State system factors and their influence on implementation, skill attainment, and fidelity: What is truly “malleable”?

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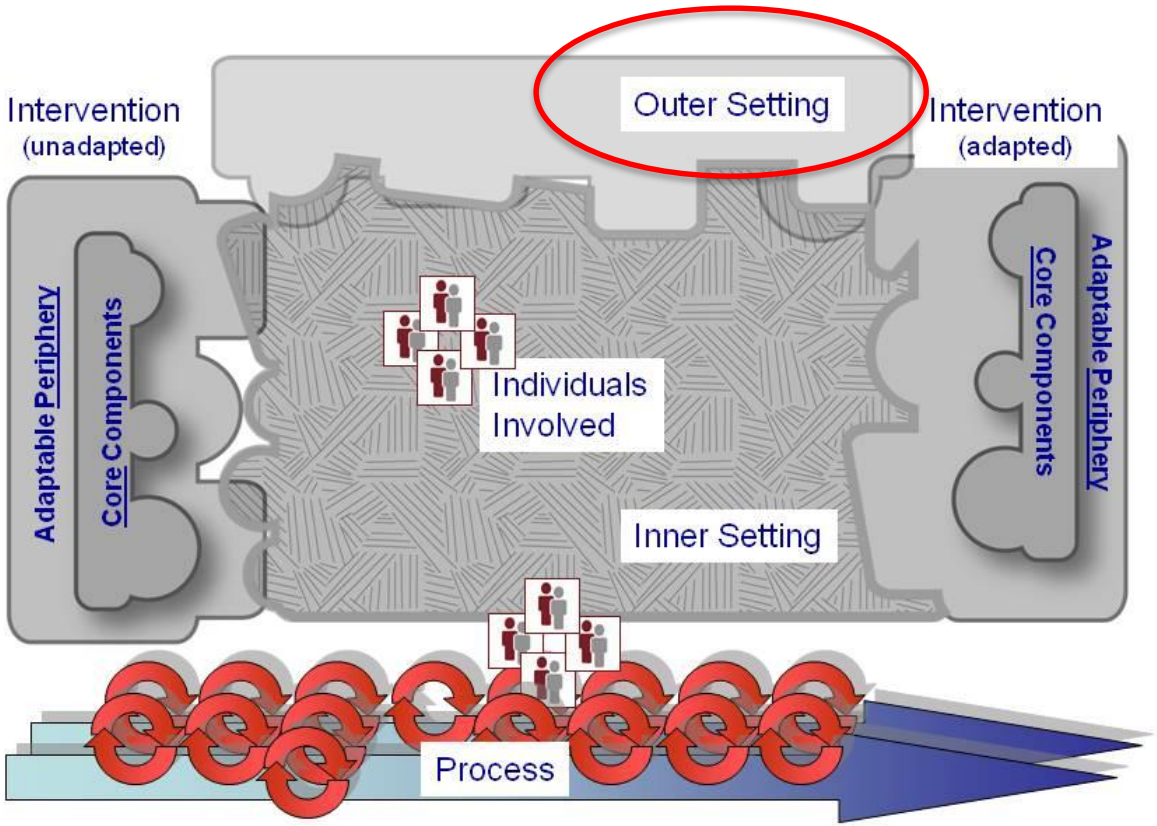
The Outer Context: The Final Frontier?

Research and investment in “Policy D&I”: Incommensurate with potential impact?



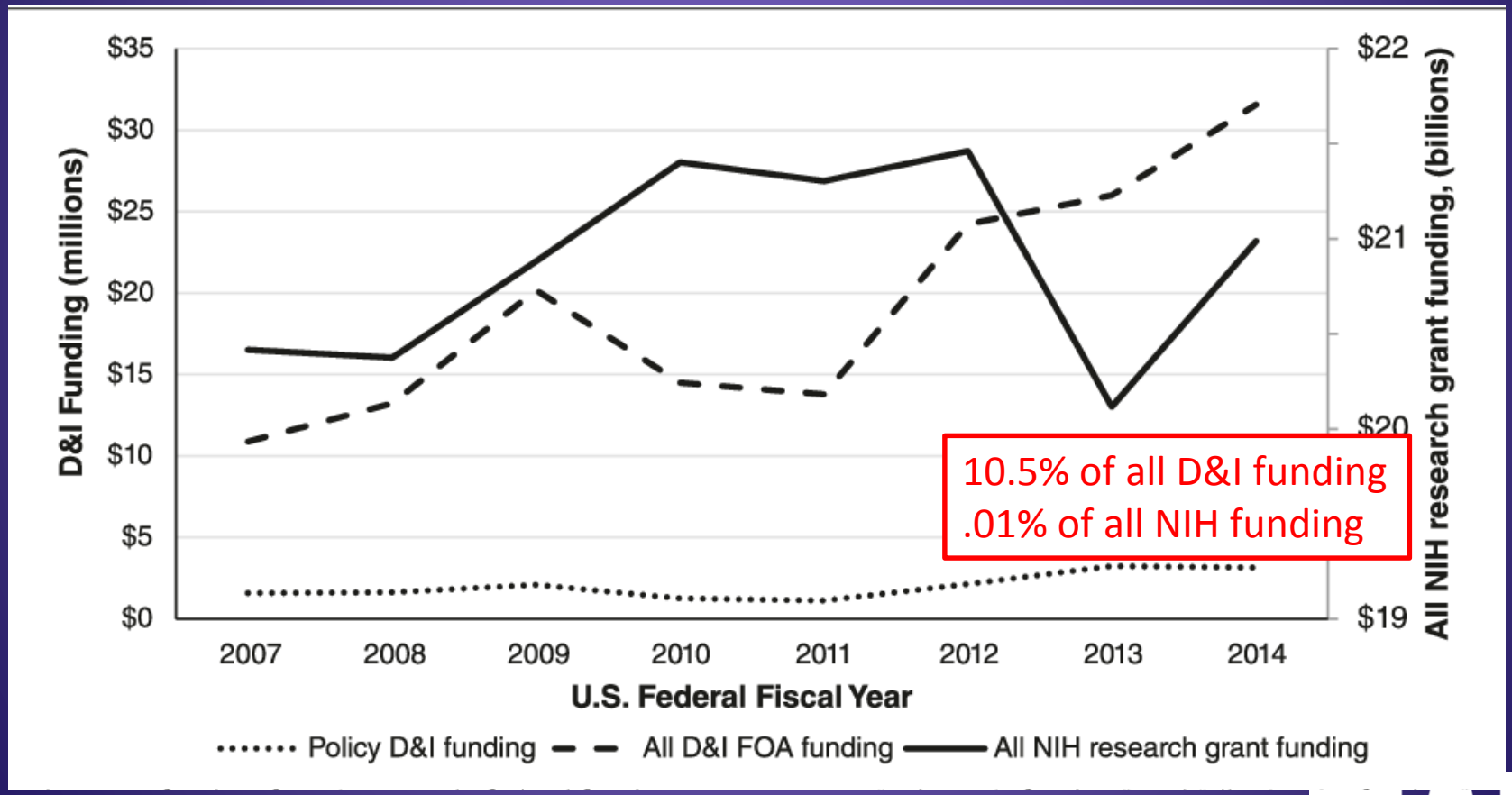
Investment in "Policy D&I": Foundational descriptions underdeveloped

III. INNER SETTING		
A	Structural Characteristics	The social architecture, age, maturity, and size of an organization.
B	Networks & Communications	The nature and quality of webs of social networks and the nature and quality of formal and informal communications within an organization.
C	Culture	Norms, values, and basic assumptions of a given organization.
D	Implementation Climate	The absorptive capacity for change, shared receptivity of involved individuals to an intervention and the extent to which use of that intervention will be rewarded, supported, and expected within their organization.
1	Tension for Change	The degree to which stakeholders perceive the current situation as intolerable or needing change.
2	Compatibility	The degree of tangible fit between meaning and values attached to the intervention by involved individuals, how those align with individuals' own norms, values, and perceived risks and needs, and how the intervention fits with existing workflows and systems.
3	Relative Priority	Indivi
4	Organizational Incentives & Rewards	Extri salar
5	Goals and Feedback	The align
6	Learning Climate	A cli and i chan suffic
E	Readiness for Implementation	Tang interv
1	Leadership Engagement	Commitment, involvement, and accountability of leaders and managers with the implementation.
2	Available Resources	The level of resources dedicated for implementation and on-going operations including money, training, education, physical space, and time.
3	Access to knowledge and information	Ease of access to digestible information and knowledge about the intervention and how to incorporate it into work tasks.

II. OUTER SETTING		
A	Patient Needs & Resources	The extent to which patient needs, as well as barriers and facilitators to meet those needs are accurately known and prioritized by the organization.
B	Cosmopolitanism	The degree to which an organization is networked with other external organizations.
C	Peer Pressure	Mimetic or competitive pressure to implement an intervention; typically because most or other key peer or competing organizations have already implemented or in a bid for a competitive edge.
D	External Policy & Incentives	A broad construct that includes external strategies to spread interventions including policy and regulations (governmental or other central entity), external mandates, recommendations and guidelines, pay-for-performance, collaboratives, and public or benchmark reporting.

Damschroeder et al. (2009). *Consolidated Framework for Implementation Research*

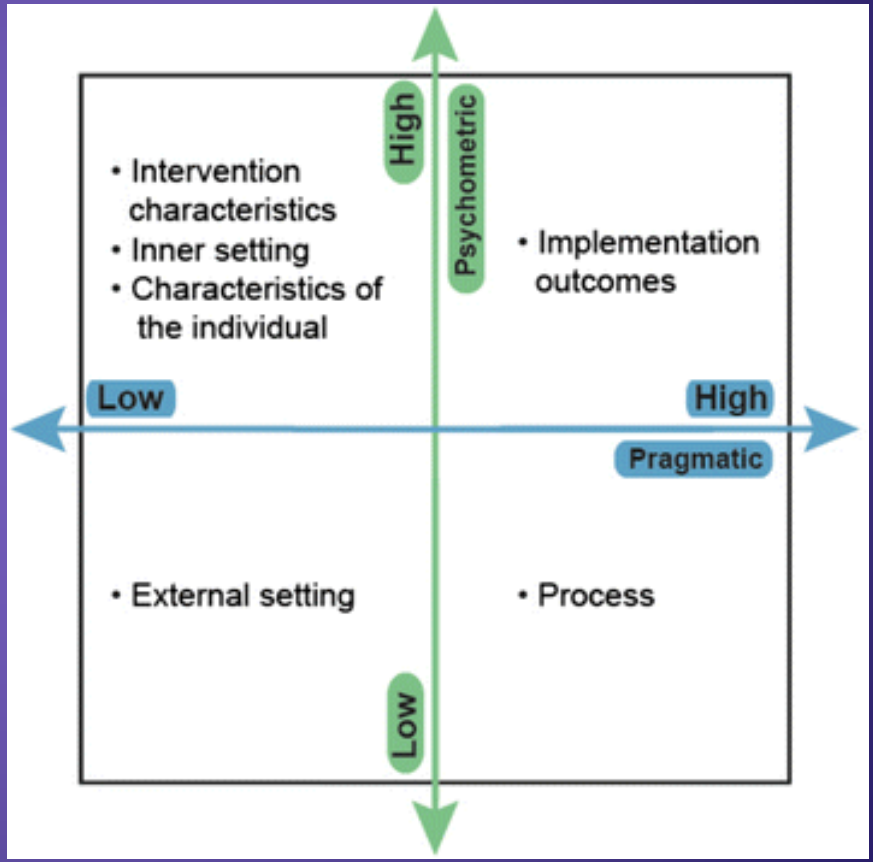
Investment in "Policy D&I": Federal funding almost non-existent



Purtle, Peters, & Brownson (2016). *Implementation Science*

Investment in "Policy D&I": Measures nearly non-existent

Domain	Total instruments
Implementation outcomes	105
Individuals	98
Inner setting	90
Implementation process	54
Intervention characteristics	19
Outer setting	**4**



Lewis et al. (2015).
Implementation Science

Notable efforts to promote Policy D&I

- Magnabosco (2006):106 unique state activities to support implementation of EBPs for adults with SMI
  - State infrastructure building
  - Stakeholder relationship building
  - Financing
  - Continuous quality management
  - Services delivery practices and training

Notable efforts to promote Policy D&I

Powell *et al. Implementation Science* (2015) 10:21
DOI 10.1186/s13012-015-0209-1

IMPLEMENTATION SCIENCE

RESEARCH Open Access

A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change (ERIC) project

Byron J Powell[1*], Thomas J Waltz[2], Matthew J Chinman[3,4], Laura J Damschroder[5], Jeffrey L Smith[6], Monica M Matthieu[6,7], Enola K Proctor[8] and JoAnn E Kirchner[6,9]

Promoting Policy D&I: 32 of 73 strategies at "outer setting"

Utilize Financial Strategies	
Access new funding	Access new or existing money to facilitate the implementation.
Alter incentive/ allowance structures	Work to incentivize the adoption and implementation of the clinical innovation.
Alter patient/consumer fees	Create fee structures where patients/consumers pay less for preferred treatments (the clinical innovation) and more for less-preferred treatments.
Develop disincentives	Provide financial disincentives for failure to implement or use the clinical innovations.
Fund and contract for the clinical innovation	(Governments and other payers of services) issue requests for proposals to deliver the innovation, use contracting processes to motivate providers to deliver the clinical innovation, and develop new funding formulas that make it more likely that providers will deliver the innovation.
Make billing easier	Make it easier to bill for the clinical innovation. This might involve requiring less documentation, "block" funding for delivering the innovation, and creating new billing codes for the innovation.
Place innovation on fee for service lists/formularies	Work to place the clinical innovation on lists of actions for which providers can be reimbursed (e.g., a drug is placed on a formulary, a procedure is now reimbursable).
Use capitated payments	Pay providers or care systems a set amount per patient/consumer for delivering clinical care.
Use other payment schemes	Introduce payment approaches (in a catch-all category).
Change Infrastructure	
Change accreditation or membership requirements	Strive to alter accreditation standards so that they require or encourage use of the clinical innovation. Work to alter membership organization requirements so that those who want to affiliate with the organization are encouraged or required to use the clinical innovation.
Change liability laws	Participate in liability reform efforts that make clinicians more willing to deliver the clinical innovation.
Change physical structure and equipment	Evaluate current configurations and adapt, as needed, the physical structure and/or equipment (e.g., changing the layout of a room, adding equipment) to best accommodate the targeted innovation.
Change records systems	Change records systems to allow better assessment of implementation or of outcomes of the implementation.
Change service sites	Change the location of clinical service sites to increase access.
Create or change credentialing and/or licensure standards	Create an organization that certifies clinicians in the innovation or encourages an existing organization to do so. Change governmental professional certification or licensure requirements to include delivering the innovation. Work to alter continuing education requirements to shape professional practice toward the innovation.
Mandate change	Have leadership declare the priority of the innovation and determination to have it implemented.
Start a dissemination organization	Start a separate organization that is responsible for disseminating the clinical innovation. It could be a for-profit or non-profit organization.

Powell et al. (2015).
Implementation Science

Building the research base: Two State-Level Policy D&I studies

1. What is the relationship between “modifiable and unmodifiable” state contextual factors and:
   - Fiscal and policy supports to promote EBPs?
   - Actual EBP adoption and penetration?
2. How does a defined state level policy and financing (outer context) strategy impact:
   - Implementation success
   - Fidelity to defined practice models

State Predictors of EBP Investment: Study Framework

UNMODIFIABLE OUTER CONTEXT: State Characteristics

- Region
- Per capita income
- State budget strength
- Controlling political party
- Medicaid expansion
- SMHA independence
- SMHA location

MODIFIABLE OUTER CONTEXT: Policies & Funding

EBP policies (examples):

- Incorporation in contracts is used to promote the adoption of EBPs
- Link dataset with other agency datasets
- Collaborate with other agencies
- Provider-to-provider training used to provide ongoing training

EBP funding (examples):

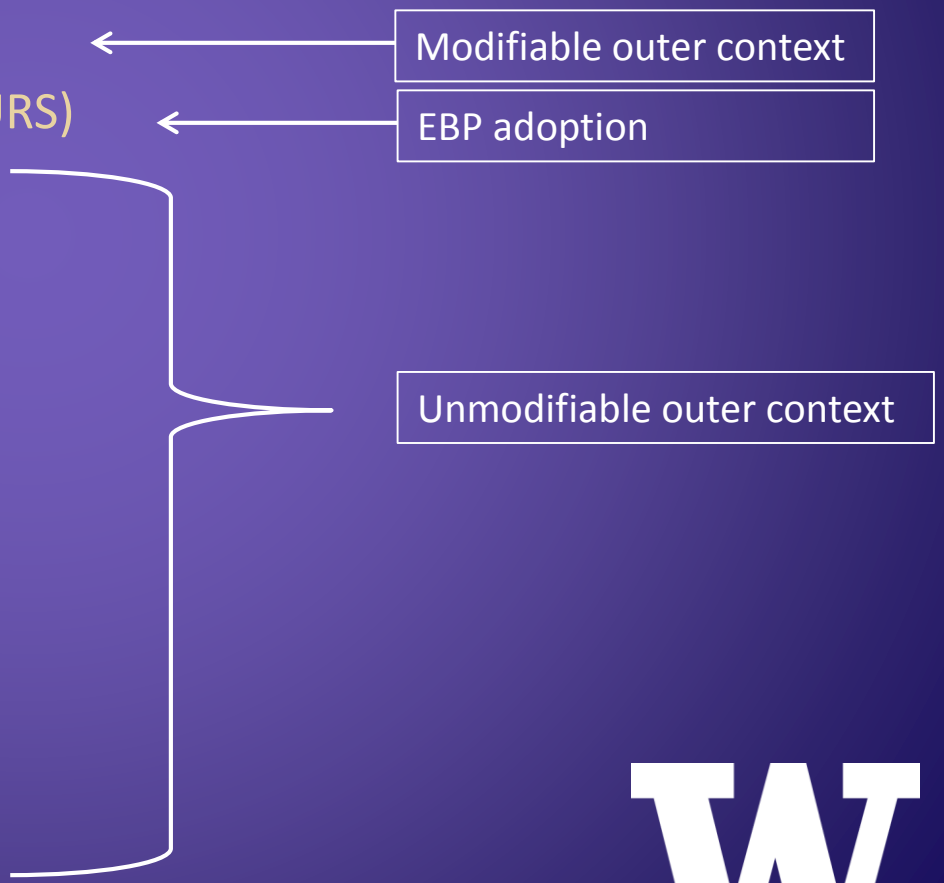
- Specific budget requests are used to promote the adoption of EBPs
- Directly operating community MH versus just funding MH services
- Investment in IT and data systems to promote the adoption of EBPs

EBP ADOPTION,e.g.:

- MST
- FFT
- TFC
- ACT
- Supported Employment
- Supported Housing

State Predictors of EBP Investment: Data Sources

- **National Association for State Mental Health Program Directors Research Institute (NRI):**
  - State Profiles System (SPS)
  - Uniform Reporting System (URS)
- **U.S. Census Bureau**
  - Total Adults and Children
  - Region
- **U.S. Department of Commerce**
  - Per capita income
- **Kaiser Family Foundation**
  - Medicaid Expansion Status
- **Carl Klarner's Dataverse Project**
  - Budget Surplus or Deficit



Summary of HLM results:

Modifiable and ***unmodifiable*** factors[1] found to predict…

EBP Investment

- *Per capita income increases*
- *State has expanded Medicaid eligibility*
- *Democrats control the leg. & exec branches*
- Investment in external SMHA research unit
- Investment in internal SMHA research unit

[1] Out of 22 total state variables tested

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EBP Policies

- SMHA collaborates with other agencies on provision of MH services
- Representatives from other state agencies are members of the SMHA planning group
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Rate of EBP adoption

- SMHA directly operate community-based programs
- SMHA promotes consumer participation

- Greater rate of EBP investments (predicts adult EBP adoption)
- Greater number of EBP policies (predicts child EBP adoption)

[1] Out of 22 total state variables tested

Study 2: Impact of State Care Management Entities on Implementation and Fidelity

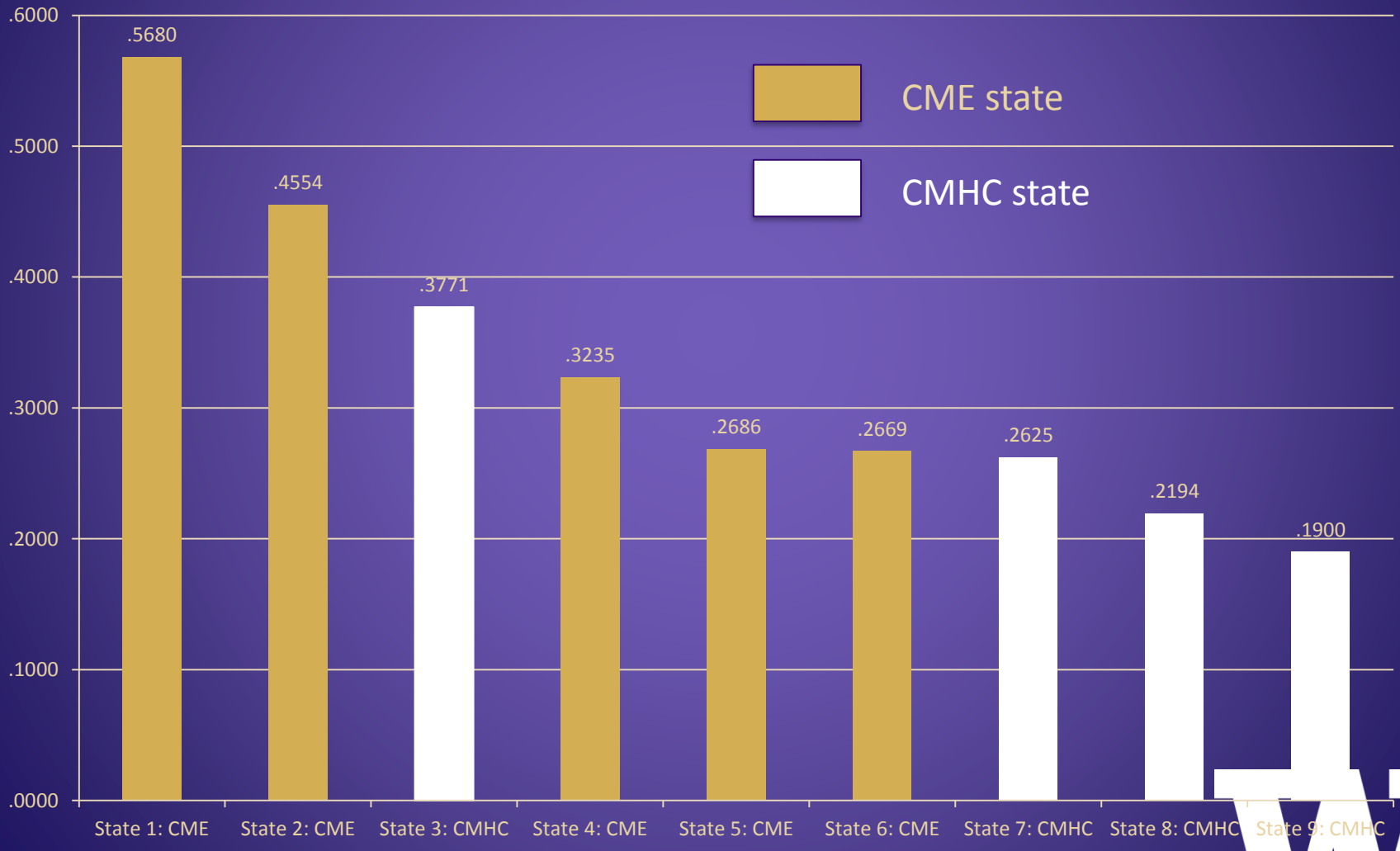
- EBP: Wraparound Care Management for youth with serious emotional and behavioral difficulties (SEBD)
- Study of 10 states supported by *National Wraparound Implementation Center (www.nwic.org)*
- Do states that employed a Care Management Entity (CME) approach to organizing and financing care for youth with SEBD demonstrate:
  - Greater levels of fidelity to Wraparound practice model
  - More rapid progress to skillful practice by wraparound staff

Features of Care Management Entities

- Convene of funders, system partners, stakeholders, advocates
- Case rate (all-inclusive or partial) approach to financing care
- Care monitoring and review, including utilization management with incentives for quality and costs
- Contract with and manage provider networks
  - Including EBPs, crisis support, youth/family peer support
- Screening, assessment, and clinical oversight
- Information management
  - Including outcomes, satisfaction, fidelity
- Training, coaching, and supervision for CME staff and practitioners in the service array

Mean Total Wraparound Fidelity Scores by State

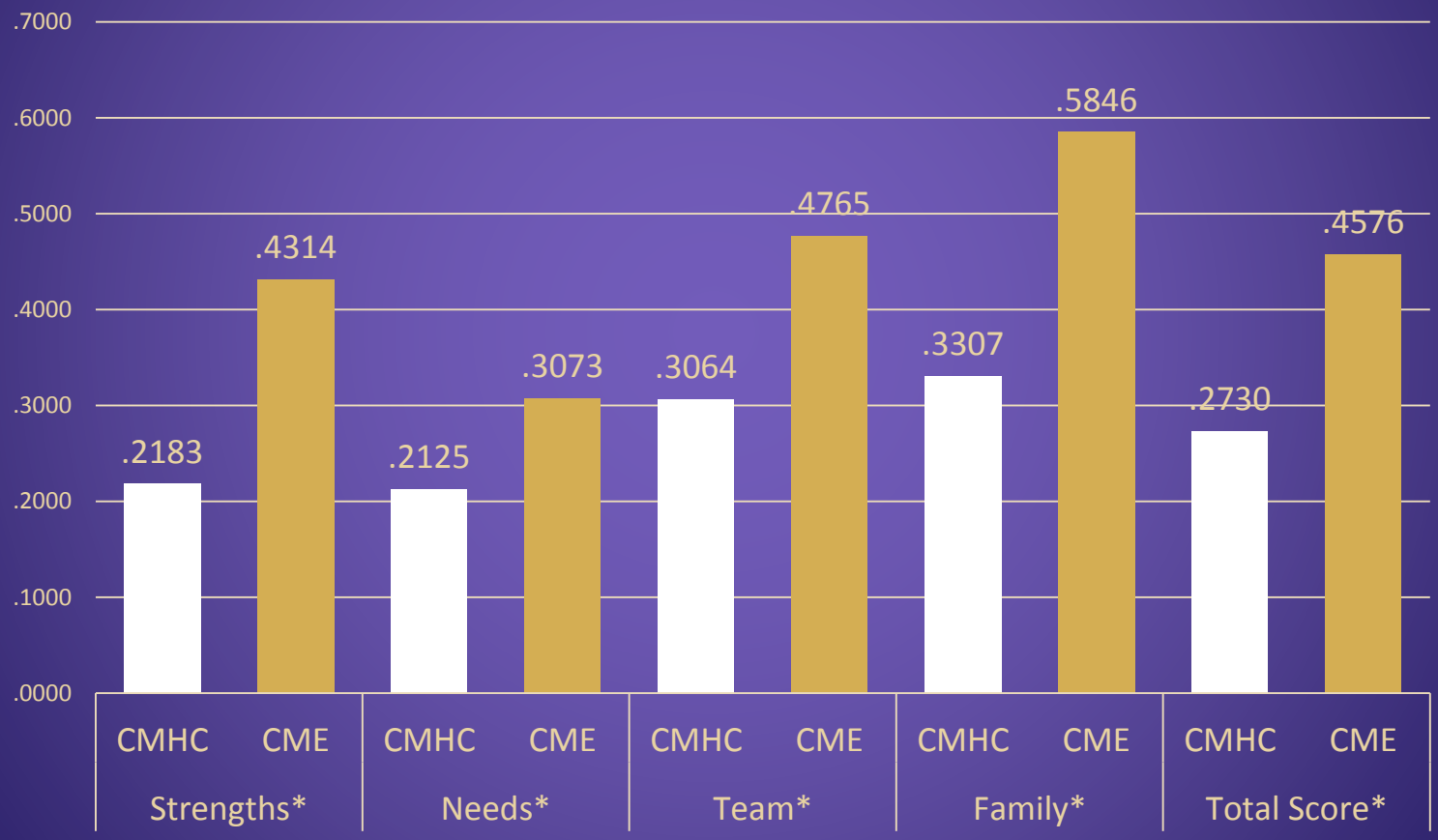
CME states (N=5) versus CMHC states (N=4)



Mean Total Wraparound Fidelity Scores

Coaching Observation Measure for Effective Teamwork (COMET)

CME states (N=5) versus CMHC states (N=4)



* p < .001

Findings and Implications

- The outer context matters
  - But some things may matter more than others
  - "Unmodifiable" and "modifiable" factors play roles
  - Promoting social processes seem to matter
- Policy and fiscal strategies may impact certain service types or populations of focus differently
  - Intriguingly, Adult EBPs may be promoted simply through budget allocation;
  - child EBPs may require more policy efforts
    - E.g., CME strategies

Discussion: Learn from “Policy D&I” Practice-Based Evidence

- Evidence based models where outer context strategies are part of the intervention:
  - Wraparound
  - Positive Behavioral Interventions and Supports (PBIS)
  - Communities that Care
  - Integrated care
- Core features: Defined strategies across practitioner, organization, and system

Discussion: Learn from "Policy D&I" Practice-Based Evidence

- Fiscal and policy frameworks that support EBP implementation and the "triple aim" of health care
  - Care Management Entities
  - Health Homes
  - Accountable Care Organizations
- Core features: Performance-based contracting, UM, organized provider networks, CQI, cross-sector coalitions

Discussion: Learn from "Policy D&I" Practice-Based Evidence

- Defined Processes that influence implementation outcomes
  - State Centers of Excellence
  - Community Development Teams
  - Learning Collaboratives / Communities
  - Systems of Care
- Core features: Building community capacity to identify needs, solve problems, create systems change

Other Thoughts on “Policy D&I”

- What are the “common elements” of effective “Outer context” efforts?
  - Map elements of existing Policy D&I onto the ERIC strategies?
- Stop admiring the “outer context” problem – take action
  - Abandon the “voltage drop” mentality
  - Incorporate system/policy steps in implementation process

Stages of Implementation Completion Adapted for Wraparound

Var No.	Var Type	SIC Variable Description	NWIC variable description
3_01	UNISIC	Date of NWIC funding plan review	Date of first cost projection for training and coaching
3_01A	**WIPS**	**Date of state wraparound funding plan review**	**Date state leadership identifies potential financing streams to support workforce development, needed system supports such as IT, and installation of Wraparound.**
3_02	UNISIC	Date of staff sequence, timeline, hire plan review	Date of initial review around role expectations (staffing, qualifications, roles and responsibilities, timelines, resources, etc.)
3_02A	**WIPS**	**Date Wrap org staffing expectations**	**Date state establishes role expectations for care coordinators and supervisors and provides guidance to local organizations on role expectations and hiring protocols.**

Other Thoughts on “Policy D&I”

> Is there a User-Centered-Design-based strategy for outer context efforts?

> Promote co-design for system and policy efforts

  – Get community leaders, youth and family advocates, policy gurus, KT scholars, and IS nerds together

Other Thoughts on “Policy D&I”

> Promote – and fund – research

- Consistent reporting of implementation strategies at all levels in trials (a la CONSORT)?
- More rigorous surveillance and tracking of state strategies?
- How do state policy and financing strategies map to sentinel outcomes of quality, access, and outcomes?

THANK YOU

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