

UNIVERSITY OF  
NORTHERN COLORADO

**Continued Validation and Bias Assessment of the Colorado Pretrial Assessment Tool (CPAT)**

**Purpose:** The CPAT is a risk assessment tool used to aid judicial decisions about pretrial release on bond. Continued research of the CPAT is important for maintaining accurate and unbiased risk assessment.<sup>1</sup> The larger implications of these evidence-informed practices for the Colorado community are to ensure public safety and the fair administration of local criminal justice. These efforts could be accomplished by establishing a research partnership with the University of Northern Colorado, pretrial service agencies, and the state of Colorado.

**Validation:** Risk assessment validation estimates the consistency between risk scores and pretrial outcomes, new arrest and/or failure to appear. Validation answers the primary research question: Is the CPAT likely to assign a risk score that is consistent with its anticipated pretrial outcome?<sup>2</sup>

**Bias:** Bias assessment estimates whether the accuracy of a pretrial risk assessment tool differs depending on a defendant's demographic characteristics. Bias assessment answers the primary research question: Does the CPAT perform with the same accuracy across protected groups race/ethnicity and gender?

**Data:** The data required to conduct continued validation and bias assessment of the CPAT are maintained by 4 primary sources: pretrial service agencies, the Colorado Department of Public Safety/Colorado Bureau of Investigation, the Colorado Judicial Branch, and the city of Denver municipal courts.

**Pretrial Service Agency Records:** Pretrial records are maintained by county-level agencies. The data required from these records pertain to a pretrial defendant's criminal identifiers and demographic characteristics, case status, arrest, charge and bond information, incidence of failure to appear to court, and risk assessment information including total and item-specific risk scores.

**Colorado Department of Public Safety (DPS)/Colorado Bureau of Investigation (CBI) Records:** The data required from the CO DPS/CBI pertain to a pretrial defendant's official criminal history. This includes Colorado criminal history records maintained by the Colorado Crime Information Center, as well as national criminal history records maintained by the National Crime Information Center.

**Colorado Judicial Branch Records:** The data required from the CO Judicial Branch pertain to a pretrial defendant's case status and events. These records are maintained by the Colorado courts records system. They include information about case status, arrest, charge, conviction and sentence, scheduled court events, warrants, and bonds.

**Denver Municipal Records:** The data required from the Denver Municipal records pertain to court cases of city law violations. This includes a variety of charges for arrests in Denver and surrounding jurisdictions for charges including not but limited to domestic violence and driving under the influence. The content of this data include case status, arrest, charge, conviction and sentence, as well as scheduled court events, warrants and bonds.

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<sup>1</sup> See Skeem & Lowenkamp, 2016; Mamalian, 2011; Berk et al, 2018.

<sup>2</sup> E.g. A low risk score would be anticipated to have a successful pretrial outcome. Successful pretrial outcome means no new arrest or failure to appear to a scheduled court event while released on bond.