

# Using Evidence to Support Healthier Families and Better Lives

Bruce F. Chorpita, Ph.D. UCLA Department of Psychology

Forum on Mental Health and Substance Use Disorders

Session Three: Promising Strategies to Translate Knowledge into Practice and Monitor Implementation

October 15-16, 2019

#### Acknowledgements and Disclosures





MacArthur Foundation



Much of the funding supporting these ideas comes or has come from the Hawaii Departments of Health and Education, the John D. and Catherine T. MacArthur Foundation, the William T. Grant Foundation, and the Wellcome Trust.

I am a founder and co-owner of PracticeWise, LLC, which builds evidence resources and provides consultation in their use.



#### Our Goal

- Alleviating human suffering by increasing the public impact of science
- Building healthier families, stronger communities
- Transforming lives



#### How Are We Doing in Youth Mental Health?

- 1,118 RCTs showing what works in youth mental health
- 50+ years of research and 20+ years of implementation
- Most youths still receive no care or low-quality care
- Evidence is packaged in a way that makes it difficult to use



#### **Evidence Based Treatments**

- There are 773 EBTs for youth
- A comprehensive array of EBTs is not possible
- EBTs have at times performed poorly in multiple community trials
- Mandates are not sufficient and not always helpful

#### How Are We Doing in You

PracticeWise. (2019). Evidence-based youth mental health services literature database. Satellite Beach, FL: Author. Retrieved from www.practicewise.com

- 1,118 RCTs showing what works in yout
- ntal health

50+ years of research and 20+ years

Most youths still receive no care or

Southam-Gerow MA, Weisz JR, Chu BC, McLeod BD, Gordis EB, Connor-Smith JK. Does cognitive behavioral therapy for youth anxiety outperform usual care in community clinics? An initial effectiveness test. Journal of the American Academy of Child & Adolescent Psychiatry. 2010;49:1043–1052.

Gyani, A., Shafran, R., Myles, P., & Rose, S. (2014). The gap between science and practice: how therapists make their clinical decisions. *Behavior Therapy*, *45*(2), 199-211. doi: 10.1016/j.beth.2013.10.004

Zima, B. T., Hurlburt, M. S., Knapp, P., Ladd, H., Tang, L., Duan, N., ... & Wells, K. B. (2005). Quality of publicly-funded outpatient specialty mental health care for common childhood psychiatric disorders in California. *Journal of the American Academy of Child & Adolescent Psychiatry*, 44(2), 130-144. doi: 10.1097/00004583-200502000-00005

Bernstein, A. D., Chorpita, B. F., Daleiden, E. L., Ebesutani, C. E., & Rosenblatt, A. (2015). Building an evidence-informed service array: Considering evidence-based programs as well as their practice elements. Journal of Consulting and Clinical Psychology, 83, 1085-1096.

Bernstein, A. D., Chorpita, B. F., Rosenblatt, A., Becker, K. D., Daleiden, E. L., & Ebesutani, C. K. (2015). Fit of evidence-based treatment components to youths served by wraparound process: A relevance mapping analysis. Journal of Clinical Child and Adolescent Psychology, 44, 44-57. doi: 10.1080/15374416.2013.828296

Chorpita, B. F., Bernstein, A. D., & Daleiden, E. L. (2011). Empirically guided coordination of multiple evidence-based treatments: An illustration of relevance mapping in children's mental health services. Journal of Consulting and Clinical Psychology, 79, 470-480.

ay that ma

s it difficult

/e

vouth

v of EBTs is

#### Evide

Park, A. L., Tsai, K. H., Guan, K., & Chorpita, B. F. (2018). Unintended consequences of evidence-based treatment policy reform: Is implementation the goal or the strategy for higher quality care? Administration and Policy in Mental Health and Mental Health Services Research, 45, 649-660.

a

- There are
- A comprel not possible
- EBTs have a poorly in mutrials
- hes performed ple community
- Mandates ard not sufficient and not always helpful

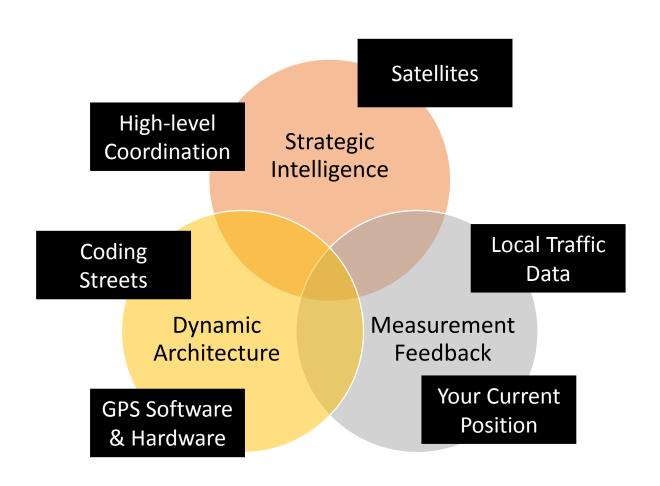
#### This Is a Design Problem



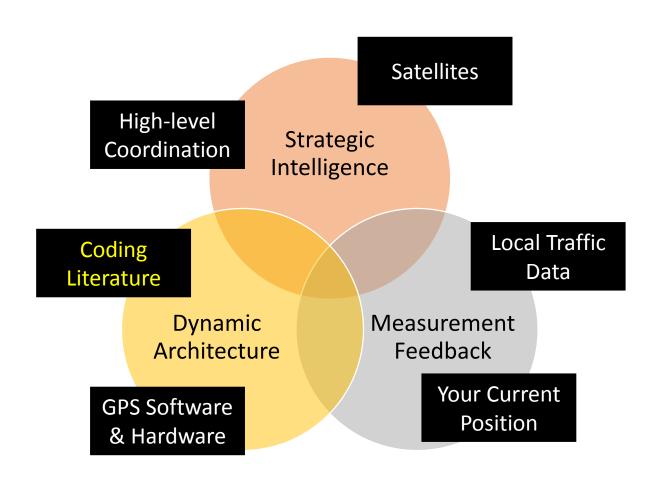
**Efficacious** 

Efficacious
Personalized
Dynamic
Accommodating of Diversity
Easy to Use

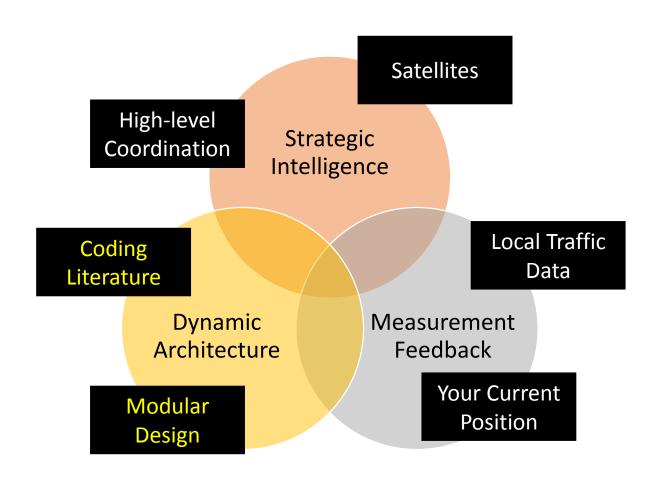




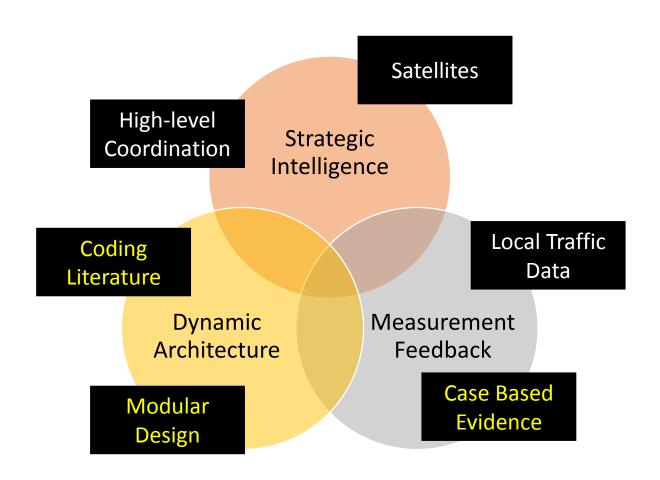




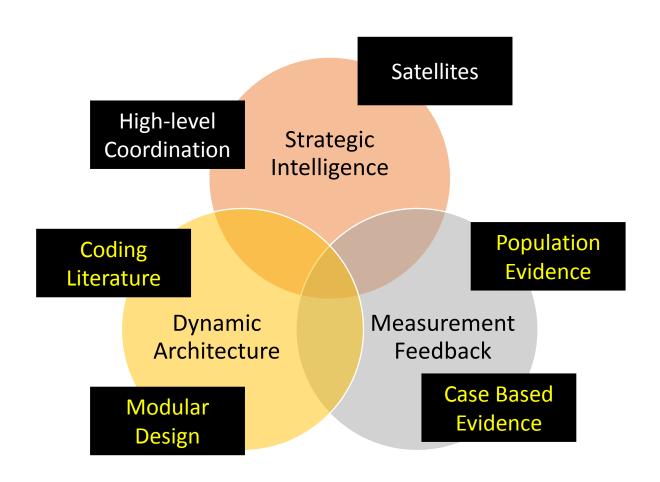




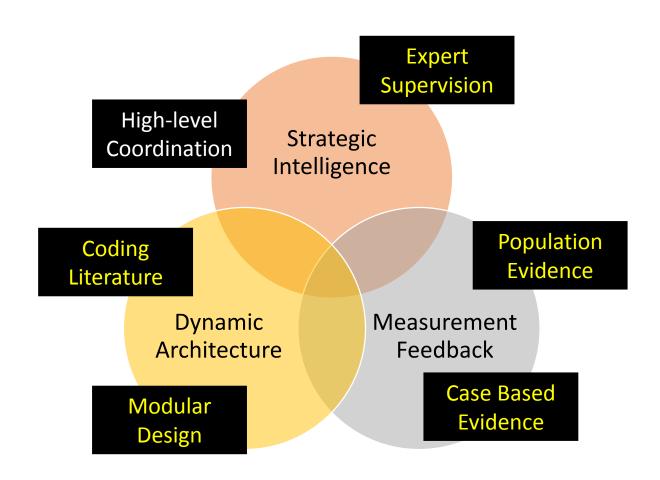




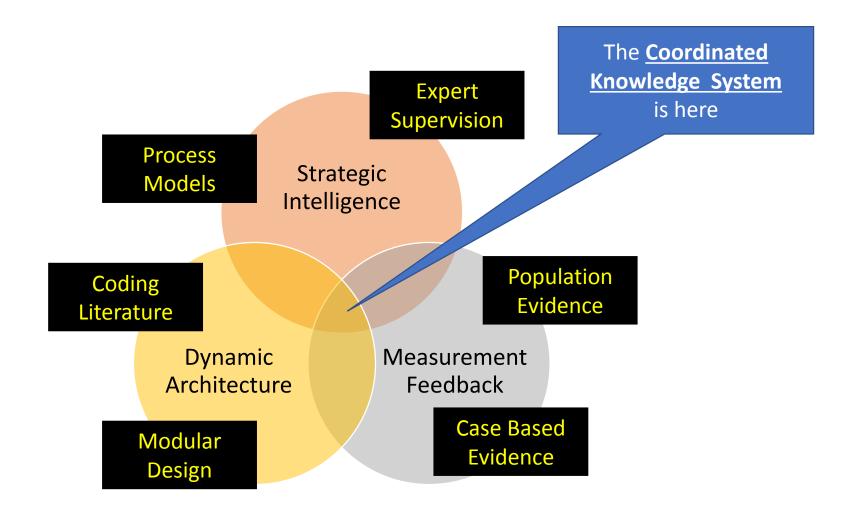








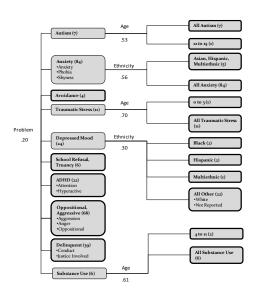


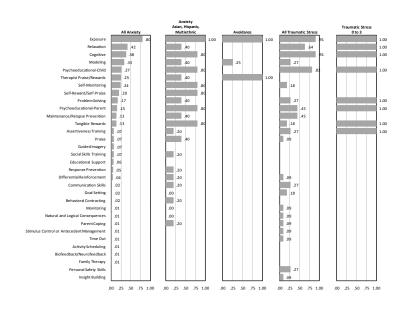


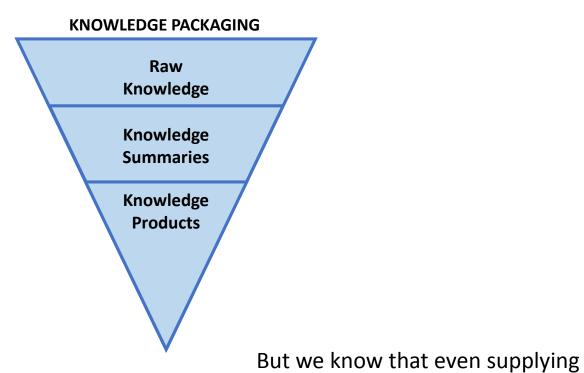




- Coded 2,440 treatments for hundreds of features over 20+ years
- Identified 30-40 "common elements" among effective treatments
- Developed a methodology for discovering what practices are common for what treatments for what problems and contexts
- We have an instant meta analysis **knowledge product** that gives the literature's matching elements for any individual youth with one click

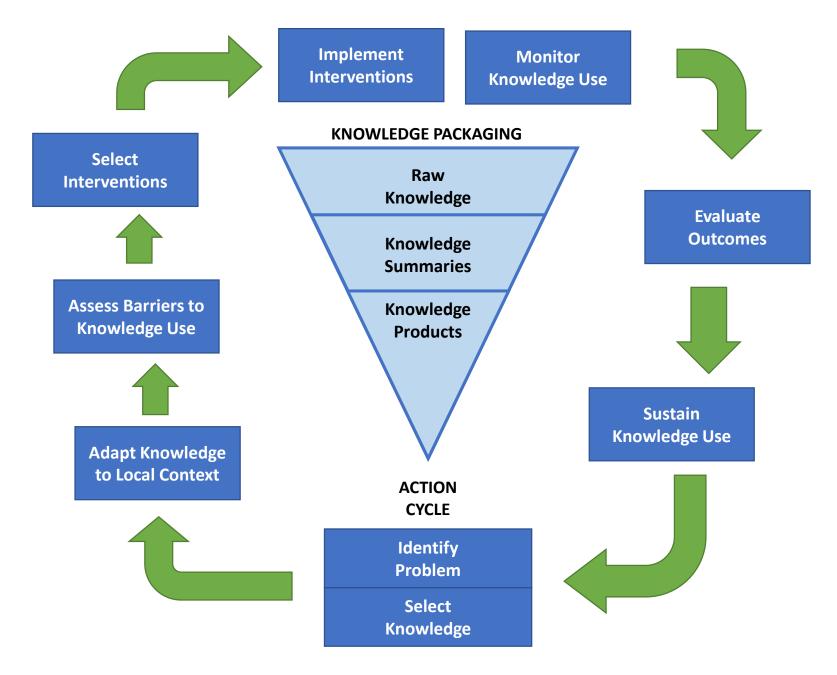






knowledge products does not lead

to their strategic use.



Adapted from Graham et al. (2006)

#### Select Interventions



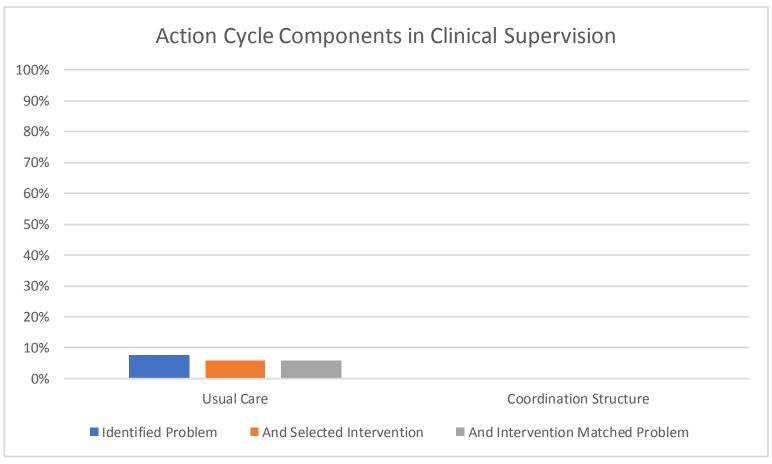
Identify Problem Select Interventions



Identify Problem



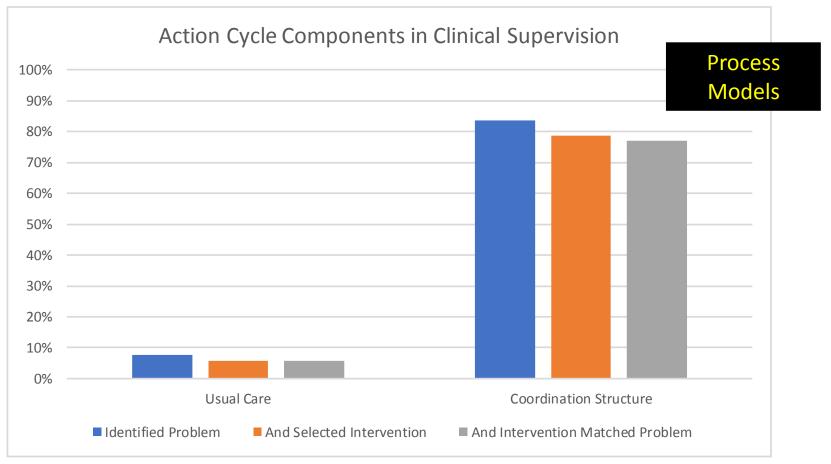
## Does the Action Cycle Happen On Its Own?



Chorpita, B. F. & Becker, K. D. Coordinated Knowledge Systems: Connecting Evidence to Action to Engage Students in School-Based Mental Health. See <a href="http://wtgrantfoundation.org/can-coordinated-knowledge-system-improve-use-research-evidence-school-based-mental-health-settings">http://wtgrantfoundation.org/can-coordinated-knowledge-system-improve-use-research-evidence-school-based-mental-health-settings</a>



## Does the Action Cycle Happen On Its Own?



Chorpita, B. F. & Becker, K. D. Coordinated Knowledge Systems: Connecting Evidence to Action to Engage Students in School-Based Mental Health. See <a href="http://wtgrantfoundation.org/can-coordinated-knowledge-system-improve-use-research-evidence-school-based-mental-health-settings">http://wtgrantfoundation.org/can-coordinated-knowledge-system-improve-use-research-evidence-school-based-mental-health-settings</a>

#### The Role of Industry?

- Health Information Systems
- Messaging & Visualization
- Literature Databases
- Ontology Building and Translation
- Learning Management Systems

The production of lettuce is more advanced and evidence-based than the delivery of mental health care to our nation's children.

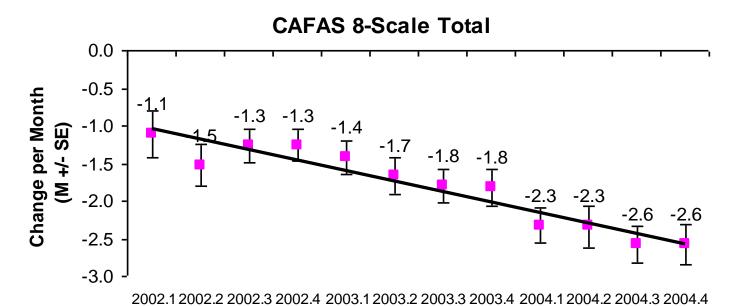
There are opportunities...





#### Fully Coordinated Systems Have...

 Doubled or tripled the average effect size of clinical and functional outcomes across all youth in Hawaii's mental health system, and these effect sizes have been sustained for nearly 20 years

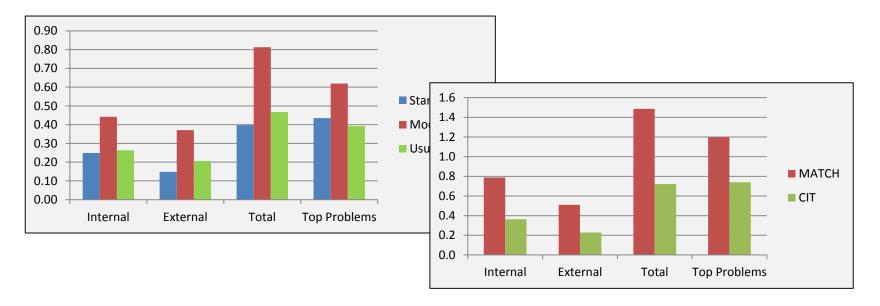


**Fiscal Quarter** 



#### Fully Coordinated Systems Have...

- Doubled or tripled the average effect size of clinical and functional outcomes across all youth in Hawaii's mental health system, and these effect sizes have been sustained for nearly 20 years
- Outperformed EBTs and/or Usual Care in two large RCTs on: Clinical outcomes, diagnostic outcomes, functional outcomes, service use outcomes, medication outcomes, provider satisfaction outcomes



# Strategic Intelligence Dynamic Architecture Measurement Feedback

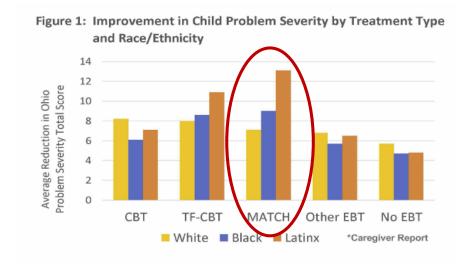
#### Fully Coordinated Systems Have...

- Doubled or tripled the average effect size of clinical and functional outcomes across all youth in Hawaii's mental health system, and these effect sizes have been sustained for nearly 20 years
- Outperformed EBTs and/or Usual Care in two large RCTs on: Clinical outcomes, diagnostic outcomes, functional outcomes, service use outcomes, medication outcomes, provider satisfaction outcomes
- Become the most used service in the nation's largest youth MHS
  - > 4,000 providers trained
  - ~ 250,000 youth served
  - 100% sustained use in Los Angeles 7 years later
  - Effect sizes comparable to efficacy trials (ES = .72; RC = 60%, N = 7,153)
  - USC built it into their university curriculum (>1,000 MSW students a year)

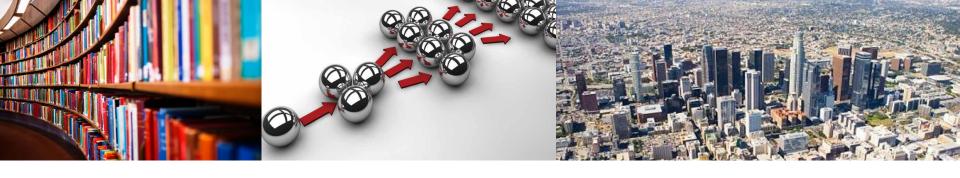
## Strategic Intelligence Dynamic Architecture Measurement Feedback

#### Fully Coordinated Systems Have...

- Shown superior improvement rate in statewide implementation (46,729 youth in CT; 14,000 received EBTs).
- MATCH ADTC had highest improvement rates (68-75% greater than for other treatments).



From: Child and Health Development Institute of Connecticut, Inc. (2019, September). Better than Usual (Care): Evidence-Based Treatments Improve Outcomes and Reduce Disparities for Children of Color. *Issue Brief, 71*.



"To tackle large social problems we cannot be intimidated into working at the fringes or allowing ourselves to feel satisfied with small steps forward. We need big leaps for humanity... We are equipped with more information and material resources than ever before in history."

#### "Big Leap For Humanity"

A coordinated knowledge architecture for mental health that can empower people to make better decisions and engage in actions that are more therapeutic and more beneficial, regardless of the context or the workforce.

