

Predictive Risk Models-Human Teaming and the Impacts of System Load on Child Welfare Screening

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Abstract

Child welfare organizations regularly receive a significant number of calls alleging child neglect or abuse. Due to limited resources available for investigations and services, it is crucial to accurately assess and screen these allegations before further investigation or intervention. Furthermore, investigations initiated based on unsubstantiated calls can lead to harmful consequences for the family involved. To aid these essential screening decisions and enhance overall efficiency, a Predictive Risk Model (PRM) has been deployed. The primary goal of this measure is to maintain a sustainable system load. This paper empirically investigates the impact of system load on the screening decision and the dynamics of human-PRM collaboration. Our results indicate that the probability of screening-in allegations is inversely correlated with the system load. Moreover, we discern that deviations from PRM recommendations display a U-shaped relationship; human social workers tend to diverge from PRM guidance more frequently when the system load is either low or high.