ADMINISTRATION FOR CHILDREN & FAMILIES

Data Mining Strategies to Refine Target Populations and Inform Intervention Selection – Sharing Experiences from the Permanency Innovations Initiative

Bryan Samuels, Commissioner, Administration for Children, Youth and Families
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Becci Akin & Tom McDonald, Kansas Intensive Permanency Project
Larry Small & Dana Weiner, Illinois' Trauma-Focus Model for Reducing Long Term Foster Care

Participant Dial-in Number: 1-800-860-2442

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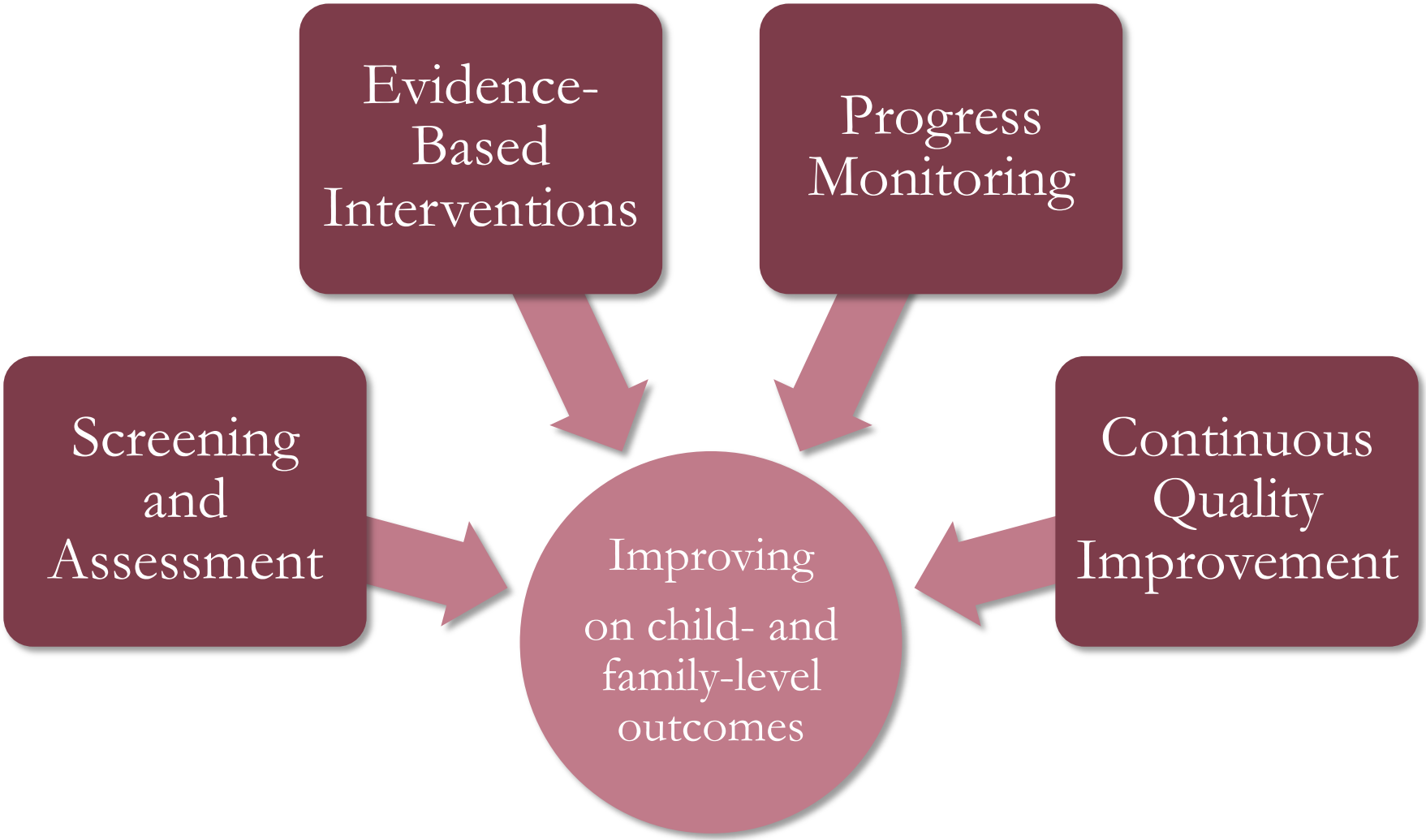
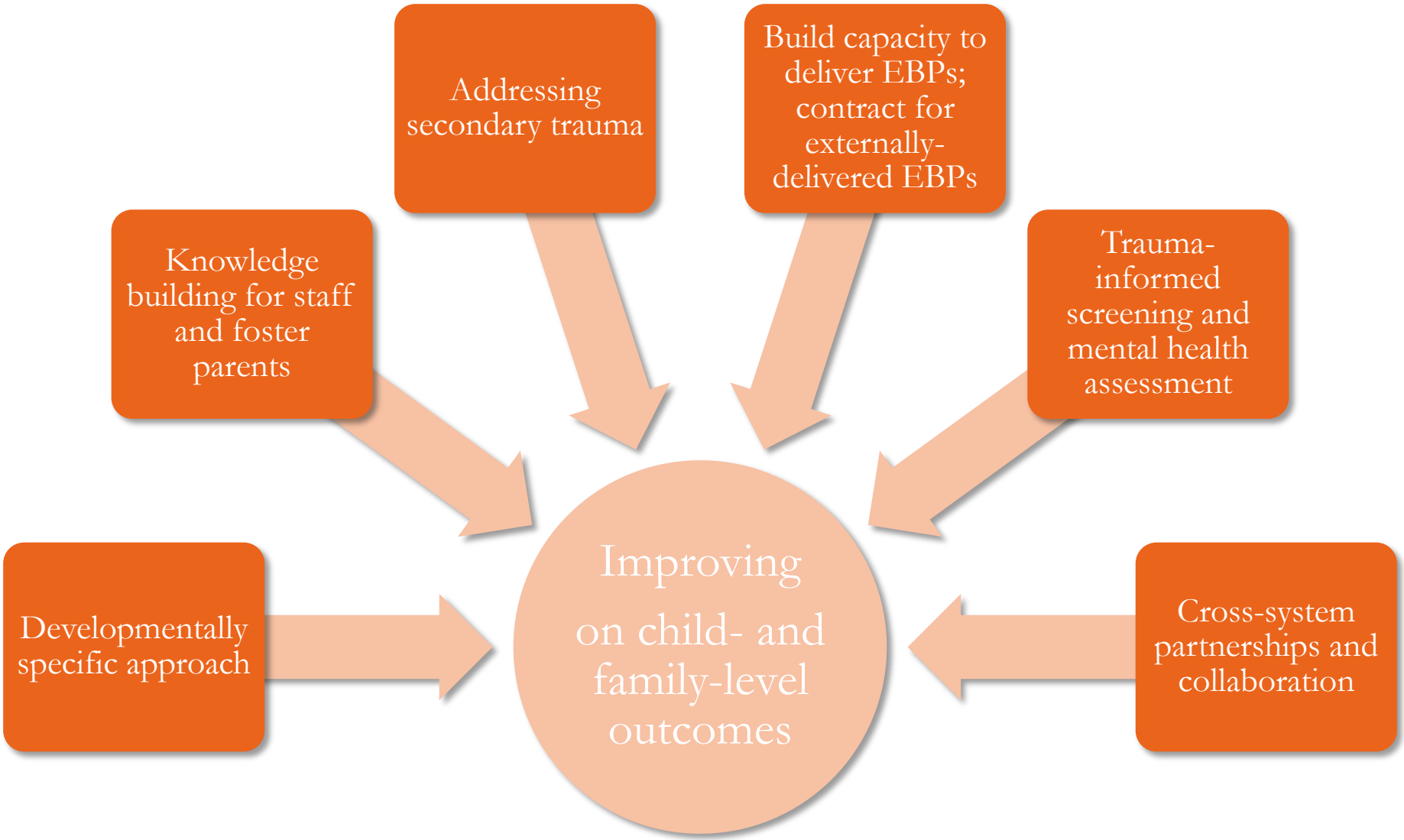
Achieving Better Outcomes for Vulnerable Children and Families

Bryan Samuels, Commissioner
Administration on Children, Youth, and Families

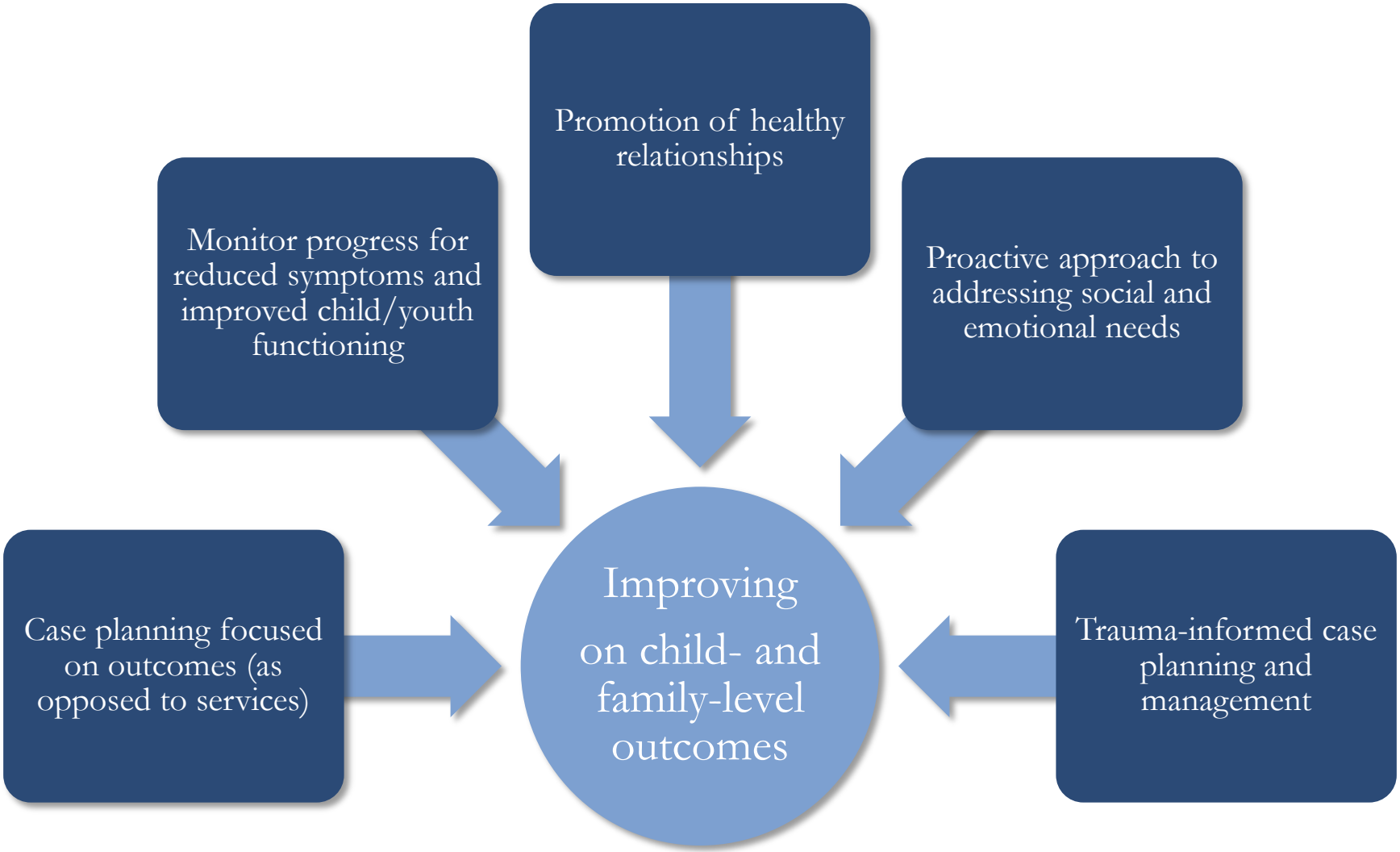
Integrating Safety, Permanency, Well-Being: System Level



Integrating Safety, Permanency, Well-Being: Program Level



Integrating Safety, Permanency, Well-Being: Practice Level



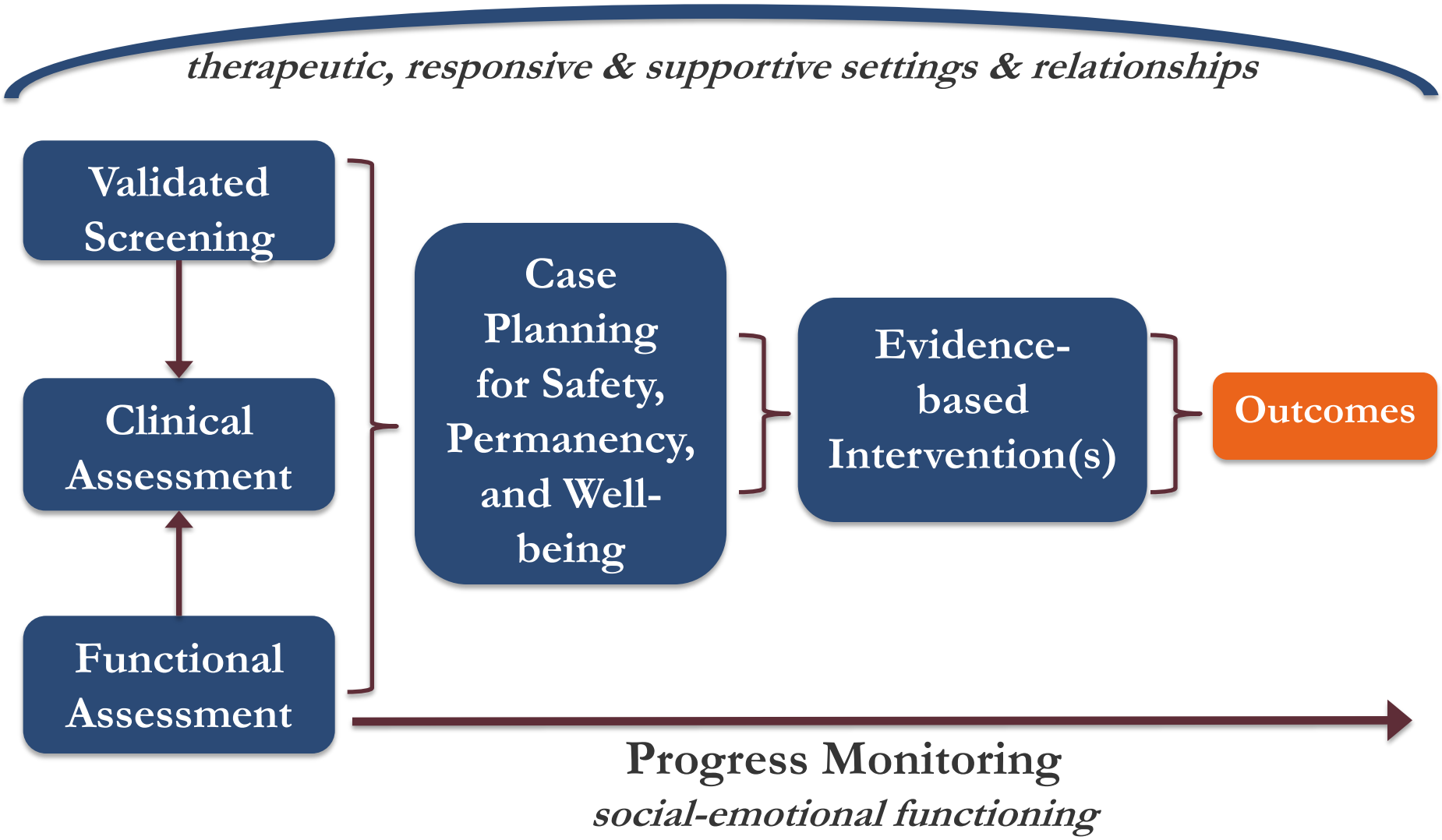
Common Concerns & Evidence-Based Interventions (1 of 2)

Diagnosis/Concern/Activity	Evidence-Based Interventions (Examples)	Age
Screening Activities		
Identification of Mental Health & Behavioral Health Issues	SCREENING TOOLS • Child & Adolescent Needs & Strengths—Trauma (CANS) • Pediatric Symptom Checklist (PSC) • Strengths and Difficulties Questionnaire (SDQ) • Child Behavior Checklist (CBCL)	0-18 4-16 4-17 4-18
Most Common Mental Health Diagnoses for Children in Foster Care		
Conduct Disorder/Oppositional Defiant Disorder	• **Parent-Child Interaction Therapy (PCIT)** • **Strengthening Families Program (SFP)** • **Early Risers – Skills for Success** • **Brief Strategic Family Therapy (BSFT)** • **Multisystemic Therapy (MST)** • **Familias Unidas** • **Multidimensional Treatment Foster Care (MTFC)**	2-7 3-16 6-12 6-17 9-17 12-17 12-17
Attention Deficit Hyperactivity Disorder	• **Parent–Child Interaction Therapy (PCIT)** • **Triple P** • **Children's Summer Treatment Program (STP)**	2-7 0-16 6-12
Major Depression	• Adolescents Coping with Depression (CWD-A) • Cognitive Behavioral Therapy (CBT) for Adolescent Depression • **Alternative for Families-Cognitive Behavioral Therapy (AF-CBT)**	13-17 13-25 4-16

Common Concerns & Evidence-Based Interventions (2 of 2)

Diagnosis/Concern/Activity	Evidence-Based Interventions (Examples)	Age
Trauma		
Actionable Trauma Symptoms → *Posttraumatic Stress Disorder*	• **Child-Parent Psychotherapy (CPP)** • **Parent-Child Interaction Therapy (PCIT)** • **Combined Parent-Child Cognitive Behavioral Therapy for Families at Risk for Child Physical Abuse (CPC-CBT)** • **Trauma-Focused Cognitive Behavioral Therapy (TF-CBT)** • **Alternatives for Families/Abuse Focused Cognitive Behavioral Therapy (AF-CBT)** • **Cognitive Behavioral Intervention for Trauma in Schools (CBITS)** • Trauma Affect Regulation: Guide for Education and Therapy (TARGET-A) • Structured Psychotherapy for Adolescents Responding to Chronic Stress (SPARCS) • Prolonged Exposure (PE) Therapy for Youth 18-25	0-6 2-17 3-17 4-55 5-17 6-12 10-55 13-21 18-25
Behavioral Concerns		
Internalizing/Externalizing Behaviors → *Behavioral Problems and Relational Concerns*	• **Child Parent Psychotherapy (CPP)** • Promoting Alternative Thinking Strategies (PATHS) • **Incredible Years** • **Triple P** • **Parenting Wisely** • **Nurturing Parenting Programs (NPP)** • **Brief Strategic Family Therapy (BSFT)** • **Fostering Healthy Futures (FHF) – mentoring + skills training** • **Functional Family Therapy (FFT)**	0-6 0-12 0-12 0-16 0-17 6-12 6-17 9-11 10-18

Achieving Better Outcomes



PERMANENCY INNOVATIONS INITIATIVE

PII

Permanency Innovations Initiative

Data Mining Strategies to Refine Target Populations and Inform Intervention Selection

December 12, 2012

An Initiative of the Children's Bureau

PERMANENCY INNOVATIONS INITIATIVE

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Introduction/Overview

Maria Woolverton

ACF, Office of Planning, Research, and Evaluation

Permanency Innovations Initiative

PERMANENCY INNOVATIONS INITIATIVE PII

Presidential Initiative

The Permanency Innovations Initiative. . . is providing support . . .focused on decreasing the number of children in long-term foster care. Over the next 5 years, this program will invest $100 million in new intervention strategies to help foster youth move into permanent homes, test new approaches to reducing time spent in foster care placements, and remove the most serious barriers to finding lasting, loving environments.*

Goal—Build Evidence for Replicable Strategies

The PII will build the evidence base for innovative interventions that improve permanency outcomes for children and youth who face serious barriers to permanency and are at high risk of long-term foster care (LTFC)

*President Barack Obama, Presidential Proclamation: National Foster Care Month, White House Office of the Press Secretary, April 29, 2011.

6 Cooperative Agreement Awards

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- Arizona Department of Economic Security
- California Department of Social Services
- Illinois Department of Children and Family Services
- University of Kansas Center for Research, Inc.
- Los Angeles Gay and Lesbian Community Services Center
- Washoe County, Nevada, Department of Social Services

PII's Approach to Implementation and Evaluation

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- Step-by-step process oriented toward achieving the outcome of interest:
  - Reducing long-term foster care
- A framework informed by:
  - Implementation science (Fixsen, Naoom, Blasé, Friedman & Wallace, 2005)
  - Evaluation research (Testa & Poertner, 2010)

3 Primary Stages of PII Approach

- Exploration and Installation
- Implementation and Evaluation
- Dissemination and Translation

Stage 1: Exploration & Installation

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YEAR 1

- Define outcome of interest
- Identify target population
- Select an innovation/intervention and appraise the strength of the research evidence
- Construct a logic model with an explicit theory of change & PICO question

EARLY YEAR 2 →

- Install the innovation

PICO:
Well-built Evaluation Questions

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*Do children in the target population (**P**) who receive the intervention (**I**) have a significantly better outcome (**O**) than children in a comparison group (**C**) who do not receive the intervention?*

- Population
- Intervention
- Outcome
- Comparison

Year 1 Tools and Deliverables: 4 Templates and 2 Plans

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Template	Plans
Population Template	Implementation Plan (developed by grantee)
Intervention Template	
Comparison Template	Evaluation Plan (developed by evaluator)
Outcome Template	

P Template–

- *What target P(s) are at risk of LTFC or disproportionally represented in LFTC?*
- *What are the specific child, placement, and family characteristics of P that put P at risk of LTFC and what evidence shows that these are associated with LTFC?*
- *Prioritize these characteristics and summarize the results of data mining that show they are associated with risk of LTFC.*
- *What key systemic barriers especially affect P (staffing, organization support/service, leadership, other)?*

Informing the Population Template

- Literature reviews
- Informant interviews
- Focus groups
- Case record reviews and data extraction
- Analyses of administrative data

Administrative Data Analyses

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- Describe the LTFC Population
- Compare characteristics of children in LTFC with children in care for shorter periods
- Model risk characteristics known at earlier points in time that distinguish children who move into LTFC from those who exit to permanency sooner

What Did We Learn from the Data Mining ?

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For some grantees, we:

- Confirmed that the intervention matched the target population
- Identified need for different or additional intervention to match the needs of target population
- Identified need for modifying the target population
- Identified sub-populations that require either additional intervention activities or warrant tracking

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Permanency Innovations Initiative

Defining a Target Population & Selecting an Intervention

by the Kansas Intensive Permanency Project (KIPP)
Co-Principal Investigators: Becci Akin and Tom McDonald

December 12, 2012

An Initiative of the Children's Bureau

Today's Presentation

- Brief Kansas context/background
- Defining target population
- Selecting an intervention
- Lessons learned from this planning process

Kansas Context

- PII Project: Kansas Intensive Permanency Project (KIPP)
- Convened by: University of Kansas School of Social Welfare
- Key partners
  - State public child welfare agency (Kansas DCF)
  - 4 foster care providers
    - KVC Behavioral Healthcare
    - St. Francis Community Services
    - TFI Family Services
    - Youthville Inc.
- Privatized foster care since 1997
- Long history of public-private-university partnership

Map of Kansas Counties by Population Density

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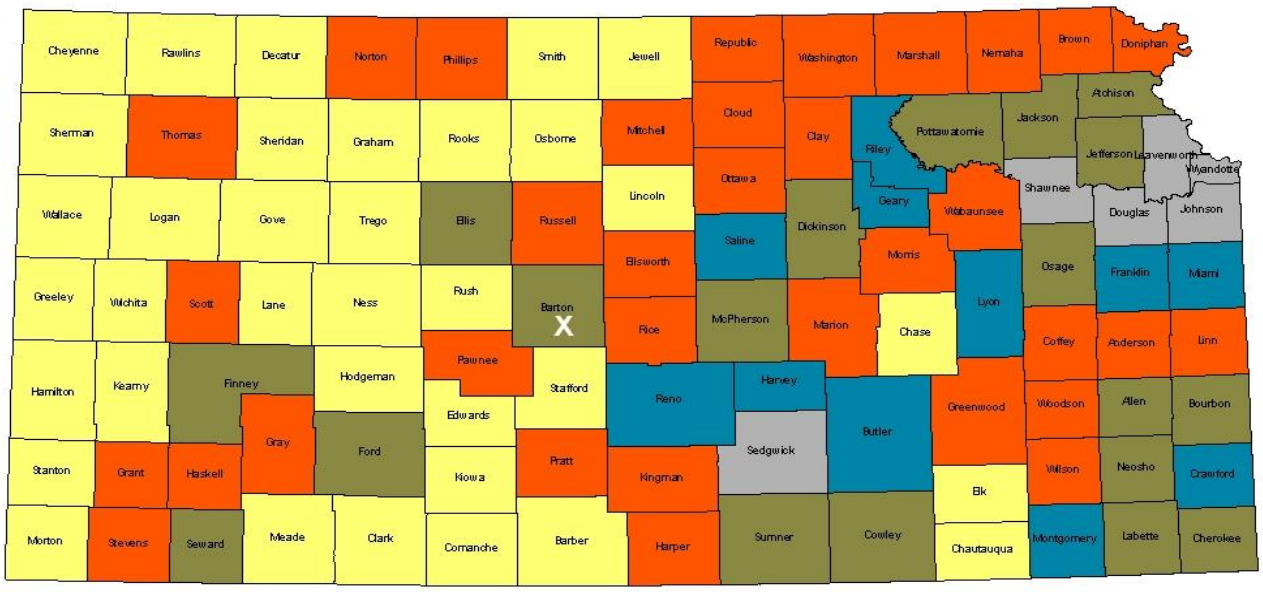

Defining KIPP's Target Population

KIPP's Initial Problem Definition

- Children with serious emotional and behavioral problems get stuck in foster care
- Lack of dedicated parent services
- Impact of parental trauma
- Widening gap between parent & child

Confirming the Target Population

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- Key questions asked:

1. What are risk factors of LTFC?
2. What are families' critical barriers to permanency?
3. What are system barriers to permanency?

What Are the Risk Factors of LTFC?

- Children at highest risk of LTFC = children with SED
  - Children with SED were 350% more likely to experience LTFC
- Both externalizing and internalizing behaviors
  - Most common dx = behavior disorders
  - More likely to present with co-occurring SED & DD

Example of Quantitative Analysis

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	All Children/Youth			Total N		Bivariate		Multivariate		95% Conf Intv for Multivar OR	
	No LTFC	Yes LTFC	% Yes LTFC			*p*	Odds Ratio	*p*	OR	Lower	Upper
Child Characteristics											
All children	6111	988	13.9%	7099		-	-	-	-		
Gender											
Female	3148	493	13.5%	3641							
Male	2963	495	14.3%	3458		0.346	1.07	0.736	0.98	0.84	1.13
Age at Entry											
Age at entry (years)	8.4	6.9	-	-		0.000	0.96*	0.000	0.91*	0.90	0.93
Race											
White	5024	722	12.6%	5746							
Black	922	245	21.0%	1167		0.000	1.85**	0.000	1.85**	1.55	2.20
Other	165	21	11.3%	186		0.605	0.89	0.495	1.18	0.73	1.91
Disability											
No Disability	4602	467	9.2%	5069							
Disability	1509	521	25.7%	2030		0.000	3.40***	0.000	2.50***	2.17	2.91
Mental Health Problems											
Not SED	3026	236	7.2%	3262							
SED	3085	752	19.6%	3837		0.000	3.13***	0.000	3.61***	3.02	4.32
Primary Removal Reason											
Neglect	1516	304	16.7%	1820							
Physical Abuse	872	146	14.3%	1018		0.099	0.84	0.114	0.83	0.66	1.05
Sexual Abuse	358	59	14.1%	417		0.202	0.82	0.647	0.93	0.67	1.28
Other	3365	479	12.5%	3844		0.710	0.71	0.150	0.88	0.74	1.05
Placement Characteristics											
Prior removals											
No	5501	868	13.6%	6369							
Yes	610	120	16.4%	730		0.038	1.25*	0.262	1.14	0.91	1.42
Initial Type of Placement											
Kinship	1311	118	8.3%	1429							
Family Foster Care	3810	720	15.9%	4530		0.000	2.10**	0.000	1.77**	1.43	2.19
Congregate Care	938	144	13.3%	1082		0.000	1.71**	0.004	1.54**	1.15	2.06
Other	52	6	10.3%	58		0.574	1.28	0.494	1.37	0.56	3.37
Siblings in Foster Care											
No	2195	231	9.5%	2426							
Yes	3916	757	16.2%	4673		0.000	1.84**	0.000	1.48**	1.24	1.77
Early Stability											
No (3+ placements)	1118	235	17.4%	1353							
Yes (0-2 placements)	4993	753	13.1%	5746		0.000	0.72*	0.010	0.79*	0.66	0.94
Runaways											
No	5581	869	13.5%	6450							
Yes	530	119	18.3%	649		0.001	1.44*	0.000	2.17**	1.662	2.821

What Are Families' Critical Barriers to Permanency?

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- Parenting competency/attitudes (97%)
- Parent mental health (90%)
- Poverty (87%)
- Parent alcohol and other drug (AOD) problems (83%)
- Parent trauma (80%)
- Engagement

Example of Case Record Data Collection

- Family Structure
  - # of caregivers
  - # of children in care
- Poverty & Resource Issues
  - Poverty related issues
  - Housing not stable
  - Lack of social supports
  - Multiple services/ need help with coordination
- Clinical Needs/Presenting Problems
  - Mental health problems
  - Parent history of trauma
  - Parent history of foster care
  - Alcohol & other drug issues
  - Developmental/Intellectual Disabilities
  - Medical problems
- Parenting
  - Competency
  - Attitude
  - Cooperation or engagement problem
  - Prior CW involvement
- Home Environment
  - Domestic violence
  - Legal or criminal issues
  - Other stress or caregiver strain

Summary of Case Record Review Findings

	Family Structure			Poverty/Resources/Supports				Clinical Needs/Presenting Problems						Parenting				Home Envir/Other Stressors		
	# of CG	# of Children in OOH Care	# of Children in Home	Poverty Related Issues	Housing Not Stable	Lack of Social Supports	Multiple Services; Need Help Coordn Services	Mental Health Problems	Hx of Trauma	Parent Hx of Foster Care	AOD Issues	Devel Disab/ Cognit Probs	Medical Probs	Parent Compt	Parent Attitude	Coop Prob or Engage Prob	Prior CW Involv/ Reports/ Subst	Dom Viol	Legal Issues or Criminal Involv	Other Stress/ Caregiv Strain
Case 1	2	3	0	1	0	1	0	1	1	0	1	1	1	1	1	0	1	1	1	99
Case 2	1	3	0	1	1	1	0	1	1	99	1	0	0	1	1	1	1	1	1	99
Case 3	1	7	0	1	1	0	1	0	1	0	1	0	0	99	1	1	1	0	0	1
Case 4	1	5	0	1	0	1	0	99	99	99	1	99	99	1	1	1	1	0	1	1
Case 5	1	4	0	1	1	1	0	1	1	0	1	0	0	1	1	1	1	0	0	1
Case 6	1	3	0	1	0	1	0	1	1	0	1	0	0	1	1	1	1	1	1	1
Case 7	2	4	2	1	1	1	1	1	1	0	1	1	1	1	0	0	1	0	0	1
Case 8	1	5	0	1	1	1	0	1	1	0	1	1	0	1	1	1	1	1	1	1
Case 9	2	3	0	1	1	0	1	1	1	0	1	0	1	1	1	1	1	1	1	1
Case 10	2	1	2	1	1	1	0	1	99	99	1	0	1	1	1	1	1	1	1	0
Case 11	2	3	0	1	1	1	0	1	1	1	0	1	0	1	1	1	0	0	1	1
Case 12	2	4	0	1	1	1	0	1	1	0	1	0	0	1	1	1	1	1	1	0
Case 13	1	2	1	1	1	1	0	1	1	0	1	0	1	1	1	1	1	1	0	0
Case 14	2	3	2	0	0	1	1	1	1	1	1	0	0	1	1	1	0	0	1	1
Case 15	2	5	0	1	1	1	0	1	1	0	1	0	1	1	1	1	1	1	1	0
Case 16	2	0	1	1	0	1	0	99	1	99	1	0	1	1	1	1	1	0	0	0
Case 17	1	1	0	0	0	1	0	1	0	0	0	1	1	1	0	0	1	0	0	1
Case 18	1	2	0	1	1	0	0	1	0	0	1	1	0	1	1	0	1	0	1	0
Case 19	2	4	0	1	0	1	0	1	1	99	1	0	0	1	1	1	0	1	1	0
Case 20	2	5	0	1	1	1	0	1	1	1	0	0	0	1	0	1	1	1	0	0
Case 21	2	1	2	1	0	0	1	1	1	0	0	0	0	1	1	0	1	0	0	1
Case 22	3	2	0	1	1	1	1	1	1	0	1	0	1	1	99	1	1	99	1	99
Case 23	2	2	0	99	99	99	0	1	1	99	1	99	99	1	0	0	1	1	1	99
Case 24	1	3	0	1	0	1	1	1	1	0	1	0	0	1	0	1	1	1	1	0
Case 25	2	1	0	1	1	0	1	1	1	1	1	0	1	1	1	1	1	1	1	99
Case 26	1	7	0	1	1	1	1	1	99	0	1	0	0	1	1	0	1	1	0	1
Case 27	2	3	0	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	0
Case 28	2	1	3	0	0	0	1	1	99	0	0	0	0	1	0	0	1	0	0	0
Case 29	1	3	0	1	1	1	1	1	1	0	1	0	1	1	1	0	1	1	1	1
Case 30	2	1	0	1	1	0	1	1	1	1	1	0	0	1	1	0	1	1	1	0
TOTAL		**3.03**		**26**	**18**	**22**	**13**	**27**	**24**	**6**	**25**	**7**	**11**	**29**	**23**	**20**	**27**	**18**	**20**	**13**
%				**87%**	**60%**	**73%**	**43%**	**90%**	**80%**	**20%**	**83%**	**23%**	**37%**	**97%**	**77%**	**67%**	**90%**	**60%**	**67%**	**43%**

What Are the System Barriers to Permanency?

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- Lack of dedicated parent services (84%)
- High caseloads (79%)
- High caseworker turnover (77%)
- Parent lack of transportation (76%)
- Court system (70%)

Summary of Target Population Findings

Target population: Children, 3-16, who meet criteria for serious emotional disturbance (SED)

Point of intervention: Parents of children with SED

Families' critical barriers to permanency

Parenting competency

Parent MH, AOD, Poverty issues

Parental trauma

Parental engagement

System barriers to permanency

Lack of dedicated parent services

High caseloads

High worker turnover

Lack of transportation

Court/Legal system

Selecting an Intervention

4 Step Process, Iterative Not Linear

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- Gather evidence from multiple sources
- Conduct interviews
  - Purveyors/program developers (4)
  - Child welfare experts/thought leaders (10)
  - Implementers (6)
- Narrow to two choices
- Select an intervention

Example Matrix on Interventions/Programs

Program	***Age***	***Description/ Format***	***Intended population***	***Intended outcomes***	***Level of evidence***	***Studied in CW pop***	***Training requirement***	***Fidelity monitoring***	***CW outcomes***
Program Name	0-18	Individual, group, Home visitor, 1:1	Parents, youth, foster parent	Reunification, Placement stability	Level 2 CEBC	Yes/no	5 days of training plus coaching	Yes, video observation; checklist by practitioner;	Permanency Safety Well-being

Total Hours = 223

Date	Participants	Activity	Approx. hours
2/9/2011	Kansas SRS Leadership; Casey Family Programs (Lien Bragg, Peter Pecora, Page Walley, Barry Salovitz)	Presentation Expert interview: Peter Pecora suggested adopting PMTO.	3
2/22/2011	KU Management Team	Meeting	2
2/22/2011	Rick Barth, Maryland	Expert interview: Recommended PMTO and cautioned that combining interventions may reduce effectiveness.	2
2/23/2011	KIPP Steering Committee	Meeting	3
2/24/2011	T/TA Webinar	Webinar	2
3/1/2011	Lee Rone, Youth Villages	Implementer interview	1
3/1/2011	KU Management Team	Meeting	2
3/1/2011	Jim Wotring, Michigan	Implementer interview	1
3/2/2011	TA Site Visit	Meeting	6
3/3/2011	Robin Spath	Evaluator interview	1
3/4/2011	KU Management Team	Meeting	2
3/7/2011	Triple P	Purveyor interview	1
3/8/2011	KU Management Team	Meeting	2
3/8/2011	Patti Chamberlain, Oregon	Expert interview: Recommended PMTO.	1
3/8/2011	PMTO	Purveyor interview	2
3/9/2011	Intervention Working Team	Meeting	3
3/9/2011	Abi Gewirtz, Minnesota	Implementer interview	1
3/14/2011	PII T/TA	Meeting	1
3/14/2011	PMTO	Purveyor interview	1.5
3/14/2011	Jill Duerr-Berrick, California	Expert interview	1
3/17/2011	PII T/TA	WebEx	1.5
3/18/2011	PII T/TA	WebEx	1
3/23/2011	Intervention Working Team	Meeting	3
3/24/2011	KU Management Team	Meeting	2
To date	KIPP Team	Post meeting debriefings	78
		TOTAL	223

Narrow to Two Choices

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- Evidence supported intervention
- Experience with our target population
- Proven effectiveness for addressing parent risk factors
- Certification time & transferability
- Fit within urban-frontier continuum
- Sufficient training, coaching & fidelity measures
- Cost
- Sustainability
- Parsimony

Selected PMTO

- Parent Management Training-Oregon Model
- Highest level of evidence (CEBC Rating 1)
  - Improving parenting capacity
  - Reducing problematic child behavior
- By helping mothers improve parenting, PMTO:
  - Reduces maternal depression
  - Speeds recovery from poverty
  - Reduces drug involvement and frequency of arrests

KIPP's Service Model

Evidence Supported Intervention

Oregon Model of Parent Management Training (PMTO)

Tailor PMTO for Parents of Children with SED in Kansas Foster Care

- Early intervention & engagement
- In-home, intensive
- Low caseload
- Accessible & responsive
- Trauma-informed
- Comprehensive family assessment
- Robust referrals
- Service coordination
- Emphasis on parent/child visits
- Clinical & team supervision

Proximal Outcomes

- Increase in positive parenting behaviors
- Decrease in coercive parenting practices
- Increase in use of community resources and social supports
- Increased readiness for reunification
- Improvements in parental mental health and substance use
- Decrease in child problematic behavior
- Increase in child functioning

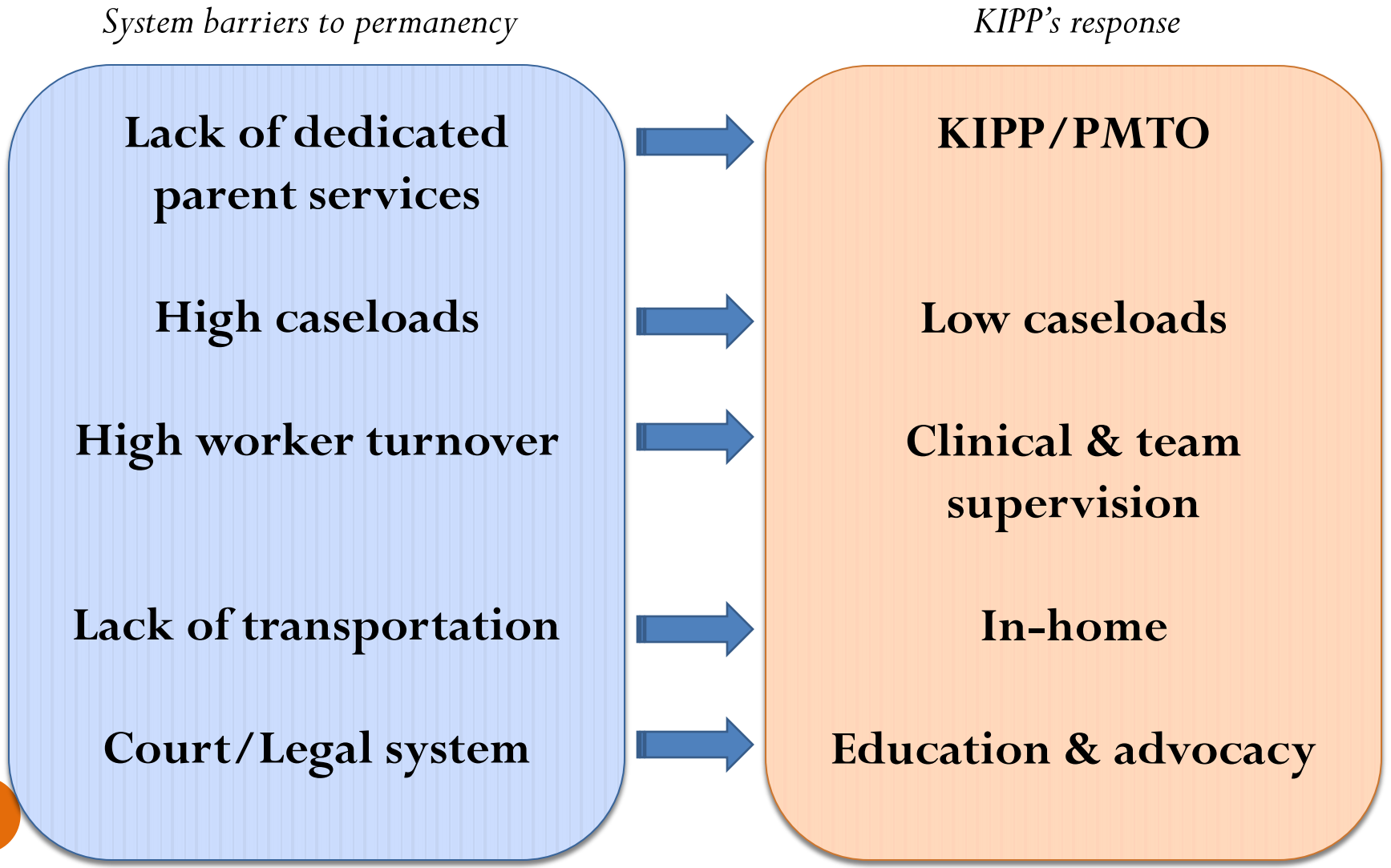
Distal Outcomes

- Increase reunification rates
- Decrease long-term foster-care rates
- Increase in stable permanency rates

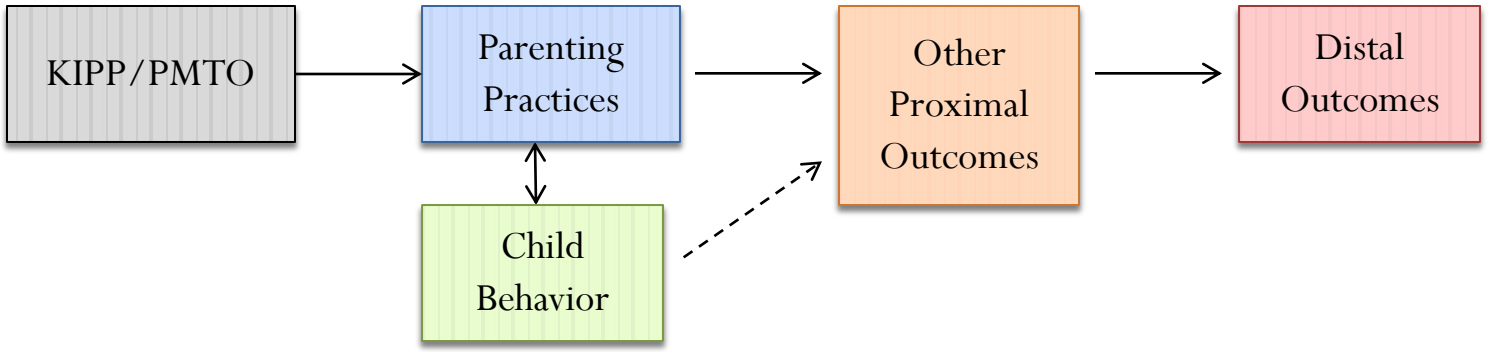
Connecting the Target Population to the Intervention (1)

Families' critical barriers to permanency	*KIPP's response*
Parenting competency	**PMTO**
Parent MH, AOD, Poverty issues	**Comprehensive assessment, robust referrals & svc coord**
Parental trauma	**Trauma-informed PMTO**
Parental engagement	**Early contact; strengths-oriented; in-home; parent/child visits**

Connecting the Target Population to the Intervention (2)



KIPP's Theory of Change



Parenting Practices

Positive Parenting Practices
- Skill Encouragement
- Positive Involvement
- Effective Discipline
- Problem-Solving
- Monitoring/Supervision

Coercive Parenting Practices
- Negative Reciprocity
- Escalation
- Negative Reinforcement

Child Behavior

- Prosocial Skills
- Problem Behaviors
- Mental Health Functioning

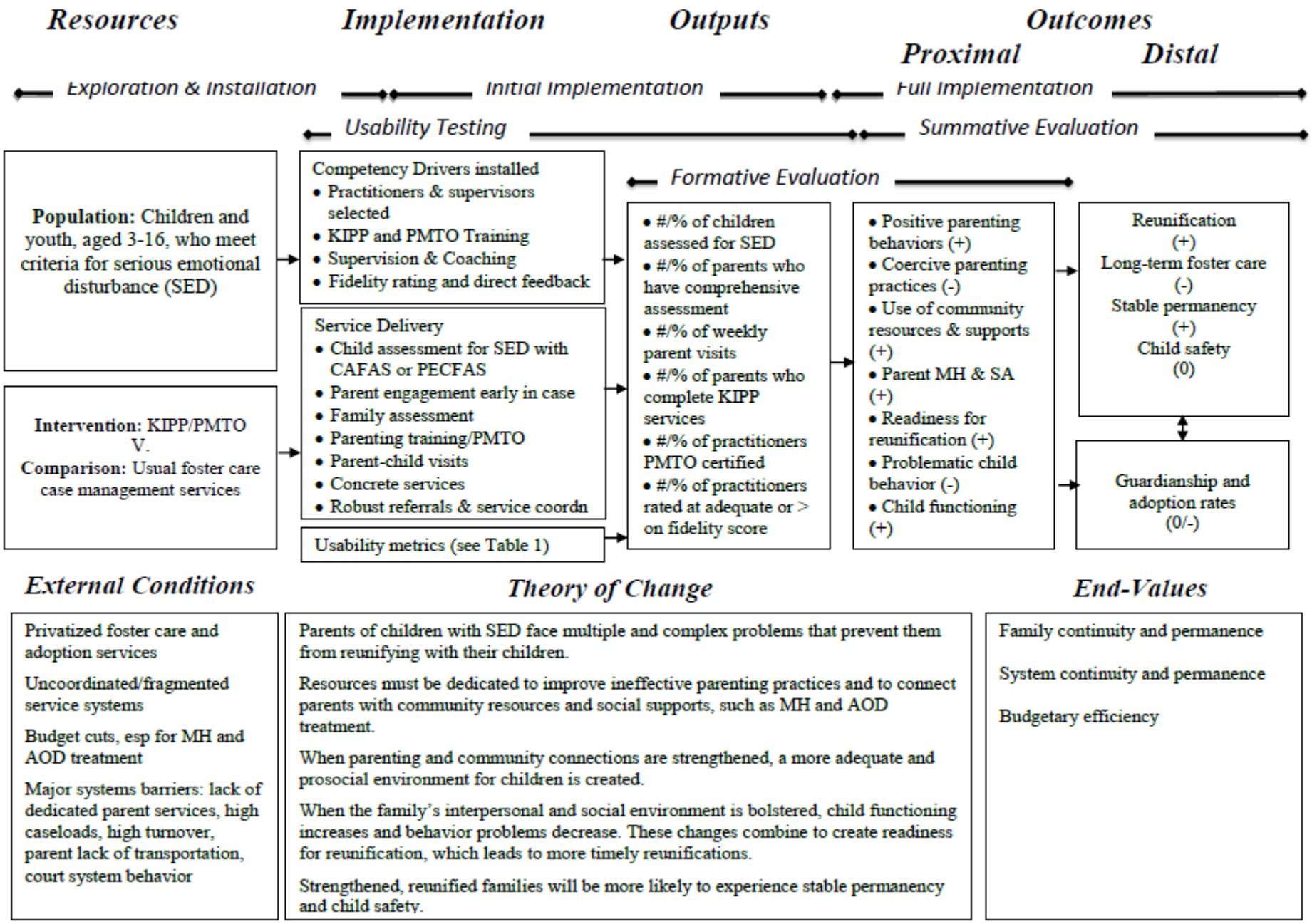
Other Proximal Outcomes

- Community Supports
- Parent MH and AOD
- Readiness for Reunification

Distal Outcomes

- Timely Reunification
- Long-Term Foster Care
- Stable Reunification
- Child Safety

Figure 1. Logic Model of the Kansas Intensive Permanency Project



External Conditions

Privatized foster care and adoption services

Uncoordinated/fragmented service systems

Budget cuts, esp for MH and AOD treatment

Major systems barriers: lack of dedicated parent services, high caseloads, high turnover, parent lack of transportation, court system behavior

Theory of Change

Parents of children with SED face multiple and complex problems that prevent them from reunifying with their children.

Resources must be dedicated to improve ineffective parenting practices and to connect parents with community resources and social supports, such as MH and AOD treatment.

When parenting and community connections are strengthened, a more adequate and prosocial environment for children is created.

When the family's interpersonal and social environment is bolstered, child functioning increases and behavior problems decrease. These changes combine to create readiness for reunification, which leads to more timely reunifications.

Strengthened, reunified families will be more likely to experience stable permanency and child safety.

End-Values

Family continuity and permanence

System continuity and permanence

Budgetary efficiency

KIPP's PICO Question

Do children, aged 3-16, in foster care who meet criteria for SED (**P**) achieve more timely and stable permanence (**O**) if their families receive early, intensive home-based parent management training (**I**) compared to children in foster care whose families receive usual services (**C**)?

- P = Population
- I = Intervention
- C = Comparison
- O = Outcome

Lessons Learned about the PII Approach

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- Promotes data driven decision-making & program design
- Requires resources for data collection, analysis, and interpretation
- Opens opportunity to find a different target population and understand risk factors with greater depth
- Creates sense of urgency for and strengthen commitment to target population
- Assists in selecting the intervention with a systematic and thorough process

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Data Mining for Identifying & Serving Populations at Risk

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An Initiative of the Children's Bureau

Purpose of Data Mining Activities

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- To compile empirical support for the focus of the proposed project (for PII, identify population at greatest risk of Long Term Foster Care)
- Describe the population at greatest risk to identify barriers to positive outcomes
- Analyze heterogeneity in the target population to identify characteristics and subgroups amenable to intervention

Illinois Context

- PII Project: Trauma-Focused Intervention to Reduce Long-Term Foster Care
- Convened by: Illinois Department of Children & Family Services
- Key partners
  - Contracted System of Care (wraparound) program providers
  - University Partners
    - Northwestern University
    - University of Chicago
    - University of Illinois – Chicago Jane Addams College of Social Work
- Decade-long commitment to trauma-informed assessment & application of trauma lens to addressing child & family needs

Infrastructure & Collaboration

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- Departmental Infrastructure
  - Ongoing data collection using trauma-informed, family-focused, strengths-based tools (CANS)
  - Ongoing maintenance to ensure the integrity of data on placement moves (CYCIS)
  - Centralized, well-documented case management (SACWIS)
- University Partners
  - Northwestern (CANS Warehouse)
  - University of Chicago (Integrated Database)
  - U of I Jane Addams College of Social Work (federal reporting)
  - UIUC Child & Family Research Center (monitoring CW outcomes)

Approaches to Defining & Refining a Target Population

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- Descriptive Analysis – What are the characteristics of youth in the population?
- Bivariate Analyses (Odds Ratios, Significance Tests, Bivariate Regression) – What characteristics are related to outcomes?
- Predictive Models (Multiple Regression) – How do those characteristics work in combination to predict risk factors or outcomes?
- Understanding Heterogeneity (Latent Class or "Cluster" Analysis) – Are there meaningful subgroups within the population of interest that require different interventions?
- Confirmatory Qualitative Analysis & Focus Groups

Transparency: Assumptions & Theory of Change

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- Ideas about which subgroups have poorer outcomes than others
- Ideas about why subgroups of youth have poorer outcomes
- Theories about what will improve outcomes among at-risk groups

Step One: Consolidating Findings from Previous Studies

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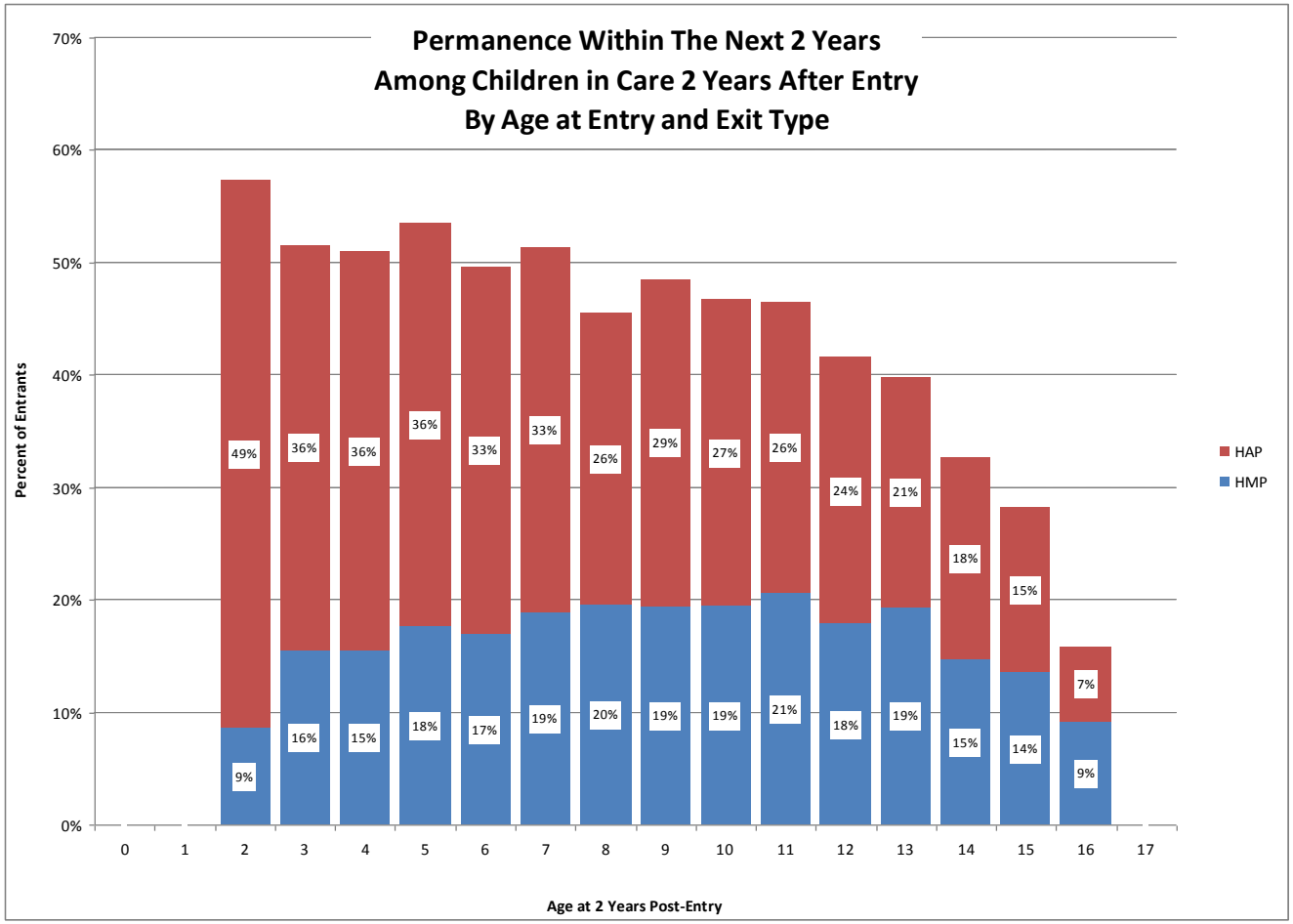
- Relative caregivers have greater resource & service needs to address physical & mental health problems; non-relative caregivers may lack knowledge and may experience higher rates of trauma-related needs. (Smithgall)
- Between 41% and 47% of 9-12 year olds enter care with an open Intact case; youth entering with an open intact case are slightly more likely to fail to achieve permanency in 24 months (Zinn).
- Youth with multiple and chronic interpersonal traumas were significantly more likely to have placement disruptions or interruptions compared to youth with single type or non-repeated traumas (Kisiel)
- 15% of kids in care 2 years who enter between 9-12 are in congregate care settings, although this increases from about 5% for youth entering at 9 to 30% among youth entering at 12 (Zinn)
- Hope for reunification wanes in adolescence (Fuller)
- For many CANS items, actionable levels of needs, or absence of strengths, predict longer time until permanency is achieved OR predict not achieving permanency by 2 years. These include trauma symptoms & externalizing behaviors (McClelland)
- Some caregiver needs are inversely related to the likelihood of achieving permanency; different groups of needs characterize biological and substitute caregivers of youth not achieving permanency within 2 years (McClelland).

Age and Risk of LTFC



Step Two: Synthesize Findings Applying Predictive Models to Historical Data

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- Predictive models more precise for Cook County, where risk of LTFC is higher
- Among youth in care 2 years, youth at increased risk for LTFC are
  - More likely to have MH problems
  - More likely to have bio parents with MH needs, housing instability, or inadequate supervision skills
  - More likely to be age 12 or older

You can only mine what you measured…

- Because we collect assessment data on trauma and strengths, we could test theories of change related to these factors
- Predictive models were hampered by omission of variables we don't capture:
  - Variation in judicial decision-making
  - Cultural/regional differences in caseworker & community bias

Step Three: Use Convergent Findings to Develop Criteria for a Current Sample

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- Age (over nine at entry)
- Parental rights (no TPR by 2 years)
- Region (Cook County)
- Placement type (ever placed in IGH)
- Placement Instability
- Mental Health/Trauma Symptoms/Risk Behaviors

Illinois PII Eligibility Criteria

- Age (over nine at entry)
- Parental rights (no TPR by 2 years)
- Region (Cook County)
- Placement type (ever placed in IGH)
- Placement Instability
- Mental Health/Trauma Symptoms/Risk Behaviors

Logistic Considerations

- Federal project overlap
  - Age
  - Time point for intervention
- Sample size
  - Requires inclusion of multiple placement types, regions, and parental rights status
- Implementation
  - Exclusion of larger congregate care settings due to established treatment regimens

Target Population Definition

- Age risk factor + federal project overlap=include youth ages 11-16 at the two-year anniversary of entry
- MH/trauma risk + Placement Stability risk + sample size considerations = include youth with *either* 1 placement change *and/or* 1 symptom at two-year anniversary of entry

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Decision-Making about Eligibility Criteria

Refining Understanding of Risk for Selecting Interventions

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PREDICTION VS. DESCRIPTION

Step Four: Describe Current Sample in Terms that Inform Intervention Selection

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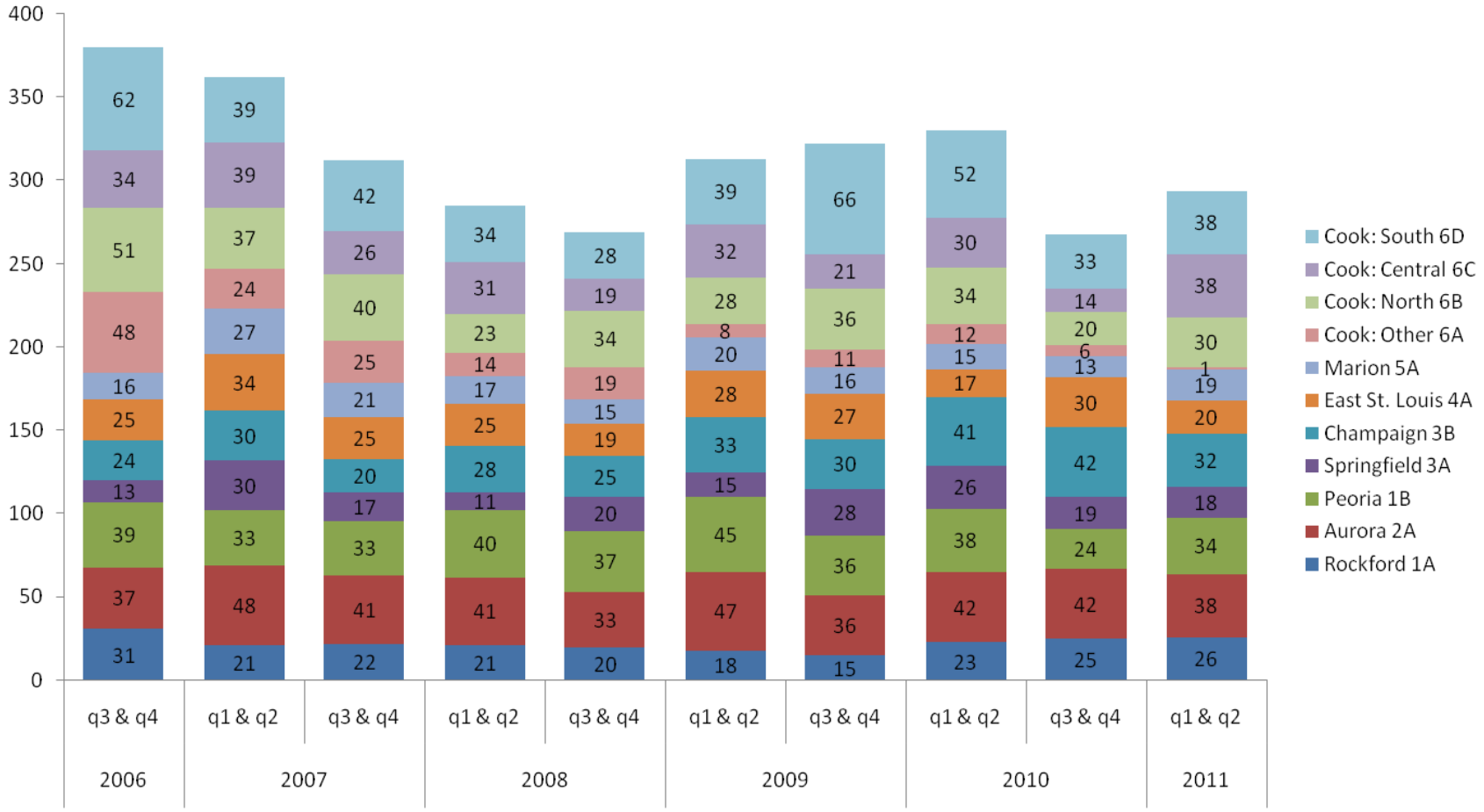
- Describe the population
  - Placement Type & Stability
  - Regional Distribution
  - Prevalence of Needs & Strengths
  - Permanency Goals
- Identify meaningful subgroups based on parameters
  - Age
  - Needs
  - Reason for Case Opening
  - Placement Stability
  - Trauma Experiences & Complex Trauma

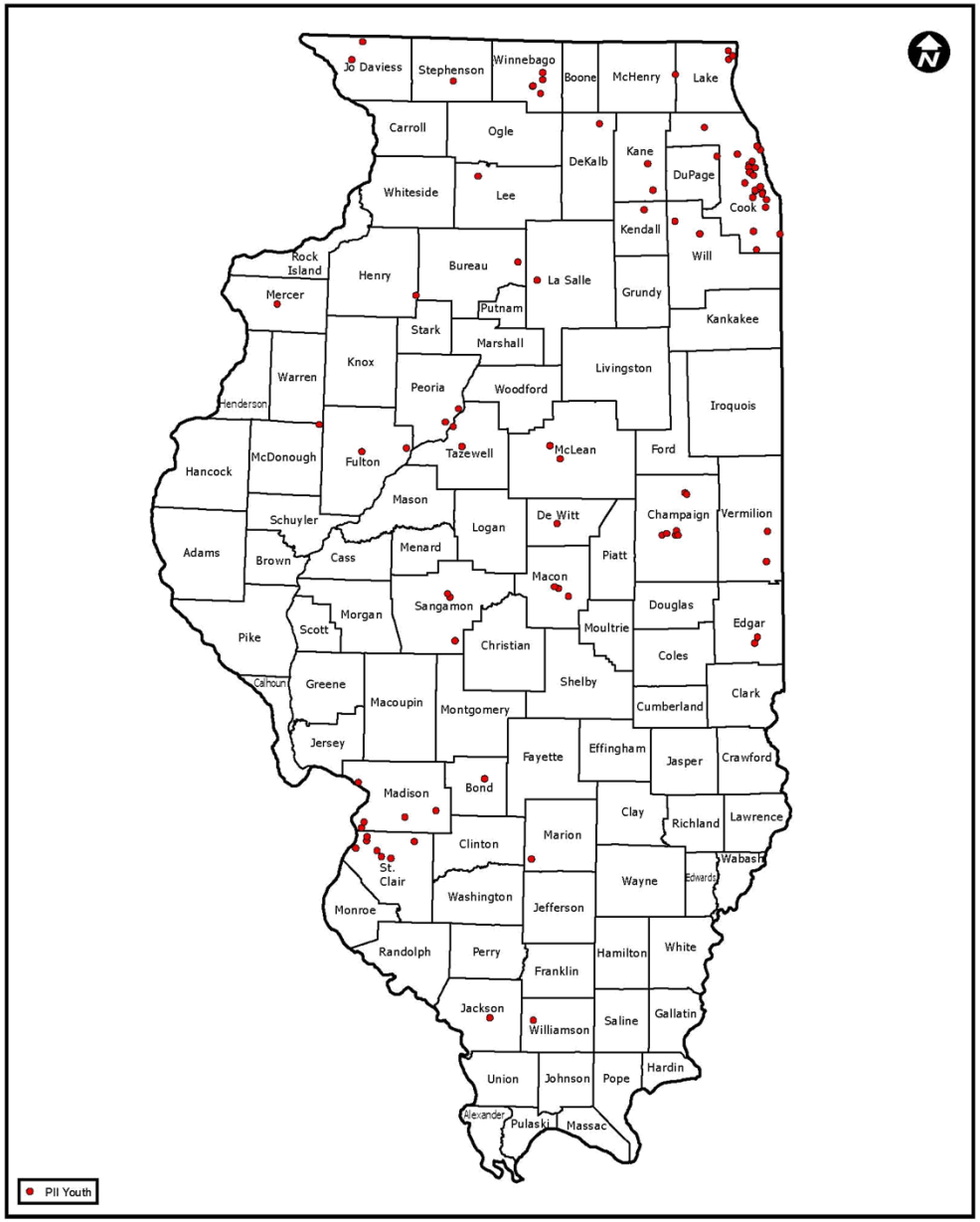
Describing the Population

- Three data sources
  - Historical cohorts
  - “Start-Up” sample of youth who would enter the sample over the last four months
  - “Projected” sample of youth who will enter the sample in the next four months

Bi-Annual Eligibility by Region



Location of Youth Statewide Meeting PII Criteria at 2 Years in Care



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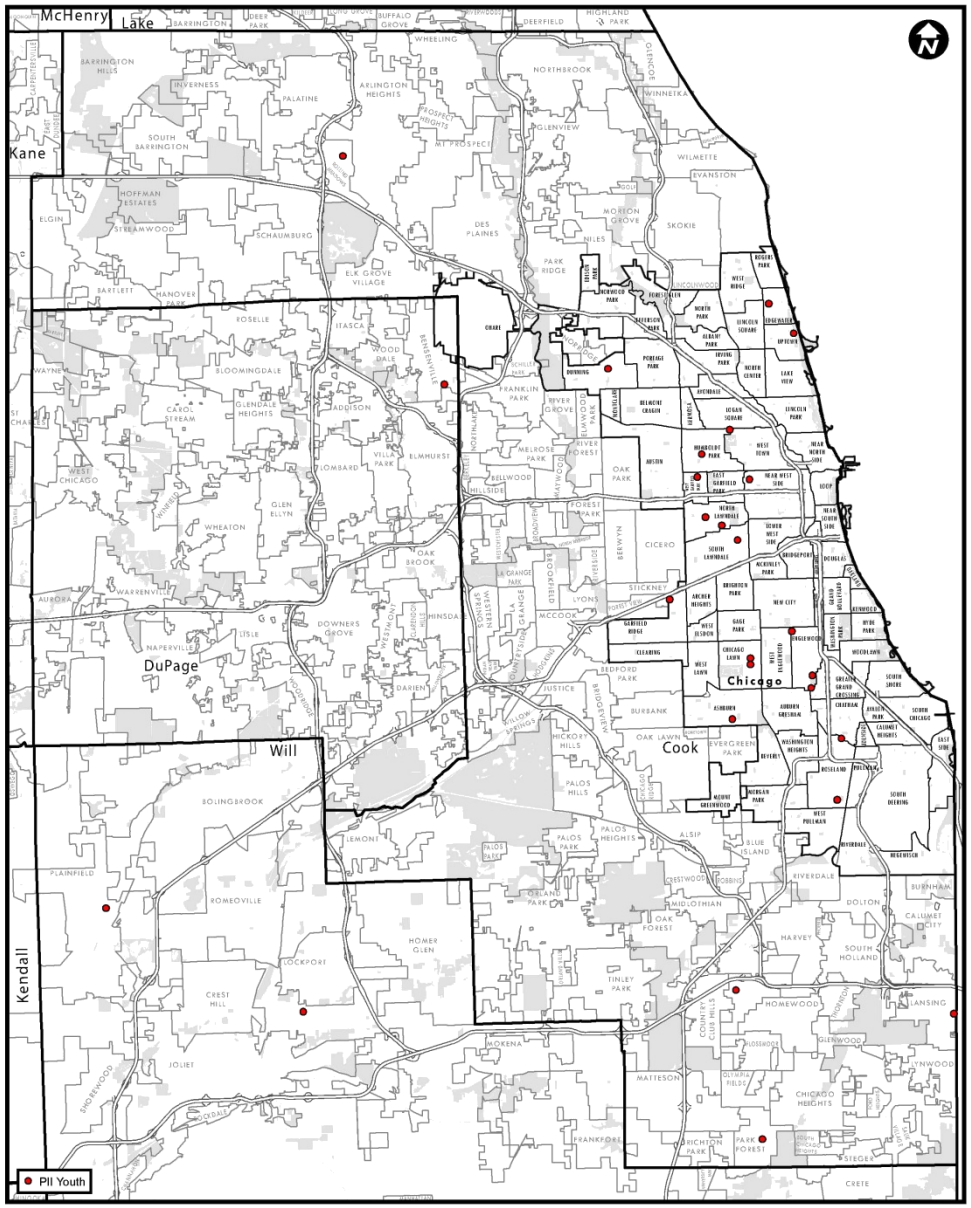
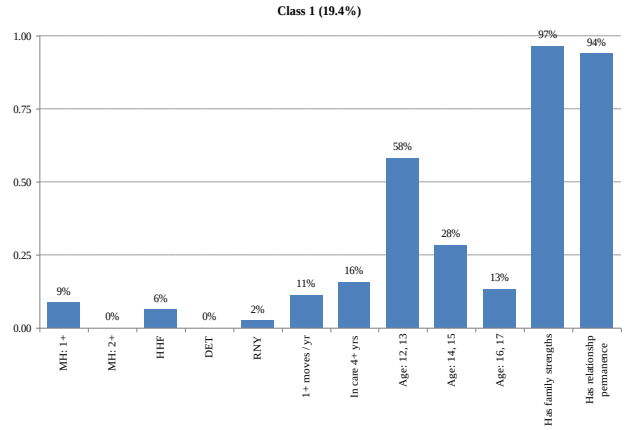
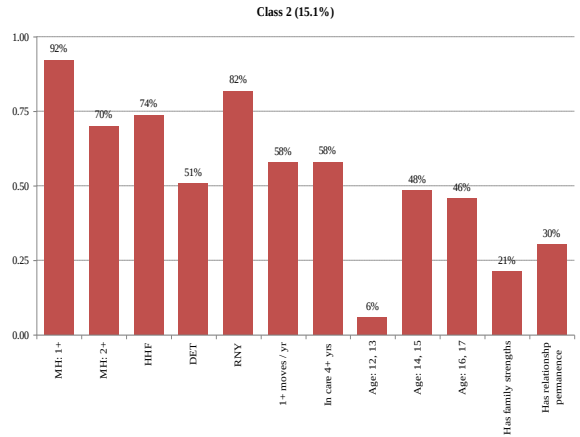
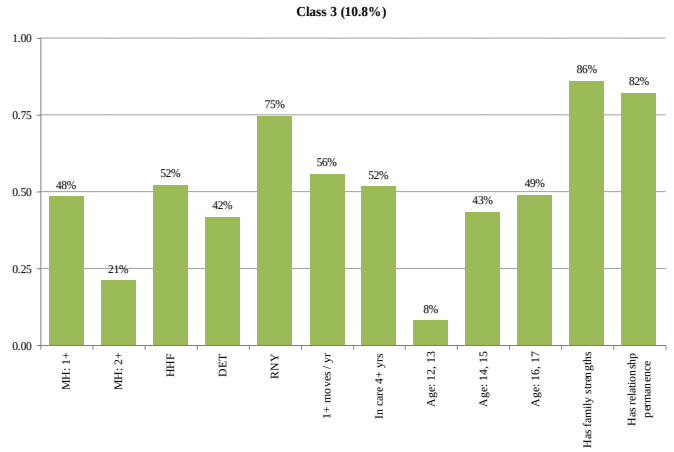


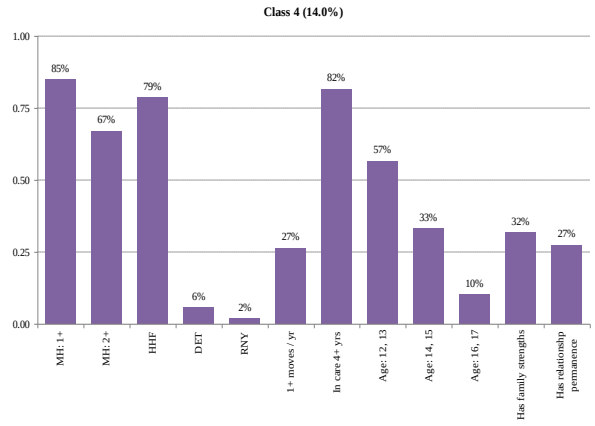
Source: Northwestern University MHSPP

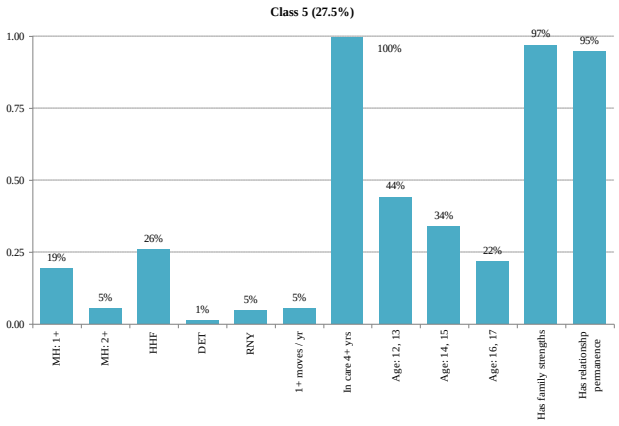
Population Heterogeneity – Meaningful Subgroups

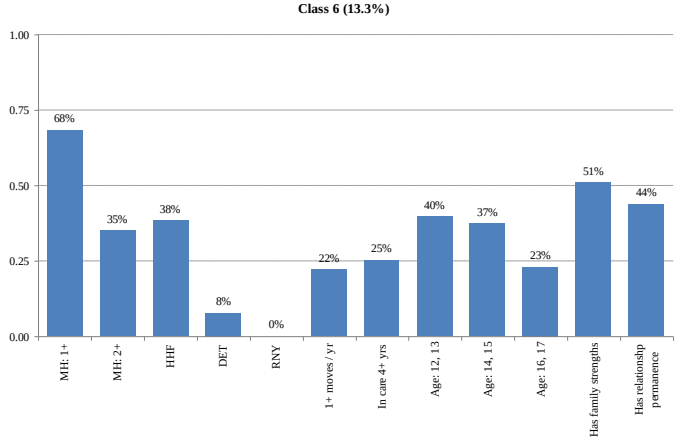












Trauma Cluster Analysis

- Cluster One (25%) typical Complex Trauma profile
  - 95% met the Complex Trauma criterion
  - high rates of symptoms in all of the four trauma symptom groups
- Cluster Two (60%) less Symptom Complexity
  - 46% met Complex Trauma criterion
  - relatively lower rates of symptoms (13-18%), indicating a lower degree of comorbidity among symptom types
- Cluster Three (15%) highly Behaviorally Disordered
  - 53% met Complex Trauma criterion
  - 100% had behavioral dysregulation issues
  - high rates of affect dysregulation (85%)
  - disproportionately male (63%)
  - at least 25% had previous detention

Implications for Intervention Selection

- If applying a complex trauma intervention, as many as 60% meet criteria
- If applying a targeted trauma intervention, all youth with symptoms and trauma experiences other than neglect only (75%) are appropriate
- In two years of intervention, estimates of roughly 800 youth becoming available for intervention meeting criteria

Prioritization of Risk Factors for Intervention

- Consistency of findings across researchers, methodologies and samples
- Suitability for intervention, especially empirically supported interventions
- Feasibility of inclusion given sample size, study duration, and other logistic considerations

Selected Intervention: TARGET

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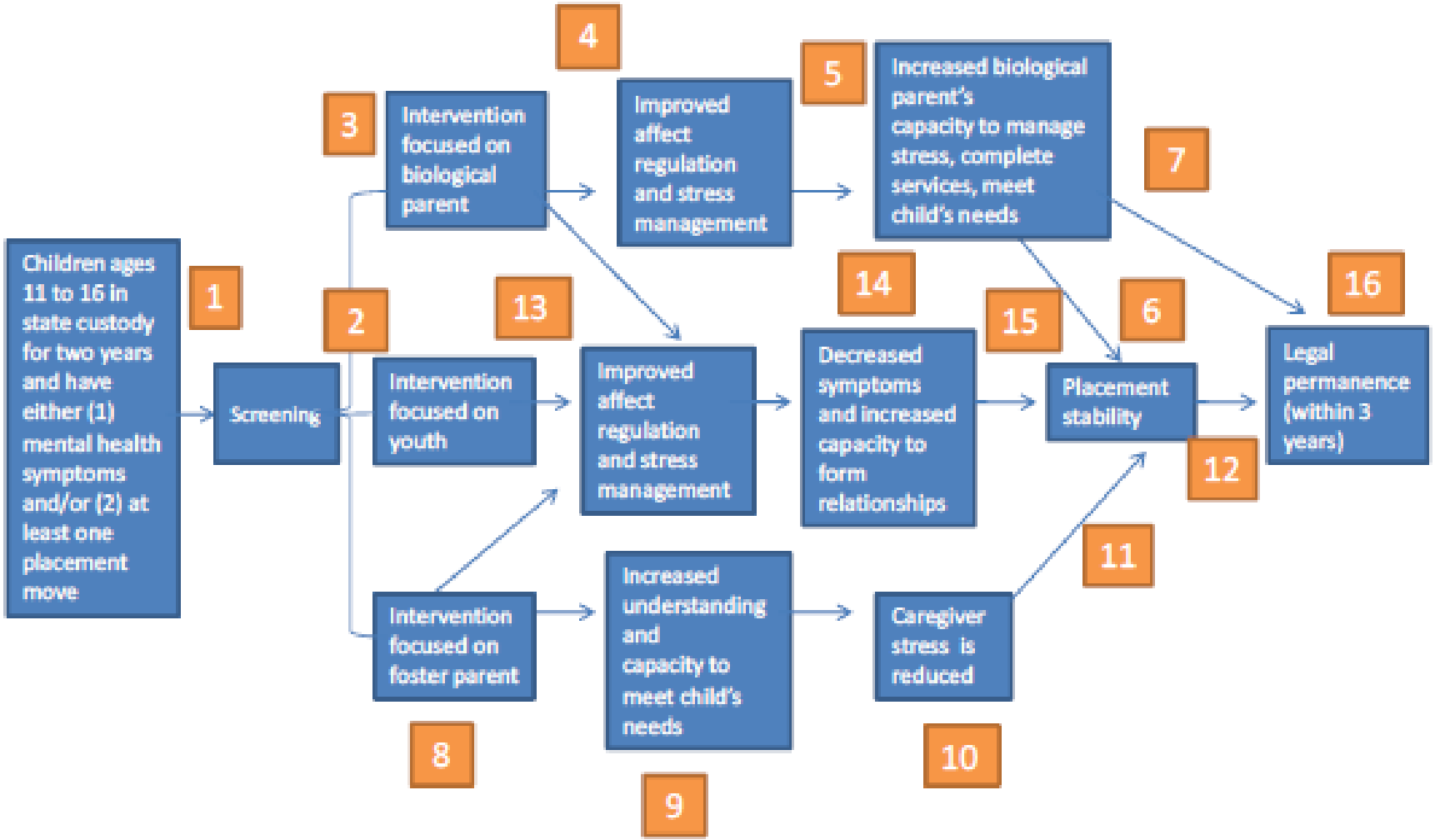
- Addresses affect dysregulation that is (1) caused by trauma and (2) results in behavioral problems that are challenging for foster parents to manage
- Can be used with foster parents, biological parents, and youth
- Is appropriate for all youth with trauma histories, not just those with discrete traumatic events
- Developers had implemented the intervention with youth in Juvenile Justice settings but were eager to modify, apply, and test intervention with child welfare population


Children ages 11 to 16 in state custody for two years and have either (1) mental health symptoms and/or (2) at least one placement move
1
Screening
2
3
Intervention focused on biological parent
4
Improved affect regulation and stress management
5
Increased biological parent's capacity to manage stress, complete services, meet child's needs
6
7
Intervention focused on youth
13
Improved affect regulation and stress management
14
Decreased symptoms and increased capacity to form relationships
15
Placement stability
12
16
Legal permanence (within 3 years)
Intervention focused on foster parent
8
Increased understanding and capacity to meet child's needs
9
Caregiver stress is reduced
10
11

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