

# Prediction, Learning & Prevention in Child Welfare Part 1

*In partnership with NCCD and New Allies/Youth Villages*



National Council on  
Crime & Delinquency



**INFLUENCE  
BUILD  
CONNECT**

**NewAllies**  
ACHIEVING TRANSFORMATION TOGETHER  
NewAllies.org

Thriving Communities Built on Human Potential

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## Our Vision

Thriving Communities Built on Human Potential

## Our Mission

American Public Human Services Association advances the well-being of all people by influencing modern approaches to sound policy, building the capacity of public agencies to enable healthy families and communities, and connecting leaders to accelerate learning and generate practical solutions together.

*Because We Build Well-Being from the Ground Up*

Washington DC Metro Area



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**2020**  
EVENTS & MEMBER ENGAGEMENT OPPORTUNITIES  
(as of October 2019)


**APHSA**  
American Public Human Services Association

<b>JUNE 7-10</b> <small>POLICY AND PRACTICE</small>  <b>APHSA NATIONAL HEALTH AND HUMAN SERVICES SUMMIT</b> ARLINGTON, VA	<b>AUGUST 3-6</b> <small>PROGRAM INTEGRITY</small>  <b>NAPIPM EDUCATION CONFERENCE</b> PORTLAND, OR	<b>AUGUST 23-26</b> <small>SNAP/TANF</small>  <b>AASD/NASTA EDUCATION CONFERENCE</b> MILWAUKEE, WI
<b>SEPTEMBER 13-16</b> <small>TECHNOLOGY</small>  <b>ISM ANNUAL CONFERENCE</b> KISSIMMEE, FL	<b>OCTOBER 4-7</b> <small>ORGANIZATIONAL EFFECTIVENESS</small>  <b>NSDTA EDUCATION CONFERENCE</b> SPOKANE, WA	<b>OCTOBER 18-21</b> <small>LEGAL</small>  <b>AAHSA EDUCATION CONFERENCE</b> COLUMBUS, OH

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**APHSA Analytics Committee**



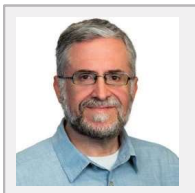
**APHSA**  
American Public Human Services Association

- [https://aphsa.org/NC/NC/Guidance\\_and\\_Resources\\_Sub/data\\_sharing\\_analytics.aspx](https://aphsa.org/NC/NC/Guidance_and_Resources_Sub/data_sharing_analytics.aspx)
  - Bitly: <https://bit.ly/37Kvn95>
- 1. *Analytic Capability Roadmap 1.0 for Human Service Agencies, and a Reference Guide to Writing an Analytics RFP*
- 2. *Roadmap to Capacity Building in Analytics*
- 3. *Guide to Data Management, Privacy & Confidentiality, and Predictive Analytics*
- 4. Still finalizing:
  - *Data Governance Value Proposition for Population Health*
  - 2-pager for Executives on Data Dictionaries

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## Presenters



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Associate Director of Research  
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**CHRISTINA BECKER**

Knowledge Mobilization  
Manager  
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## What do we mean by “Predictive Analytics”?



- Longitudinal data
- Using the past to predict the future
- Likelihood

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## Is this new?



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## Preconditions for success



- Data... good data
- Leadership buy-in
- Data governance system
- Internal capacity
- Access to specialized expertise




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## About that specialized expertise...




Predictive Analytics in C


+

▼

<https://aspe.hhs.gov/predictive-analytics-child-welfare-decision-tool>



U.S. Department of Health & Human Services



**ASPE**  
 OFFICE OF THE ASSISTANT SECRETARY  
 FOR PLANNING AND EVALUATION

ABOUT ▼


TOPICS ▼

PUBLICATIONS

DATA AND TOOLS ▼

### PREDICTIVE ANALYTICS IN CHILD WELFARE DECISION TOOL


HOME • PREDICTIVE ANALYTICS IN CHILD ...



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## <https://aspe.hhs.gov/predictive-analytics-child-welfare>



Predictive analytics is increasingly seen as a technology that can improve child welfare outcomes, with a range of possible applications and potential pitfalls. ASPE in 2016 initiated a project to help inform HHS and the child welfare field about how predictive analytics is beginning to be used in in child welfare, what successes and challenges early adopters are encountering, the potential this field has to improve child welfare outcomes, and ways the federal government could facilitate progress. Several products are available from this contract:

- Predictive Analytics in Child Welfare: An Assessment of Current Efforts, Challenges and Opportunities.** Child welfare agencies are interested in leveraging new and emerging techniques to help them harness data and technology to make dramatic improvements to child welfare practice and ultimately produce better outcomes for children and families. This document explores the state of the use of predictive analytics in child welfare by conducting an environmental scan of child welfare agencies, academia, nonprofit organizations, and for-profit vendors. Topics discussed in qualitative interviews included how each jurisdiction uses predictive analytics to support child welfare practice, the challenges that motivated using predictive analytics, and the challenges faced as these agencies have begun their modeling efforts. Whether motivated by an unfortunate event or a directive to improve performance on a certain metric, agencies recognize that multiple problems may need to be tackled to obtain the full benefit of predictive analytics.
- Predictive Analytics in Child Welfare: An Introduction for Administrators and Policy Makers.** This document introduces child welfare administrators and policy makers to the benefits and challenges faced in using predictive analytics to improve child welfare practice. It suggests questions that administrators and policy makers considering a predictive analytics effort can use to improve the likelihood that the effort will produce useful information and improve outcomes for children and families. Issues discussed include: data sufficiency; data quantity; the identification of a well-considered implementation strategy; resource requirements; stakeholder support; model validation; model accuracy; and model precision. Each criterion is described, with examples, to demonstrate how they may be used to inform planning for a predictive analytics project.
- Web-based Decision Tool Illustrating Conditions Necessary for Predictive Analytics To Be Useful in Child Welfare.** A companion to the Introduction for Administrators and Policy Makers, this interactive decision tree steps through several key issues that need to be considered regarding the development and implementation of a predictive analytics model in the child welfare context. At each step it provides suggestions on how to improve the endeavor's probability of success.
- Predictive Analytics in Child Welfare: Considerations in Contracting Vendors for Predictive Analytics.** An increasing number of child welfare agencies are considering using predictive analytics in their work. Typically they do so by contracting with a vendor to develop and maintain a predictive analytics model that is used by the agency to predict risk of a specified outcome. There are significant differences between contracts for these services and other types of contracts child welfare agencies enter into. This document identifies some of those differences and outlines sections for a request for proposals (RFP) suited to procuring predictive analytic capability. It provides guiding principles and ideas that should be considered during the contract development process, and walks through examples specific to the context of child welfare. Every agency's priorities and stakeholders are different, and no set of suggestions will be relevant for every RFP. Therefore, this document constitutes a set of guiding principles intended to help inform agency staff considering contracting for the development and/or implementation of a predictive analytics model applicable to child welfare services. Suggestions focus on three sections of the acquisition package that most need information specific to predictive analytics: the Requirements Documentation, Special Contract Requirements, and Evaluation Factors for Award.

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## Today's Topics



When to use  
decision support

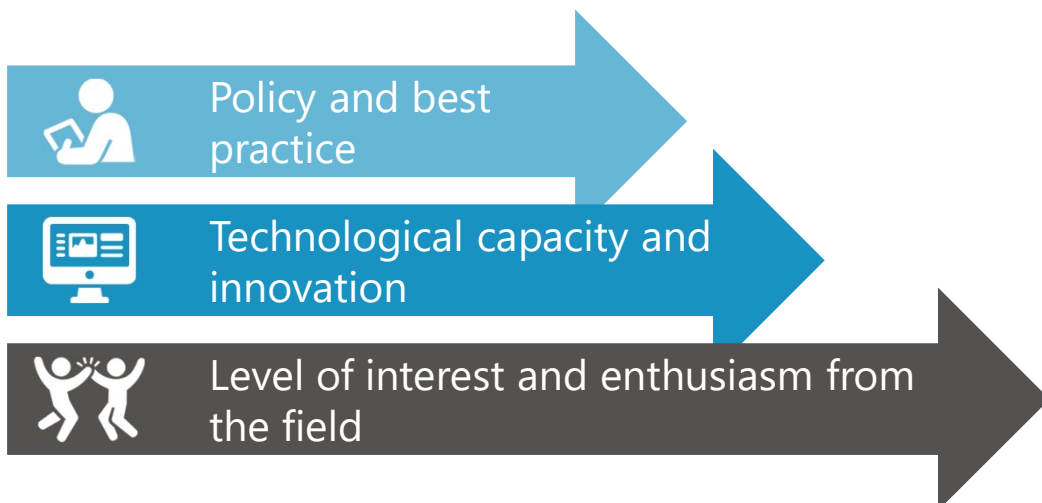


How to develop  
and implement  
solutions



What it means to  
"get it right"

## Context of 2020 Child Welfare Innovations



## When to Use Decision Support

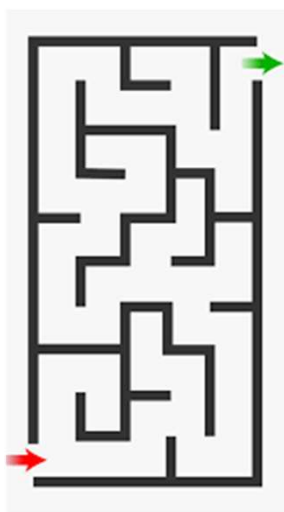
First, define the question; then, determine if a predictive analytics model (or whatever the innovation is) is the right tool to help answer it.





## The "Who?" Decision

Data target variables are not always a straight line to answer the "who" question





## Getting It Right



**Accurate**



**Reliable**



**Fair**



**Useful**



## Getting it Right: Implementing with Organizations



## Getting It Right: Phases of Implementation



- Pre-Implementation
- Implementation
- Sustainability



## Pre-Implementation: Key Tasks

- Stakeholder workgroups
- Data analysis
- Adaptation and customization in local policy
- Key questions about unintentional impact of bias



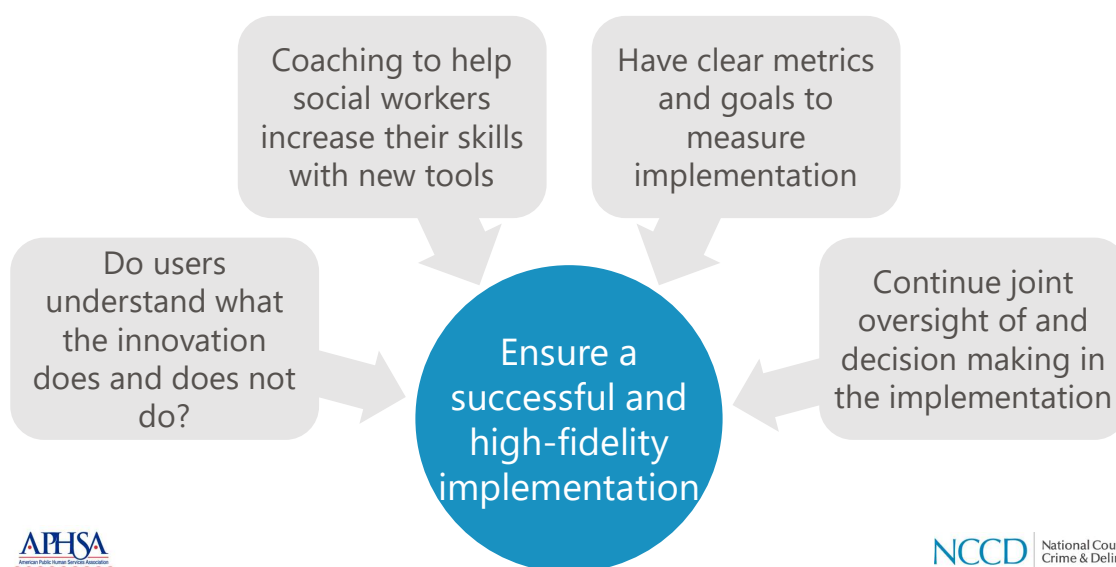
## Implementation: Just a Beginning



- Training considerations
  - » Knowledge
  - » Skills
  - » Values
  - » Plan
- Automation



## Sustainability: Coaching and CQI

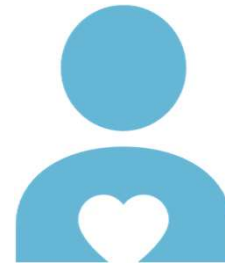


## Summary: There Is an Ethical Imperative In Data Innovation

Transparently and deliberately lead with *intention*, and rigorously and continuously account for *impact*.



**Impact**



**Intent**



## Q&A



Thank you!

### Our Contact Information

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