcomes</th>
<th>Program</th>
<th>Unit Cost</th>
<th>Total Investment (per year)</th>
<th>Return on Investment (per dollar spent)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-4 years</td>
<td>864</td>
<td>All children at risk of behavior problems c. 30% = 250 Improved behavior, academics, delinquency</td>
<td>Incredible Years BASIC</td>
<td>$2,022</td>
<td>$127,386</td>
<td>$4.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aiming to serve 25% of target group (N=63)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-10 years</td>
<td>1,360</td>
<td>ALL Improved behavior, academics, emotional regulation</td>
<td>Promoting Alternative Thinking Strategies</td>
<td>$112</td>
<td>$50,773 (for 3 years)</td>
<td>$13.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aiming to serve 100% of target group (N=1360)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-14 years</td>
<td>840</td>
<td>ALL Reduced substance abuse, violence, risky driving</td>
<td>Life Skills Training</td>
<td>$34</td>
<td>$14,280</td>
<td>$42.13</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aiming to serve 50% of target group (N=420)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-16 years</td>
<td>1,400</td>
<td>Young people at risk of detention = 100 Reduced substance abuse, recidivism, improved mental health</td>
<td>Functional Family Therapy (FFT)</td>
<td>$3,190</td>
<td>$287,100</td>
<td>$11.86</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aiming to serve 90% of target group (N=90)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-19 years</td>
<td>650</td>
<td>Pregnant girls and young women = 25 Improved prenatal health. Fewer childhood injuries, improved school readiness</td>
<td>Nurse Family Partnership (NFP)</td>
<td>$9,42</td>
<td>$103,631 (for 2 years)</td>
<td>$3.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Aiming to serve 88% of target group (N=22)</td>
<td></td>
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</tr>
</tbody>
</table>

$583K
Despite this Progress...

Prevention approaches that do not work or have not been evaluated are more widely used than those shown to be efficacious.

(Ringwalt, Vincus et al., 2009)
The Challenge

- How can we build support for prevention infrastructure to increase use of tested and effective prevention policies and programs with fidelity and impact at scale…

while recognizing that communities are different from one another and need to decide locally what policies and programs they use?
Possible Solutions

- Increase advocacy for effective prevention/promotion
- Build community prevention/promotion infrastructure
- Integrate prevention/promotion in primary care
Despite the Evidence of the Effectiveness of Prevention, We Continue to Invest Less in Prevention

Federal Drug Control Spending For FY 2008 through 2017

Idea 1: Advocacy to Unleash the Power of Prevention

An Action Plan to Advance Prevention Practice and Policy

The Coalition for the Promotion of Behavioral Health
Unleashing the Power of Prevention

- A summary of evidence pertaining to behavioral health problems and an action plan aimed at increasing the widespread use of preventive interventions

- Developed by the Coalition for the Promotion of Behavioral Health
  
  - Published as a Discussion Paper by the National Academy of Medicine  
  
  - Selected as a Grand Challenge initiative by the Academy of Social Work and Social Welfare  
Unleashing the Power of Prevention
10 Year Goals

- Reduce the incidence and prevalence of behavioral health problems in the population of young people from birth through age 24 by 20%

- Reduce racial and socioeconomic disparities in behavioral health problems by 20%
How Can We Advocate for Prevention?
7 Action Steps

1. Increase public awareness of Prevention Science effectiveness
2. Increase public funding for evidence based prevention
3. Build prevention infrastructure and capacity at the community level
4. Increase the number of states that have criteria for evidence based interventions
5. Build state level prevention support systems and policies
6. Increase utilization of evidence-based Prevention programs and policies
7. Increase trained workforce to deliver evidence-based Prevention
Unleashing the Power of Prevention: Assessing Progress

Selected indicators of progress in *Unleashing the Power of Prevention*:

- **Action Step 1:** Increase public awareness of prevention...
  - Up to 70% of the public favors preventive polices and practices
  - Now need them to support effective policies and programs

- **Action Step 2:** Ensure 10% of public funds are spent on prevention...
  - Recent federal legislation (e.g., *Healthy Kids Act* and *Family First Prevention Services Act*) and allocation of state marijuana tax dollars to preventive interventions demonstrate shift to prevention

- **Action Step 3:** Implement capacity-building tools to guide communities...
  - 27 states use statewide surveys to assess risk and protective factors for behavioral health problems
  - CTC is being implemented in more than 200 communities in the US:
    - 48 new CTC sites in 42 Colorado counties
  - PROPSER: **PRO**moting School-Community-University Partnerships to **E**nhance **R**esilience is being implemented in 64 sites in the US
• Selected indicators of progress in meeting the goals of *Unleashing the Power of Prevention*:

• Action Step 4: Establish and implement criteria for preventive interventions...

  Blueprints for Healthy Youth Development and other registries provide evidence for tested and effective programs

  Pennsylvania used *Blueprints* to create a menu of acceptable tested and effective programs

  Pew-MacArthur *Results First* works with 27 states to implement evidence-based decision making systems and programs

  *Washington State Institute for Public Policy* provides benefit cost analyses to inform public policy
• Selected indicators of progress in meeting the goals of *Unleashing the Power of Prevention*:

• **Action Step 5:** Increase State infrastructure to support prevention...  
  Pennsylvania’s *EpisCenter* supports high-quality implementation of tested and effective programs  
  
  Other backbone models and organizations include Massachusetts Technical Assistance Partnership for Prevention, and University of Maryland Institute for Innovation and Implementation, UNC Frank Porter Graham Child Development Institute, others?  

• **Action Step 6:** Monitor and increase access to effective preventive interventions...  
  States are working to develop integrated data structures across Justice, child welfare, education, employment, health, etc. Systems  
  
  PA implemented 327 tested and effective (*Blueprints*) programs between 1998 and 2018  
  
  Programs such as *LifeSkills Training* have expanded their reach in the nation’s schools and communities  
  
  Technology-assisted approaches to prevention are developed and tested
• Selected indicators of progress in meeting the goals of *Unleashing the Power of Prevention*:

• Action Step 7: Prepare students for practice in prevention...

20 interdisciplinary prevention training modules have been developed, Sloboda, Spoth et al

Curricula modules have been developed by the Coalition for the Promotion of Behavioral Health
Join the Coalition for the Promotion of Behavioral Health!

Coalition for the Promotion of Behavioral Health

Jeffrey Jenson, PhD, Co-Chair
Denver University
Jeffrey.Jenson@du.edu

Valerie Shapiro, PhD, Co-Chair
UC Berkeley
vshapiro@berkeley.edu
IDEA 2: Enhance Adoption of EBI by Building Prevention Infrastructure at the Community Level

- Build cross-sector prevention/promotion coalitions
- Assess and prioritize risk, protection, and behavioral health problems
- Match priorities to efficacious preventive/promotive interventions (policies/programs)
- EBI chosen should address priorities and fit with community values
- Enhance implementation fidelity and implementers’ capacity to reach sufficient and diverse community members
Effective Community Prevention Approaches in the Surgeon General’s Report

Communities that Care, PROSPER, Communities Mobilizing for Change on Alcohol, Project Northland, Project Star, Reducing Underage Drinking through State Coalitions, Safer California Universities, Saving Lives, Study to Prevent Alcohol Related Consequences, Sacramento Neighborhood Alcohol Prevention Project
CTC: A Continuous Improvement Process

1. Get Started
2. Get Organized
3. Develop Community Profile
4. Create a Plan
5. Implement & Evaluate
A trial of Communities That Care, with interventions supported in middle school produced significant reductions in drug use and delinquency compared to control communities. These differences were maintained beyond high school.
# CTC effects on youth outcomes

<table>
<thead>
<tr>
<th>Age 11 Grade 5</th>
<th>Age 12 Grade 6</th>
<th>Age 13 Grade 7</th>
<th>Age 14 Grade 8</th>
<th>Age 16 Grade 10</th>
<th>Age 18 Grade 12</th>
<th>Age 19</th>
<th>Age 21</th>
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## Delayed Initiation and Sustained Abstinence

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<thead>
<tr>
<th>Category</th>
<th>Age 11 Grade 5</th>
<th>Age 12 Grade 6</th>
<th>Age 13 Grade 7</th>
<th>Age 14 Grade 8</th>
<th>Age 16 Grade 10</th>
<th>Age 18 Grade 12</th>
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<td>✓</td>
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<td>✓</td>
<td>✓</td>
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<td></td>
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<td>✓</td>
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<td></td>
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<td>✓</td>
<td></td>
<td>ns</td>
<td>ns</td>
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</tr>
<tr>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓ males</td>
<td>✓ males</td>
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</tr>
<tr>
<td><strong>Marijuana</strong></td>
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<td>ns</td>
<td>ns</td>
<td>✓ males</td>
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<tr>
<td><strong>Any Drugs +</strong></td>
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<td></td>
<td>✓</td>
<td>✓ males</td>
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Scaling CTC
What is Possible in Two Decades?

• Pennsylvania Adopted CTC in 1994

• 16 cycles of CTC training have been delivered.

• About 65 CTC communities are currently functioning.

• First opportunity to study CTC in a long-term large-scale implementation under real-world conditions - developers not involved in the research.
Pennsylvania’s EBP dissemination in 1999...
Pennsylvania’s EBP dissemination in 2015...
Pennsylvania’s CTC coalitions
CTC Improves Academic Performance and School Engagement and Reduces Delinquency in Pennsylvania

(Feinberg, Greenberg et al., 2010).
Public Health Benefits 16 Years After Communities That Care in Pennsylvania

- Significantly reduced alcohol, marijuana and lifetime drug use (22-26%)
- Significantly less likely to be suspended from school or arrested by the police

(Chilenski et al., 2019)
Colorado adopted CTC as a statewide prevention system in 2016.

Budget for 2017-2018 using marijuana tax revenue:

$9,100,000
COLORADO
COMMUNITIES THAT CARE (CTC), 2017 - 2018
$9,100,000
48 COMMUNITIES THAT CARE IN 42 COUNTIES

KEY:

COUNTIES WITH... 22 0 CTC COMMUNITIES 34 1 CTC COMMUNITY 7 2 CTC COMMUNITIES

SOCIAL DEVELOPMENT RESEARCH GROUP
UNIVERSITY of WASHINGTON
School of Social Work
Colorado’s coaching and TA infrastructure supports high-quality implementation of CTC
Communities That Care
Building Community Engagement and Capacity to Prevent Youth Behavior Problems

By: Abigail A. Fagan, J. David Hawkins, David P. Farrington, and Richard F. Catalano

Communities That Care (CTC) is a coalition-based prevention system implemented successfully in hundreds of communities across the world that promotes healthy development and reduces crime rates for youth.

• Contains the first comprehensive description of the development, through community-based participatory research, implementation, and evaluation of the Communities that Care prevention system

• Includes the results of a benefit-cost analysis and beneficial findings demonstrated over a 14-year period

• Provides a comprehensive and current review of the literature related to community-based prevention

Hardback | 9780190299217
United States | December 2018 | $99.00
United Kingdom | December 2018 | £64.00
Paperback | 9780190299224
United States | December 2018 | $27.95
United Kingdom | December 2018 | £18.99

Order online at global.oup.com/academic with promotion code ASFLYQ6 to save 30%
Idea 3: Integrate Prevention/Promotion into Primary Care

- Preconception Health Care
- Prenatal Health Care (Preterm Birth, Adverse Exposures and Conditions, Prenatal Parenting Education)
- Postnatal Health Care
- Integrating Behavioral Care and Primary Health Care (Pediatric, Adolescent and Young Adult Medicine, Chronic Disease Care for Children and Youth)
Integrating Effective Parenting Programs in Primary Care

Guiding Good Choices for Health
WHY IMPLEMENT PARENTING PROGRAMS?

▪ Parents want their children to be successful

▪ Children want to discuss important issues with their parents throughout development

▪ Many risk and protective factors for behavior problems can be affected by family action

▪ Parenting programs have shown impact on risk and protective factors, increased positive and reduced behavioral health problems in controlled trials
TESTED & EFFECTIVE PARENTING PROGRAMS FOR PARENTS OF ADOLESCENTS

- Guiding Good Choices
- Family Check-Up/Positive Family Support
- Strengthening Families 10-14
- Strong African American Families
- GenerationPMTO
- Positive Family Support
- Group Teen Triple P – Level 4
- New Beginnings for Children of Divorce
- Effekt
- Familias Unidas
- Keep Safe
- Parent Handbook

¹Surgeon General, 2016  * blueprintsprograms.org
However...

SCHOOL-BASED TRIALS OF PARENTING PROGRAMS RECRUIT A SMALL PROPORTION OF THE ELIGIBLE SAMPLE: PROSPER EXAMPLE

- 17% of the eligible families enrolled in the Strengthening Families 10-14 study (Spoth, Clair, Greenberg, Redmond & Shin, 2007).

- PROSPER demonstrated that this level of involvement was still enough for significant population-level effects on youth substance use initiation.
WHY ARE EFFECTIVE PROGRAMS NOT WIDELY ATTENDED?

1) Stigma associated with participating in parenting programs;
2) Concerns about the expertise of those providing parenting advice;
3) Difficulties in accessing evidence-based programs,
4) Absence of stable, sustainable funding mechanisms.
Providing evidence-based parenting programs through primary health care could reduce stigma associated with participation, concerns about provider expertise, and difficulties in access.

These programs are not typically available through primary care because, traditionally, they have not been covered by private insurance, Medicaid or the Children’s Health Insurance Program.
WHY PARENTING IN PRIMARY CARE?

Shifts in pediatrics
- Broader focus – social influences on children’s health
- Behavioral health integration

Many effective parenting programs are aligned with goals of primary care
- Some have been successfully implemented in pediatric primary care
- Anticipatory guidance recommended by AAP

Doctors: trusted ally in children’s development
- Their recommendations matter to parents
  
  (Perrin, Leslie, & Boat, 2016; Leslie, et al., 2016)
Recruitment to Effective Parenting Programs is a Critical Research Question

- School-based trials of parenting programs have produced population wide effects despite low recruitment rates.

- What population level effect might be achieved if 40% or more of eligible families were reached with an effective preventive intervention?

- Can a non-stigmatizing, credible primary care provider obtain this level of parenting program exposure?
Guiding Good Choices for Health (GGC4H) Fills a Service Gap in Pediatric Primary Care

**Overall aim:** Evaluate feasibility and effectiveness of implementing Guiding Good Choices in 3 large integrated healthcare systems at the 12 year old well child visit

Working in partnership with University of Washington – developers of GGC

*This pragmatic trial – with 72 pediatricians and 3,600 families -- set in the context of real-world health systems, will allow us to examine recruitment and retention outcomes as well as adolescent behavioral health impacts.*

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
<th>Year 5</th>
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<tbody>
<tr>
<td><strong>UG3 Phase</strong>&lt;br&gt;1-Year Planning Phase</td>
<td></td>
<td>UH3 Phase&lt;br&gt;4-Year Pragmatic Trial</td>
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WE ARE HERE
What is Guiding Good Choices (GGC)?

- 5-session program -- all parents of adolescents ages 11-14

- Impacts (in 2 prior Tests):
  - Improved setting guidelines, monitoring children’s behavior, more positive, less negative consequences regardless of family risk (Spoth et al., 1998)
  - Substance Use Poly, Delinquency beh you can get arrested for; Depressive Symptoms (Mason et al., 2003, 2007)
  - Cost-beneficial: Benefit-Cost Ratio: $2.77 (WSIPP, 2018)

- Session goals – Social Development Model
  - Build family bonding
  - Establish and reinforce guidelines, monitor children’s behavior
  - Teach children skills to resist peer influence
  - Improve family management practices
  - Reduce family conflict

<table>
<thead>
<tr>
<th>GUIDING GOOD CHOICES SESSIONS</th>
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<tbody>
<tr>
<td>1</td>
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<td>3</td>
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<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
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</tbody>
</table>
Pilot Study Engagement and Pediatrician Referral Process

**KP Northern CA**
Large, urban clinic
Ethnically and socio-economically diverse

**KP Colorado**
3 clinics
2 suburban, 1 more urban
Diverse ethnically and socio-economically across clinics

**Henry Ford Health System**
1 suburban clinic
Large population of Arab Americans

- **Strong support from HCS leaders**
  - 5 out of 5 clinics agreed to participate in the trial
  - 15 pediatricians randomized to pilot; none opted out

- **HCS-embedded research teams facilitated fast start**

- **Pragmatic pediatrician referral process at well child visit**
  - Brief to fit normal workflow
  - Flexible to account for different pediatrician styles
  - Tools to facilitate
Prescription Pads

Guiding Good Choices: prescription for success

We know good parents like you often have a lot of questions about the teen years. You're looking for ways to help your kids avoid some of the risky behaviors that come with that age. You also want to know how to talk with your kids about challenging issues and keep your relationship strong.

We are offering a free class for parents called Guiding Good Choices that does just that. This proven-effective program provides you with tools to help your child steer clear of risky behaviors, communicate effectively, and maintain strong family bonds. It has helped many families like yours navigate adolescence. And it's now available to you.

Guiding Good Choices – A prescription for good health and wellbeing for young adolescents.

Instructions:
- Contact us: 510-910-1328
- Hear from us: We'll call you in 1-2 weeks.
- Attend our groups with food!

Prescriber:

Kaiser Permanente Oakland Pediatrics
Sample Scripts

“We have a new free program called Guiding Good Choices for Health and I’m encouraging all parents of my 11-12 year old patients to attend this free program.”

“The reason I’m recommending this class is that there is research showing that it is effective in helping parents talk to their kids about the importance of avoiding risky behaviors, while also supporting strong parent-child relationships.”

“We’re offering a new free class called Guiding Good Choices. It’s for parents of children your son’s/daughter’s age in my practice, to provide you with tools to help your child avoid risky behaviors during the challenging teen years while keeping your relationship strong.”
Pediatrician Referral and Parent Enrollment in GGC

- Naturalistic experiment with two modes of recruitment: In-person during well visit or by letter/email

- Both letter and pediatrician referral led to higher enrollment than in community settings
  - Some preliminary evidence that “in-person” pediatrician referral resulted in stronger enrollment
Pilot Study Supported Feasibility of GGC Group or Self-Guided

- High fidelity delivery, high retention and satisfaction among parents
  - ~75% of enrolled parents attended at least 1 GGC session
  - Modal attendance among attendees: 4 out of 5 sessions
  - Overall satisfaction: 6.8 out of 7.0 ("very worthwhile"), and 100% would recommend GGC to other parents

- Self-guided GGC: 67% of those offered engaged, much positive feedback.

- Parents also want guidance about social media and screen time.
Early Lessons

- Pediatric primary care may be a viable platform for scaling evidence-based parenting programs to achieve greater public health impact.

- GGC as a universal preventive intervention for parents of early adolescents fills a service gap.

- Pediatrician recommendation may lead to higher enrollment compared to community-based implementation.

- Parents like GGC!
### GGC4H Multi-site Leadership Team

*Guiding Good Choices for Health (GGC4H)*

#### GGC4H Scientific Leadership

<table>
<thead>
<tr>
<th>University of Washington</th>
<th>Kaiser Permanente Northern CA</th>
<th>Kaiser Permanente Colorado</th>
<th>Henry Ford Health System</th>
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</thead>
<tbody>
<tr>
<td>Richard Catalano, PhD, MPI</td>
<td>Stacy Sterling, DrPH, MPI</td>
<td>Arne Beck, PhD Site PI</td>
<td>Jordan Braciszewski, PhD, Project Officer</td>
</tr>
<tr>
<td>Margaret Kuklinski, PhD, MPI</td>
<td>Rahel Negusse, BA, Site PD</td>
<td>Jennifer Boggs, PhD Post-Doc</td>
<td>NCCIH Robin Boineau, MD, Project Officer</td>
</tr>
<tr>
<td>Sabrina Oesterle, PhD Methodologist</td>
<td>Charles Quesenberry, PhD, Lead Biostatistician</td>
<td>Erica Morse, MA, Site PD</td>
<td>NIDA Jacqueline Lloyd, PhD, Project Scientist</td>
</tr>
<tr>
<td>Kevin Haggerty, PhD GGC Master Trainer</td>
<td>Oleg Sofrygin, PhD, Biostatistician</td>
<td>Matt Daley, MD Physician Leader</td>
<td>Ad Hoc Members</td>
</tr>
<tr>
<td>Hendricks Brown, PhD Consultants</td>
<td>Constance Weisner, PhD, Senior Leader</td>
<td>Lauren Hartman, MD, Physician Leader</td>
<td>Qilu Yu, PhD, NCCIH</td>
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<tr>
<td>Kathryn McCollister, PhD</td>
<td>John Graham, PhD</td>
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<td>Elizabeth Nielsen, PhD, ODP</td>
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<td>Ellen Perrin, MD</td>
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<td>Erica Spotts, PhD, OBSSR</td>
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#### NIH Leadership

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<td>Jacqueline Lloyd, PhD, Project Scientist</td>
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We gratefully acknowledge GGC4H study funders
National Center for Complementary and Integrative Health
National Institute on Drug Abuse
Office of Disease Prevention
Office of Behavioral and Social Sciences Research

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A Role for Advocacy!
New policies and regulatory standards are needed

1. Effective family focused prevention programs for subclinical child behavioral health problems should be paid without requirement of a diagnosis of child disorder.

2. Effective family focused prevention programs provided through primary care practices and delivered by trained and certified allied professionals should be paid.

3. Effective family focused prevention programs provided to parents without the child/patient present should be paid.
For additional information, please visit http://www.nas.edu/CCAB

Add your name and contact information to the Collaborative on Healthy Parenting in Primary Care.

Contacts:
Leslie Walker-Harding, MD
Leslie.Walker-Harding@seattlechildrens.org

Erin Kellogg EKellogg@nas.edu
Conclusions

- Behavioral health problems are significant causes of adolescent morbidity and mortality
- Risk and protective factors that predict behavioral health problems are potential targets for intervention
- Controlled trials show that policies and programs can prevent adolescent behavioral health problems and promote healthy development
- Despite the evidence, effective promotion/prevention programs are under utilized
- 3 Big Ideas—Advocacy, Community/State Prevention Infrastructure Enhancement, Integrate Promotion/Prevention in Primary Care
Thank You!

Richard F. Catalano, Ph.D.

Co-Founder, Social Development Research Group
Professor, School of Social Work
University of Washington

www.sdrg.org

Join the Coalition!
Jeffrey.Jenson@du.edu

Join the Healthy Parenting Collaborative!
Leslie.Walker-Harding@seattlechildrens.org