

National Council of Child Support Directors
2018 Annual Meeting & Conference
Child Support: A Safe Harbor for the Future
May 13 – 16, 2018 • Norfolk, Virginia



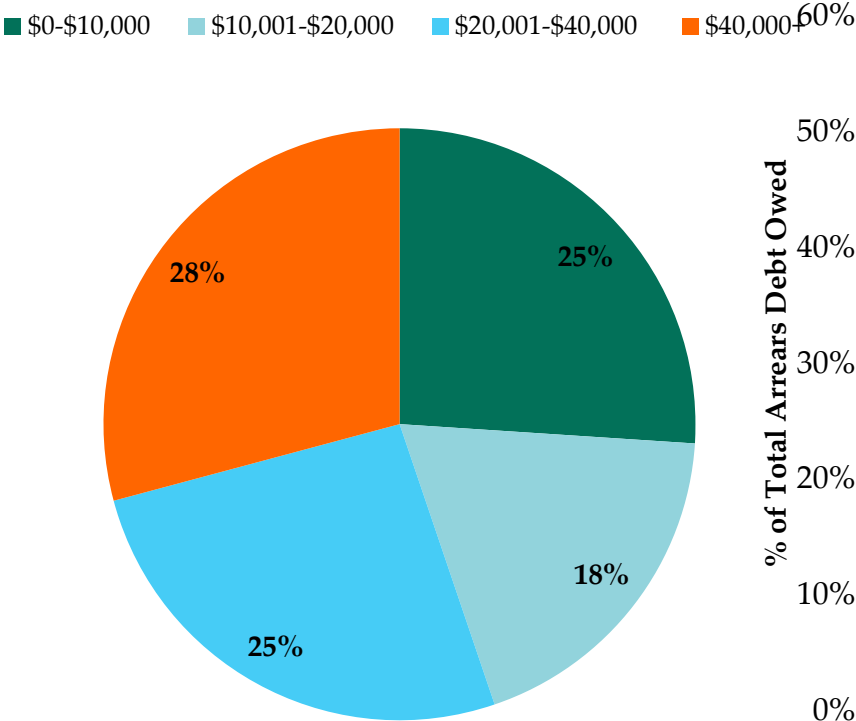
Wave of the Future: Progress Report on the Collaborative Analytics Project

Wednesday, May 16, 2018 • 11:00 – 11:45 am

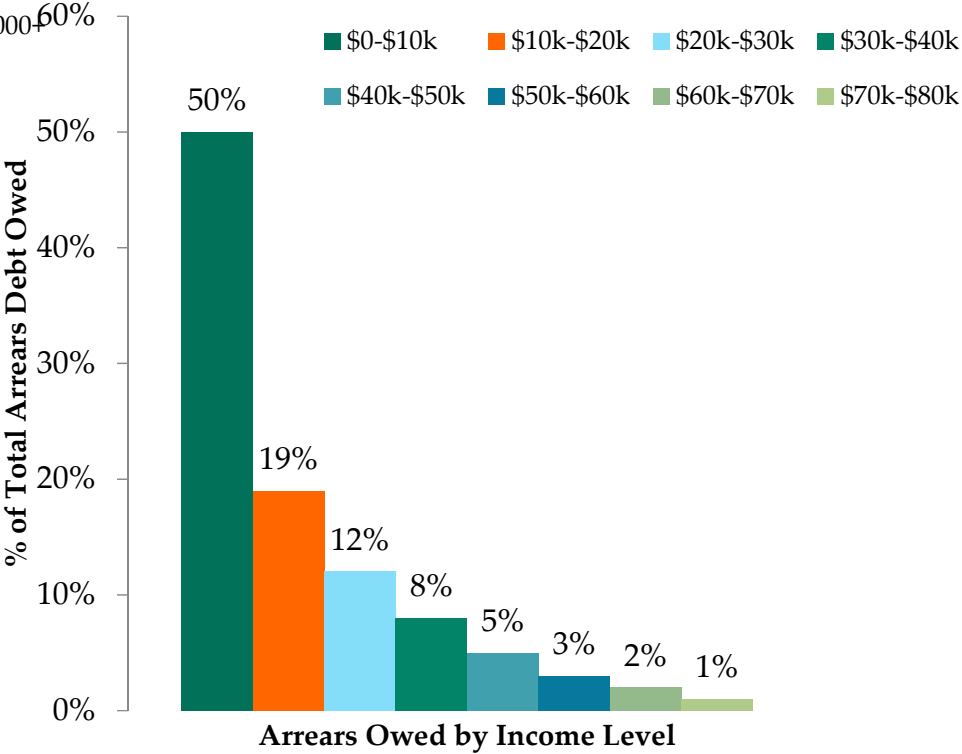
Benidia Rice, Director, Child Support Services, District of Columbia
Maria Arzola, Chief Deputy Director, Orange County, CA Child Support Services
Jolie Sheppick, Research Team Manager, Orange County, CA Child Support Services
Wally McClure, Director, Washington State Division of Child Support



Breakdown of Arrears Cases by Income Level



Lowest Earners Owe the Greatest Arrears Balance

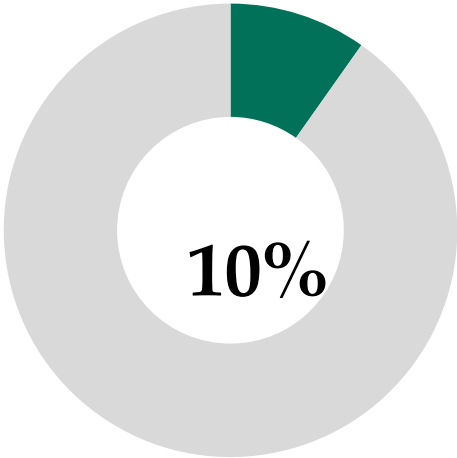




Percentage of NCPs who have Made at least One Payment in the Past Year

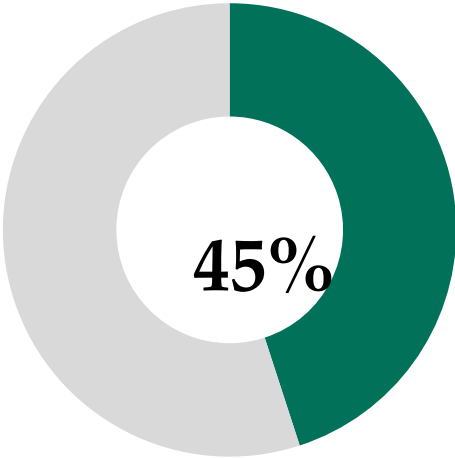
Annual Income Level

\$0-\$10,000



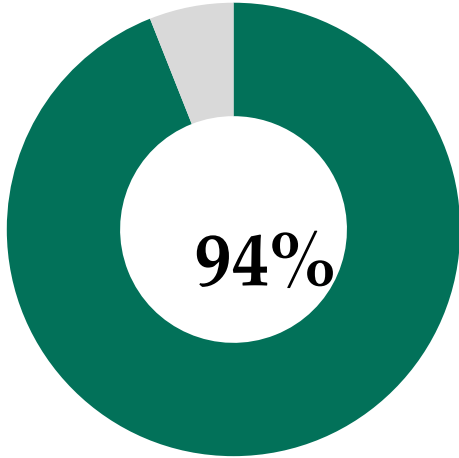
- Made Payment
- No Payment

\$10,001-\$20,000



- Made Payment
- No Payment

\$20,001-\$30,000

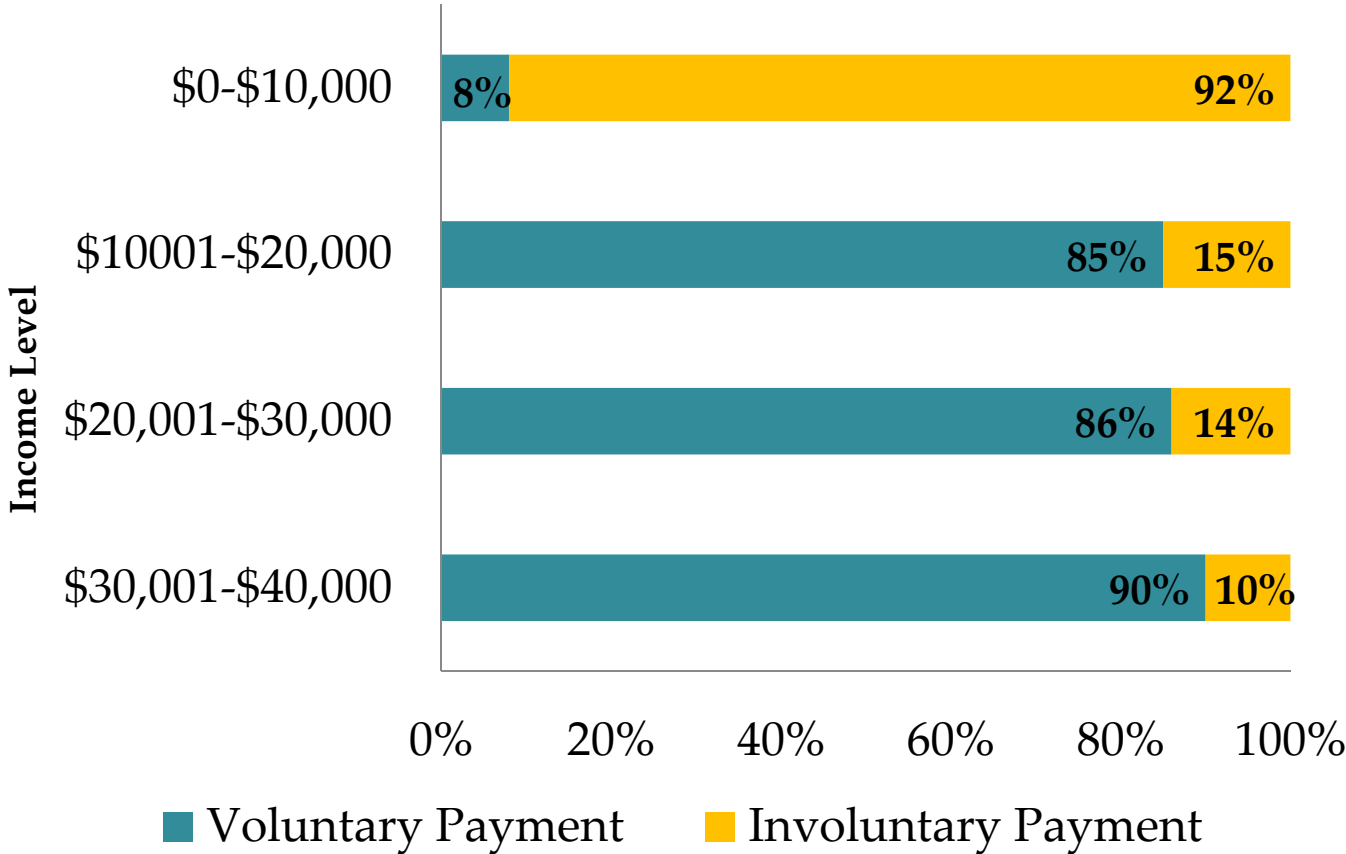


- Made Payment
- No Payment



Voluntary vs Involuntary Child Support Payments by Income Level

*based on most recent payment received



Predictive Analytics in Orange County, California



Social Good

Use predictive analytics to benefit the largest number of people in the largest possible way



Predictive Analytics in Orange County, California

A program administrator's perspective

Value

- Broad view of customer needs
- Preventative and proactive
- Family wellbeing and parental success

Drivers

- Data-driven approach (mostly)
 - Balanced with professional expertise
- Efficiency in managing resources and data

How we have used it

- Evidence-based decision making
- Informing stakeholders for program credibility (policy makers, public, funders)
- Identifying and removing a parent's barriers to payments



Predictive Analytics in Orange County, California

A program administrator's perspective

Lessons Learned

- Operational Communication and Partnerships
- The role of the research staff/team/vendor
- Patience



Predictive Analytics in Orange County, California

A program administrator's perspective

You need 3 things....

- Investment in technology and staffing
- Access to good data (internal and external)
- Operational (case manager) experience, input and involvement

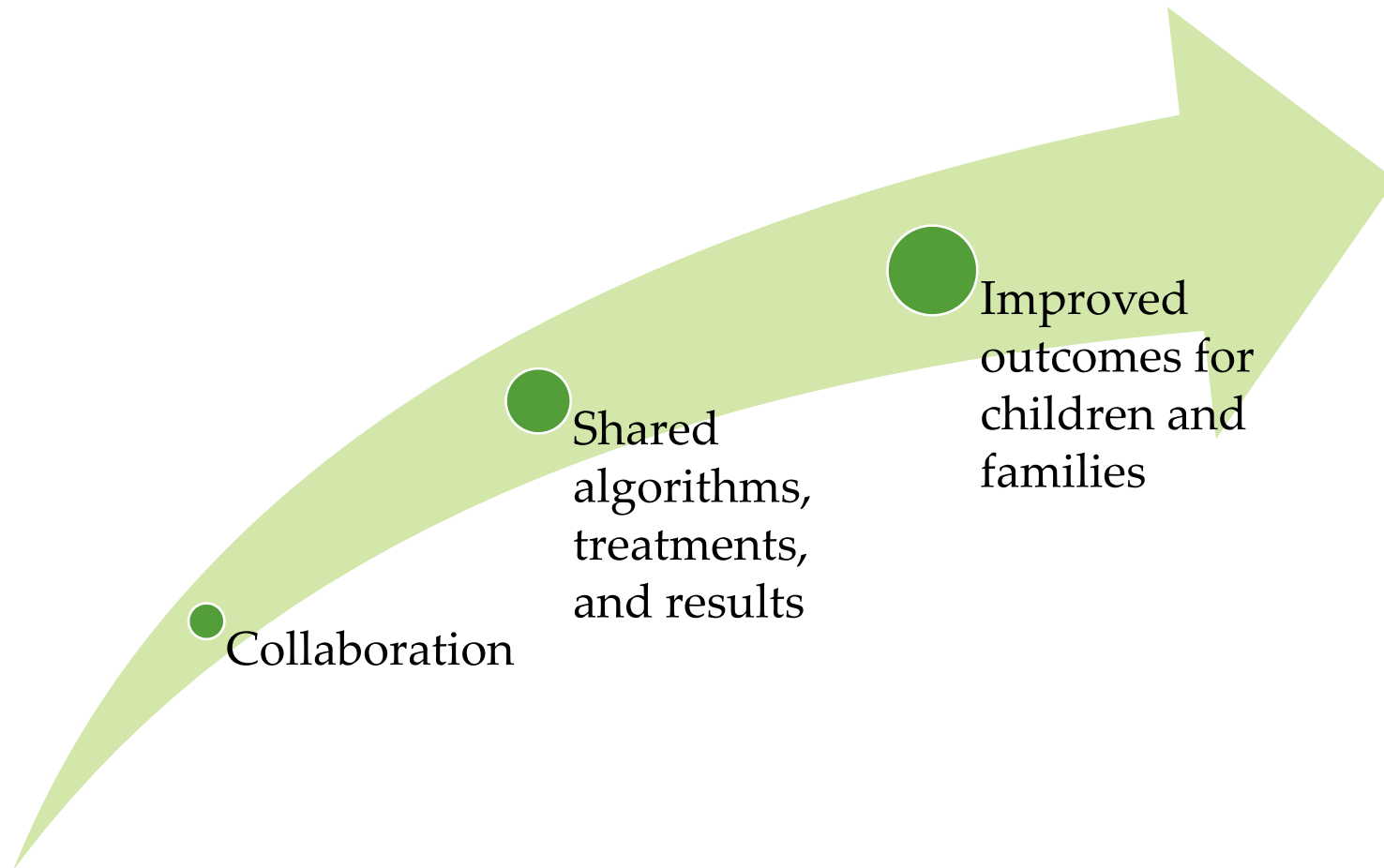


Predictive Analytics in Orange County, California

- Models we developed/developing
 - iScore
 - Payment Compliance
 - Poverty
- Why we joined the collaborative
 - Learn
 - Share
 - Build capacity in other LCSAs
 - Perpetuate the practice that helping all customers benefits the family as a whole (it's not just about performance or enforcement)

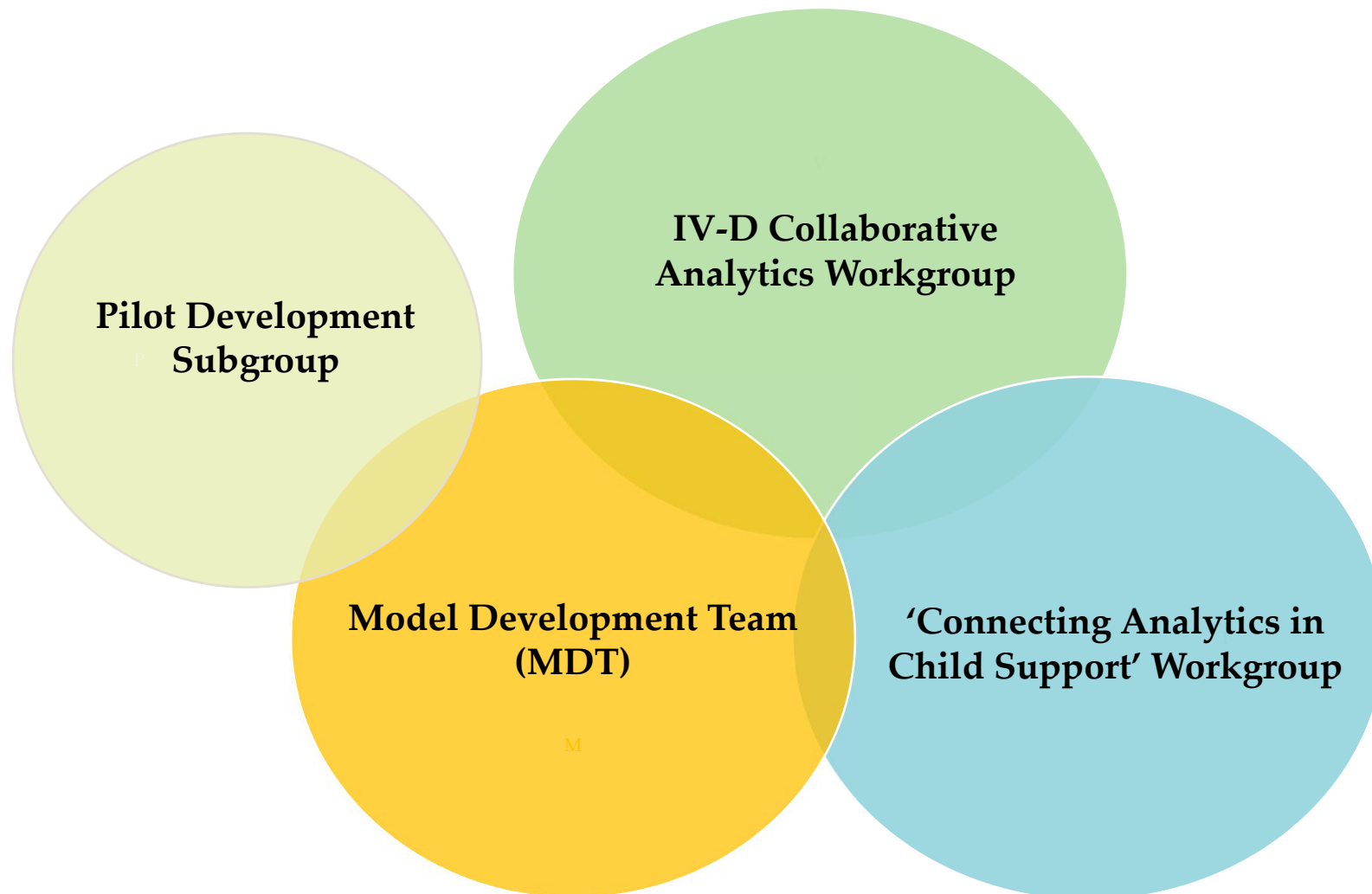


Collaborative Analytics Update





Washington's Journey



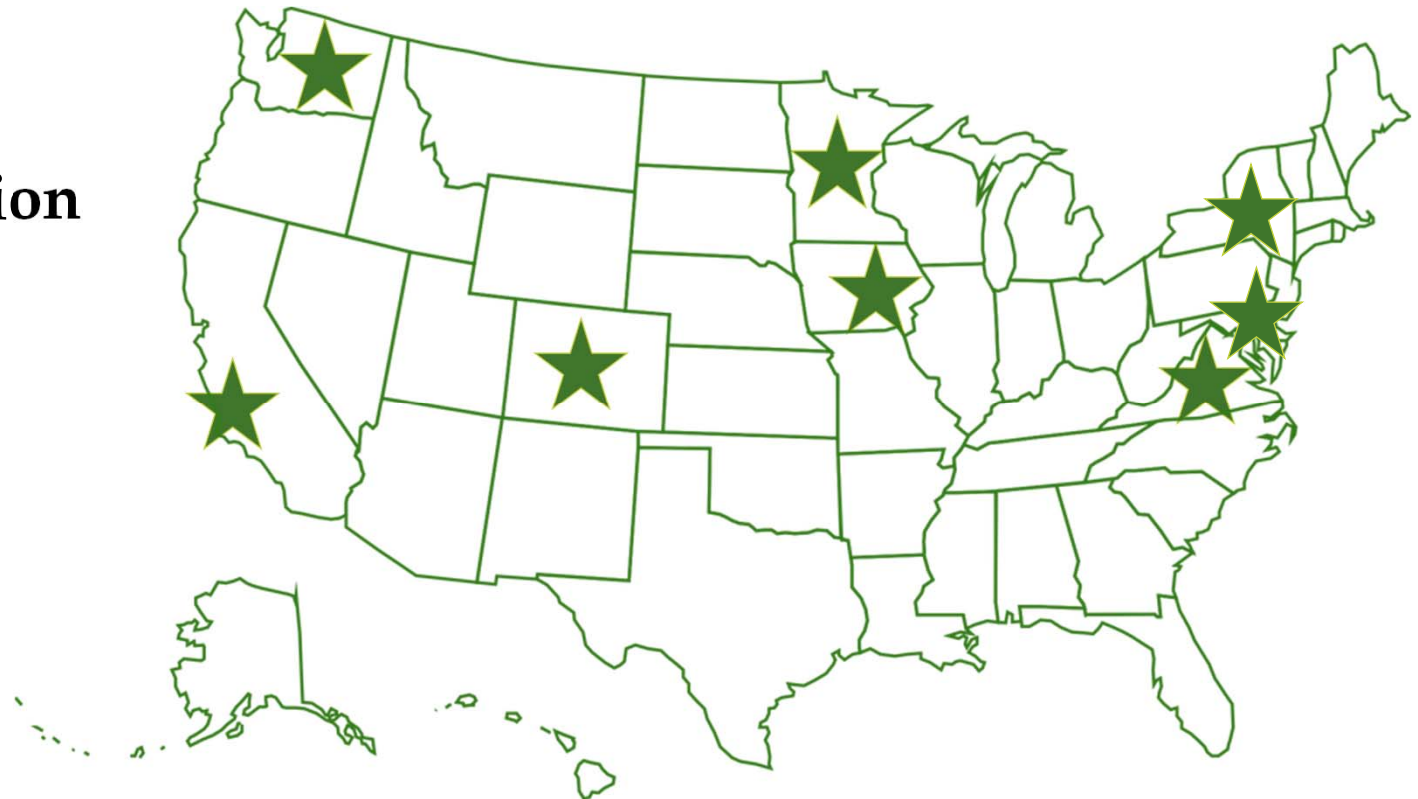


IV-D Collaborative Analytics Workgroup

- Share models
- Lessons learned

IV-D Collaborative

- Members from 8 child support agencies and OCSE
- Online collaborative platform to share:
 - **Models**
 - **Variables**
 - **Information**



IV-D Collaborative

Current Focus:

- Replicating a predictive model across state lines

Next Steps:

- Organizing subgroups to **collaboratively build predictive models** from the ground up.
 - Ratio of order to wages (ROTW)
 - Performance based on geographic location



A one-page handout is available for more information

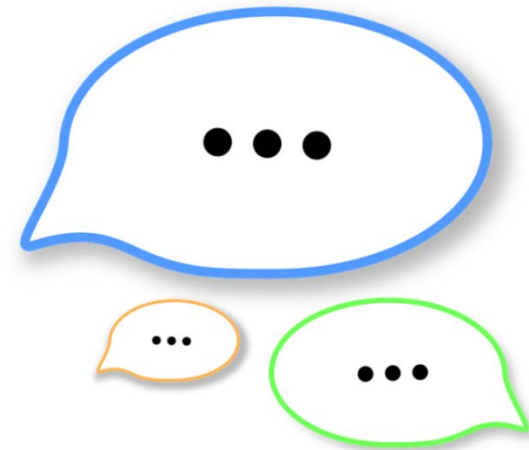


'Connecting Analytics in Child Support' Workgroup

- Inventory of states' experiences

Connecting Analytics in Child Support

- **Thirteen programs** at all levels of experience were interviewed
 - Hopes and expectations
 - Interesting approaches
 - Frustrations or barriers
 - “A-Ha!” moments or surprises
 - Helpful tips/tricks



Hopes and Expectations

- Move beyond data review to more sophisticated analytics
- Build **customizable caseload management tools** to assist caseworkers
- Analytics **at intake** to prepare case for long-term success
- Increase **collections** and program **efficiencies**

“You use analytics to guide the individual case manager ... We need to be thinking, ‘How can I help these parents right now?’”



Interesting Approaches

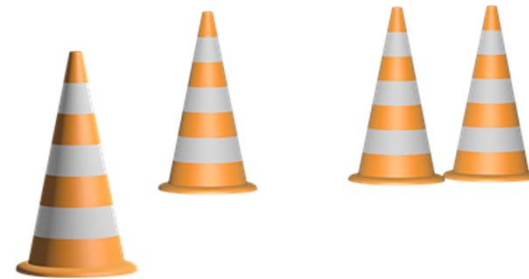
- University partnerships
- In-house researchers
- Behaviorally informed tests
- Specialized teams building and testing the model
- Community partnerships to better understand/address customer needs



“[Our] research team... [is] constantly [asking], ‘How would you use this?’ ‘What should the tool look like?’ ‘Did you have a problem implementing the model?’”

Barriers

- Working with outdated legacy systems
- Lack of (in-house) resources
- Predictive model less powerful than expected
- Outdated data
- Data integrity issues
- Lack of staff buy-in



“Getting staff to trust [the model] has been a struggle. As soon as you find one thing – ‘Well it told me to do this, and it shouldn’t have. I don’t believe this model!’...You need to show success and need them to be able to see it and believe it for themselves. “

Surprises



- Many programs are at the same place
- Discovering hidden analytics experience
- Staff buy-in varies by experience
- Some variables were not as meaningful as expected
- Even failed models provided benefits

“...Some variables that you wouldn't think matter seem to matter quite a bit, and the other variables that you think are the 'end-all' solution kind of factor out.”

Tips

- Pilot tests demonstrate results and build staff buy-in
- Dedicate resources to predictive analytics
- Collaborate with social service partners
- Take case worker insight/experience to heart
- Consider ethics and policy implications at all times
- Regularly update predictive models to ensure accuracy

“Talking to the end user and the customer... in the beginning is really important.”





**Pilot
Development
Subgroup**

**Model Development
Team (MDT)**

- Design, test, and implement predictive analytics in DCS

Delinquency Predictor Pilot Project

Project Overview

- **Delinquency Predictor Model** predicts the likelihood of future payment delinquency for NCPs with little to no earnings history and sporadic payment behavior
 - **Phase I: November 2017 – April 2019**
 - **Goal:** Pilot enforcement strategies
 - **Phase II: May 2019 – December 2019**
 - **Goal:** Automate tool



Delinquency Predictor Pilot Project

- **Predictive factors so far:**
 - Percentage of monthly order amount (MOA) paid in prior month
 - Rate of arrears reduction in proportion to MOA
 - Number of continuous payments
 - Number of enforcement forms
- **May 2018:** Begin developing pilot
- **October 2018 – April 2019:** Run pilot, analyze results, and identify lessons learned



Reflections

- This effort is an unprecedented nationwide collaboration between child support agencies
- All child support programs are welcome to join the IV-D Collaborative, regardless of experience!





Questions

