"Pendulum" of Family Preservation and Child Safety in the Child Protection System in the USA: A researcher’s perspective

John D. Fluke
Kempe Center for the Prevention and Treatment of Child Abuse and Neglect
Department of Pediatrics
University of Colorado School of Medicine

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Topics

• Child Welfare as a System
• Decision Making Theory
• The Decision-Making Ecology
• Child Protection Screening Decisions
• Differential Response
• Some Discussion
Maltreatment Incidence?

99 per 1000

55%

14%

85%

33%

Key Contributors to Theories in Modern Decision Science (Nobel Prize Winners)

• Herbert Simon
  – Bounded rationality – introduces the ideas of uncertainty placing constraints on the our capacity to make the most rationale/optimal decisions

• Daniel Kahneman and Amos Tversky
  – Most well known for their elaboration of the concept of decision heuristics; the unconscious decision making shortcuts we take
  – Known for setting out the psychology of irrational (non-optimal) decision making as elegantly described in prospect theory

• Richard Thaler
  – The founder of behavioral economics where the concept is to create systems of decision making (nudges) that reinforce the best interests of the decision maker within their social context thereby countering irrational decision making.
Bounded Rationality, Heuristics, Biases, Slow & Fast Thinking, Nudges & Noise

• A long list of shortcuts and simple heuristics that can create biases that make decisions less than optimal.
  – Examples:
    • Base rate fallacy
    • Hindsight
    • Recency
    • Representativeness
    • Framing

• Fast thinking is a type of unconscious human behavior supported by heuristics which does consumes less energy compared to slow thinking. Slow thinking requires the evaluation of decisions and consequently more energy (Kahneman).

• One way to think about nudges is that they are “best interest” decisions that can be made in fast thinking mode and where slow thinking is required to make a less optimal choice (Thaler).

• Even if we can’t be sure about the outcomes of a decision, variability or noise still leads to worse outcomes (Kahneman)
Two Prototypical Decision Situations in Child Welfare and Protection

• Choice Between Alternatives
  – (e.g., removal from home, a selection of a foster home)

• Assessment
  – (e.g., risk level)
Normative Theory - Simple

How Do We Know?

Probability Of Outcome

Value Of Outcome

Whose Values?
Child Welfare is not simple: Multiple Alternatives and Multiple Outcomes to Consider

- Safety
- Maintain Family Ties
- Develop Social Skills
- Good Role Models
- Stability
- Stay at home
- Foster Family
- Least restrictive residential
- Most restrictive residential
Very Important Insight for Child Welfare

• Due to the fact that life is uncertain, one can make a good decision and the outcomes will be bad!!!
• Cannot judge a decision making process solely by its outcomes
• Would you pay 10$ to play the following game:
  • Throw a dice,
    – if it falls on any number between 1-5 you get 1000$ and on 6 you get nothing
• Most people are willing to play this gamble.
• If the dice falls on 6 – what does that say about your decision process?
The Decision-Making Ecology (DME)

A Systems Framework for Thinking about Child Welfare Decision Making
Decision-Making Ecology
(Baumann, Dalgleish, Fluke, & Kern, 2011)
Decision-Making Ecology
(Baumann, Dalgleish, Fluke, & Kern, 2011)

- Case Factors
- Organizational Factors
- External Factors
- Decision Maker Factors

- Type Maltreatment
- Pattern of Maltreatment
- Risk of Harm
- Safety
- Child and Family Characteristics

Influences
Decisions
Outcomes
Decision-Making Ecology

(Baumann, Dalgleish, Fluke, & Kern, 2011)

- Resources and Caseloads
- Time Pressures
- Bureaucratic Distractions
- Support & Unit Cohesion
- Policy

Case Factors
- Organizational Factors
- External Factors
- Decision Maker Factors

Influences
Decisions
Outcomes
Decision-Making Ecology
(Baumann, Dalgleish, Fluke, & Kern, 2011)

- Case Factors
- Organizational Factors
- External Factors
- Decision Maker Factors

- Law
- Critical Events
- Community Engagement
- Funding
- Pandemics
- Social Issues (e.g., Disparities)

Influences
Decisions
Outcomes
Decision-Making Ecology

(Baumann, Dalgleish, Fluke, & Kern, 2011)

- Experience
- Skills (e.g., training)
- Values
- Comfort with Casework and Self-Efficacy
- Worker Beliefs and Orientation

Case Factors
Organizational Factors
External Factors
Decision Maker Factors

Influences
Decisions
Outcomes
Crucial points:
The general model for assessment and decision making

Separates: The assessment of the situation.

From: The decision to do something about it.

Distinguishes: The person’s ability to detect the need to take action (how good they are).

From: The person’s willingness to take action (their threshold).

• Qualitatively different factors influence assessment and decision making.
The Process of Decision Making: The Threshold Concept

Assessed level of risk or need

- High
  - Threshold $W_2$
  - W2 Assessment.
  - W1 Assessment.

- Low
  - Threshold $W_1$
  - Yes
  - Assessed level of risk or need

- If threshold low, $W_1$, needs little evidence before taking action
- If threshold high, $W_2$ needs much evidence before taking action.
- Even if they agree on the assessment,
  - they disagree about taking action.

*From Len Dalgleish, 2000
Decision Making Ecology

- Case Factors
- Organizational Factors
- External Factors
- Decision Maker Factors

Decision Making

- Influences
- Decisions
- Outcomes
Four-Fold Table Example

Outcomes for decisions to take action to place or not (Dalgleish, 2012):

<table>
<thead>
<tr>
<th>Should have taken action</th>
<th>Should NOT have taken action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRM Prediction:</strong></td>
<td></td>
</tr>
<tr>
<td>YES - Remove</td>
<td>False Alarm</td>
</tr>
<tr>
<td>Hit is Yes</td>
<td>Error</td>
</tr>
<tr>
<td>Correct Outcome</td>
<td>Damned if you Do False Positive</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>PRM Prediction: NO - Not Remove</td>
<td>Hit is No</td>
</tr>
<tr>
<td>Miss Error</td>
<td>Correct Outcome</td>
</tr>
<tr>
<td>Damned if you Don’t False Negative</td>
<td></td>
</tr>
</tbody>
</table>
Quick Poll

• [https://PollEv.com/johnfluke314](https://PollEv.com/johnfluke314)

• Text **JOHNFLUKE314** to **22333** once to join, then enter your response
Why is action at screening important in thinking about child welfare decisions?

- In the US we have mandatory reporting. A decision to screen in means that we are necessarily going to engage with a family – for good or bad.

- Taking action to investigate when we don’t need to is the most outcome (false positives).

- How the child welfare system responds to reports is how it trains the community about what is meant by child maltreatment.

- Screening actions translate into resource expenditures by the child welfare system.

- Racial disparities in child welfare emerge most strongly from reports made by the community; they are a function of poverty that is driven by historical racism, structural racism, urban/rural differences, and biases.
Effect of Thresholds on False Positives

* The assessment has an Area Under the Receiver Operator Curve = 63%: Prevalence assumed to be 10%: Applied to 100,000 children
Initial Intake Decisions: Some Issues

- Starting Points:
  - State rates of screening-in referrals are highly variable (16% to 98%, avg 54%)
  - Assessments used at intake are based on policy or predictive models
  - Racial inequities are most pronounced at the point of child welfare referral (screening)

- Some Questions:
  - Can we reduce racial inequities by changing our approach thinking differently about screening decisions?
  - Instead of just focusing on what families to screen in (e.g., PRM), can we do a better job of keeping families out?
  - What evidence could we use to help with that?

Colorado CPS Disparities at Initial Referral and Assessment Decisions - African American Children with Respect to White Children

<table>
<thead>
<tr>
<th>Year</th>
<th>Referrals to CPS</th>
<th>Accepted for Assessment</th>
<th>Post Assessment Services</th>
<th>Out of Home Placement if Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>2.6</td>
<td>-0.29</td>
<td>1.0</td>
<td>1.2</td>
</tr>
<tr>
<td>2006</td>
<td>2.7</td>
<td>-0.2</td>
<td>1.1</td>
<td>1.2</td>
</tr>
<tr>
<td>2007</td>
<td>3.1</td>
<td>-0.17</td>
<td>1.1</td>
<td>1.2</td>
</tr>
<tr>
<td>2008</td>
<td>2.8</td>
<td>-0.14</td>
<td>1.2</td>
<td>1.2</td>
</tr>
</tbody>
</table>
Reframing child protection: A response to a constant crisis of confidence in child protection

James Mansell
Rissa Ota
Ricus Erasmus
Kip Marks

Child, Youth and Family
Ministry of Social Development
New Zealand

January 2011
1. Strategic issues are driven by decision making practice, uncertainty and intense scrutiny
   • How to stabilise CP system?

2. Place decision making at the core of our knowledge capability to improve dialogue, support and planning
   • Measurement of decision performance
   • Building decision practice into demand and cost models

3. Bypass the short term “risk management” imperative and focus on longer term needs
   • Build the capability to control and cost targeted services campaigns
Child Protection System Dynamics

- **Visibility of child abuse**: (+)
- **Elimination of abuse**: (-)
- **Risk Screening**: (+)
- **Detect Cases (TP)**: (+)
- **Do soft cases (FP)**: (+)
- **Demand Management (B)**
  - **Demand**: (+)
  - **Social Costs**: (-)
  - **Spare Capacity**: (-)
  - **Adjust Capacity (B)**: (+)
  - **Funding**: (+)

Intolerance to abuse

- **Child abuse**: (+)
- **Miss Cases (FN)**: (+)

Spare Capacity

- **Funding**: (+)

Intake Decision Tree

Concern arrives

Further Action? (FAR) / No Further Action? (ROS, NFA, ADD)

TP / FP / FN / TN
Finding or Outcome / No Finding or Outcome / Comes back with finding or outcome / Stays away
Child Welfare Triage: Use of Screening Threshold Analysis to Evaluate Intake Decision-Making

Aubrey D. Kearney1*
Elisabeth S. Wilson1
Dana M. Hollinshead 2
Michael Poletika 1
Heather H. Kestian1
Terry J. Stigdon1
Eric A. Miller1
John D. Fluke 2

1Indiana Department of Child Services, 302 West Washington Street, Indianapolis IN, 46225
2 Kempe Center for the Prevention and Treatment of Child Abuse and Neglect, University of Colorado Department of Pediatrics Anschutz Medical Campus 13123 E. 16th Ave. Aurora, CO 80045
## Reports in State Fiscal Year 2018

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessments</td>
<td>128,896</td>
</tr>
<tr>
<td>Cases</td>
<td>21,423</td>
</tr>
</tbody>
</table>

What is happening here?
1. Impact and 2. Resources
Indicators in INDCS case management system that maltreatment exists or that support was needed:

- New Screened In Reports
- New Assessments
- Allegations are Substantiated
- A Case is Opened

These indicators are relevant ONLY if they fall within 180 days from report date and include at least one shared perpetrator and victim.

If any ONE of these indicators is present, we consider the index report to be “positive” for maltreatment.
<table>
<thead>
<tr>
<th>Intake Decision</th>
<th>Initial or Subsequent Response Confirmation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screened In N (%)</td>
<td>Response Confirmed</td>
<td>Response Not Confirmed</td>
</tr>
<tr>
<td>True Positive</td>
<td>105,226 (41.73%)</td>
<td>False Positive</td>
</tr>
<tr>
<td>Screened Out N (%)</td>
<td>False Negative</td>
<td>True Negative</td>
</tr>
<tr>
<td>5,997 (2.38%)</td>
<td>11,982 (4.75%)</td>
<td>17,979 (7.13%)</td>
</tr>
<tr>
<td>Total</td>
<td>111,223 (44.11%)</td>
<td>140,938 (55.89%)</td>
</tr>
</tbody>
</table>
What might this look like for our CQI – Screening Review?

- **First Story – Monitoring**
  - Screening Threshold (STA) Baselines

- **Prioritization**
  - Candidate Race Based Structural Factors

- **Implementation & Testing (Action Teams)**
  - Systemic Analysis

- **Prioritization**
  - Assess Decisional Outcomes for Structural Factor Sub-Populations & Potential Impact

- **Second Story – Safety Science**
  - ID STA Structural Factor Sub-Populations

- **Engagement & Feedback**
  - Determine What Screening Policy to Change
  - Implement Policy Change and Evaluate in Comparison to Baseline
Some Limitations and Concerns

• Decisional Outcomes are Not “gold standards”
  • Unintended Consequences are very possible
  • There may be pushback from safety focused advocates

• Identification of Appropriate Sub-Populations is Challenging
  • The identification of appropriate sub-populations may not be feasible given the data
  • Identifiable sub-populations may be too small or too large
  • Effect sizes may be too small

• Approach is Incrementalistic and Changes will be Gradual
Where do we go from here?

• Ultimately, the numbers themselves aren’t helpful when looked at in isolation, as they don’t incorporate the different contexts that influence decision making.

• As part of our future statewide CQI process we want to merge our quantitative data with qualitative reviews to capture more useful and actionable information and develop evidence for effective change.

• Goal Seeking Iteratively to:
  • Reduce Screen-In Rates Safely and Systematically
  • Reduce Racial Disparities at Intake
Quick Poll

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- Text **JOHNFLUKE314** to **22333** once to join, then enter your response
How is Practice Shaped?

Family Preservation

Child Safety
Differential Response and Children Re-Reported to Child Protective Services: County Data From the National Child Abuse and Neglect Data System (NCANDS)

John D. Fluke¹, Nicole Harlaar¹, Brett Brown², Kurt Heisler³, Lisa Merkel-Holguin¹, and Adam Darnell⁴

Abstract
Child protection systems that implement differential response (DR) systems screen to route referrals to an investigation response (IR) or alternative response (AR). AR responses emphasize family engagement, assessment of family needs, and service linkage. Usually, AR state-level policy does not require child welfare staff to make a maltreatment determination. Jurisdictions implement DR systems differently, leading to variations in the proportion of AR cases, risk levels of cases served, and the ways families access and use services. County data from the National Child Abuse and Neglect Data System were analyzed for six states from 2004 to 2013 that implemented DR. Variation in county-level AR rates were associated with county-level re-report rates using regression models with risk adjustments for socioeconomic and other county characteristics. Counties had 3% fewer re-reports overall for each percentage increase in AR use; higher levels of AR use are related to lower levels of re-reporting. When county AR and IR cases were analyzed separately, increasing rates of AR were associated with lower re-report rates for IR cases, but higher re-report rates for AR cases. Findings for the AR and IR subgroup must be interpreted with caution as a number of technical factors may be driving these results.
• Current evidence for DR is largely based on child-level contrasts of AR and IR tracks within a single jurisdiction
  • RCTs in Minnesota, and Ohio (Loman, Siegel, et al.)
  • Few exceptions: NCANDS analysis of 6 states (Shusterman et al.)
  • Re-reporting rates for DR and AR cases about the same
  • DR criticized as being unsafe (Hughes, 2013)

• Substantial differences between DR systems
  • Number of tracks, timing of track assignment, criteria for assignment, etc.
• Large differences in percentage of cases referred to AR have been observed (IAR, Shusterman et al.)

• Populations assigned to AR and IR in RCTs differed as well (IAR)

• Differences in populations referred to AR may influence observed differences between tracks

• Little research to date on criteria for determining “low risk” at intake, or how differences in populations served in AR influence effectiveness
Analysis rationale

• AR utilization rate as proxy for track determination threshold

• Assumption: Increasing AR utilization reflects
  • Higher level of level of risk in the AR track
  • More cases receiving AR

• Here we explore the relationship between county AR utilization and re-reporting
# Differential Response in Six States

- **States**

<table>
<thead>
<tr>
<th>Kentucky</th>
<th>Minnesota,</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missouri</td>
<td>North Carolina</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>Tennessee</td>
</tr>
</tbody>
</table>

- **Mature DR systems**

- **3 state-administered / 3 county-administered**

- **2-4 tracks**

- **Statewide and phased implementation strategies**
Data preparation

- NCANDS data file obtained from ACF Children’s Bureau (CB) for Federal Fiscal Years (FFY) 2004-2013
  - Analytic file constructed by CB staff
  - Counties are de-identified
  - All counties for all years and all states are available

- Screened-in reports only

- All analysis variables are county-level
• Between 2004 and 2014 six states included over
  • 4.4 million child-response events
  • 2.0 million responses were AR
Child Abuse and Neglect Responses and AR Utilization (2004–2013)
County Average Child Abuse and Neglect AR Utilization (2004–2013)*

* Error bars are standard error of the estimate
1) Overall, higher rates of alternative response were associated with lower re-reports.

2) Overall for cases where IR was the initial response higher rates of AR utilization were associated with lower numbers of re-reports.

3) Overall for cases where AR was the initial response higher rates of AR utilization were associated with greater numbers of re-reports.

4) The net difference in AR vs IR Re-reporting was zero, but this was in the presence of the overall reduction in Re-reporting.
Adjusted
Model Results - Alternative Response Utilization and Rates of Re-Reporting

Overall Re-report
IR Re-report
AR re-report
% Net Difference in AR and IR
% Net Reduction in Overall Re-Reporting
Discussion

• Child-level research indicates that AR is at least as effective as IR in preventing re-reporting

• System-level research is a valuable addition to the current knowledge base on DR
  • AR utilization appears to reduce re-reporting overall
  • It also reduces (Motoyama-Johnson, et al. 2022)
    • Neglect victimization
    • Foster care utilization
Questions

- Re-reporting risk tolerance: What error (false positives/false negatives) do you want to avoid?
  - Jurisdictions with higher AR utilization are likely have increased re-reporting among the AR component of the screened in cases

- Is there a better way to screen at intake in general?

- Can Engagement enabling policy like DR work to reduce false positives?
  - Is re-reporting risk meaningful as an outcome? Is there a better measureable outcome to evaluate safety than re-reporting?
  - Assuming that re-reporting reflects safety concerns how can re-reporting risk be identified at intake?
  - Assuming that re-reporting is not a preferred indicator of safety what other forms of high risk are identifiable at intake in a reliable and valid manner?
Discussion

- What Influences Beliefs About Child Welfare and Family Preservation?
- Are Values and Beliefs About Child Welfare and Family Preservation Important Decision-Making Drivers?
- How Can the Child Protection System Be Balanced? Is There a “Right” Balance?