

# Improving Processes & Practices in Child Welfare:

Is Cognitive Computing Part of the Solution?

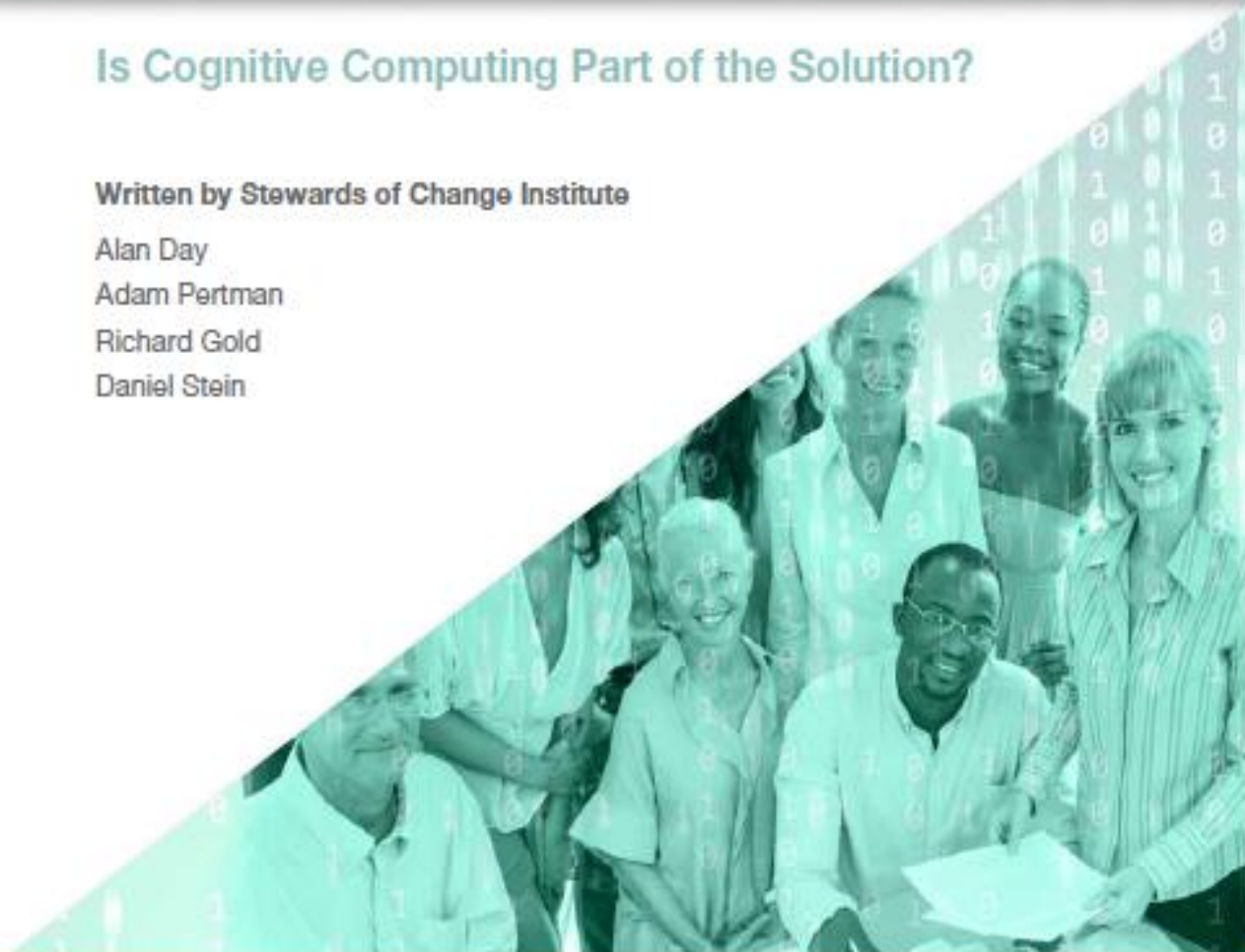
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# Cognitive Computing for Child Welfare Agenda

- Daniel Stein
  - *Background, Overview of Research, Key Findings, Recommendations*
- Adam Pertman
  - *Implications of “Within Our Reach: A National Strategy to Eliminate Child Abuse and Neglect Fatalities” Report*
- Richard Gold
  - *A Practitioner’s Perspective On Cognitive Applications to Child Welfare*
- Alan Day
  - *Broader System-wide Applications*
  - *Conclusions*

# Research Key Findings

- Strong interest for new tools and technologies to improve access to information, and improve analytics to support case management and administration.
- Lack of technologies and tools limit access or use of existing/new information e.g. more accurate risk assessments, case history mining, solution modeling, and pattern identification (fraud, abuse, neglect).
- Lack of evidence-based approaches impacts worker effectiveness e.g. safety assessments, staff selection, matching children with families.
- High caseloads and employee turnover limits knowledge regarding policies and best practices.
- Administrative burden - and lack of automation tools - limits workers ability to interact most effectively with families.
- Few opportunities exist to leverage subject matter experts for training new workers.

# Recommendations

1. Public and nonprofit child welfare agencies should pilot 'level 1' cognitive tools to help solve immediate problems e.g. access to policies and procedures.
2. Public agency's should incorporate cognitive computing tools into future procurements.
3. University and philanthropy consortiums should build scalable models to accelerate testing to benefit the child welfare community.
4. Federal officials, foundation leaders, academia and vendors should convene to shape how they will share responsibility for sponsoring and funding pilots, research and analysis.

# Recommendations cont'd

5. Similarly, they should outline procurement guidelines to ensure that new investments encourage the use of these tools.
6. Foundations, universities, government and vendor representatives should form a consortium to underwrite research on how best to use cognitive systems in child welfare.
7. HHS leaders should convene all partners to explore how cognitive computing could help advance the Social Determinants of Health and Wellness, especially as value-based pricing from healthcare accelerates.

# Within Our Reach

A National Strategy to Eliminate  
Child Abuse and Neglect Fatalities



COMMISSION TO ELIMINATE  
CHILD ABUSE AND NEGLECT FATALITIES



## A Public Health Approach:

- Leadership and Accountability: strong leaders at every level
- Decisions Grounded in Better Data and Research: real-time sharing
- Multidisciplinary Support for Families: cross-system prevention and intervention

## Principal Findings Include:

- Four to eight children a day, every day, die of abuse or neglect
- Some are seen not by child welfare, but healthcare, schools, courts, etc.
- Access to real-time information about families is vital but not available
- A lot is known, but there are few evidence-based or promising solutions

## Recommendations Include:

- States should review the past five years of abuse/neglect data to identify circumstances that led to fatalities and to shape preventive policies and services
- All relevant programs (Medicaid, etc.) should focus on reducing these fatalities
- The administration should lead the drive for real-time sharing of information

# What is the Wider Scope and Role of Cognitive for Social Determinants of Health?

- Cognitive Analytics – Productive Patterns in Complex Information
  - *Inform Key Child Welfare Decision Guidance*
  - *Identify Productive Coordinated Care Patterns Across Other Domains*
- CCWIS for Child Welfare, A-87, Medicaid Fund Matching & SDOH
  - *All Push Data Sharing and Integrated Care*
  - *SDOH Seeks Lower Healthcare Costs by Better Social Services Engagement*
  - *All Need Effective Models For Using Shared Data to Work Together.*
- Needs Very Large Research/Analysis Investment
  - *Payback Societal – Not Often Agency Internal*
  - *Investment From Societal Level Players*
    - Government, Foundations, Investors (how to share benefits?)



# Conclusions

- The Child Welfare Field is maturing slowly, but it is in desperate need for better tools to leverage the data in hand to make more evidence based decisions.
- Technologies and tools are able to handle the complexity and volume of information – both unstructured and structured
- CCWIS enables bi-directional information flows, and will be a catalyst for next generation systems to support children and families
- We owe it to our children and families to act local but think globally – and use the best tools available.