

HARNESSING IMPLEMENTATION SCIENCE TO REALIZE THE PROMISE OF EVIDENCE BASED PRACTICE

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- I receive royalties from Oxford University Press
- I have provided consultation to the following organizations within the past three years
 - Merck Sharp, & Dohme
 - Camden Coalition of Healthcare Providers

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the conversation



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Agenda

**Why
implementation
science?**

**What is
implementation
science?**

**Applications in
Philadelphia**

WHY IMPLEMENTATION SCIENCE?



Implementation
Science

“Emma” was a 16 year old female with impairing anxiety. She felt hopeless and uncertain she would ever enjoy the activities that once brought her joy. She came to me after seeing other therapists who **didn't use evidence-based practice.**



I came to the startling conclusion that kids were **not** receiving cognitive behavioral therapy in community settings and it changed the trajectory of my career



Implementation science as a **potential solution** to my observation



WHAT IS IMPLEMENTATION SCIENCE?



Not idiosyncratic to mental health: There are research-to-practice gaps all around us

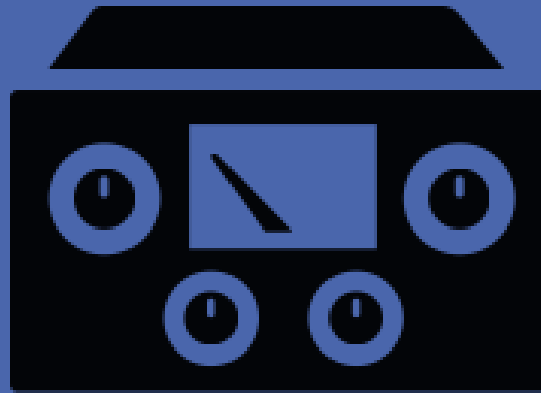


Citrus can prevent scurvy (1601)
Introduced on ships (1785)



Today, we believe that it takes 17 years for 14% of research to make its way into practice.

Implementation science is about making sure that people are receiving approaches that work in the community to **move the needle** in health and mental health



Or...the **scientific study of methods** to promote systematic uptake of **proven** clinical treatments, practices, organizational, and management interventions into **routine practice**, and hence to **improve health** (Eccles et al., 2012)

Some basic assumptions or “truths”

Implementation science is about “clinician” behavior change within organizational constraints

Context is **not** seen as a nuisance

There is an **evidence-based “thing”** to be implemented

APPLICATIONS IN PHILADELPHIA





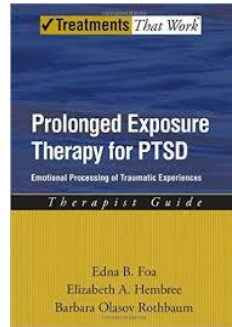
City of Philadelphia



DBHIDS

DEPARTMENT of BEHAVIORAL HEALTH
and INTELLECTUAL disABILITY SERVICES

A tremendous opportunity to learn from a visionary system transformation built upon a thirty year community academic partnership.



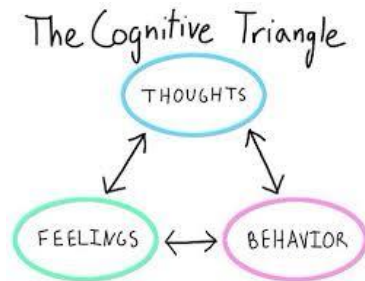
2007

2011

2012

2013

2016

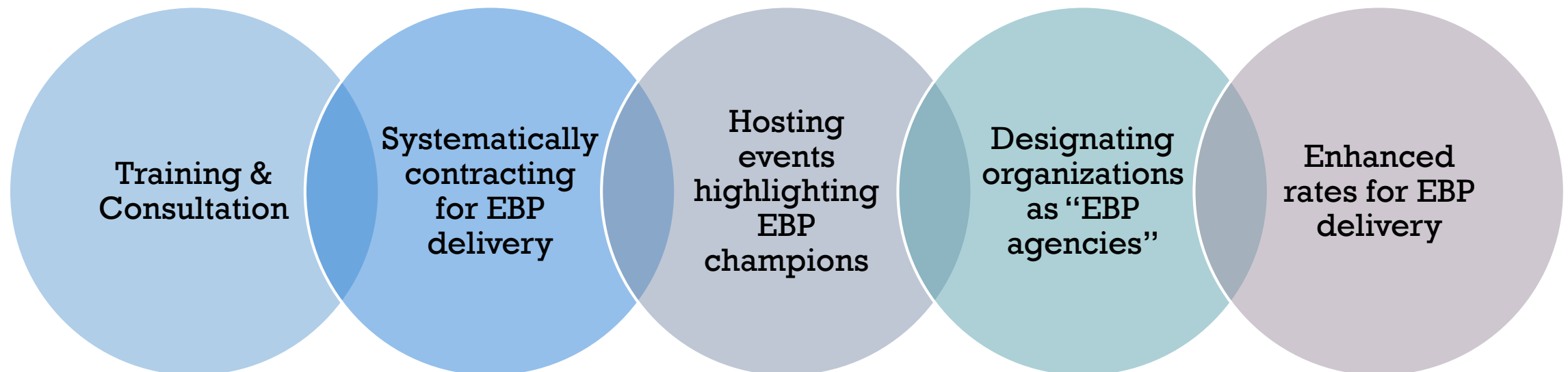


Dialectical
Behavior
Therapy



Applying the Policy Ecology Framework to Philadelphia's Behavioral Health Transformation Efforts

Byron J. Powell^{1,2} · Rinad S. Beidas² · Ronnie M. Rubin³ · Rebecca E. Stewart² ·
Courtney Benjamin Wolk² · Samantha L. Matlin⁴ · Shawna Weaver³ ·
Matthew O. Hurford⁵ · Arthur C. Evans³ · Trevor R. Hadley² · David S. Mandell²



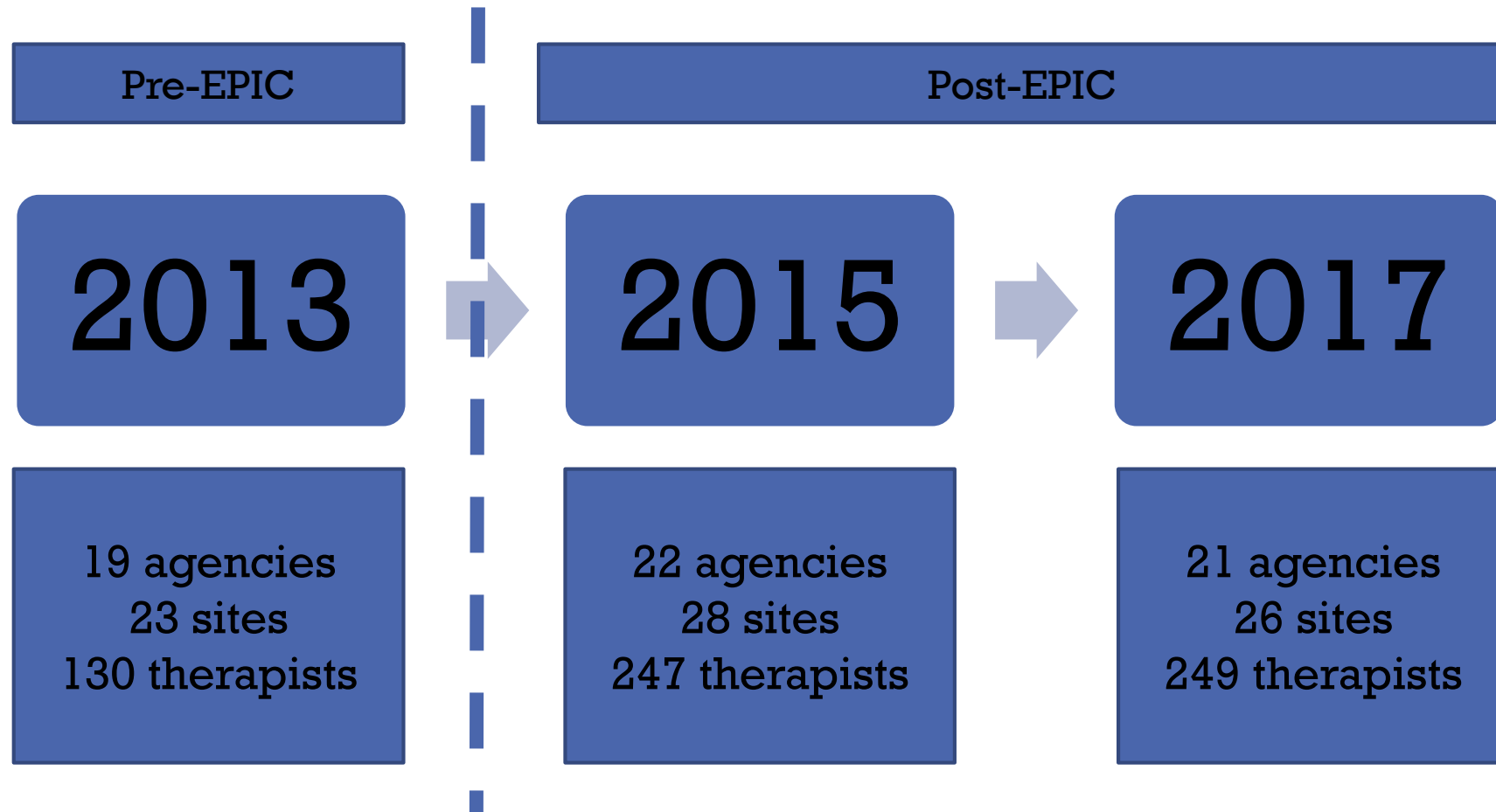
Plain language (Courtesy of Geoff Curran)

CBT is **the thing**

Implementation strategies are the stuff we do to try to help people/places **do CBT** (training, enhanced rate)

Main implementation outcomes are **how much or how well clinicians/agencies do CBT**

Prospective **mixed-methods** observational design



What contextual factors predict therapist use of practices (cross-sectional)?

Research

Original Investigation

Predictors of Community Therapists' Use of Therapy Techniques in a Large Public Mental Health System

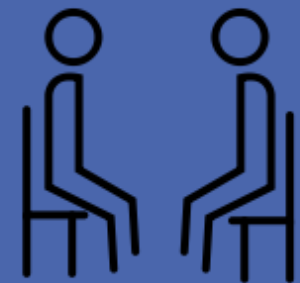
Rinad S. Beidas, PhD; Steven Marcus, PhD; Gregory A. Aarons, PhD; Kimberly E. Hoagwood, PhD; Sonja Schoenwald, PhD; Arthur C. Evans, PhD; Matthew O. Hurford, MD; Trevor Hadley, PhD; Frances K. Barg, PhD, MEd; Lucia M. Walsh, BS; Danielle R. Adams, BA; David S. Mandell, ScD

IMPORTANCE Few studies have examined the effects of individual and organizational characteristics on the use of evidence-based practices in mental health care. Improved

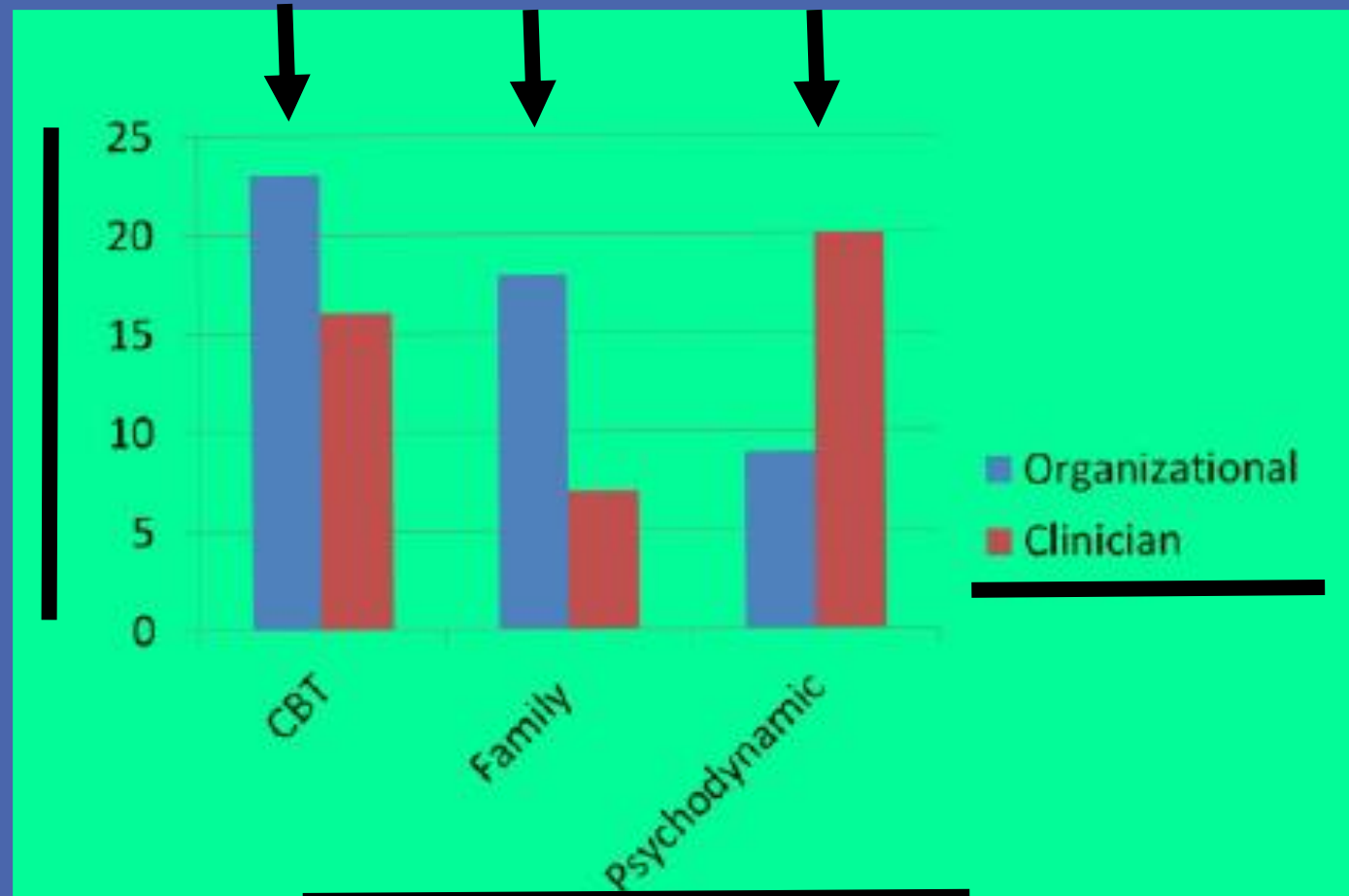
 Supplemental content at jamapediatrics.com



and/or



Organizational factors explains more variance in use of EBP;
therapist factors explains more variance in use of non-EBP



Organizational
culture
Organizational
climate
Implementation
climate
Leadership

Demographics
Attitudes
Knowledge

What about practice change over time (longitudinal)?

On average, clinicians' (n = 340) use of CBT increased by 6% from 2013 to 2017. For each additional EBP initiative that clinicians participated in, CBT techniques increased by 3%.

Proficient organizational culture at baseline predicted more steep increases in use of CBT.

What about the **qualitative data**? Key insights to stakeholder perspectives on barriers and facilitators

Adm Policy Ment Health
DOI 10.1007/s10488-015-0705-2

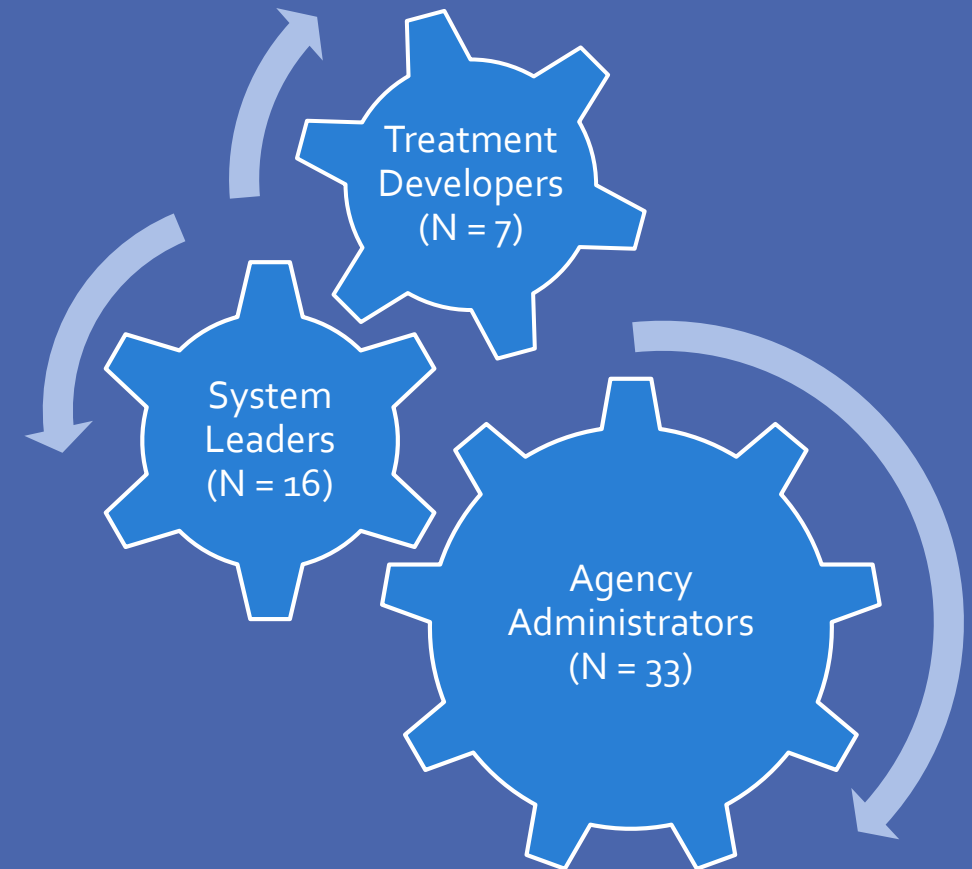


ORIGINAL PAPER

A Multi-Level Examination of Stakeholder Perspectives of Implementation of Evidence-Based Practices in a Large Urban Publicly-Funded Mental Health System

Rinad S. Beidas¹ · Rebecca E. Stewart¹ · Danielle R. Adams¹ · Tara Fernandez¹ · Susanna Lustbader¹ · Byron J. Powell¹ · Gregory A. Aarons² · Kimberly E. Hoagwood³ · Arthur C. Evans^{1,4} · Matthew O. Hurford^{1,4,5} · Ronnie Rubin⁵ · Trevor Hadley¹ · David S. Mandell¹ · Frances K. Barg⁶

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Facilitator: Coordination, communication, & collaboration

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Threat #1: Chilling **fiscal** climate

The Perfect Storm: Collision of the Business of Mental Health and the Implementation of Evidence-Based Practices

Rebecca E. Stewart, Ph.D., Danielle R. Adams, B.A., David S. Mandell, Sc.D., Trevor R. Hadley, Ph.D., Arthur C. Evans, Ph.D., Ronnie Rubin, Ph.D., Joan Erney, J.D., Geoffrey Neimark, M.D., Matthew O. Hurford, M.D., Rinad S. Beidas, Ph.D.



“ We are losing our shirt”

“We hold our breath and hope when we pay people”

“They really do expect the agencies to sustain. How? We already do not have the funding to support our basic program, let alone anything extra”

Threat #2: Turnover

Adm Policy Ment Health
DOI 10.1007/s10488-015-0673-6



ORIGINAL ARTICLE

A Prospective Examination of Clinician and Supervisor Turnover Within the Context of Implementation of Evidence-Based Practices in a Publicly-Funded Mental Health System

Rinad S. Beidas¹ · Steven Marcus^{2,3} · Courtney Benjamin Wolk¹ · Byron Powell^{1,8} · Gregory A. Aarons⁴ · Arthur C. Evans^{1,5} · Matthew O. Hurford^{1,5,6,9} · Trevor Hadley¹ · Danielle R. Adams¹ · Lucia M. Walsh¹ · Shaili Babbar¹ · Frances Barg⁷ · David S. Mandell¹

24% of clinicians and supervisors quit in one year



Threat #3: A new workforce model

Independent Contractors in Public Mental Health Clinics: Implications for Use of Evidence-Based Practices

Rinad S. Beidas, Ph.D., Rebecca E. Stewart, Ph.D., Courtney Benjamin Wolk, Ph.D., Danielle R. Adams, B.A., Steven C. Marcus, Ph.D., Arthur C. Evans, Jr., Ph.D., Kamilah Jackson, M.D., M.P.H., Geoffrey Neimark, M.D., Matthew O. Hurford, M.D., Joan Erney, J.D., Ronnie Rubin, Ph.D., Trevor R. Hadley, Ph.D., Frances K. Barg, Ph.D., M.Ed., David S. Mandell, Sc.D.

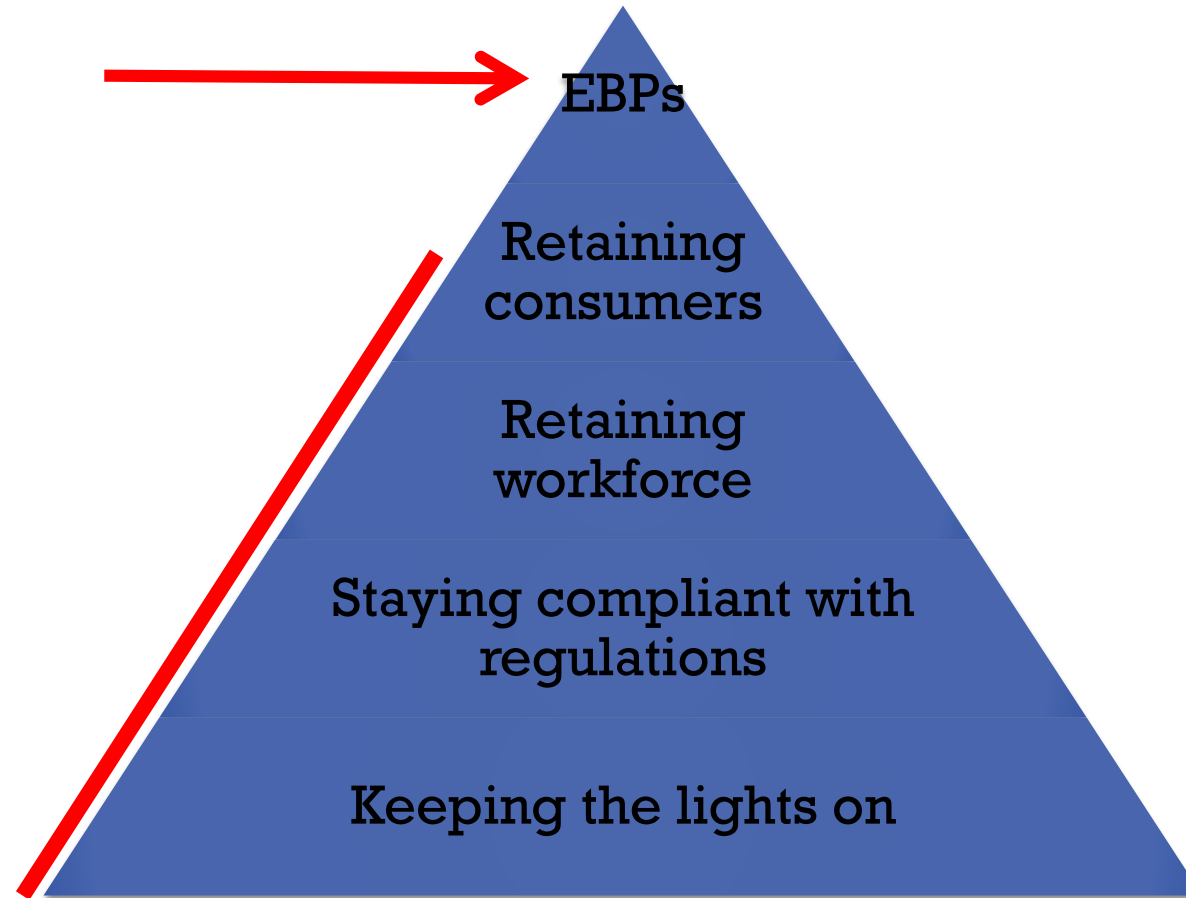
Less positive attitudes; less knowledge; less use of EBP; administrators less likely to invest



A **crumbling infrastructure** may not be the most sound foundation for EBP implementation



Maslow's Hierarchy for Community Mental Health



Main takeaways and implications for other systems

Because the system was **evaluating** the outcomes of efforts to implement EBPs, they were able to iterate their approach



Measurement – fidelity?

Clinicians have a really **hard** job and work in challenging contexts. If we are to be successful in improving care, we must make it easier, not harder



Behavioral economics – Penn ALACRITY

Beyond training...**Organizational** factors such as proficiency culture and implementation climate are key



Organizational interventions

EBPs will not be a panacea for **infrastructural challenges**



Invest in community mental health infrastructure

Why implementation science is important



GRATITUDE



Our Community Partners

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R01 MH 108551



National Institute
of Mental Health



Key Citations

- Beidas, R. S., Aarons, G. A., Barg, F., Evans, A., Hadley, T., Hoagwood, K. E., Marcus, S., Schoenwald, S., Walsh, L. M., & Mandell, D. S.: Policy to implementation: Evidence-based practice in community mental health: Study protocol. Implementation Science. 8(38), 2013. Notes: doi:10.1186/1748-5908-8-38.
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