Big Thinking from Small Science:

Promoting Coordinated Action to Build Knowledge-Informed Systems for Youth and Families

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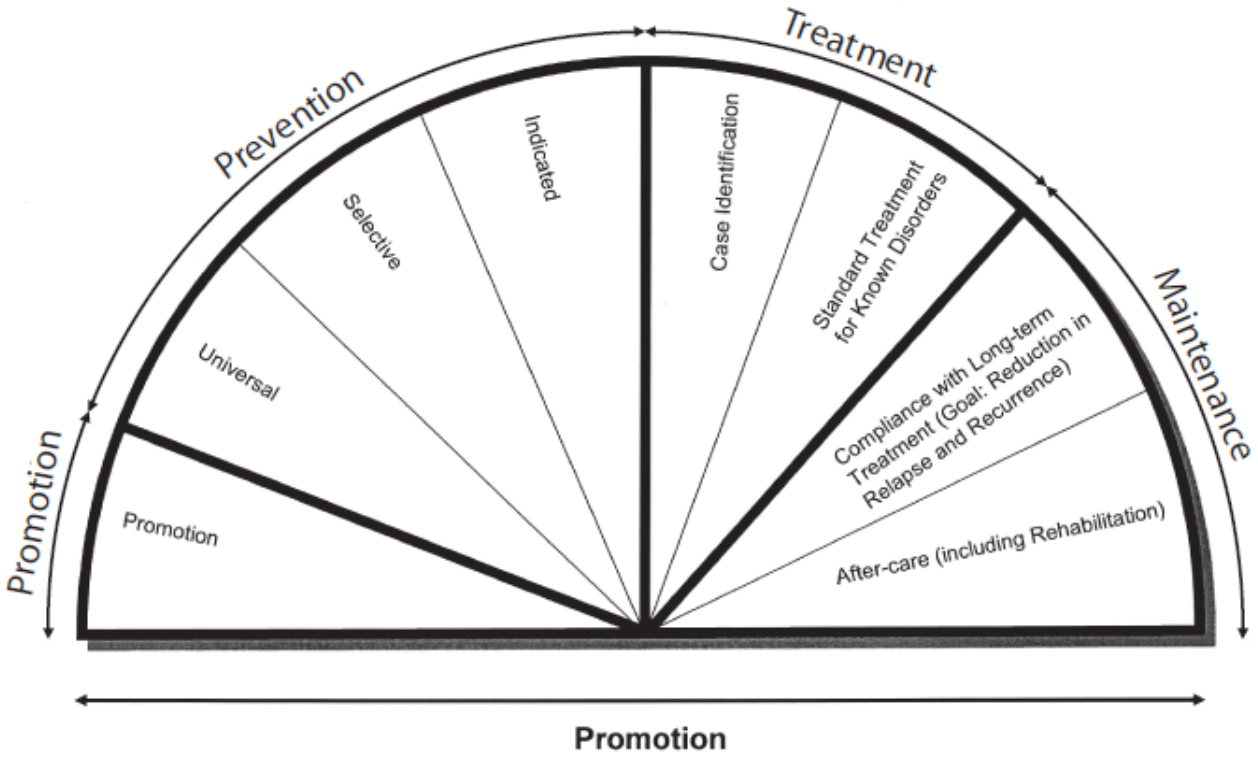
UW School MH Assessment Research and Training (SMART) Center: http://education.uw.edu/smart

National Wraparound Initiative: www.nwi.pdx.edu

IOM-NRC Forum on Children's Cognitive, Affective, and Behavioral Health Washington, DC

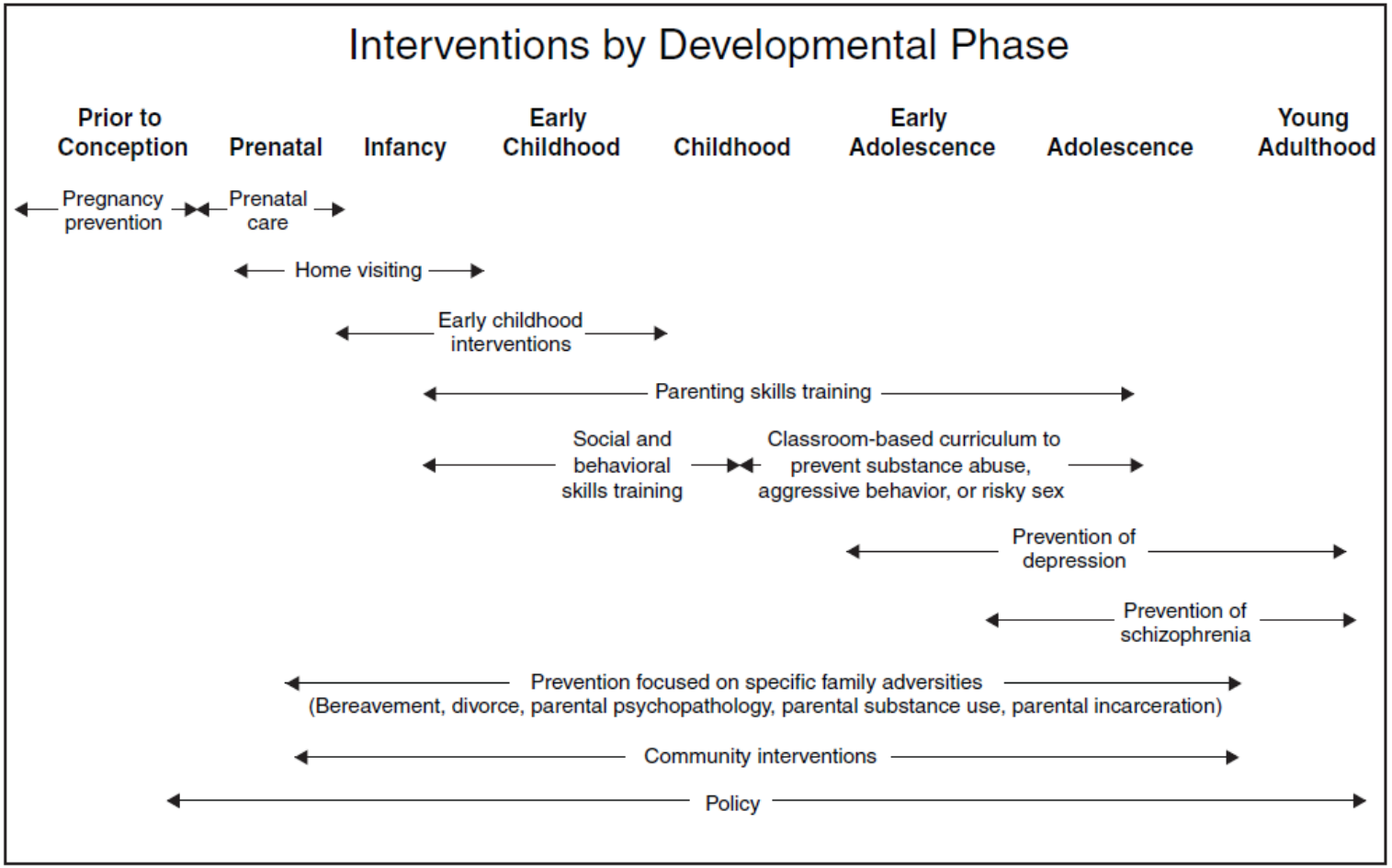
June 16, 2014

System building: The aspiration



Source: Committee on Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults, 2009

System building: The aspiration



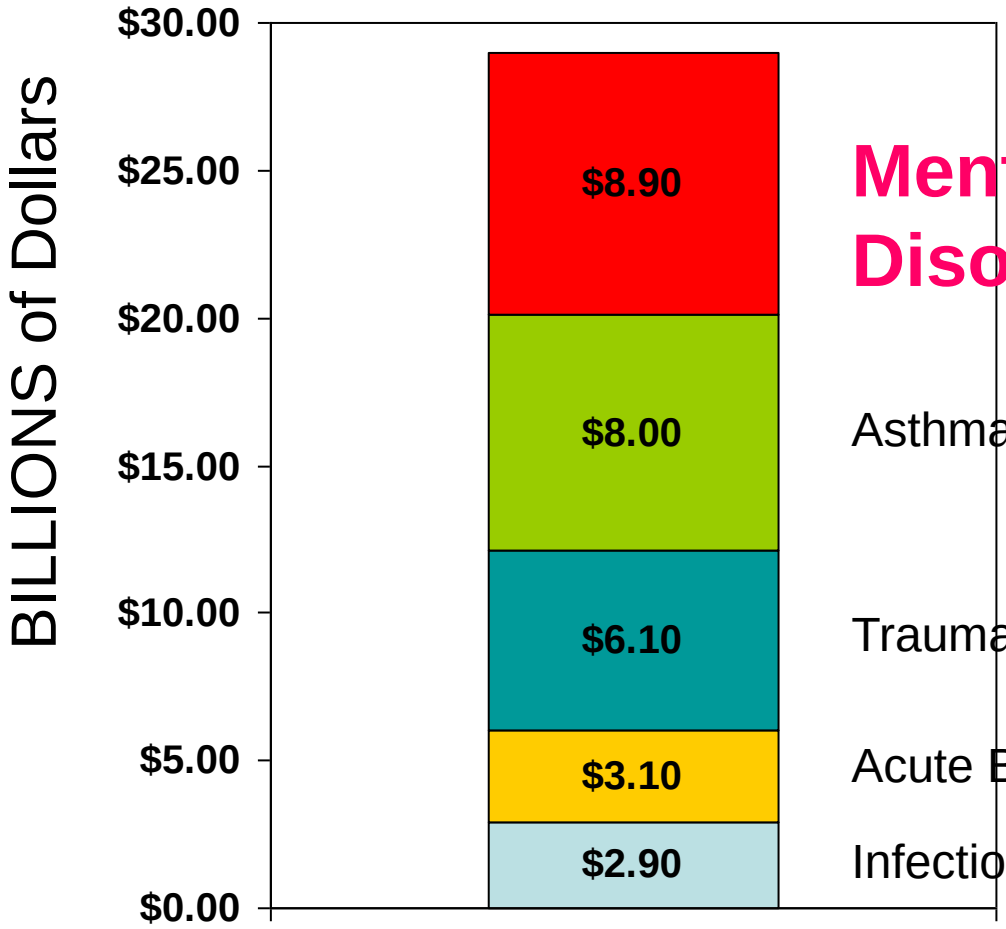
System building: The aspiration

System building: What it often feels like

A few barriers to uptake in real world systems

- Imbalanced resource allocation
- Lack of empirical orientation to policy and practice
- Need for new conceptualizations of uptake and implementation
  - Implementation models for single EBPs versus suites of EBPs
  - “Program drift” and “voltage drop” versus real world dynamism
  - Program “Effect size” versus “Reach”
- Not measuring – and managing – the right things
- Expert models of practice = Workforce “shortages”

The Five Most Costly Children's Health Conditions (Billions)



Soni, 2009 (AHRQ Research Brief #242)

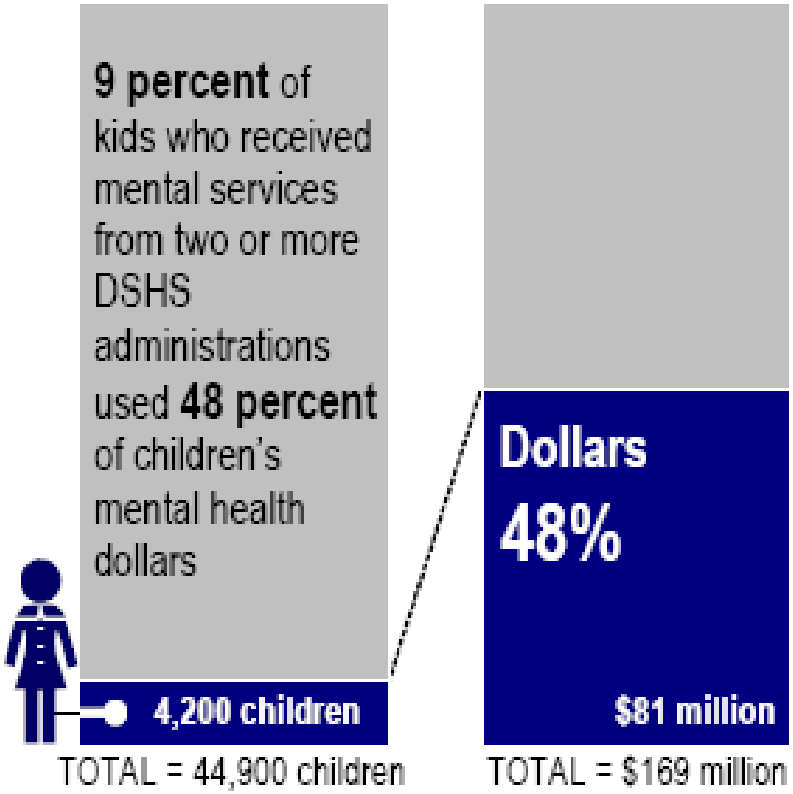
Imbalance of resource allocation

- Behavioral health services have an overall penetration rate of **9.6%**, accounting for **38%** of total Medicaid child expenditures ($19.3B)
- **Residential treatment and therapeutic group homes** account for largest percentage of total expenditures – **19.2%** of all expenditures for **3.6%** of children using behavioral health services

Pires, S.A. (2014). *Children in Medicaid with Behavioral Health Challenges.* CMS Grand Rounds, May 8, 2014

Imbalance of resource allocation

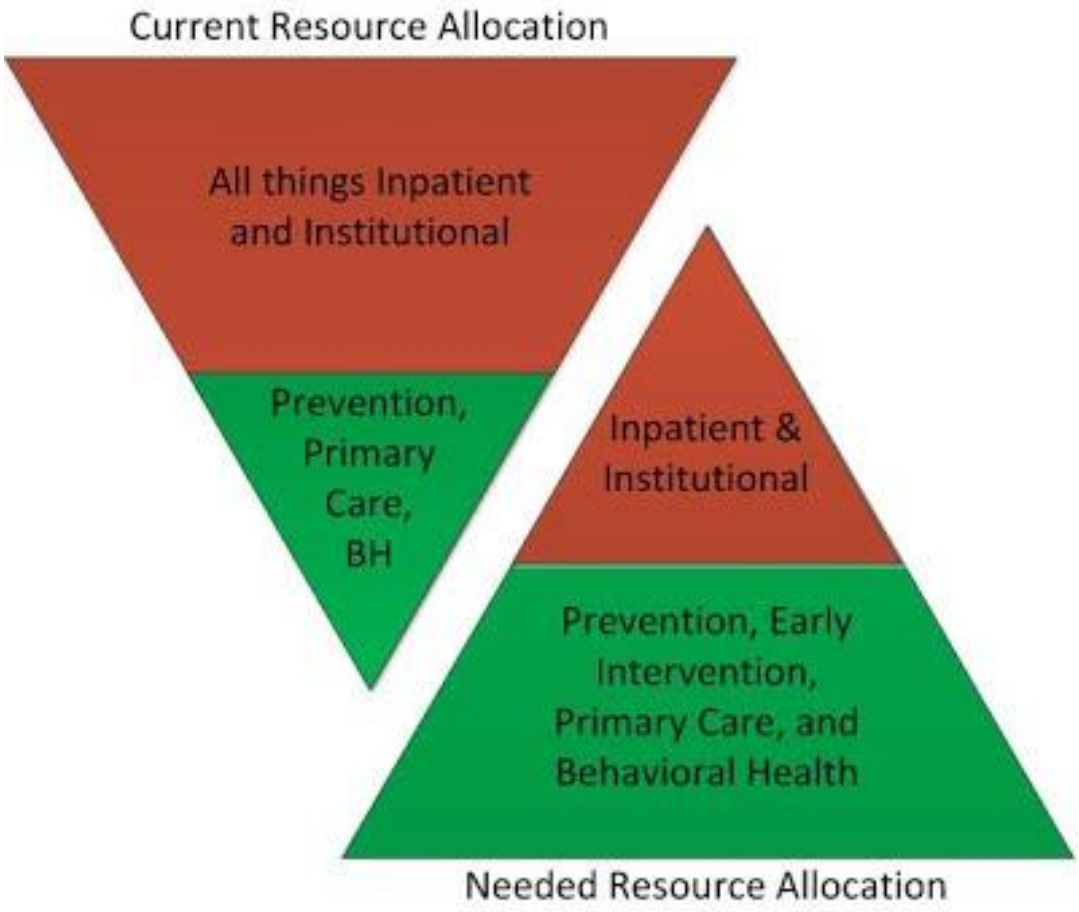
Washington State Example



- Over **126,000** children and youth received services from three DSHS programs: CA, JRA, and/or MHD.
- **44,900** of these children and youth received at least one mental health service from one of the systems during that year.
- Collectively, the mental health services for those 44,900 young people **cost $169 million**.
- **Half of that expenditure** ($81 million) was spent on the **9 percent** who received mental health care from two or more programs.

Source: WA DSHS, 2004

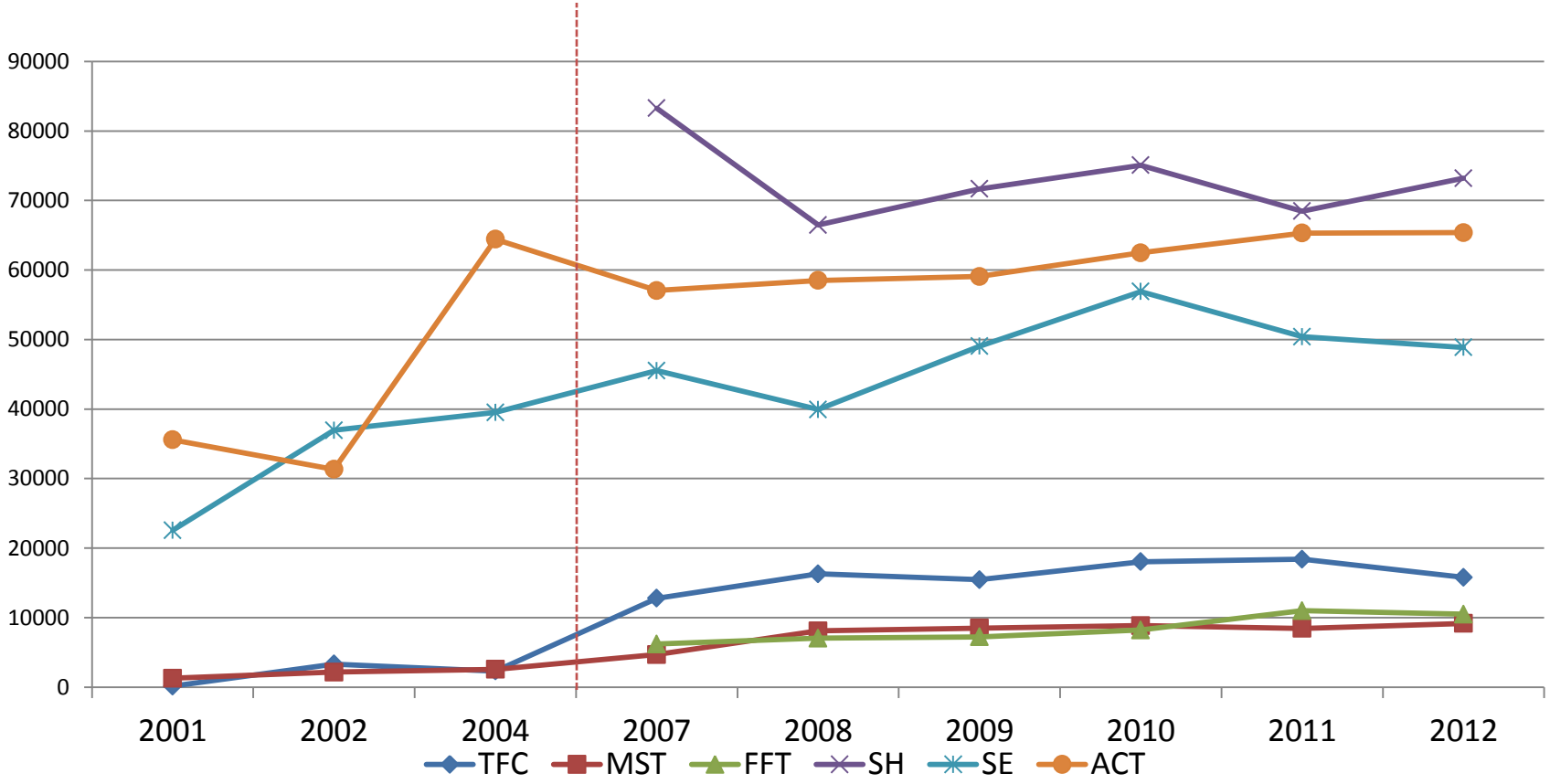
Flipping the triangle



Source: Dale Jarvis and Associates

Lack of empirical orientation

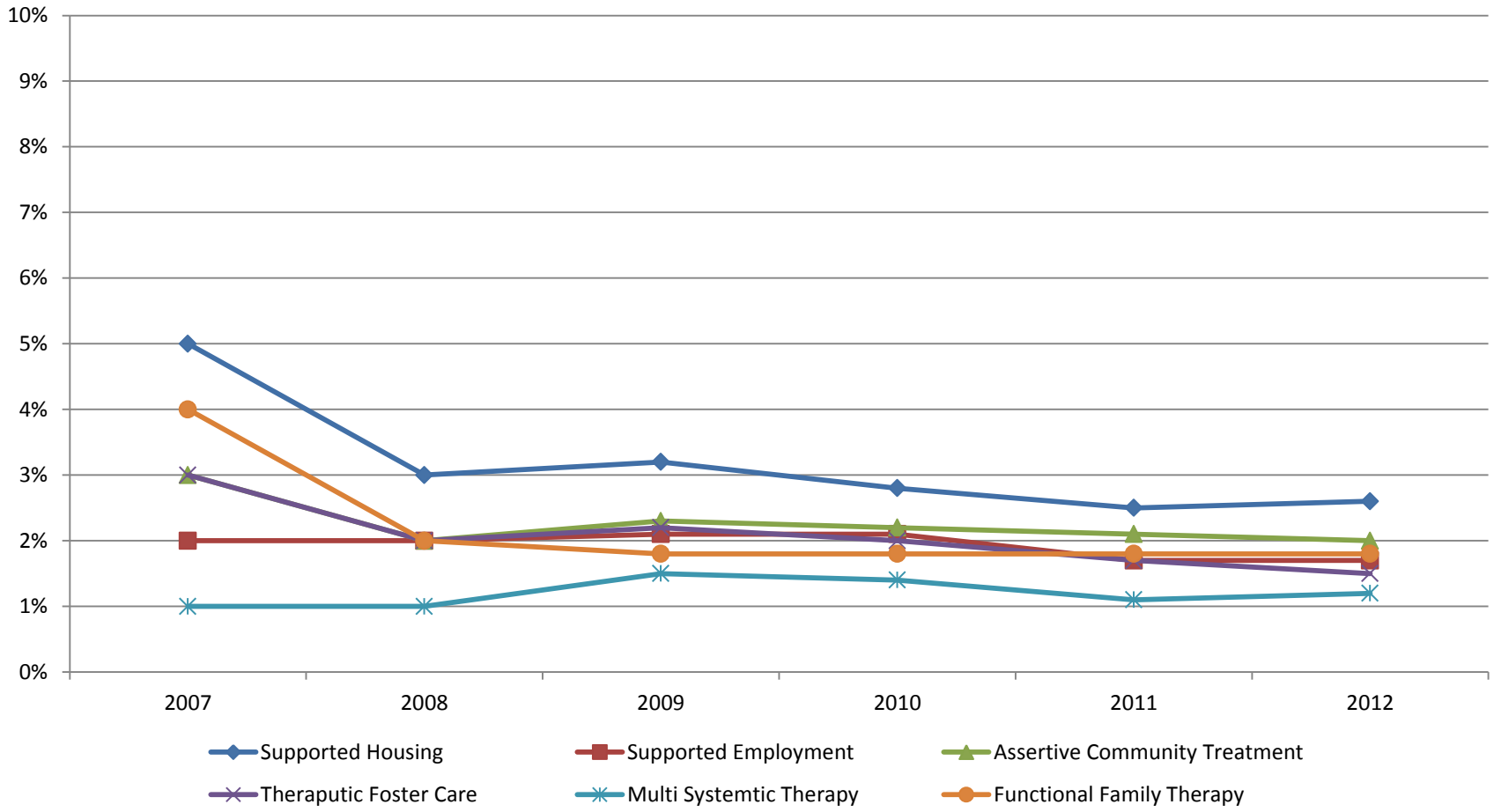
Number of Adult/Youth Clients Served by EBPs as reported by SMHAs



SOURCE: NASMHPD Research Institute; Bruns, Hensley, Kerns, & Hoagwood, 2014

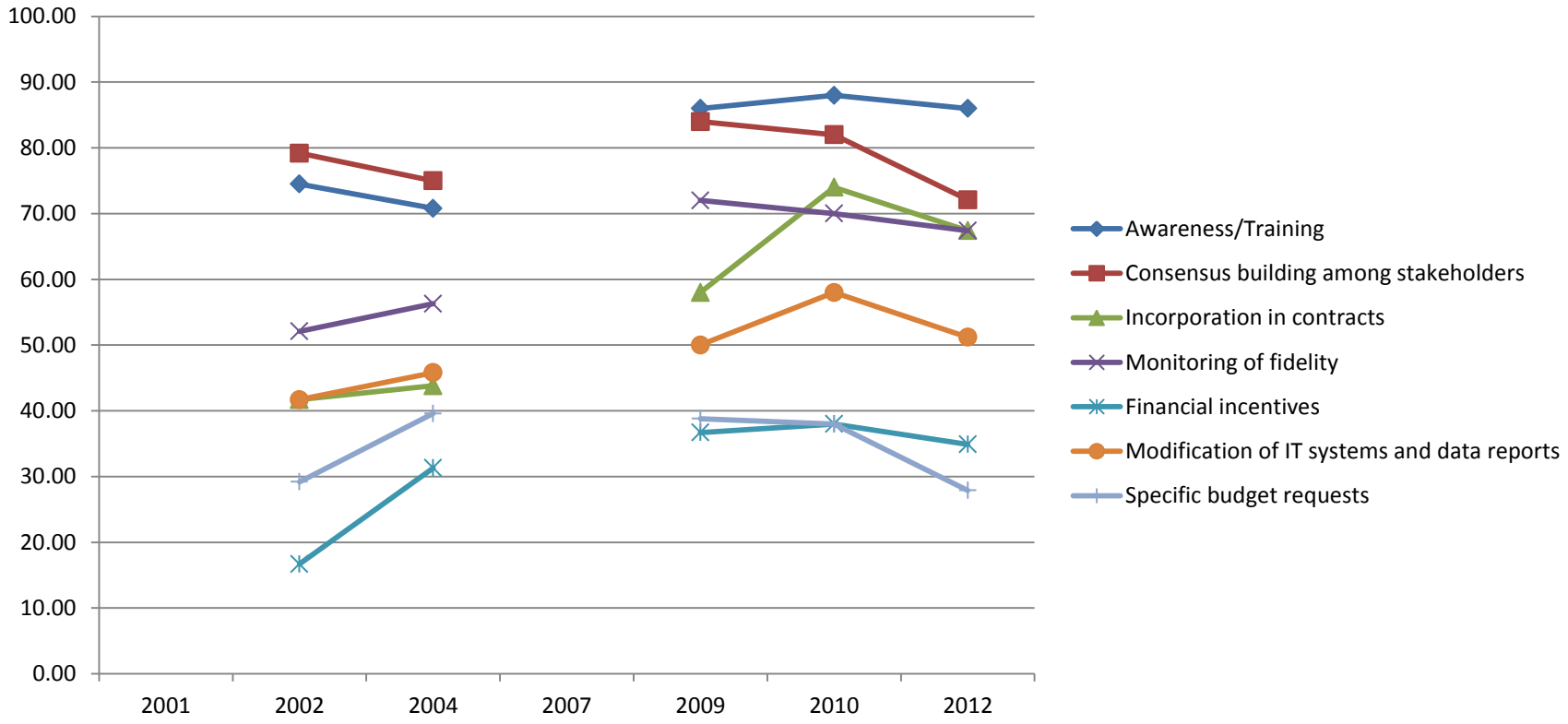
National Rate of EBP Use

As a function of number of adults with SMI / Youth with SED



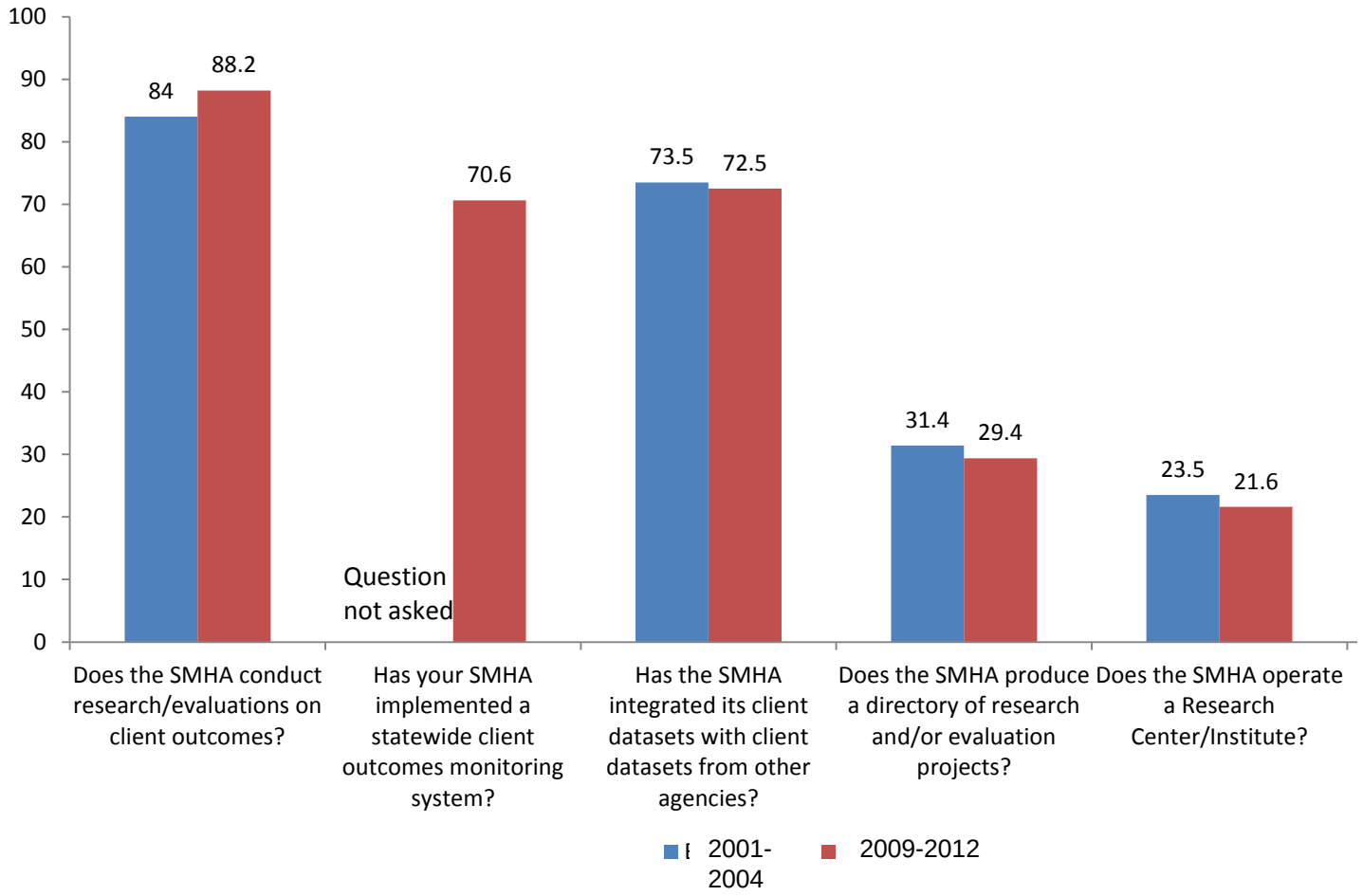
Initiatives to Support EBP Implementation

"What initiatives, if any, are you implementing to promote the adoption of EBPs?"



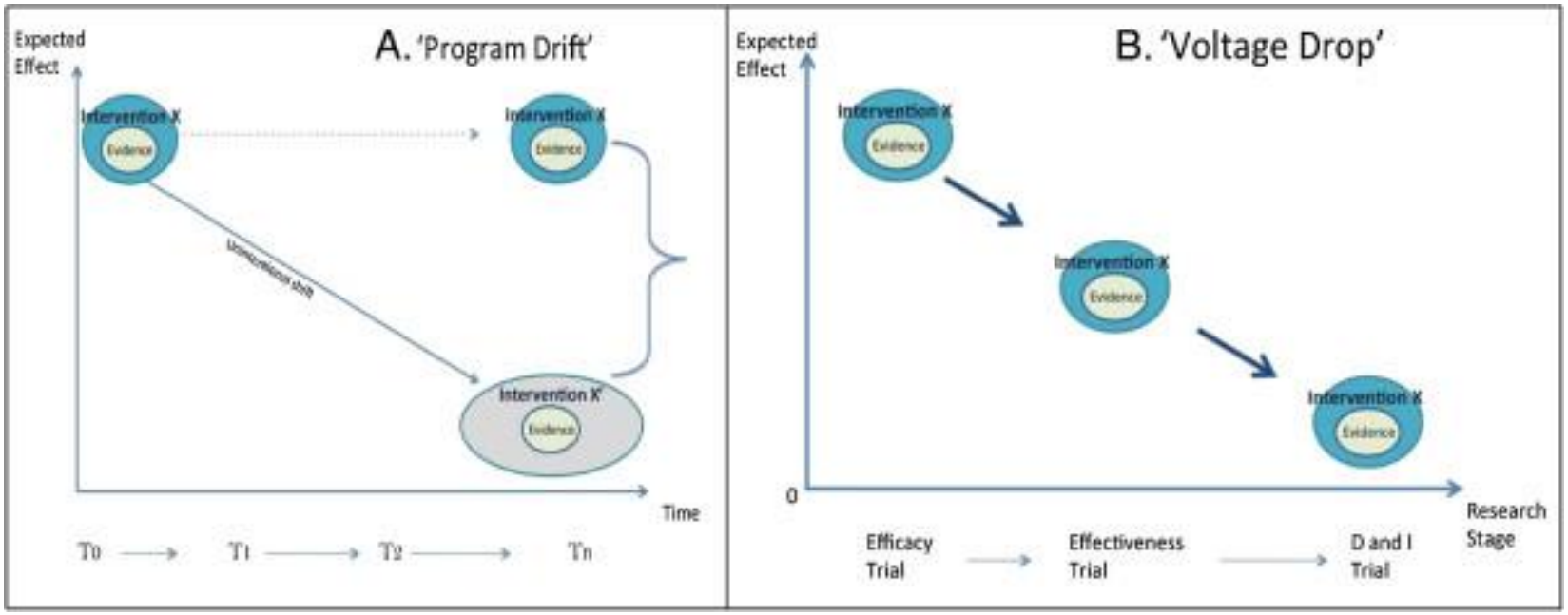
SOURCE: NASMHPD Research Institute; Bruns, Hensley, Kerns, & Hoagwood, 2014

SMHA Data and Research Use



SOURCE: NASMHPD Research Institute; Bruns, Hensley, Kerns, & Hoagwood, 2014

Outdated concepts?



Chambers, Glasgow, & Stange (2013). The Dynamic Sustainability Framework. *Implementation Science*, *8*: 117

Program "Reach" vs. effect size

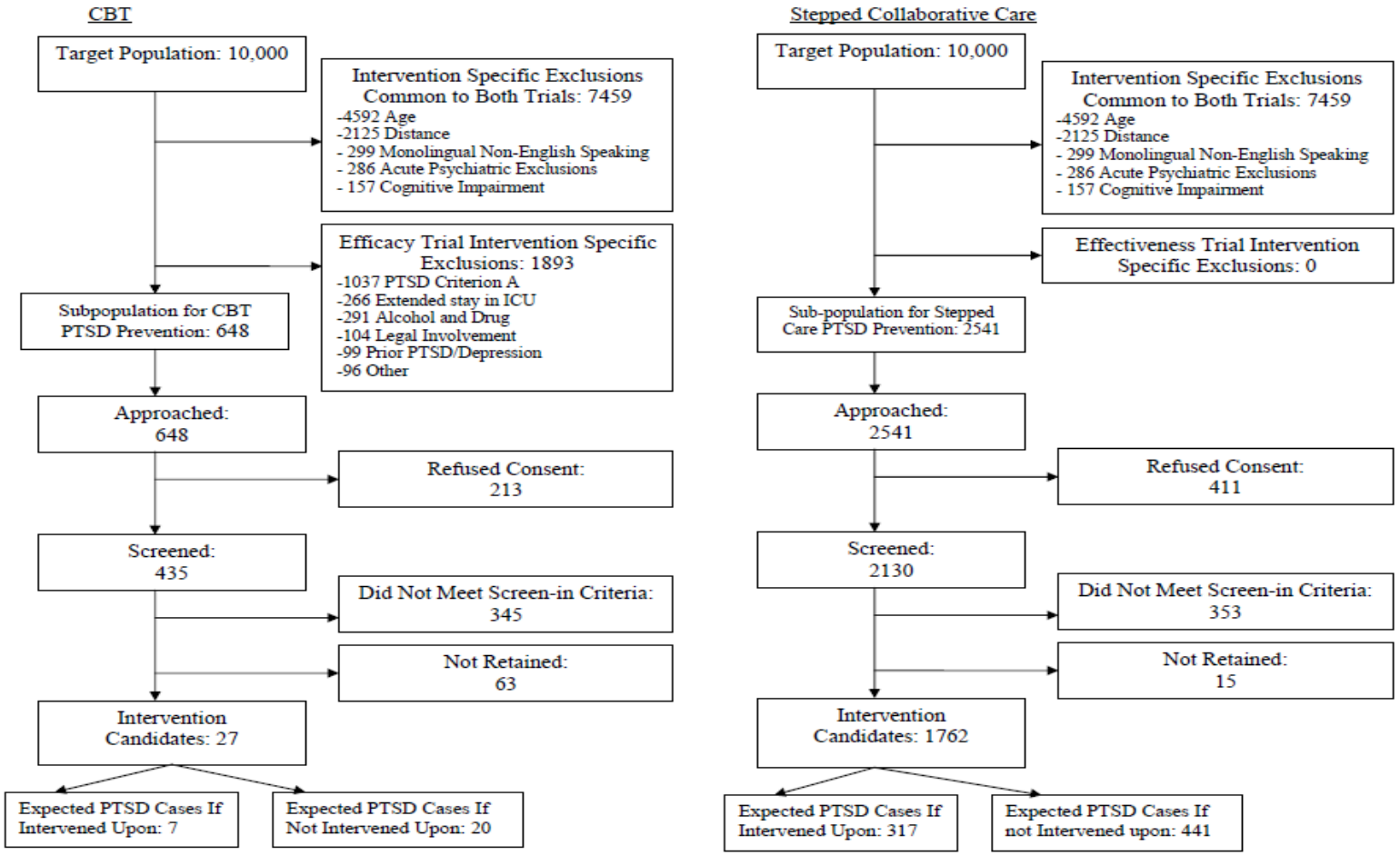


FIGURE 3. Projected CBT and Stepped Collaborative Care Flow Diagrams Specifying Target Populations for PTSD Prevention (Diagram B)

Zatzick, Koepsell, & Rivara (2009). Using Target Population Specification, Effect Size, and Reach to Estimate, and Compare the Population Impact of Two PTSD Preventive Interventions. *Psychiatry*, 72

Solutions?

Barrier	Solution(s)
Overreliance on institutional care	State Medicaid strategies: Research-based care coordination, multi-modal EBTs
Lack of uptake of manualized EBT	• Common factors/elements into the real world • State Centers of Excellence • Relevance mapping → program selection • Research-based quality frameworks
Complexity borne of multiple EBTs	Cross-EBP fidelity measurement
Expert-driven systems, lack of engagement	Family engagement strategies, Family/youth peer support
Workforce shortages	Train and support indigenous helpers
Lack of knowledge about best system solutions	Funding for state-level research, child BH specific health reform effects, etc.

Reducing costs through research-based care coordination

- **Georgia** – Comparing youth out-of-home placements in the 6 months pre-CME engagement to the 3-8 months post-CME engagement showed:
  - 86% reduction in inpatient hospitalization for CME youth meeting PRTF waiver criteria
  - 89% reduction in inpatient hospitalization for other high need youth enrolled in CME
  - 73% reduction in PRTF stays for CME youth meeting PRTF waiver criteria
  - 62% reduction in PRTF stays for other high need youth enrolled in CME
- **New Jersey** –
  - Savings of $40 million from 2007 to 2010 by reducing the use of acute inpatient psychiatric services
  - Residential treatment budget was reduced by 15% during the same time period, and length of stay in residential treatment centers decreased by 25%
- **Maine** –
  - Experienced 30% net reductions in Medicaid spending, comprised of decreases in PRTF and inpatient psychiatric with increases in targeted case management and home- and community-based services

Customization Strategies in Medicaid

- **Cover a broad array** of behavioral health home and community-based services
  - E.g., NJ: Mobile response and stabilization; therapeutic group home care; treatment homes/therapeutic foster care; intensive care management using Wraparound process; behavioral assistance; intensive in-home/community services; transportation; youth support and development
- **Cover evidence-based practices**, e.g. Trauma-Focused Cognitive Behavioral Therapy, Multisystemic Therapy, Functional Family Therapy, Multidimensional Treatment Foster Care (growing number of states)
- **Incorporate intensive care coordination using Wraparound** approach for children with serious behavioral health challenges
- Require that every child has a **designated primary care provider** and coordination between physical and behavioral health care providers
- Require coordination with child welfare system and with Part C, CSHCN

Efficacy of EBTs may be due to confounds in "Usual Care" comparison groups

"Usual Care" Effect Size

LARGE

ZERO

"UC" is a bona fide treatment

Quality/amount of supervision

Therapist caseload

Specialized training provided

Treatment from a researcher

Spielmans, GI (2010). Effects of evidence based psychotherapy versus usual care for youth: Controlling confounds in a meta-reanalysis. *Psychotherapy Research, 20 (2).*

To get larger effects, adopt the common factors of EBTs

LARGE

Effect Size

ZERO

Enhance current systems

Treatment based on evidence

Effective, specialized training

High-quality supervision

Treat to target, measure progress

Lower caseloads

WA State JJRA

- Integrated Treatment Model
  - JRA's Integrated Treatment Model is a research-based treatment approach that utilizes cognitive-behavioral and family therapy principles. The model is tailored for use in both residential and parole programs in the JRA continuum of care.
- **Residential care**
- **Functional Family Parole**
- **Residential Treatment and Care Program**
- **Mentoring Program**

JRA ITM
Residential Care

- **Mindfulness Skills** for decreasing impulsiveness and rigid thinking, and for increasing awareness of thoughts and feelings.
- **Emotion Regulation Skills** for understanding the function of emotions and for managing difficult emotions.
- **Distress Tolerance Skills** for managing stress and accepting life's sometimes painful realities.
- **Interpersonal Effectiveness Skills & Social Skills** for pro-social assertiveness, managing conflict, and building healthy relationships.
- **Moral Reasoning Skills** for making mature decisions when faced with difficult dilemmas.
- **Anger Management Skills** for managing anger without engaging in aggressive behavior.
- **These skills also provide critical "soft skills" necessary for obtaining and maintaining employment.**

JRA ITM
Functional Family Parole

- Parole staff work with families to address the role each member has in generating and ultimately resolving "problem behavior”
- The primary theoretical foundation for this section of the model come from James Alexander, PhD and Thomas Sexton, PhD in *Functional Family Therapy*, a research-based family intervention considered a "Blueprint" model from the Center for the Study and Prevention of Violence.
- Functional Family Parole counselors work to engage and motivate all family members by creating a balanced alliance with each, and creating a family focus for treatment.
- Early interventions reduce blame and negativity among family members and instill hope for change.
- Families are also referred to needed services in the community that match family interaction styles and provide continued support for the family once the youth is no longer on parole.

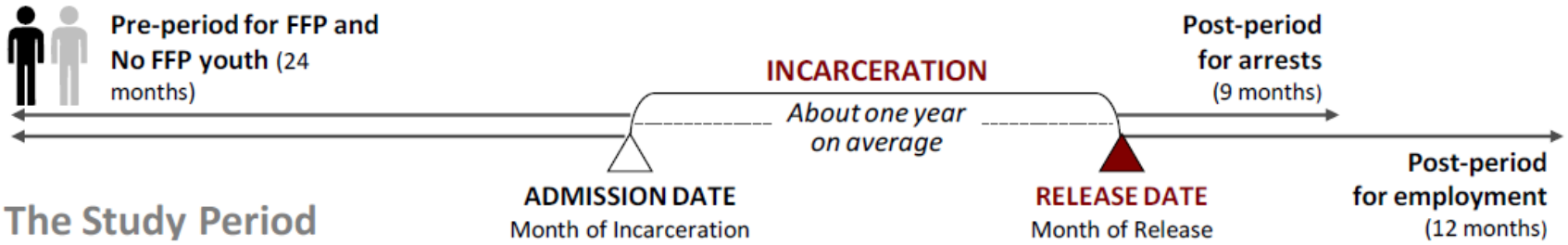
Effects of Functional Family Parole on Re-Arrest and Employment for Youth in Washington State

EXECUTIVE SUMMARY

Barbara A. Lucenko, PhD, Lijian He, PhD, David Mancuso, PhD, and Barbara Felver, MES, MPA

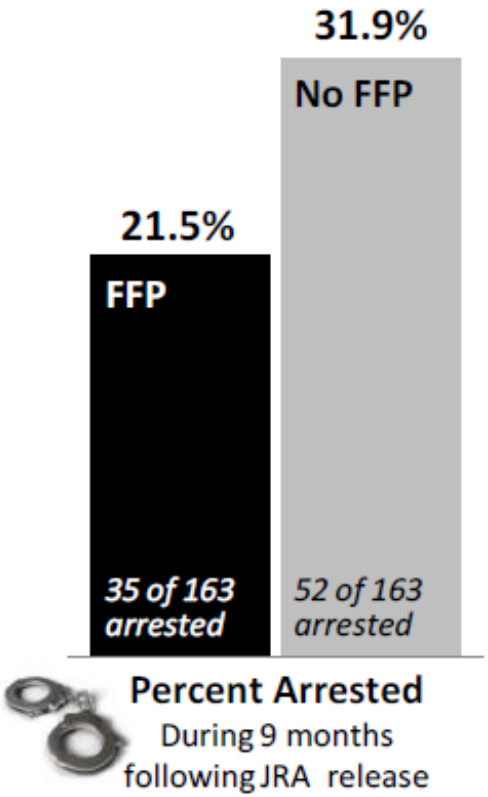
In collaboration with Bob Salsbury, Juvenile Rehabilitation Administration

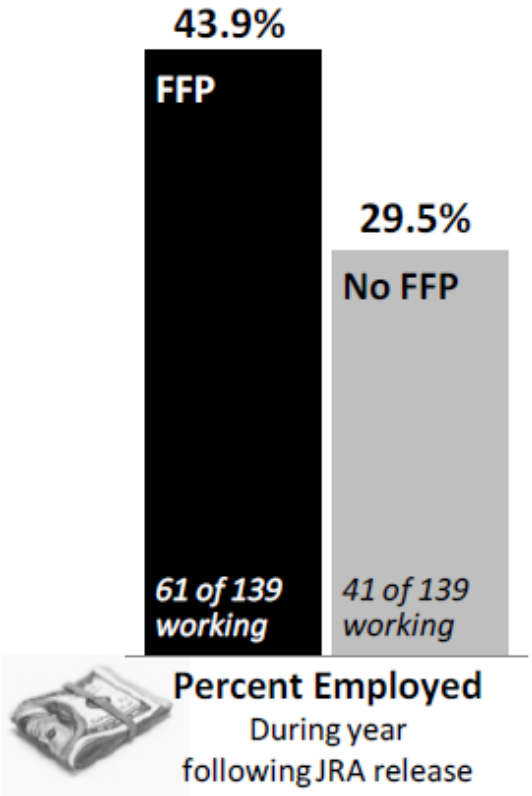
NOTE: *See* ***Technical Appendix*** *for Methods and Definitions: http://www.dshs.wa.gov/rda/.*



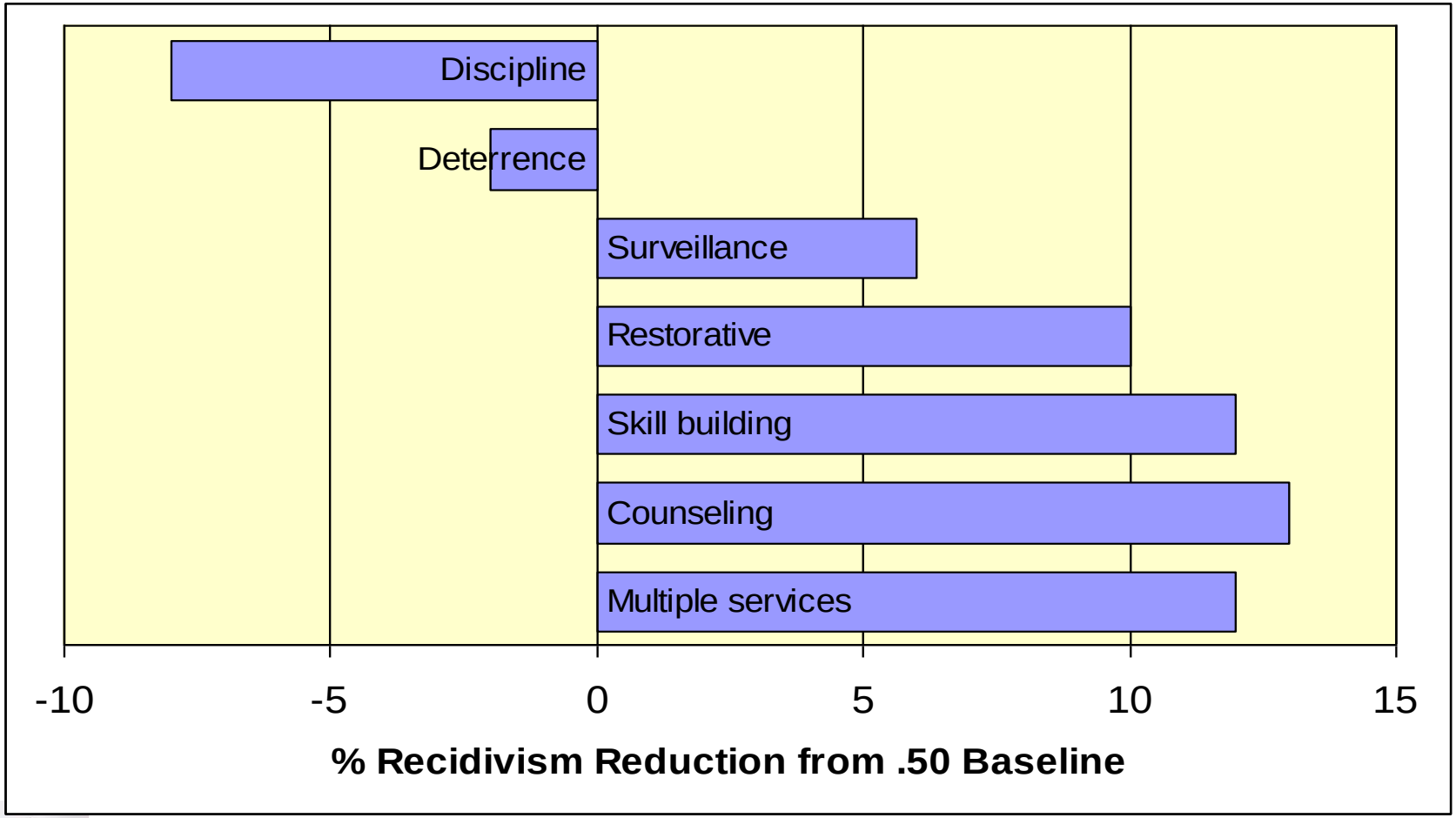
Department of Social and Health Services | Planning, Performance and Accountability | Research and Data Analysis Division

FFP youth far less likely to be arrested and more likely to be employed 12 months later



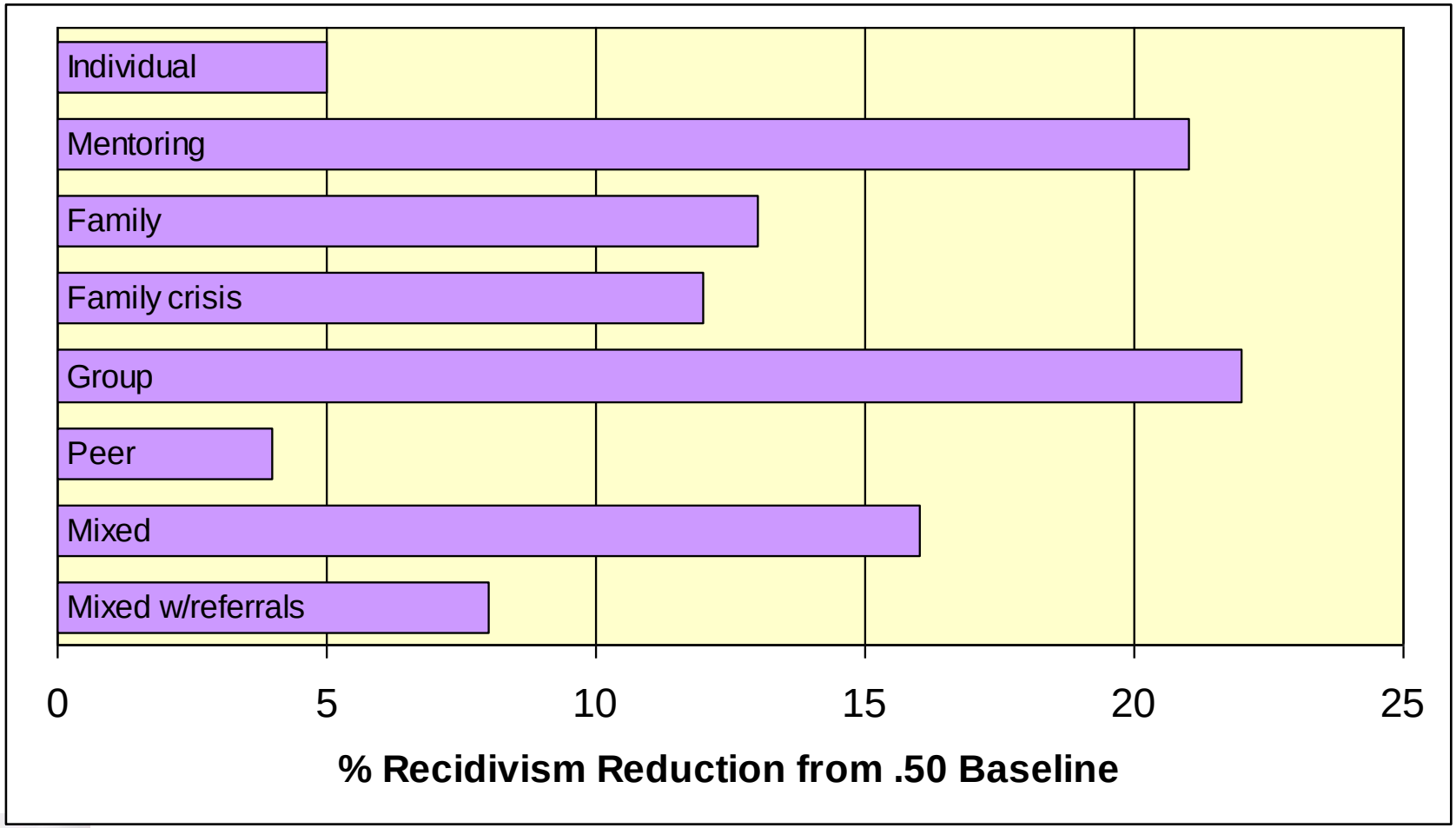


Meta-Analysis of studies of interventions for juvenile offenders (Lipsey & Chapman, 2011): Average recidivism effect for Program types



Chapman & Lipsey, 2011

Recidivism by intervention type within, e.g., counseling approaches



Chapman & Lipsey, 2011

Points assigned proportionate to the contribution of each factor to recidivism reduction

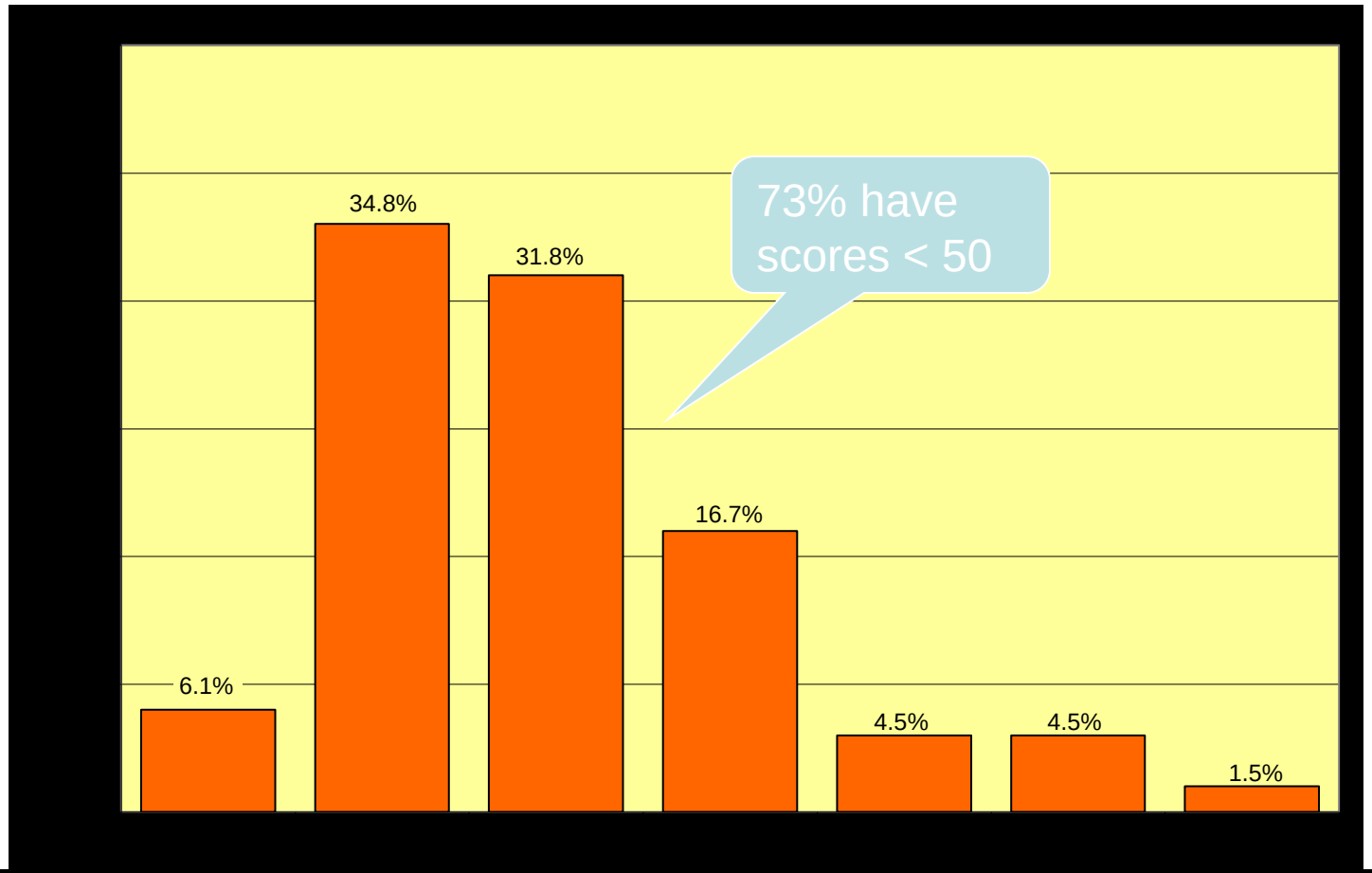
Target values from the meta-analysis (generic) OR program manual (manualized)

Chapman & Lipsey, 2011

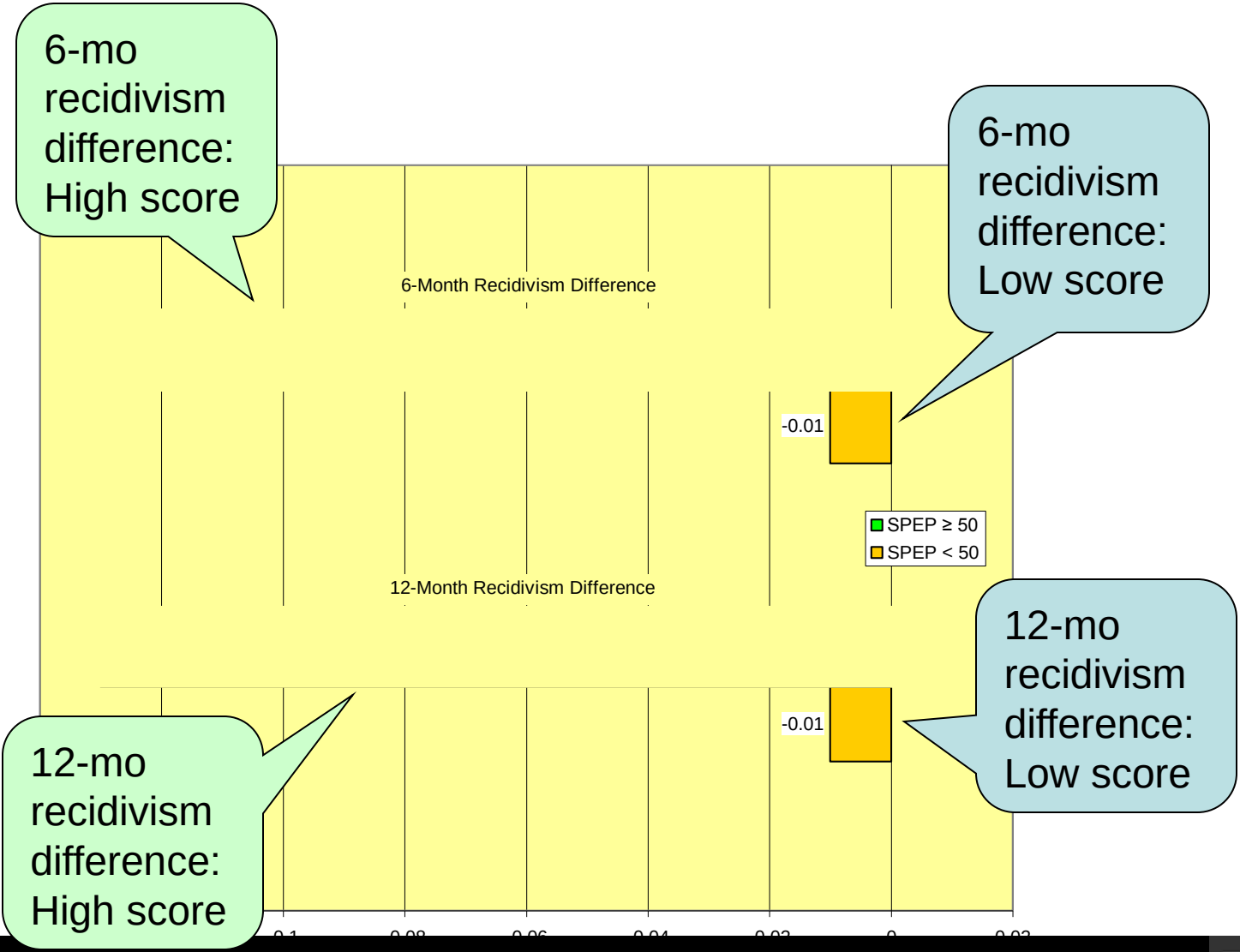
Standardized Program Evaluation Protocol (SPEP) for Services to Probation Youth

	Possible Points	Received Points
Primary Service:		
High average effect service (35 points) Moderate average effect service (25 points) Low average effect service (15 points)	35	
Supplemental Service:		
Qualifying supplemental service used (5 points)	5	
Treatment Amount:		
Duration: % of youth that received target number of weeks of service or more: 0% (0 points) 60% (6 points) 20% (2 points) 80% (8 points) 40% (4 points) 100% (10 points)	10	
Contact Hours: % of youth that received target hours of service or more: 0% (0 points) 60% (9 points) 20% (3 points) 80% (12 points) 40% (6 points) 100% (15 points)	15	
Treatment Quality:		
Rated quality of services delivered: Low (5 points) Medium (10 points) High (15 points)	15	
Youth Risk Level:		
% of youth with the target risk score or higher: 25% (5 points) 75% (15 points) 50% (10 points) 99% (20 points)	20	
Provider's Total SPEP Score:	100	[INSERT SCORE]

Distribution of scores across 66 AZ probation programs



Actual vs. predicted recidivism for providers with scores ≥ 50 and < 50



Brief Intervention for School Clinicians: A Modularized Evidenced-informed Mental Health Treatment

Collaborative Team:

US Department of Education/IES, UW, Seattle Public Schools, Seattle/KC Public Health and Community Partners

Group Health Cooperative, International Community Health Services , Navos, Neighborcare, Seattle Children's' Hospital, Swedish Hospital, Sound Mental Health

BRISC

Brief Intervention for School Clinicians

UNIVERSITY of WASHINGTON

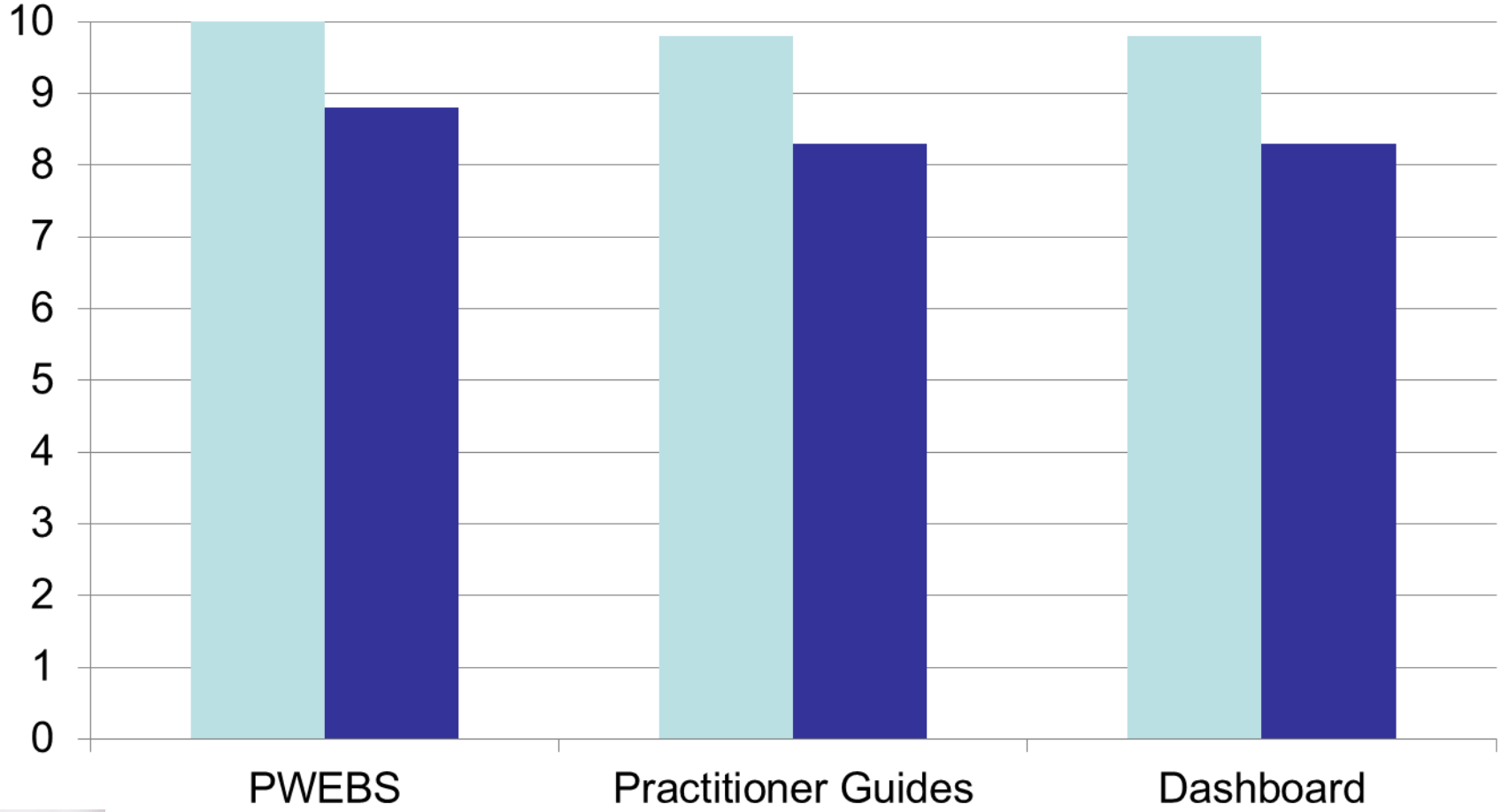
BRISC Common Factors

1. Agenda Setting
2. Problem Solving Framework
3. Progress Monitoring and Feedback
   - Weekly stress rating - generally and then related to identified problem (0=low to 10=high)
   - Useful in identifying targets to address /monitoring progress (i.e. it's like a ruler to measure change)
4. Practice Exercises
   - Tracking targets—moves from therapy to real life application
   - Helps identify barriers to change

Wraparound + Managing and Adapting Practice (WRAP+MAP)

Coordinating research-based treatment elements into an individualized care coordination model for youths with complex and overlapping mental health needs (Bruns, Walker, Bernstein, Daleiden, & Chorpita, 2013)

Care Coordinators Rate Usefulness of MAP Tools Almost as Highly as Therapists



Solutions?

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Complexity borne of multiple EBTs	Cross-EBP fidelity measurement
Expert-driven systems, lack of engagement	Family engagement strategies, Family/youth peer support
Workforce shortages	Train and support indigenous helpers
Lack of knowledge about best system solutions	Funding for state-level research, child BH specific health reform effects, etc.

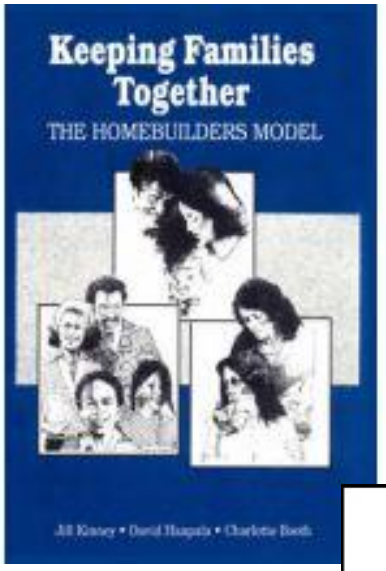
Promoting uptake of EBPs in real world systems

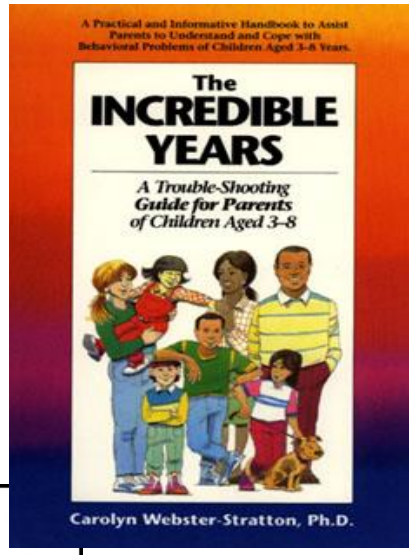
STATE CENTERS OF EXCELLENCE

Children's Administration – University of Washington EBP Partnership

- Beginning in 2012 the Children's Administration collaborated with the University of Washington Division of Public Behavioral Health and Justice Policy to:
  - Oversee and administer provider trainings on core EBPs
  - Conduct fidelity monitoring and quality assurance for providers contracted to provide the selected EBPs
  - Provide expert consultation on EBP implementation, sustainability and data analysis
- The CA-UW EBP Partnership is guided by a conceptual model based on the conceptual model of implementation research developed by Proctor et al. (2009)
  - The model distinguishes but links key implementation processes and outcomes

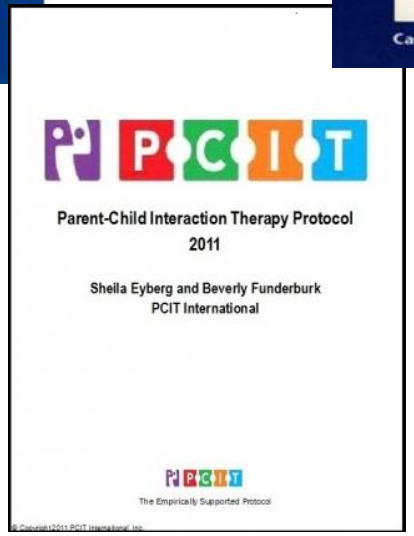
Priority EBPs selected based on alignment with core outcomes and coverage of CA population





SafeCare
Stronger Families | Brighter Futures

Promoting FIRST Relationships

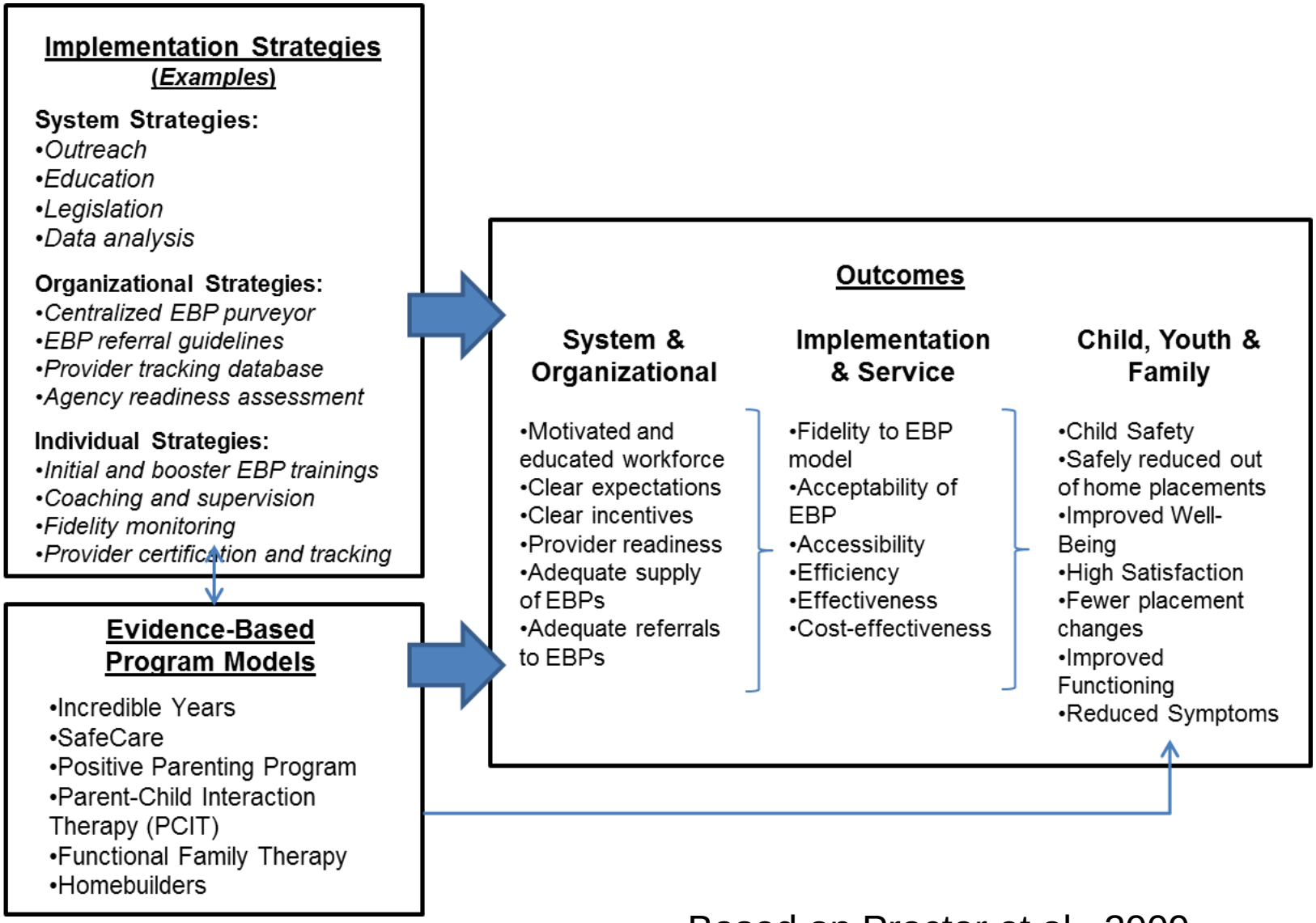


Triple P
Positive Parenting Program
for every parent

Multidimensional Treatment Foster Care®
An evidence-based solution for youth with behavioral problems, their families, and their communities

FFT Functional Family Therapy
Evidence Based. Cost Effective. Sustainable. Family, Youth & Culture Sensitive.

Theory of Change for the CA-UW EBP Partnership Regarding Use of Evidence-Based Practices



Based on Proctor et al., 2009

Specific strategies and products that extend from the conceptual model

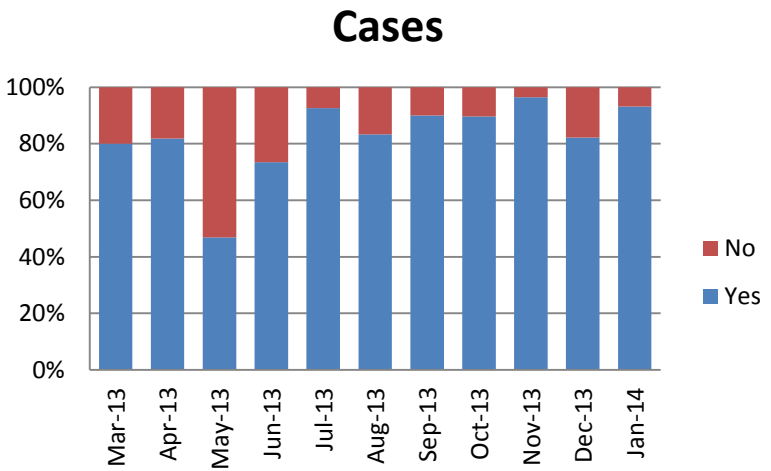
- A unified approach to EBP fidelity supports and monitoring
- The "**Guidance Tool**"
  - Detailed set of EBP referral guidelines for use by CA social workers
- The "**Toolkit**" – Provider fidelity tracking database using consistent categories
  - Facilitates compliance and provision of technical assistance
- Structured EBP **readiness assessment**
  - Used by Children's Administration regional staff persons during contract negotiations
- EBP **Staff Selection Guide**
  - Pre-Training Agreement signed by provider agency rep in advance of EBP training
- **Enhancements** to existing suite of EBPs
  - E.g., Motivational enhancement training
- **Data analysis and use of information** to inform programming
  - E.g., differential rates of EBP use across regions

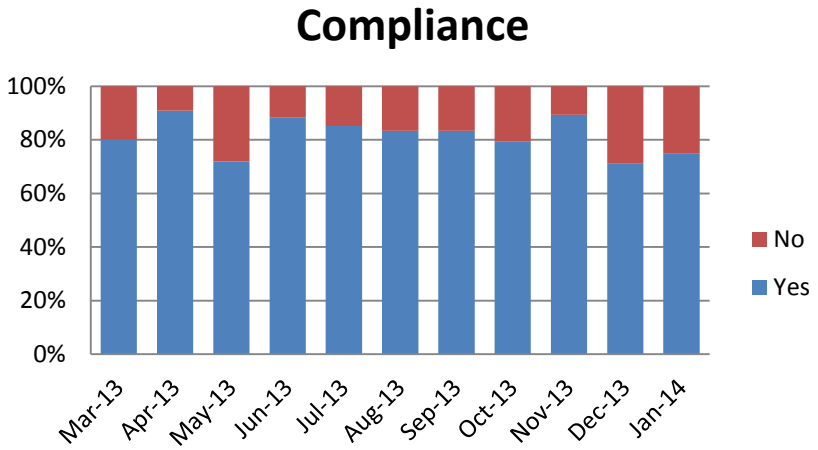
Measuring fidelity to multiple EBPs in a statewide service improvement initiative

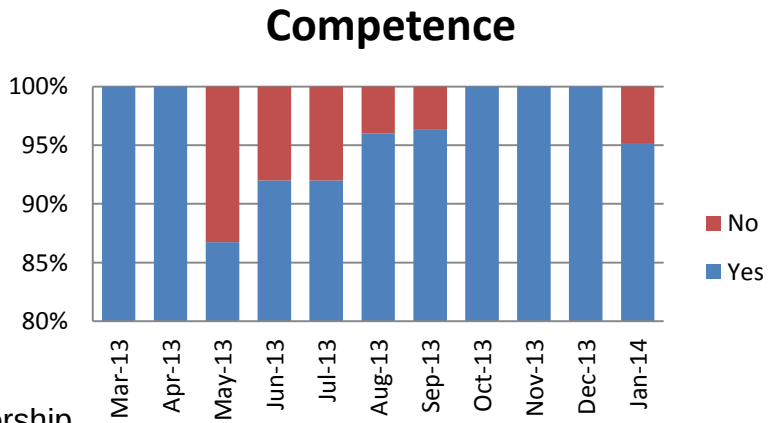
- Standardized, cross-intervention fidelity monitoring strategy
- Maintains adherence to specific requirements of model developers
- Provides consistent information needed to manage comprehensive implementation of EBPs for a statewide child welfare system
  - Adequacy of referrals
  - Provider compliance
  - Provider competence

Triple P - Meeting Fidelity Criteria

March 2013-January 2014



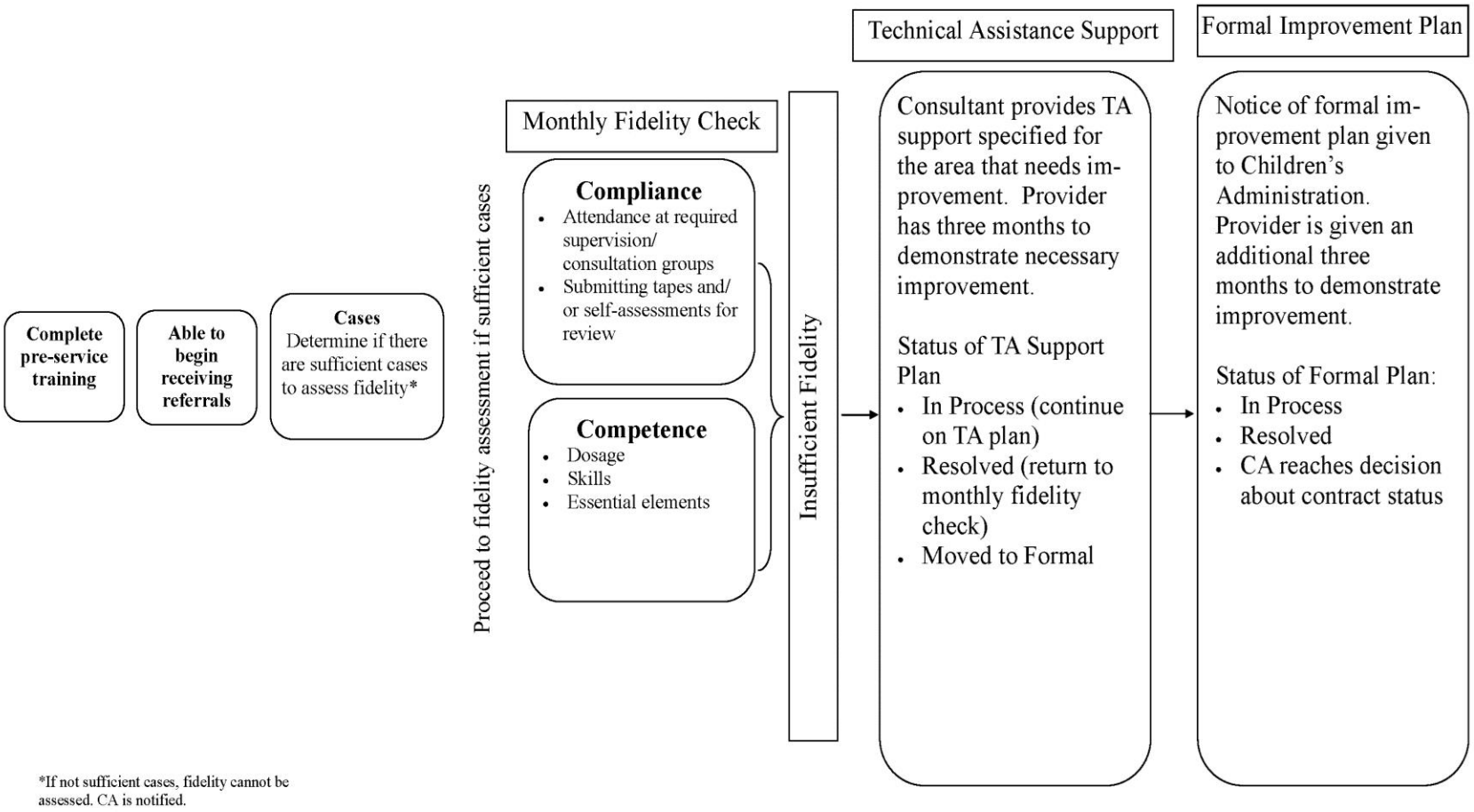




SOURCE: CA-UW EBP Partnership

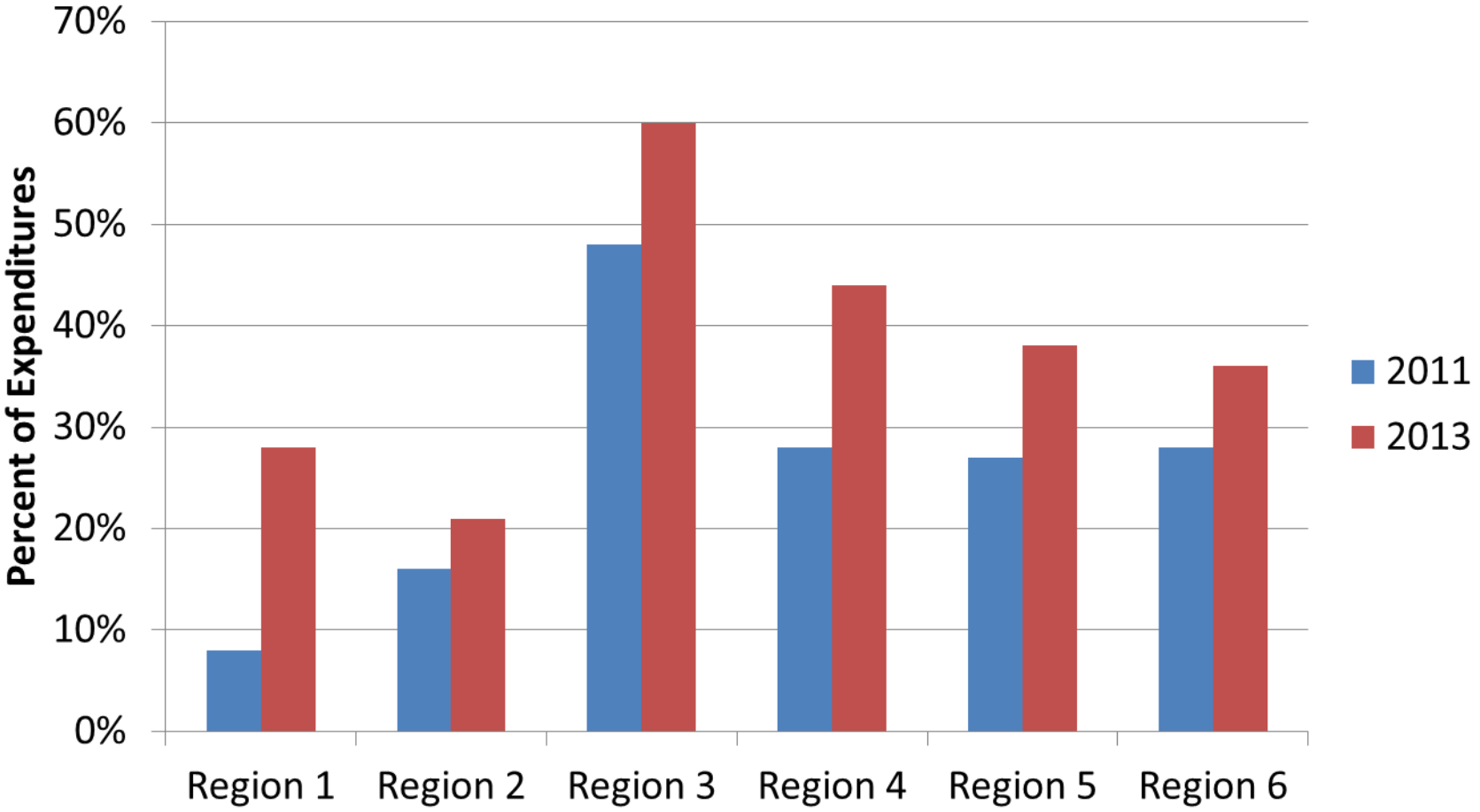
EBP Quality Assurance Plan

Promoting accountability and feedback



Evidence-Based Program Utilization for Children's Administration In-Home Contracted Services

FY2011 - 2013



Key states' efforts to roll out evidence-based practices (EBPs) and quality improvement (QI) initiatives in children's mental health

	California	Colorado	Hawaii	Michigan	New York	Ohio	Oklahoma
1. Authority	California State Department of Mental health (6, 32)	State and local administrators (6, 33, 34)	Hawaii Department of Health (9)	State Department of Community Health (6, 11, 12, 35)	New York State Office of Mental Health (9, 10)	Ohio Department of Mental Health (36, 37)	Department of Human Services (38, 39)
2. Year(s) active	2006-Present	2000-Present	1999-Present	1998-Present	2006-Present	2007-Present	2003-2007
3. Setting	Partnering with non-profit agencies and community-based organizations in the public mental health system, Community Development Teams (CDTs) have been formed. This model involves provision of information, incentives, training, consultation, and technical assistance in implementing EBPs.	The Center for Effective Interventions (CEI), an academic entity, collaborates with local, state forces, and provider agencies to promote the development of EBPs.	The Empirical Basis to Services Task Force of the Child and Adolescent Mental Health Division and the University of Hawaii provide statewide trainings in treatments targeting specific need areas.	University evaluators and community providers have formed a partnership to promote statewide continuous improvement through data and outcome monitoring across providers, practitioners, and families.	Through a state-academic partnership, the Evidence-Based Treatment Dissemination Center (EBTDC) serves as a coordinating center for improving assessment, training clinicians on EBPs, incentivizing the use of EBPs, and identifying community advocates.	Consumer advocacy groups, local mental health boards, private research entities, and a provider trade association have formed 7 Coordinating Centers of Excellence (CCOE), which provide technical assistance in promoting the adoption and implementation of EBPs throughout the state.	Oklahoma State Children Services System collaborated with a network of non-profit organizations to conduct a statewide randomized effectiveness trial of an evidence-based intervention to reduce child neglect.

Hoagwood et al. (in press). Characterizing Clinic Adoption of Child Mental Health Initiatives in New York State. *Psychiatric Services*

Summary of major points

- States are the major potential locus for building evidence based systems as well as improving uptake of EBP
- Incentives are needed for translating major Medicaid and other federal reform efforts into development of research based state systems
  - Are Legislation and Litigation what is needed?
- Funding is needed for “macro level” state research:
  - Impact of child BH-specific Medicaid customization efforts
  - State-level system building efforts – currently lots of n=1 experimentation going on
  - Greater consistency and relevance of state data reporting would help this cause
- Research also needed on strategies for taking evidence to scale:
  - E.g., Peer support, task shifting, common elements, QI frameworks, workforce efforts

A "Knowledge Informed Systems" Framework

Systems/States

- System wide CQI/Outcomes Systems
  - Disparities analyses
  - Review of plans of care
  - Consistent measures – beyond HEDIS (incl. penetration of services by type)
- Higher education certification/placement strategies
- Fiscal incentives for EIP/CQI
- Family/youth advocacy organizations
- State Center of Excellence
- Relevance mapping for EBP selection
- Waiver programs and case rate financing
- Cross-agency coordination/"Children's Cabinet"

Organizations

- Leadership/Climate and Culture
- Business Training and Communities of Practice
- Incentives for EIP use
- Subsidies for training/coaching
- Implementation supports
  - Staff selection, Data systems, Supervision

Services/Providers

(What providers do)

- Common Elements/Modularized EBP Models
- Manualized EBPs
- "Common Factors"
  - Family Engagement/Alliance
  - Cultural/Linguistic Competence
- Family/Youth Support
- Care Coordination/Wraparound (complex needs)

Youth/Families

- Family-driven, Youth-guided
- Timely and efficient
- Coordinated, based on effectiveness
- Individualized
- Culturally/linguistically competent
- Home & community based as possible

FOCUS ON POSITIVE OUTCOMES