Prioritizing Possibilities for Child and Family Flourishing: Our Greatest Public Health Opportunity

Because there is more right than will ever be wrong

By Christina Bethell, PhD, MBA, MPH
Professor of Bloomberg School of Public School, Johns Hopkins Bloomberg School of Public Health, Population, Family and Reproductive Health
Director, Child and Adolescent Health Measurement Initiative
The presenter documents that she has no financial relationships to disclose or conflicts of interest to resolve.
--What is flourishing to you?
--Is it an important public health priority?
--What do you believe is possible to do now to foster child, family and community flourishing?

We must believe in possibilities or there are none.
Well-Being is Upon Us
(and within and between us)
When our science, lived experience and policies meet

WE ARE THE MEDICINE
Ours is a social brain.
Preventing and healing developmental trauma is a matter of public health.
Knowledge about the biology of human relationships, brain plasticity, epigenetics and the healing journey make promoting healthy parenting, self-awareness and healthy relationships key public health strategies.


Flourishing Among School Age Children In the US (Age 6-17 years)----
Nationwide: 40.3%; State Range: 29.9%- 45.0%
https://www.childhealthdata.org/browse/survey/allstates?q=5373
Prevalence of Flourishing, US Children Age 6-17 Years

https://www.childhealthdata.org/browse/survey/allstates?q=5373

33% for United States Flourishing
34% for South Carolina Flourishing

Definitely True response to 0-1 items
Definitely True response to 2 items
Definitely True response to all 3 items

Flourishing (based on factors possible for parents to observe and foster):

1. **Curiosity**: Interest and curiosity in learning new things
2. **Body/Emotion Regulation**: Stays calm and in control when faced with a challenge. Enables positive relationships, engagement, etc.
3. **Persistence/Determination**: Works to complete tasks begun

Shining a light on flourishing is important for all children in the US!

Variation by Insurance Type
School Age (6-17)

- **Publicly Insured**: 37.2% Nationally (26.3% SC) meet all 3 criteria
- **Privately Insured**: 45.3% Nationally (47.3% SC) meet all 3 criteria
Over one in five of children in South Carolina have 2 or more ACEs (21.0%)

https://www.childhealthdata.org/browse/survey/allstates?q=5545
When a baby feels safe, they explore and if a baby explores, they learn.
Clemson Memorial Stadium
Can Hold 82,000 fans

USC Williams-Brice Stadium
Can Hold 80,000 fans

About 44.9%—Approximately 481,071—of children in SC have 1 or more ACEs

That’s Memorial Stadium AND Williams-Brice Stadium combined, times three!

Children who flourish only fill both stadiums 1.7 times

How far would a line of school buses span if they were filled with children with ACEs in South Carolina?

With 1+ ACEs: 66.3 miles
This is 5x the length of Hilton Head Island

With 2+ ACEs: 30.9 miles
This is 3x the length from the Nurturing and Developing Minds Conference to the Airport!

Children who have experienced at least one ACE can make up 2/3 of the length is takes from Greenville, SC to the South Carolina State House in Columbia!

Bethell, C 2019
Flourishing by Adverse Childhood Experiences (ACEs), 2016-2017 NSCH

Prevalence of Flourishing by ACEs, Age 6-17 Years
Nation vs. South Carolina

<table>
<thead>
<tr>
<th>No ACEs</th>
<th>1 ACE</th>
<th>2-3 ACEs</th>
<th>4+ ACEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nation</td>
<td>47.9%</td>
<td>37.8%</td>
<td>30.6%</td>
</tr>
<tr>
<td>SC</td>
<td>45.4%</td>
<td>38.5%</td>
<td>22.1%</td>
</tr>
</tbody>
</table>

ACEs Rates US Children Age 0-17: No ACEs: 55.0%; 1 ACE 23.9%; 2+ ACEs 20.9%

Bethell, C 2019
Proportion of Children With Mother’s In Excellent or Very Good Physical and Mental Health: By Child’s ACEs Status

Maternal Health and Child Health

Source: Bethell, C 2016
What is flourishing and is it an important public health priority?

**Prompts**

- Where do you see human flourishing in your life?
- What are attributes and requirement for flourishing?
- Is human flourishing an important public health opportunity?
- What would be required to promote flourishing?
- Complete the short Flourishing Survey and see how it maps to your notion of flourishing
Below are eight statements with which you may agree or disagree. Using the 1–7 scale, indicate your agreement with each item by picking the appropriate response for each statement.

7 – Strongly agree
6 – Agree
5 – Slightly agree
4 – Neither agree nor disagree
3 – Slightly disagree
2 – Disagree
1 – Strongly disagree

1. I lead a purposeful and meaningful life
2. My social relationships are supportive and rewarding
3. I am engaged and interested in my daily activities
4. I actively contribute to the happiness and well-being of others
5. I am competent and capable in the activities that are important to me
6. I am a good person and live a good life
7. I am optimistic about my future
8. People respect me

**Scoring:**
Add the responses, varying from 1 to 7, for all eight items. The possible range of scores is from 8 (lowest possible) to 56 (highest PWB possible). A high score represents a person with many psychological resources and strengths.
"The way I see it, every life is a pile of good things and bad things. The good things don't always soften the bad things, but vice-versa, the bad things don't necessarily spoil the good things and make them unimportant."

-The Doctor, Doctor Who

Health operates on a dual continuum: absence of illness and adversity does not equal positive health and positive health can exist in the midst of disease and adversity.
Flourishing of the remembering self
Life Satisfaction Evaluation

Flourishing of the experiencing self
Real time assessment of your enjoyment and pleasure

Flourishing of the requiring self
Assessment of having fundamental needs met (safety, food, housing, social support)

Flourishing of the living and relating self:
A way of living that is engaged and enables and reinforces a sense of meaning and growth and positive relationships

Source: Author's conceptualization and synthesis (Bethell, 2019)
Three Components of the Child Flourishing Index from the National Survey of Children’s Health

Curious & Interested in Learning New Things

Persist & Works to Complete Tasks

Stays Calm & In Control When Faced With Challenges

Interrelated attributes that reflect, contribute to or are precursors for flourishing of the “living and relating self” & supporting living a meaningful and engaged life
Chicken or egg questions—is it trauma and poor resilience or the diagnosis?

Prevalence of emotional, mental or behavioral conditions 3.6 times lower among children who experience 2 or more Adverse Childhood Experiences when they are taught resilience (all US children ages 6-17)

Prevalence of Emotional, Mental or Behavioral Problems Identified by the CSHCN Screener, by Resilience and ACEs, age 6-17 years


Child and Adolescent Health Measurement Initiative (CAHMI)
Can we do this?

Promote family resilience and connection
Components of the Family Resilience and Connection Index
Created using data from the combined 2016 and 2017 National Survey of Children’s Health

Family Resilience
(talk & work together, hopeful, sees strengths)

Parent-Child Emotional Connection

Parents Cope with Demands of Parenting

Interrelated attributes that reflect, contribute to or are precursors for family resilience and connection

Source: Bethell, C 2018
Can we do this?

Promote whole population flourishing
Flourishing by Household Income: By ACEs and Health Status

Prevalence of Flourishing, Age 6-17 Years

Source: Bethell, C. 2017

(Excerpt: Christina Bethell)
Prevalence of Emotional, Behavioral or Developmental Problems Among Children with 4+ ACEs: By Federal Poverty Level (FPL)

- **All Children**: 14.2%
- **400% FPL**: 37.2%
- **200-399% FPL**: 35.4%
- **100-199% FPL**: 37.7%
- **0-99% FPL**: 41.8%

Source: Bethell, C 2016

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Rich or poor
The withholding of love Pierces
May you be led to the mysterious transfiguration this piercing can allow
And open to the truth from within like the nautilus closing off all former layers
And slowly, patiently rising up into the love that always was
Mirrored or not Always was Always will be

Excerpt from "Breaking Ground" Christina Bethell
Dismantle and transform our narrative and the cultural and systems structures that have enabled inequities and neglect of our own well-being and flourishing as a population.
“The success of an intervention depends on the interior condition of the intervenor.” William O’Brien, former CEO, Hanover Insurance

<table>
<thead>
<tr>
<th>Growth Mindset*</th>
<th>Fixed Mindset</th>
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<tbody>
<tr>
<td>Attention on learning what works as its own reward</td>
<td>Attention on being right to avoid implicit or explicit “punishment”</td>
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<tr>
<td>Curiosity and tolerance for complexity and not knowing</td>
<td>Drive to simplify and know</td>
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<tr>
<td>Developmental mindset where the possibility to improve and change is embraced</td>
<td>People are seen as fixed and incapable of change. Needing to improve frowned upon.</td>
</tr>
<tr>
<td>Experimentation, learning and feedback infuse daily work life.</td>
<td>Standardization, knowing and limited feedback</td>
</tr>
</tbody>
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*Twitter CEO Janet Van Huysse and Carol Dweck, Stanford University “Beliefs Organizations Should Hold” 2011 Neuroleadership Summit

“To translate individual engagement to collective engagement, companies must also cultivate a culture of trust and respect,” Elizabeth Craig and Yaarit Silverstone "Tapping the Power of Collective Engagement."
Are We Suffering from a Societal Level “Hard-Easy” Cognitive Bias?

Source: Bethell, C 2016

Depression Lowers When Teens Learn They Can Change, Study Shows

Sept. 23, 2014

A low-cost, one-time intervention that educates teens about the changeable nature of personality traits may prevent depressive symptoms often seen during the transition to high school, according to new research from The University of Texas at Austin.
Can we do this?

Inspire to rewire....and heal...together!
Earl Life Adversity

Protective factors  →  Predisposed vulnerability

NEURO  CHRONIC DYSREGULATION  ENDOCRINE  IMMUNE

TOXIC STRESS

Clinical Implications

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<tr>
<th>Epigenetic</th>
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<td>Immune</td>
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<tr>
<td>Inflammatory</td>
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<tr>
<td>Cardiovascular</td>
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Source: Adapted from Bucci, M., et al. Toxic Stress in Children and Adolescents, 2016

http://www.kscourts.org/court-administration/Legal_Institute_on_Adverse_Childhood_Exp/Toxic%20Stress%20in%20Children%20and%20Adolescents%20(Bucci%20et%20al%202016).pdf
The event(s) or circumstance(s) causing actual or perceived physical or psychological harm

One’s experience of the event – differs across individuals – depends on beliefs, availability of supports, developmental stage, meaning making

The resulting effects or symptoms – neurobiological and behavioral adaptations

Source: SAMHSA’s Concept of Trauma and Guidance for a Trauma-Informed Approach (2014)
ACEs and Toxic Stress: Impact Pathways

"You can go good places with your mind if you can’t go good places with your body."
Stephen Porges, PhD
Professor Emeritus, University of Illinois at Chicago.
Director, Brain Body Center in the Department of Psychiatry. Author: The Polyvagal Theory

Source: Kabat Zinn, J, Full Catastrophe Living, 2009
TRAUMA INTERRUPTED
Self-Awareness of Sensations, Thoughts and Emotions, Stress Regulation and Promoting Positive Emotions Leverage Neuroscience and Epigenetics

Inside Out: 'vastly more complex than a $175m studio tentpole has any right to be'

Pixar’s latest effortlessly conveys the idea that its hero is both the sum of her emotions and somehow independent of them.
The power of seeing the pattern!

Source: Bethell, C. 2015
Nearly 50 Years of Research Linking Child Well-Being to Safe, Stable, Nurturing Relationships to Stress and Health Across Life

1968
Herbert Benson of Harvard University publishes *The Relaxation Response*

John Bowlby publishes *Attachment and Loss*

1975
Norman Cousins (UCLA) publishes *Anatomy of an Illness* in the *NEJM*

1976
Richard Davidson publish first neuroscience paper evaluating the effects of meditation on brain physiology and attentional and affective capacities.

Eugene Gendlin from University of Chicago publishes “Focusing” which lays out a 6 step process for changing the way thoughts and emotions impact the body.

1982
David Barker publishes landmark research and theories on the fetal and early life origins of health and adult disease, launching a now vital new field of study on the developmental origins of health and adult disease (DOHaD).

1986

1990
Jon Kabat Zinn publishes bestselling *Full Catastrophe Living* -- the first textbook describing mechanisms of stress on the body-mind and role of mindfulness-based stress reduction approaches to reduce pain and improve mental and physical health.

1996
CDC/Kaiser Permanente launch the Adverse Childhood Experiences (ACE) Study to understand links between childhood social and emotional experiences and adult health.

1998
Former JHU NIMH scientist central to Nobel Prize winning discovery of the opioid receptor site publishes *Molecules of Emotion* documenting the molecular underpinnings of the mind-body connection.

Daniel Siegel publishes *The Developing Mind* textbook that integrates multiple streams of neuroscience, biologic and human development sciences into a coordinated theory called *Interpersonal Neurobiology*.

1999
The Institute of Medicine/National Academy of Sciences releases *Neurons to Neighborhoods*.

2000

Source: Bethell, C 2016
Nearly 50 Years of Research Linking Child Well-Being to Safe, Stable, Nurturing Relationships to Stress and Health Across Life

2010

- The World Health Organization World Mental Health Survey Initiative documents impact of ACEs and other adversities across 21 countries, finding similar results as the CDC/Kaiser ACE study.

2011

- The National Survey of Children’s Health includes questions about ACEs and resilience, providing first ever population based data for all US children, youth and families.

2012

- Nobel Prize winning Elizabeth Blackburn’s research team finds mindfulness meditation may slow the rate of cellular aging and extend life expectancy.

- The American Academy of Pediatrics Issues is first policy statement to pediatricians explaining and advancing the science and practice of preventing and addressing early childhood stress and trauma.

2013-2015

- Numerous high profile studies published linking early childhood investments to adult health
- Precedent setting lawsuit launched against CA School District giving children with social and emotional trauma rights under the American’s With Disabilities Act

2016

- The American Academy of Pediatrics will publish its first policy statement to US pediatricians on the use of mind-body methods to improve health of children and youth.
- North Carolina ACO specifically studies Community Resilience Model as strategy for chronic disease management

Source: Bethell, C 2016
Advances in the sciences of human development create unprecedented opportunities to proactively advance child well-being. Breakthrough findings across disciplines point to a new science of thriving that illuminate often untapped capacities for the promotion of healthy development and healing despite adversity. Given high rates of adversity, healing is prevention.

Key to this possibility are policies and practices that enable and support families and communities to recognize and learn to heal and flourish in the face of stress and adversity. Relationships and engagement are fundamental!

New Science of Thriving: Design Concepts

- Concerns itself with the **capacity** for positive human development even in the face of adversity.
- Frames flourishing as a **learned** ability of the “living and relating self”
- Places the **locus** of human health and dynamics of development within the social, emotional, and environmental context we co-create
- Balances conventional focus on negative development, risk factors and pathology with an explicit **focus on strengths and what is already whole**
- Innovates to **engage** largely untapped capacities for self-led healing, resilience and flourishing at the individual, family, community and societal levels
- Focuses on the **social and emotional skills** central to preventing interpersonal harm, poor self-care behaviors and essential to enhance self-healing, resilience, and higher consciousness

Bethell, C. 2015

A National Agenda to Address Adverse Childhood Experiences

What are ACEs and Why Do They Matter?

In 2016, nearly half of U.S. children—34 million kids—had at least one Adverse Childhood Experience (ACE) and more than 20 percent experienced two or more. The new brain sciences and science of human development explain how ACEs can have devastating, long-lasting effects on children’s health and wellbeing. These events resonate well beyond the individual child to have far-reaching consequences for families, decades, and communities.

Developing a National Agenda

Over a four-year period, the Child and Adolescent Health Measurement Initiative (CAHMI) and Academy Health engaged more than 500 people across multiple sectors in a rigorous process to establish a national agenda to address ACEs. It began with the first-ever available national and state level data on ACEs, resilience, and family functioning from the 2011–12 National Survey of Children’s Health. To develop the agenda, a series of in-person meetings and

SUMMARY FROM NATIONAL AGENDA AND FIELD BUILDING COLLABORATION

Prioritizing Possibilities for Child and Family Health: An Agenda to Address Adverse Childhood Experiences and Foster the Social and Emotional Roots of Well-being in Pediatrics

Christina D. Bethell, PhD, MBA, MPH, Stephanie Guinosso, PhD, MS, David Ford, BA, Lisa A. Simpson, MA

From the Child and Adolescent Health Measurement Initiative, Academy Health, Washington, DC; and the National Collaborative for Adverse Childhood Experiences and Child Well-being, Washington, DC.

The authors have no conflicts of interest to disclose. Address correspondence to Christina D. Bethell, PhD, 1111 19th St NW, Suite 800, Washington, DC 20036.

Citation: Bethell, CD, Simpson, LA, Solloway, M, Adverse Childhood Experiences and Foster the Social and Emotional Root of Well Being. Academic Pediatrics (2017).

Translate the science of ACEs, resilience, flourishing and nurturing relationships

Cultivate the conditions for cross-sector collaboration to incentivize action and address structural inequalities

Fuel “launch and learn” research, innovation, and implementation efforts

Restore and reward safe and nurturing relationships and self-, family-, and community-led prevention and healing


Guinosso, S, et al. Prioritizing Possibilities for Child and Family Health: An Agenda to Address
Summary from National Agenda and Field Building Collaboration

Prioritizing Possibilities for Child and Family Health: An Agenda to Address Adverse Childhood Experiences and Foster the Social and Emotional Roots of Well-being in Pediatrics

Christina D. Bathel, PhD, MBA, MPH; Michele R. Sulykway, PhD, MPA; Stephanie Guinosso, PhD, MPH; Sandra Hasenik, MD, FAAP; Aditi Shrivastav, MPH; David Ford, BA; Lisa A. Simpson, MB, BCh, MPH, FAAP

Payment for Progress: Investing to Catalyze Child and Family Well-Being Using Personalized and Integrated Strategies to Address Social and Emotional Determinants of Health

A report on strategic priorities emerging from the “Payment transformation to address social and emotional determinants of health for children” project, Prepared for the Children’s Hospital Association by the Child and Adolescent Health Measurement Initiative, Johns Hopkins University, and AcademyHealth.

Christina Bathel, PhD, MBA, MPH; Susan Kennedy, MPP, MSW; Enrique Martinez-Vidal, MPP; Lisa Simpson, MD, BCh, MPH, FAAP

November 2018

Proposition 64 Recommendations Roadmap

“These recommendations seek to ensure that a culturally responsive, racially just, healing-centered and trauma-informed approach guides expenditure decision processes”

Below is a high-level summary of recommendations in each of these areas:

1. Relationship and Engagement-Centered Assessment, Interventions, and Healing;
2. Training and Capacity Building;
3. Cross-Sector Collaboration;

“Compassionate, dependable, and trustworthy relationships that foster interpersonal and community connections re-establish healing and well-being as well as a sense of agency in addressing trauma.”
Love as a Public Health Intervention

Marissa J. Levine, MD, MPH; Mary Ann Cooney, MPH, MSN, RN

Would actions of compassion, care, helpfulness, respect and devotion improve community health?
South Carolina launches a national, community-based campaign to advance a new science of thriving—demonstrating child and family flourishing is possible now!!

By John Smith
We Are the Medicine

Healing is Upon Us!
(and within and between us!)

Source: Bethell, C 2016
EXTRA SLIDES/FOR COMMUNITY PANEL DIALOGUE
Structure of Scientific Revolutions
An acronym for making a lasting impact toward a safe, sustainable more compassionate community

PIRMA
Population-Based
Integrated
Relationship-Centered
Multi-Systems
Advocacy oriented


Child and Adolescent Health Measurement Initiative
Integrating a Trauma Informed Approach With an Explicit Focus on Restoring Relatedness, Connection and Nurturance

- **Realizes**
  - the widespread impact of trauma and understands potential paths for recovery

- **Recognizes**
  - the signs and symptoms of trauma in clients, families, staff, and others

- **Responds**
  - by fully integrating knowledge about trauma into policies, procedures, and practices

- **Resists**
  - re-traumatization by fully integrating knowledge about trauma into policies, procedures, and practices

Implementing trauma informed principles represents a *We Are the Medicine* paradigm shift

Relational wounding requires relational healing

Source: Substance Abuse Mental Health Services Administration, National Center for Trauma-Informed Care ([http://www.samhsa.gov/nctic/trauma-interventions](http://www.samhsa.gov/nctic/trauma-interventions))

Source: Bethell, C 2016
Four key capabilities of infrastructure were emphasized in the national agenda setting process (see Bethell, C. (et al) Prioritizing Possibilities, Academic Pediatrics, Special Issue, September, 2017).
What is most difficult, that which is easiest, to see what is before your eyes. Goethe

2001 National Research Council Future Directions for NIH Behavioral and Social Science Research
1. Predisease pathways
2. Positive health
3. Gene expression
4. Personal ties
5. Healthy communities
6. Inequality
7. Population health
8. Interventions
9. Methodology
10. Infrastructure
WE NEED: Both Population-Based and High Risk Methods for Addressing Trauma and Promoting Positive Health

High Risk Trauma-Specific Interventions Recognize:

1. The survivor's need to be respected, informed, connected, and hopeful regarding their own recovery

2. The interrelation between trauma and symptoms of trauma such as substance abuse, eating disorders, depression, and anxiety

3. The need to work in a collaborative way with survivors, family and friends of the survivor, and other human services agencies in a manner that will empower survivors and consumers

Known Trauma-Specific Interventions
Addiction and Trauma Recovery Integration Model (ATRIUM)
Essence of Being Real
Risking Connection®
Sanctuary Model®
Seeking Safety
Trauma, Addiction, Mental Health, and Recovery (TAMAR)
Trauma Affect Regulation: Guide for Education and Therapy (TARGET)
Trauma Recovery and Empowerment Model (TREM and M-TREM)
Vision for the National Agenda

(see Bethell, C. (et al) Prioritizing Possibilities, Academic Pediatrics, Special Issue, September, 2017)

- Improved resilience, positive health, and healthy social-emotional skills for children and families
- Higher rates of children who are healthy and ready to learn and positively engaged in school and life
- Increase in families providing safe, stable, and nurturing relationships and environments for children
- Increases in self, family, and community self-care and use of evidence-based mind-body and related trauma healing and stress reduction methods

- Trauma-informed systems of care and workplaces
- Reductions in health problems and costs associated with ACEs, trauma, and chronic and toxic stress, including social costs due to poor health behaviors, loss of hope, and crime
- Reduced provider burnout
- Reduced structural inequities that contribute to stress and ACEs, and pose barriers to healing trauma
- Reduction in ACEs
With awareness of trauma and its impact, agencies make changes to:

- Practices
- Policies
- Environment

**Consequence of TIC Changes**

- Service Users and Staff...
  - Feel safe
  - Feel empowered (with voice and choice)
  - Feel valued and cared for
  - Believe organization has their interests in mind
  - Trust the organization, staff, and leadership

**Short-term Outcomes** (hypothesized)

- Service user will be engaged
  - Appointment completion
  - No shows
  - Absences (school)

- Staff will be engaged
  - Turnover
  - Sick days

- SU will be satisfied with service
  - Satisfaction survey
  - Self report

**Staff will be satisfied with work**

- Turnover
- ProQOL
- Commitment to Org measure
- Self report

**Better Health & Wellness** (Long-term Outcomes)
Prioritize Possibilities

There is more right with us than will ever be wrong!

Expand the scope of the legislation to include **prevention and resilience-building** as well as treatment; and address ongoing adversity as well as specific traumatic events.

Identify and support the use of **best practices** by building on existing **knowledge** and structures.

**Strategic Recommendations on Proposed Legislation to Address Trauma (Durban-Hietkamp)**

Expand the scope of the legislation to include **prevention and resilience-building** as well as treatment; and address ongoing adversity as well as specific traumatic events.

Prioritizing prevention and early intervention for **high-risk individuals**

Identify and support the use of **best practices** by building on existing **knowledge** and structures.

Address health care practices in a **comprehensive and inclusive** manner.

Test new models using a **variety of evaluation strategies**, looking more broadly to support both evidence-based practices and emerging practices that show success.

Disseminate best practices, but also focus on **systemic change**.

**Law enforcement coordinating center**

**Faith leaders and other community figures**

**Workforce**