

*Using Integrated Data to
Support Program Management, Evaluation
and Research*

**2011 National Child Welfare Evaluation
Summit**

**August 30, 2011
Washington, D.C.**



Wisconsin Administrative Data Core

An Integrated Data System to Support
Management, Evaluation and Research

2011 National Child Welfare
Evaluation Summit

August 30, 2011



Acknowledgments

- U.S. DHSS/ACF for support provided through “Building an Integrated Data System to Support the Management and Evaluation of Integrated Services for TANF-Eligible Families”
- State of Wisconsin for administrative data access and related consultation
- IRP research and programming staff
- Key collaborators: Patricia Brown, Maria Cancian, Eunhee Han



Outline

- Context: IRP, the IRP Data Core, and the logic of collaboration
- Data system
 - IRP data infrastructure
 - State data sources
 - New data integration model & Multi-Sample Person File (MSPF)
- Key lessons



What is IRP?

- **History:** Created in 1966 during the War on Poverty to support basic research, training, and evaluation of anti-poverty policy
- **Funding:** IRP core infrastructure funded by U.S. DHHS and the UW; research projects funded by grants and contracts from foundations and state and federal agencies
- **Organization:**
 - Researchers:
 - IRP staff activities generally supported through specific project funding
 - IRP Faculty Affiliate supported through specific projects and as part of their faculty appointment
 - Research support staff includes specialize programmers with expertise in Wisconsin administrative data
 - Research projects directed by project-specific Principal Investigators

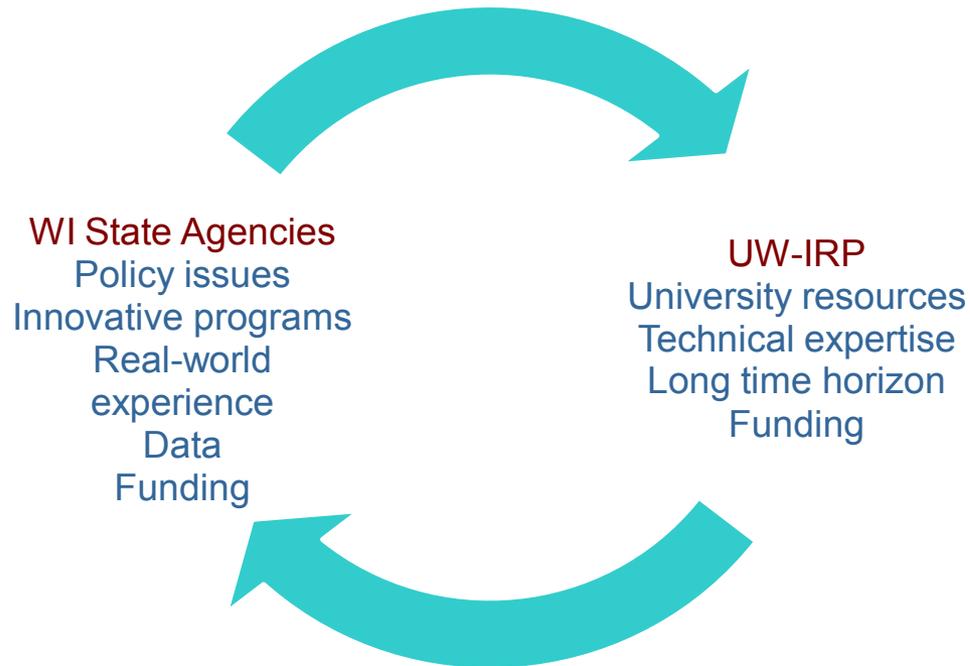


What is the IRP Data Core?

- **History:** Evolved from a series of large-scale evaluation projects conducted by IRP for the State of Wisconsin, including the Child Support Demonstration Evaluation CSDE (1997-2006). Formally organized as an IRP enterprise in 2009.
- **Funding:** Primarily through research projects funded by grants and contracts from state and federal agencies; administrative support from UW-Madison and the IRP Core grant (USDHHS/ASPE).
- **Organization:**
 - Administrative Director: Jennifer Noyes, IRP Associate Director
 - Technical Director: Patricia Brown
 - Data Sharing and Institutional Liaison: Steven Cook
 - Data Security Officer: Margaret Darby Townsend
 - Advisors: Maria Cancian, Tim Smeeding



Collaboration Supports Policy Development and Academic Research





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 - New data integration model & MSPF
- Key lessons & next steps



IRP Administrative Data Infrastructure

- Specialized programming staff with expertise in administrative data systems (≈ 5 FTE)
- Dedicated technical support staff responsible for data sharing agreements, data security and related training, and human subjects reviews (≈ 1.75 FTE)
- Core faculty and staff researchers contributing to data development and use
- Graduate student trainees involved in data analysis (and related dissertation research)
- Specialized hardware software and technical support from UW-Social Science Computing Cluster



Current Wisconsin State Data Resources

CORE:

- AFCD/TANF (CARES)
- Child Support (KIDS)
- SNAP/Food Stamps (CARES)
- Medicaid/Badgercare (CARES)
- Unemployment Insurance Benefits (UI)
- Child Care subsidy (CARES)
- Child Protective Services (WiSACWIS)
- *Corrections (in progress)*

REGULAR MATCH:

- Unemployment Insurance Wage Records

SPECIALIZED MATCH:

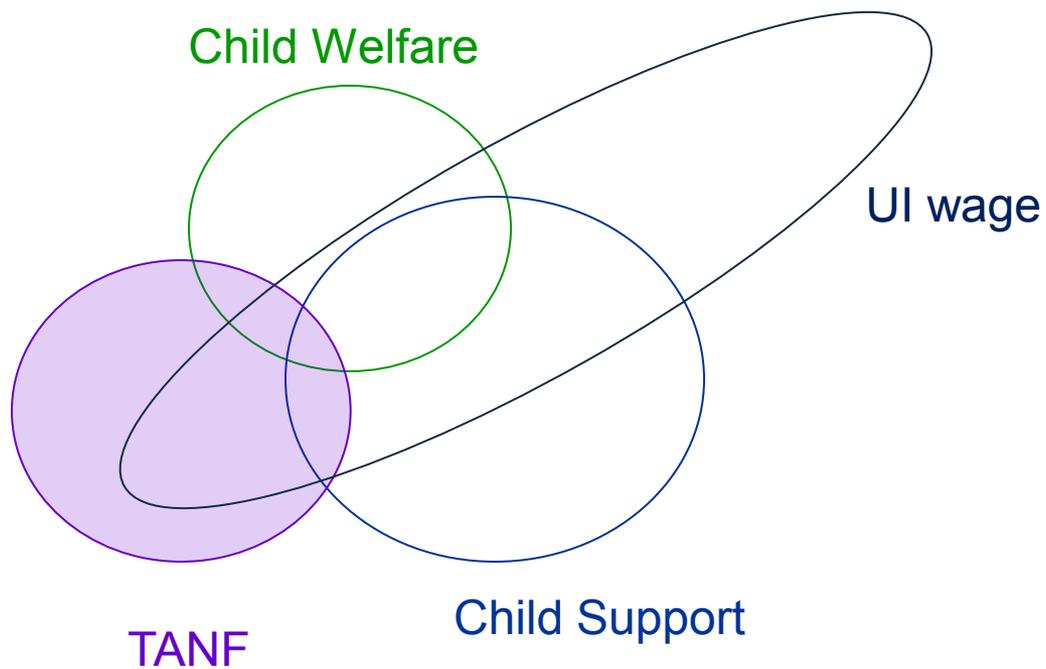
- Department of Revenue

OTHER:

- SSI records (from CARES)
- Vital Records
- Court Record (not electronic)
- TANF Applicants (not electronic)

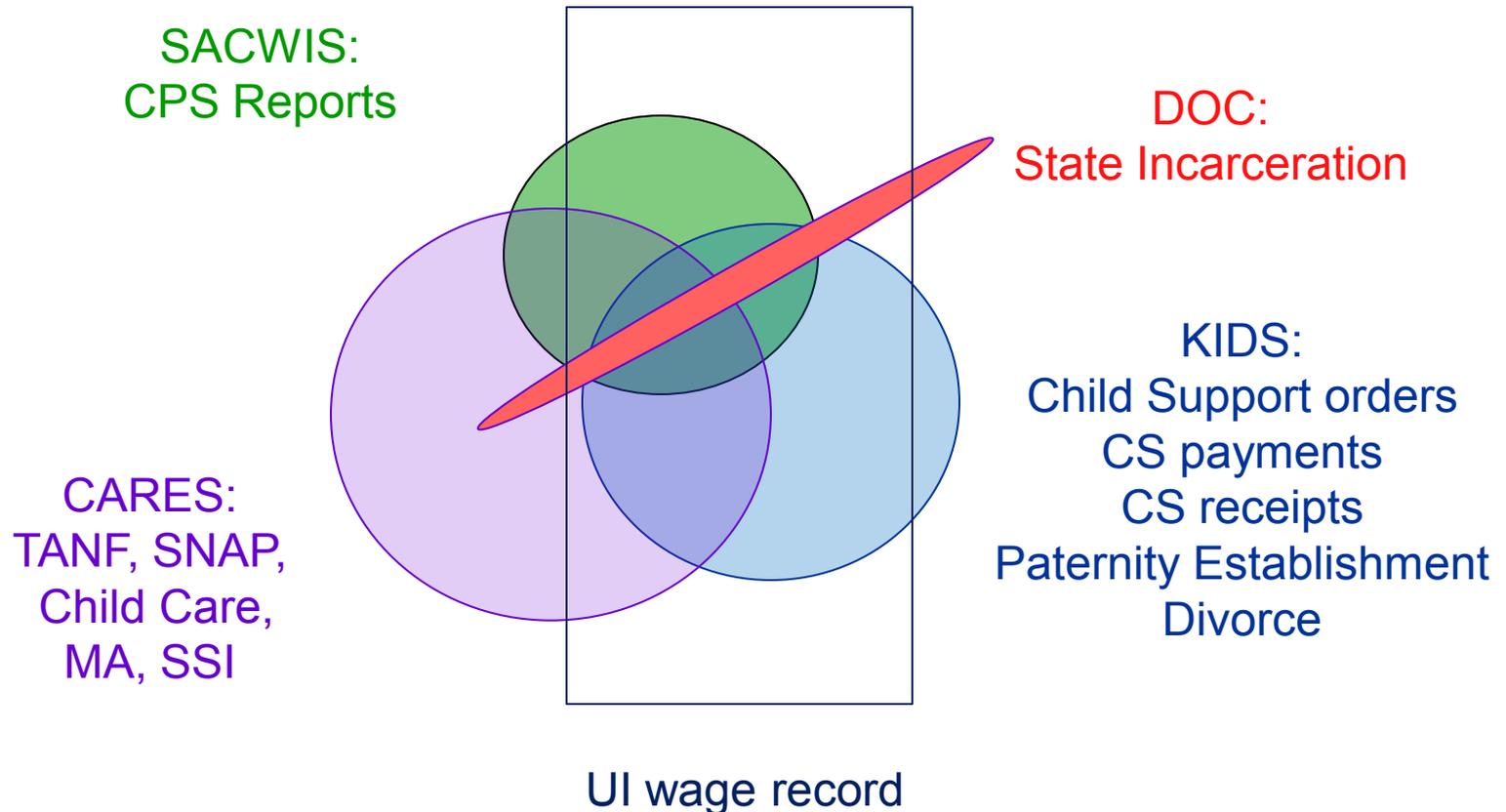


Data Integration: Old Model





Data Integration: Current Model





Data Integration

MSPF: Process and Structure

- Creation of a “Multi-Sample Person File” (MSPF)
- Structure: one record per individual, without distinction between adults and children, or between male and female.
- Most complex and most time-consuming to program (SAS)
- Process: Match/merge all individuals from all primary data sources, using identifying variables with some combination of these traits:
 - a) commonly recorded (name, sex)
 - b) uniquely-identifying (SSN, ITIN)
 - c) immutable (date of birth, place of birth)
- MSPF File = 4,990,000 individuals

Note: MSPF designed for research only; not “legally” accurate, given use of fuzzy/probabilistic matching techniques.



Data Integration

MSPF: Data Files Created

- Data Core integrates data to create a more user-friendly system for researchers:
 - Multi-Sample Person File (all individuals in the data systems from the date of creation through 2010)
 - Parent/Child Files
 - Participation Files (2002-2010)
 - “Case” File
 - Cross-walk ID files
 - Other: Location, Race/Ethnicity
- All files linked by unique IRP-constructed Personal ID and/or Case ID (when appropriate)



Data Integration

MSPF: Issues

- Goal: one record/individual
 - 3,225,000 (CARES) + 5,000,000 (KIDS) + 1,600,000 (SACWIS) + 90,000 (DOC) + 35,000 (CRD) = 9,950,000
- Task: “un-duplicate” multiple observations per individual
- Major challenges:
 - Proliferation of multiple PINs (Personal Identification Numbers) within data systems (e.g. up to 13 KIDS PINs (observations) for an individual)
 - Match/merging with missing data in identifying variables, particularly SSNs



Data Integration

MSPF: Key Strategies

- Identifying Variables
 - Common: SSN, sex, DOB, date of death, name, birth location
 - PINs shared across data systems
 - Multiplying effect with use of more variables
- Major Lesson Learned: Use Mother's first name, DOB, SSN as identifying variables for her children (regardless of age)
 - Mothers' identifiers added significant power to unique identification of individuals
 - MSPF: 5,335,000 reduced to 4,990,000 individuals
 - Mothers' info. available in 4 of 6 of our primary data sources
- Father info. can also be used to match multiple child records
- Vice versa – child's info can be used to match parent records



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Key Lessons

- IRP-State Agency collaboration has been and will continue to be essential
- Infrastructure requires sustained commitment by all parties and significant funding— big “fixed” costs are hard to fund and manage
- As it expands and is refined, the Data Core can support a growing range of management, evaluation and research efforts, at a lower per-project cost



Using Administrative Data to Understand Child Welfare/Child Support Interactions

Maria Cancian

Based on collaborative research projects with Yiyoon Chung, Eunhee Han, Jennifer Noyes, Mai Seki, Kristi Slack, and Mi Youn Yang

**Institute for Research on Poverty
University of Wisconsin-Madison**

Acknowledgements

- Results drawn from five papers:
 - “Child Support Referral for Families Served by the Child Welfare System” (2011). **Coauthors:** Steven Cook, Mai Seki, Lynn Wimer.
 - “Measuring the Multiple Program Participation of TANF and Other Program Participants” (2010). **Coauthor:** Eunhee Han.
 - “The Effect of Family Income on Risk of Child Maltreatment” (2010). **Coauthors:** Kristen Shook Slack and Mi Youn Yang.
 - “Child Support and the Risk of Child Welfare Involvement: An Initial Assessment of Relationships” (2010). **Coauthor:** Mai Seki.
 - “The Income and Program Participation of Wisconsin TANF Applicants” (2010). **Coauthors:** Jennifer Noyes and Yiyoon Chung.
- Thanks to colleagues at the Wisconsin Department of Children and Families (DCF) and the Department of Workforce Development (DWD) for advice and data access; thanks to Pat Brown and IRP programming staff for data construction.
- Thanks to USDHHS/ACF, USDHHS/ASPE, DCF, DWD, and the W.T. Grant Foundation for financial support.

Outline

- Measuring cross-system participation
- Describing the relationship between child support (CS) receipt and child welfare (CW):
 - Definitions: CPS and CW
 - CS => CW
 - CW => CS
- Next steps: Using research evidence to support improved policy and practice

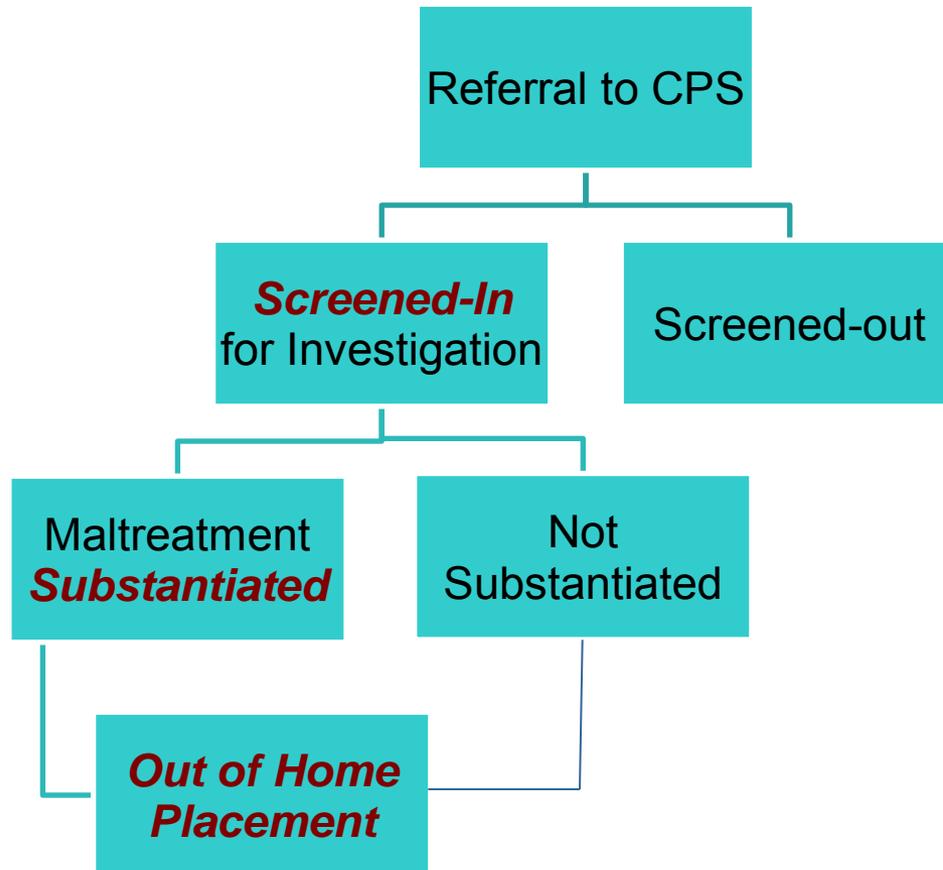
Measuring Cross-System Participation

- Among families with screened-in CPS report in June 2008 in Wisconsin:
 - 7% received TANF cash benefits (18%, if CPS and TANF measured over 2006-8)
 - 14% received subsidized child care (30%)
 - 51% received Food Stamps/SNAP (69%)
 - 69% received Medicaid (78%)
 - 49% received child support (60%)
 - 56% parents with formal earnings (82%)

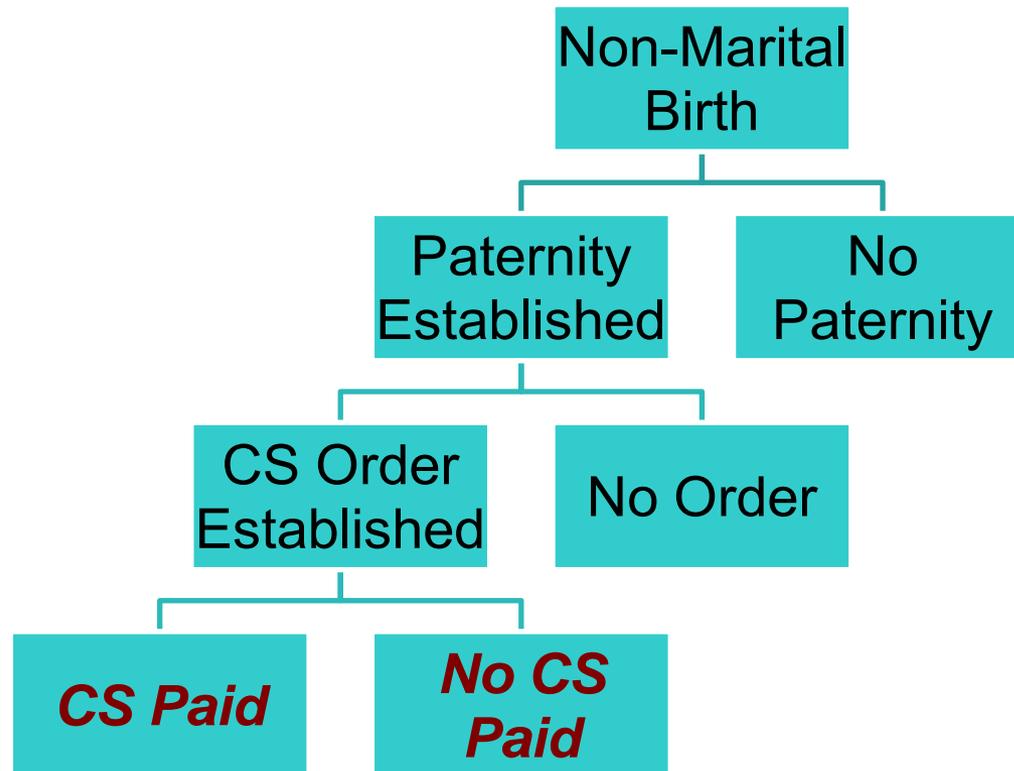
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Child Protective Services Process



Child Support Process



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Relationship between CS and CPS

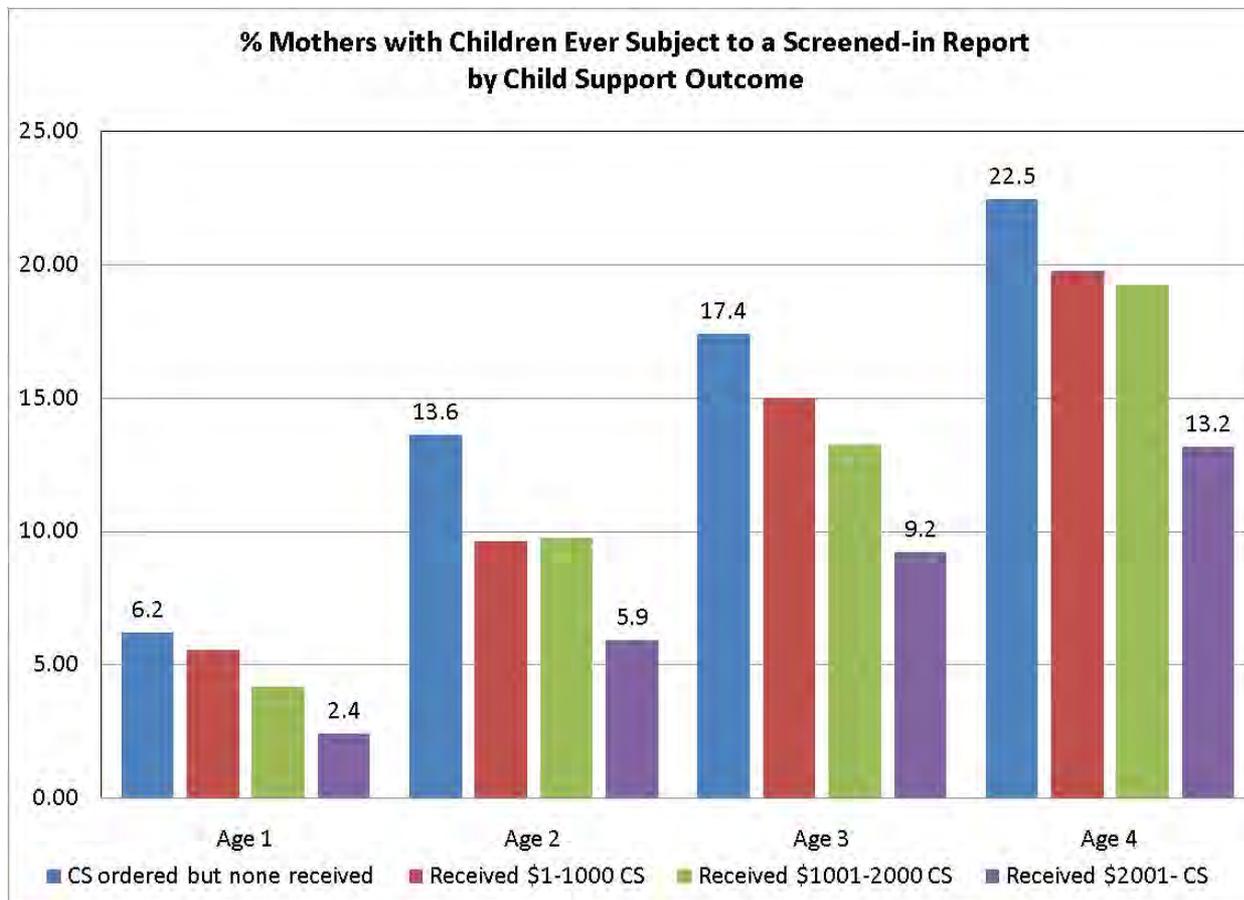
- **Paper:** “Child Support and the Risk of Child Welfare Involvement: An Initial Assessment of Relationships” (2010). Cancian and Seki.
- **Sample:** Mothers with a first nonmarital birth in 2004 (n=10,275)
- **Approach:** Using CS (KIDS) and CW (WiSACWIS) administrative data, follow a family for 4 years to track CS outcomes and CPS involvement

CS and CPS Outcomes Among Mothers with a First Nonmarital Birth in 2004

Four years after the first birth we observe:

- Paternity established: 80% of all nonmarital births
- CS ordered: 49% of those with paternity; 39% of all children
- CS received: 82% of those with an order; 32% of all children
- Child subject to a screened-in CPS call: 5% in that year; 14% in the past 4 years (cumulative)
- Child with substantiated maltreatment: 1% in that year; 3% in the past 4 years (cumulative)

Result: Mothers Receiving More CS Less Likely to be Involved with CPS



Why are mothers receiving CS less likely to be involved with CPS?

- Causal relationship (e.g. additional income may reduce stress, support good parenting, and/or increase independence from other partners)

OR

- Correlation due to other factors: mothers who had children with fathers who pay support are different (e.g. may have better opportunities, live in better neighborhoods)

There is evidence for both these interpretations; estimated relationship probably represents a combination.

Evidence of a *Causal* Relationship between CS, TANF and CPS

- **Paper:** “The Effect of Family Income on Risk of Child Maltreatment” (2010). Cancian, Slack and Yang.
- **Sample:** Unmarried mothers entering TANF in WI in its first year (1997-1998) and randomly assigned through the Child Support Demonstration Evaluation (CSDE) to receive some or all CS paid (n=13,516)
- **Approach:** Using CS (KIDS), CARES and WiSACWIS, compare mothers in the CSDE experimental and control groups and their CPS involvement over the next two years

Results: Mothers Receiving All CS (E) Less Likely to Have CPS Involvement

- Percent of mothers with at least one child the subject of a screened-in CPS report (simple comparison):
 - Experimental: 18.51%
 - Control : 20.23%
- Regression estimates suggest mothers in the experimental group are 10-11% less likely to have a screened-in report ($p < .05$)

Why are mothers receiving full CS less likely to be involved with CPS?

- Causal relationship (e.g. additional income may reduce stress, support good parenting, and/or independence from other partners)

NOT

- Correlation due to other factors: mothers were randomly assigned to E/C, so they are not systematically different in any other way

These results provide strong evidence for a causal effect of income on CPS involvement.

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Child Support Referrals for Families Served by CPS

- Child support paid by nonresident parents may be used to offset CPS costs
- (Formerly) resident parents may be ordered to pay child support to offset CPS costs
- Research questions:
 - Do reduced economic resources delay or disrupt reunification? Or, motivate change by parents?
 - If reunification timing is affected, how does that change the calculation of costs savings?

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Using Research Evidence to Support Improved Policy & Practice

- Many families are served by multiple programs, creating opportunities for productive coordination:
 - ⇒ Evaluations of CSE and TANF programs should account for benefit of reduced child maltreatment
 - ⇒ Evaluations of policies that reduce CS or TANF income for vulnerable families should account for cost of increased child maltreatment (e.g. potential unintended consequences of using CSE to recover costs of foster care placement)
- Information on multiple program participation may help identify families most likely to benefit from prevention programs (even when relationships are not causal)
- Challenges: developing a shared policy and practice model across systems with different goals/financing/data

Using Administrative Data to Inform Program Design and Implementation

Mary Anne Snyder, WI Children's Trust Fund

Kristen S. Slack , School of Social Work and Center on Child Welfare Policy and Practice, UW-Madison

August, 2011



Outline

- Guiding question:
 - Does poverty contribute to child maltreatment (and would reducing poverty, in the absence of other interventions, reduce maltreatment)?
- Community response programs:
 - History and results of statewide implementation evaluation
 - La Crosse pilot
 - Milwaukee community response program (M-CRP)
- M-CRP evaluation
 - Design and Objectives, and use of administrative data

Poverty and child maltreatment:

- Clear and well documented correlation (both CPS involvement, maltreatment risk, and maltreatment-related behaviors);
- No experimental evidence of causal link;
- Limited information about causal mechanisms;
- Most CPS involved families (though not necessarily workers) rank access to economic resources as a primary need.

Poverty and Maltreatment:

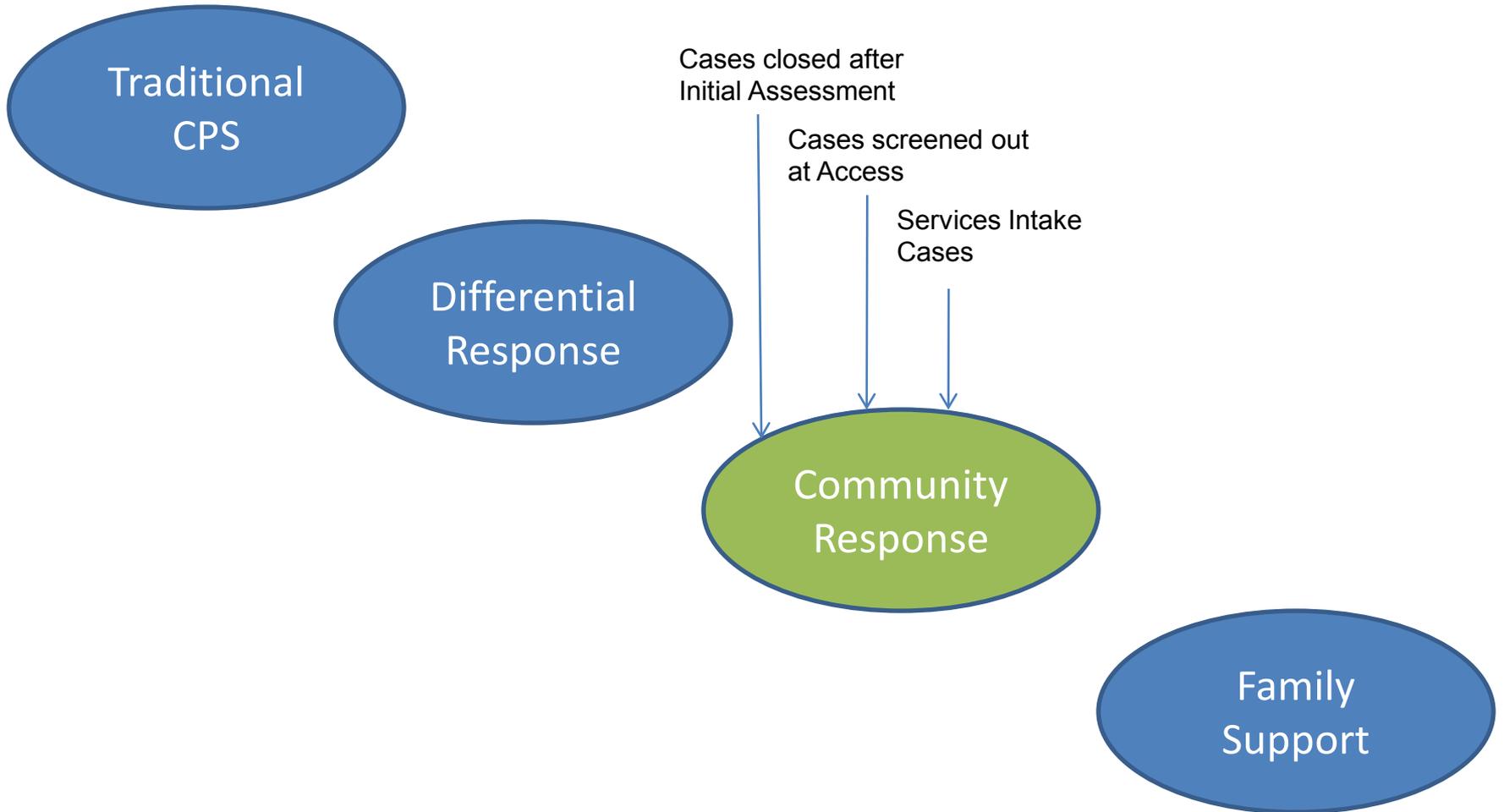
WHAT WE DON'T KNOW

- No experimental evaluations linking access to economic resources to child maltreatment related factors
 - Delaware's welfare reform experimental evaluation (Fein & Lee, 2000).
 - Wisconsin's Child Support Demonstration Evaluation (Cancian, Slack, & Yang, 2011)
- Limited understanding of the mechanisms linking poverty and child maltreatment
 - Direct effects of resources
 - Stress/coping
 - Surveillance bias
 - Social "selection"

Guiding Question

- **TO WHAT EXTENT CAN INCREASED ECONOMIC RESOURCES ALONE PREVENT CHILD MALTREATMENT?**
 - **Economic resources: material resources and financial decision-making**
 - **Mechanisms**
 - **Maltreatment vs. CPS involvement**

FULL ← Continuum of CPS Involvement → NONE



History of Community Response in Wisconsin

2006: Children's Trust Fund developed and issued an RFP to fund Community Response Programs (CRPs); 6 sites initially funded.*

2007: DCF, BMCW, CTF and UW-Madison researchers collaborated to design a Milwaukee CRP model, or "M-CRP."

2008-9: CTF funded 5 additional CRP sites.

2009: DCF plans to fund M-CRP put on hold.

2010: UW-Madison received \$200,000 to evaluate M-CRP model in La Crosse (La Crosse Family Resources); Child Abuse and Neglect Prevention Board approves \$300,000 per year for 5 years for M-CRP.

2011: RFP issued and Milwaukee M-CRP provider agency selected.

*Several other sites proceeded with CRPs without CTF \$⁴⁸

Goals of Children's Trust Fund CRP Pilot Initiative

- To enhance comprehensive voluntary services to lower-risk families that are reported to, but not served by, the CPS system;
- To reduce demands on the CPS system;
- To prevent re-reports to CPS related to escalation of risks;
- To build a more comprehensive, community-based service continuum for families at risk for maltreatment.

Findings from the Statewide CRP Implementation Evaluation

- Participant reports of public benefit receipt were relatively low at CRP intake; but most participants reported income levels that are likely to meet income-tested eligibility criteria for a range of public benefits.
 - Administrative data linked to verify benefit receipt at program intake and approximate eligibility
- Having an income-related service goal was highly predictive of goal attainment.
 - Administrative data used to determine benefit take-up (and loss)

CRP Evaluation Findings, cont.

Service Goal	Percent with Referral Reason	Percent with Goal
Parenting/home environment	74.9%	39%
Income and benefits	27.6%	48.3%
Child health/behavior	9.7%	15.2%
Parental well-being	35.7%	44.1%
Other resource needs	29.7%	17.7%

Families most often referred to CRP for parenting needs, but CRP worker/family defined needs most likely income-related.

The Milwaukee-CRP Model

Linking to Benefits and Economic or Material Resources

Financial Decision-making Assistance

One-time emergency assistance with economic needs

Target Population:

Families investigated or assessed by CPS but not served

Service Duration:

~10 weeks with 6-month follow-up; families can re-engage if they need additional assistance

ECONOMIC SUPPORT FOR FAMILIES AT RISK

*Referrals for other “non-economic” service needs

Piloted in La Crosse County

- No main effect of the intervention in La Crosse; however, over one-third of the treatment group was referred for other services outside of the intervention (mostly to parenting services)
- Possible surveillance effect
 - Using administrative data to explore relationship between outside referrals and reporter sources

Service Delivery and Evaluation Summary

- Milwaukee Social Development Commission (SDC) selected through RFP process to deliver the 3-pronged intervention described above
 - Intervention delivered outside of CPS system
 - SDC has demonstrated experience providing economic support linkages/services
- Randomize all families with a child age 0-5 who were investigated or assessed but had their case closed due to no maltreatment/safety concerns.
 - 1,800 families in 12 months; 2:1 ratio (treatment: control); follow for at least 36 months
 - Control group receives “services as usual”
 - Funding to begin July 1, 2011; ~4-6 month implementation phase

Research Objectives

1. Does M-CRP participation reduce CPS involvement (and other maltreatment indicators)?
 - a. Does participation increase economic resources?
 - b. Do increased resources explain reductions in CPS involvement (maltreatment)?
 - c. Subgroup analyses
2. Was program implemented and delivered with fidelity to the model? What changes were made to the model based on worker and client feedback?
3. What characteristics predict program take-up and completion?
4. Do the benefits of the program outweigh its costs?

Components of Evaluation and Relevant Data Sources (1)

- Process evaluation
 - Including implementation of intervention and RCT procedures (monitored with administrative data)
- Administrative data/impact evaluation of intermediate and long-term outcomes
 - CPS; Earnings; Unemployment Insurance, EITC/tax returns; TANF; Food Stamps/SNAP; child care subsidies; Medicaid/S-CHIP; housing assistance; child support

Components of Evaluation and Relevant Data Sources (2)

- Survey data and credit reports: short-term and intermediate outcomes/mechanisms
 - Family and child functioning and well-being; parenting and parent-child relationship measures; financial decision making/resource management; financial stress; services accessed
- Cost-benefit analysis
 - Implementation data, service delivery data, **administrative data**

Using Administrative Data to Validate New Risk Assessment Measures for Practice

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Jane Holl, Northwestern University

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Consortium of private foundations and other government agencies

Why Focus on Neglect in Early Childhood?

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- **Most prevalent form of child maltreatment**
 - Most recent National Incidence Study estimates 61% (harm standard) - 77% (endangerment standard) of maltreatment incidents are neglect-related
 - Most commonly alleged reason for reports to child protective systems (CPS)
 - Relatively little research on neglect compared to physical or sexual abuse
 - Younger children at greatest risk for neglect, with infants at highest risk
 - Severe neglect, including fatalities, also more common among younger children

Risks as Predictors of Neglect

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- Large literature exists on “correlates” of maltreatment
 - Studies that employ cross-sectional designs
- Little known about factors that predict neglect
 - True understanding of risk requires prospective lens (i.e., risks/protective factors measured prior to occurrence of outcome)
- Great variation in measures across studies
 - Leads to difficulty in comparing findings
- Very few studies that incorporate more than one neglect outcome measure
 - Neglect vs. Neglect-related CPS involvement

Goals of Analysis

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Among low-income families with young children (0-5 years)...

- To see what predicts involvement with child protective services (CPS) for reasons of neglect *within* three separate studies.
- To see whether similar factors *within* separate studies predict both neglect-related CPS involvement and a validated (parental) self-report measure of child neglect.
- To see whether there are consistencies *across* studies in the predictors of both neglect outcomes.

(Full paper is published in the Children and Youth Services Review, 2011, 33, 1354-1363)

Three Studies

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Fragile Families
and Child
Wellbeing (FFCW)
N=1,820

Healthy Families
New York
(HFNY)
N=421

Illinois Families Study-
Child Wellbeing
(IFS-CWB)
N=385

- All involve probabilistic samples (or subsamples) of low-income families with young children
- All involve prospective, longitudinal designs
- All are able to distinguish neglect from other forms of maltreatment, and have two different measures of neglect outcomes
- They share a relatively large set of common/approximate measures

Outcome Measures

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- Investigated CPS neglect reports (**administrative data**)
 - HFNY and IFS-CWB have official reports; FFCW has parent self-report measure
 - HFNY (53%); IFS-CWB (14%); FFCW (5%)
- Parent-Child Conflict Tactics Scale (Straus et al., 1998)
 - CTSPC neglect subscale involves 5 items that capture caregiver failure to provide for basic developmental needs of child
 - Neglect subscale dichotomized to allow for easier comparison to CPS outcome models
 - HFNY (17%); IFS-CWB (22%); FFCW (13%)

Risk and Protective Factors (Predictors)

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- **Demographic Factors**
 - (e.g., parent age, education level, race/ethnicity, family structure)
- **Economic Factors**
 - (e.g., work status, public benefit receipt, material hardships)
- **Parent and Child Wellbeing Factors**
 - (e.g., child health, parent depression, self-efficacy, social support, domestic violence, substance abuse)
- **Parenting Factors**
 - (e.g., spanking, parenting stress, involvement in child activities)

Statistically Significant Predictors of Neglect

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CPS NEGLECT

HFNY: public benefit receipt, **material hardships**, unemployment, depression, substance use

IFS-CWB: public benefit receipt, **material hardships**, unemployment, (low) self efficacy, (low) involvement in child activities, spanking, parenting stress

FFCW: **material hardships**, depression, parent health problems, (low) self efficacy, (low) involvement in child activities, parenting stress

CTSPC NEGLECT

HFNY: public benefit receipt, **material hardships**, spanking, (low) self efficacy, LBW (-)

IFS-CWB: **material hardships**, (low) self efficacy, (low) involvement with child activities, parenting stress, domestic violence

FFCW: **material hardships**, depression, parent health problems, child health problems, domestic violence, substance use

Summary of Findings

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- **Economic factors are strong predictors of neglect across studies**
 - Does not appear to be the sole result of “surveillance” (given similar findings for CTSPC) related to material hardships
 - Surveillance may still play a role with respect to public benefit receipt
 - Economic factors not affected by inclusion of other measures in full models
- **Less consistency across studies with respect to parent and child wellbeing factors**
- **Moderate consistency related to parenting factors**

Implications of Findings

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- Markers of both poverty and parenting struggles predict both measures of neglect;
- Parenting characteristics do not appear to “explain” the links between poverty and maltreatment;
- Suggests independent effects of poverty and parenting.
- Economic factors may serve as an intervention target in efforts to prevent child maltreatment, rather than exclusive focus on parenting or parent/child wellbeing

Transferring Findings to Practice

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- **Need for easily administered risk assessment tools, particularly for child neglect, and appropriate for voluntary clients in family support services.**
- **Few existing neglect risk assessment tools are intended for use with voluntary service families outside of the CPS system.**
- **Many existing tools place heavy emphasis on static or distal factors– not malleable or proximal factors.**

The Family Support Study (FSS)

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- **Development of a brief child neglect risk assessment tool intended for use within maltreatment prevention programs.**
- **Items and subscales from previously validated measure, as well as new items, were self-administered.**
- **22 Women, Infants, and Children (WIC) Program offices from around the State of Wisconsin, and one Home Visiting Program (N=1,086).**
- **Participants will be tracked with **administrative data** for approximately 12 months, to identify predictive validity of survey measures.**
- **Final product: scale useful for identifying families that have a high likelihood of future CPS contact, and for identifying types of family needs with respect to neglect risk.**

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