

INITIAL EVALUATION OF THE DOUGLAS COUNTY DECISION AID: SUMMARY



Researchers have completed an initial impact evaluation of the **Douglas County Decision Aid**, a child welfare decision aid tool to support screening of child maltreatment referrals. They find that the tool affects screening decisions, decreasing the chance of screen in for low risk referrals and increasing the chance of screen in for high risk referrals. Evaluating the long-term impact of the tool is an important next step.

The Douglas County Decision Aid

In 2019, Douglas County (CO) introduced the Douglas County Decision Aid (DCDA), a tool built from a predictive risk model. The County uses the DCDA to support the RED (Review, Evaluate, Direct) team process, where small teams of caseworkers and supervisors meet to discuss whether a child maltreatment referral should be investigated.

The DCDA uses data from the state's child welfare and benefit systems to generate a needs and risk score from 1 to 20. A higher score means that the family is likely to have higher service needs because the children face higher risks.

Accuracy

Validation of the DCDA showed children with high scores had an increased risk of being placed in foster care, as well as being re-referred with egregious or near fatal injuries ((Vaithianathan, 2019).

Previous research has also found that children with high scores from similar tools were around four times more likely to have a near fatal or fatal maltreatment event (Vaithianathan et al., 2018).

Short-Term & Long-Term Goals

While existing research confirmed that the score is strongly correlated to risk, the County wanted to better understand the impact of using the DCDA:

- **Short-term**, did the tool help to identify higher need families so preventative services could be provided?
- And **long-term**, did the tool help to reduce chronic involvement of higher need families with the child welfare system, reducing outcomes like child removal?

Impact Evaluation

To assess the impact of the DCDA on short-term goals, the County needed to know whether referrals with higher risk scores were more likely to be investigated, and referrals with lower risk scores were more likely to be screened out.

To explore this question, the County contracted with independent evaluators from Cornell and Duke universities to complete an impact evaluation.

The evaluators used a randomized controlled trial (RCT), a method considered the 'gold standard' for evaluating the impact of new interventions because it allows researchers to identify resulting outcomes.

The evaluation ran for the first year the County used the DCDA; whether a RED team saw the DCDA score was random. This allowed the evaluators to compare decisions made with and without the score and draw conclusions about the effect of the score on screening decisions.

Key Findings

Access to Douglas County Decision Aid score:

- Does affect screening decisions.
- **Decreases** the likelihood of screen in for referrals with lower risk scores.
- **Increases** the likelihood of screen in for referrals with higher risk scores.

Notable Effects

- **Lower risk referrals** (score 6–10) were up to 27% less likely to be screened in¹ when the score was seen.
- **Highest risk referrals** (score 16–20) were 33% more likely to be screened in when the score was seen.

“The main finding is that making the DCDA available to child welfare workers assessing whether to screen in a referral for investigation has the expected effect on the probability of screening in across the distribution of predicted risk.”

Evaluation Report

Evaluating Long-Term Impact

Initial evaluation findings confirm that the DCDA improves the chances that higher needs families with children at risk of removal will receive services early, while also reducing the likelihood that lower risk families will be screened in unnecessarily.

The next step is to test whether the tool is achieving its long-term goal: reducing chronic involvement of higher risk families with the child welfare system.

Further research will study impacts of the DCDA on:

- Case opening rates for children screened in for investigation; and
- Removal and foster care placement rates.

Read the **Evaluation Report** (Fitzpatrick & Wildeman, 2021)

¹Some referrals with a low-risk score are required to be assigned because they meet the Colorado statutory definition of abuse or neglect.

Fitzpatrick, M. D., & Wildeman, C. (2021). *Final Report on Douglas County Decision Aid (DCDA) Predictive Risk Modeling Randomized Control Trial Experiment*. https://csda.aut.ac.nz/__data/assets/pdf_file/0012/504102/Douglas-RCT-Final-Report-210211.pdf

Vaithianathan, R. (2019). *Implementing a child welfare decision aide in Douglas County: Methodology report [PDF]*. https://csda.aut.ac.nz/__data/assets/pdf_file/0009/347715/Douglas-County-Methodology-Final_3_02_2020.pdf

Vaithianathan, R., Roulund, B., & Putnam-Hornstein, E. (2018). Injury and Mortality Among Children Identified as at High Risk of Maltreatment. *In Pediatrics* (Vol. 141, Issue 2). <https://doi.org/10.1542/peds.2017-2882>