Change in Mind:

Tools to Translate Science into Policy and Systems Change

Healthy child development is the basis for prosperous children, families, and communities. Adverse experiences in childhood that generate toxic levels of stress can cause negative effects on the development of brain architecture, which provides the groundwork for all future learning, behavior, and health[1]. Just as a weak foundation compromises the quality and strength of a house, adverse experiences and toxic stress in childhood can impair brain development, with negative effects lasting into adulthood[2]. The threats to healthy development are complex and require practice and policy solutions to meet these challenges. To better engage these challenges, Children's Hospital of Wisconsin (Children's) applied to become a site in the Change in Mind (CiM) Initiative, which focused on advancing science based policies and practices that address and prevent the consequences of toxic stress.

A collaboration between the Alliance for Strong Families and Communities, the Robert Wood Johnson Foundation, and Palix Foundation/Alberta Wellness Initiative, the goal of CiM is to infuse, align, and accelerate the infusion of insights from brain science research into practice, policy, and systems change. Starting with a learning cohort of 15 organizations from the United States (10) and Alberta, Canada (5), the initiative focused on providing an adaptive framework around how to support policy and systems change. CiM recognized that non-profit organizations play a central role in developing and advancing brain-science informed solutions, and saw opportunity to provide additional tools to enhance these innovations.

By connecting experts in the areas of brain science, health, strategic communication, policy, and evaluation with a community of practice comprised of non-profit organizations, CiM established an

adaptive approach for advancing science based policy. Increasing the capacities of organizations supports a wide range of system change efforts, including Children's efforts to expand the use of evidence based services and support healthy and stable housing, while also advancing collective efforts in the U.S. and Canada. Exposure to the insights, knowledge, and experiences of cohort peers and experts invited to convene provided essential tools that have improved how we approach systems change and practice innovation.

Lessons Learned from Change in Mind

CiM provided a unique learning experience, both with information from experts in their respective fields, project team members, and peers in the community of practice. The following highlights represent some of the insights generated from CiM that Children's has already infused into our work to support practice and policy innovation:

Systems Innovation in Practice

The **Alberta Family Wellness Initiative** is an example of philanthropic and governmental funders collaborating with service providers across systems to align practice, policy, and funding with brain science. Beginning in 2004, the **Palix Foundation** sought to improve the health and well-being of Alberta residents by bridging the gap between the latest evidence on brain development, mental health, and addiction with day-to-day practice and policy.

AFWI then embarked on a several years innovation process that engaged researchers, government officials, and experts in strategic communication before launching a three-year knowledge mobilization process. Participants from academia, research, the non-profit sector, practice, policy, government, health care, justice, education, early childhood, and human services convened in cross-sector learning teams to support integration of brain science concepts into practice and policy.

AFWI's ongoing efforts include supporting "Innovation Teams" focused on breaking down communication barriers, transforming knowledge into action, dissemination of multimedia training and research materials, as well as professional development and outreach in the community.

Evaluation doesn't have to wait.

Systems change is a complex, multi-level and non-linear endeavor which frequently needs to monitor effectiveness and adapt to changing circumstances. Developmental Evaluation is a method grounded in systems thinking and complexity theory that supports innovation by collecting and analyzing real time information that leads to informed and ongoing decision making as part of the design, development, and implementation process[3]. This approach features the evaluator as an embedded team member, assisting in generating insights that inform strategic course corrections in real time. CiM employed Developmental Evaluation, utilizing rapid cycle testing to support the wide range of activities within the cohort, including ongoing project adjustments, as well as understanding the collective impact of the initiative.

Strategic communication supports systems change.

Framing issues within a positive context, avoiding public misconceptions and unproductive assumptions while using metaphorical explanations supports communicating with a strategic purpose. Research from The FrameWorks Institute found that public discourse tends to misunderstand the structural and societal causes of underlying problems, as the public over-attributes an individual's choice in causing social issues[4]. FrameWorks has been developing, testing, and supporting the use of topic-specific strategic frames to support system changes, and shared insights and resources from their work around child development with the CiM cohort. While the target audience may change, FrameWorks' principles have been applied in a diverse range of settings, with tools and techniques focused on advancing conversations around new solutions to the threats toward healthy child development.

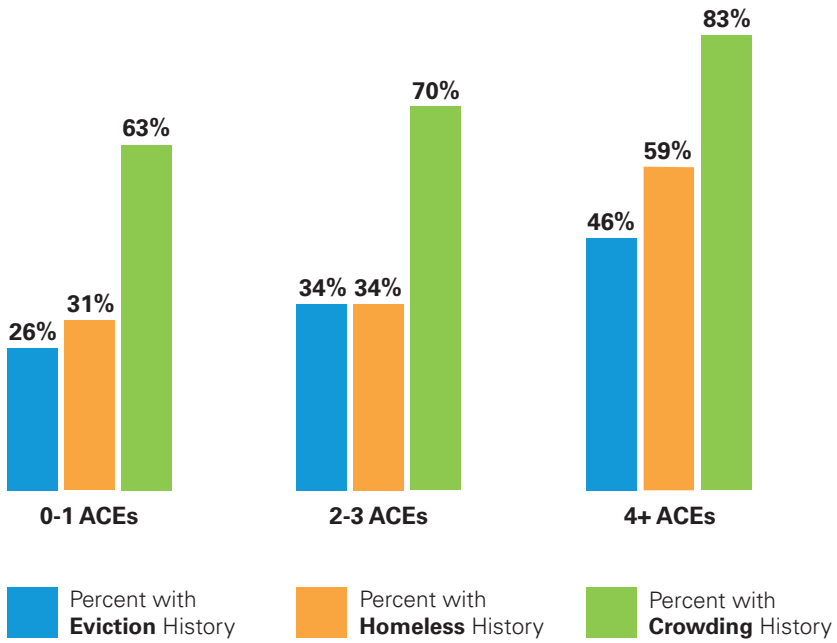
Brain science should inform practice, policy, and funding.

The CiM issue brief, *Using a Brain Science-Infused Lens in Policy Development*[5], advances values and principles that can be used to inform policies and procedures that support evidence-based practices. Science based policies are a core component to establishing lasting systemic changes that are centered on enhancing child development and parent core capabilities. Significant and enduring shifts in improving systems through infusing brain science into policy and practice can only occur with support of funders, both philanthropic and government based. Both play a role in emphasizing the use of science driven practice and creative systemic solutions that both address complex challenges and measurably improve child and family well-being. Having a shared understanding of brain science, from funders to families, can also provide an opportunity to redefine systems success and function in supporting child and family well-being.

Design thinking adds structure for creative solutions.

Developing solutions for complex challenges that have no, or limited, established solutions requires an approach that provides a framework for innovation. Through the CiM community of practice Children's was exposed to Human-Centered Design (HCD), a creative problem-solving method that provides tools and structure for addressing complex problems, while also incorporating the voice and perspective of those impacted by the change process. Another design thinking approach highlighted in CiM was Frontiers of Innovation's (FOI) IDEA Framework, which draws on HCD and adds additional scientific rigor and principles to create interventions based in brain science that address unmet needs in existing programs and practices. A core component of both approaches is an iterative process of small scale testing of new interventions, rapid feedback from a wide range of sources, making program design alterations, and repeating the process until the desired outcomes are achieved.

ACEs and Housing Instability of Parents Involved with Child Welfare



Brain science has demonstrated how adverse childhood experiences (ACEs) can negatively impact planning, focus, and self-control in adulthood. Linking ACEs and housing history data of parents with children entering foster care uncovered a need to create easier and timely access to housing for families. This resulted in establishing the HOMES initiative, which included multiple collaboration projects with local advocates to provide stable and healthy housing to families at-risk.

> "The only thing worse than failing and not knowing why you failed, is succeeding and not knowing why you succeeded."
>
> — *Jane Timmons-Mitchell*

Measuring process is necessary but not sufficient.

Our better understanding of brain science provides an opportunity to measure the success of programs differently. The consequences of chronic adversity on child development and the central role parents play in developing resiliency in children forces us to look beyond a family's "successful exit" from a program or system, to meaningful changes in child and parent functioning. Current program outcomes are often based on process indicators such as changes in the number of children or families served, or reductions in days in care, neither of which speak to improvements in functioning or likelihood of long-term success for the family. While measuring core practices and process indicators can be essential in supporting key principles of practice, they are not sufficient to measure progress on positive and long-lasting change. What we understand now about brain architecture and development necessitates a change in how we define success in programs and systems. A shift toward program and systemic metrics centered on changes in child development and adult functioning, while challenging on several levels, more accurately reflects the impact of programs and systems on child and family well-being.

Conclusion

Our understanding of the complex challenges that families face has grown significantly based on research on adverse childhood experiences, brain science, and toxic stress. These insights provide seemingly endless opportunities to improve health and well-being. Family serving organizations need systems, policies, and funding sources with a shared foundation in brain science, combined with understanding and willingness to innovate, to fully realize this opportunity. Change in Mind provided access to knowledge, insights, and methods that can be central to leveraging brain science to realize meaningful system changes that support the well-being of children, families, and communities.

Benefits from the Change in Mind Initiative

The Change in Mind Initiative provided Children's with valuable tools, a community of practice, and expertise to support innovation at both the system and practice level. Children's and the Institute for Child and Family Well-Being have applied lessons learned from CiM in several projects, with outcomes including:

Strategic Framing

We used framing in our ongoing educational activities with staff, policy makers, and other organizations around brain science concepts and their application.

Design Thinking

We integrated concepts from Human Centered Design and the Frontiers of Innovation IDEA Framework to structure projects on housing, child neglect, and school based mental health.

Rapid Cycle Evaluation

We used applied Developmental Evaluation concepts in our efforts to affect change at the policy and systems level, enabling us to monitor progress and adjust strategy.

Science-Based Priorities

We prioritized practice innovation efforts around evidence based 2-Generation approaches such as Parent-Child Interaction Therapy and Trauma-Focused Cognitive Behavioral Therapy.

Cross-Systems Change

We focused our systems change efforts around evidence based cross system approaches that ease stress on families, such as School Based Mental Health, supportive housing in child welfare, and Medical-Legal Partnerships to stabilize housing within a community health program.

Citations:

[1]The Science of Early Childhood Development. (2007) National Scientific Council on the Developing Child. http://www.developingchild.net

[2]National Scientific Council on the Developing Child. (2005/2014). Excessive Stress Disrupts the Architecture of the Developing Brain: Working Paper 3. Updated Edition. http://www.developingchild.harvard.edu

[3]Developmental Evaluation: Applying complexity concepts to enhance innovation and use (2011), Michael Q. Patton

[4]FrameWorks Institute (2007). Frequently Asked Questions about Framing and FrameWorks. Washington, DC: FrameWorks Institute. http://www.frameworksinstitute.org/assets/files/eZines/FAQ_ezine.pdf

[5]Alliance for Strong Families and Communities & The Palix Foundation (2016). Using a Brain Science-Infused Lens for Policy Development. Achieving healthier outcomes for children and families. http://www.alliance1.org/change-in-mind

Resources:

Alliance for Strong Families and Communities Change in Mind:
http://alliance1.org/change-in-mind

Alberta Family Wellness Initiative:
http://www.albertafamilywellness.org/

The Center on the Developing Child at Harvard: Frontiers of Innovation:
http://developingchild.harvard.edu/innovation-application/frontiers-of-innovation/

Human Centered Design Field Guide:
http://www.designkit.org/resources/1