

# Evaluation of the PSA/DMF System in Dane County, Wisconsin

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The Access to Justice Lab at Harvard Law School

Jim Greiner, Chris Griffin, Ryan Halen,  
Heidi Liu, & Matthew Stubenberg

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# Background: PSA/DMF System

- PSA: Predisposition risk assessment instrument
  - Development funded by LJAF → AV
  - Associates variables observable at arrest with risk of arrestee misbehavior if released: FTA, N(V)CA
  - 9 inputs, mostly criminal history, none depend on arrestee interview
  - Two 1-6 scales plus an NVCA flag
- DMF
  - Incorporates objective information from PSA with
    - community-specific determinations regarding local policy and values
    - state statutes
    - local resources
  - Produces a release recommendation

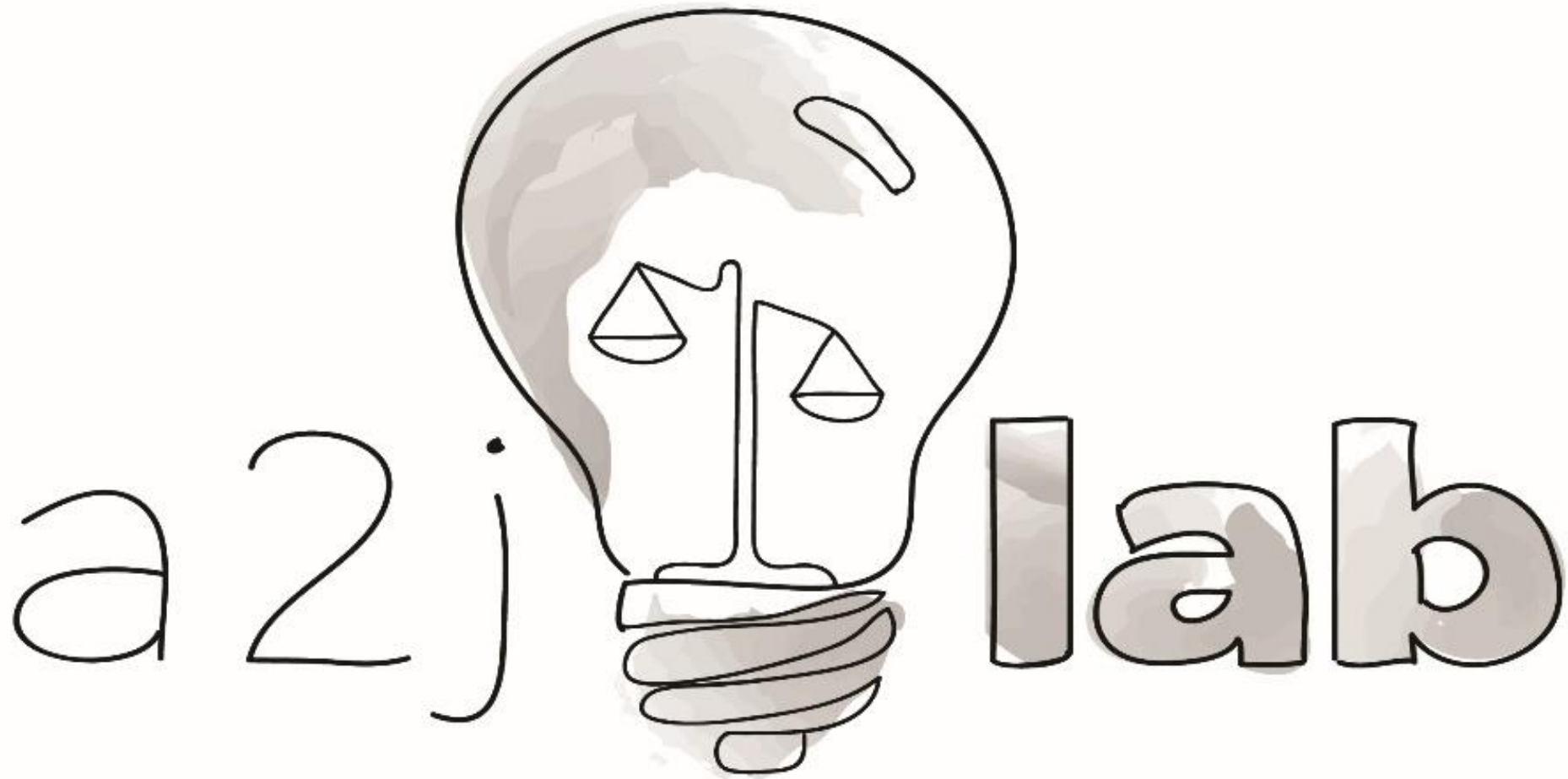
# Background: PSA/DMF System

- PSA/DMF system printout available at first appearance
  - Goal: Provide information to Commissioners in deciding initial release
  - Printout available to
    - Commissioner
    - Prosecution
    - Defense
  - Printout is one among many sources of information
  - No legal obligation to consider, much less follow, DMF recommendation
- PSA/DMF system is not free
  - Dane County: Two FTEs, other costs
  - Grant by AV to defray some cost of adoption, initial use

# The Studies: Arnold Ventures

- Philanthropic foundation/venture: Laura & John Arnold
- Committed to rigorous evaluations, including criminal justice
- Predisposition a priority
- Funded
  - Before/after comparison studies of PSA/DMF system
  - “Validation” studies of PSA/DMF system
  - Gold-standard randomized control trials (“RCTs”)
    - Dane County
    - Two jurisdictions in Iowa
    - Four jurisdictions in Utah

# The Studies: The Access to Justice Lab



# The Studies: The Access to Justice Lab

- Goal: Transform legal profession into an evidence-based field
- Means
  - Field RCTs
  - Draw lessons learned
  - Disseminate information on
    - Evidence-based thinking
    - RCTs
    - Lessons learned
- Scope: legal profession, practice and adjudication
  - Criminal & civil
  - All phases

# The Studies

- PSA/DMF system RCT
  - Randomly allocate some cases to PSA/DMF system printout, others no
  - Follow outcomes, current focus on
    - FTA
    - NCA
    - NVCA
    - Measures of racial fairness
      - 1-2 dozen such measures
      - Some are mathematically incompatible with others, except in irrelevant circumstances
      - A2J Lab will produce many measures, others as requested
- Interview-based variables study
  - Data from public defender interview entered into database there
  - Walled-off investigator: compare predictive power with and without

# The Studies: Dane County Timeline

- 2016-2017: Discussions, training on PSA/DMF system
- April-May, 2017: PSA/DMF system implemented
  - Other reforms implemented almost simultaneously
  - Makes before/after study problematic, thus need for RCT
- May-June, 2017: Start of studies
- Early 2019: Agreement to extend RCT to end of 2019
  - Approx 2-month period, only one PSA/DMF assessor, may not be able to use
  - Lower-than-anticipated case volume
- December 31, 2019: close of study period
- December 31, 2021: close of follow-up data period



# The Studies: Data Work, Present Status

- Dane County: produce and merge data, five different databases, Year 1
  - PSA, PROTECT, CCAP statewide, CCAP local, Spillman
  - Special thanks to
    - Noemi & Isabel
    - DA's office
    - Sheriff's office
    - Clerk's office
    - Many others
- A2J Lab: understanding, processing, requesting supplementation, clarifying
- Lingering data issues, *e.g.*, cases with no disposition dates
  - 230 (~ 10% of Year 1 cases) cases, no disposition dates
  - Some ongoing, some due to other circumstances, working to understand
- These are standard problems in any operation of this size

# The Studies: Analysis, Present Status

- Checks on integrity of RCT, Year 1 (essentially complete)
- Initial analysis of outcomes, Year 1 data (progress, but not ready)
  - Likely available by early spring
  - Will be preliminary, tentative
    - Data checking, cleaning likely to continue/linger
    - Insufficient number of units for rigorous analysis
- State of the art analysis of outcomes, Year 1 data
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# The Studies: Analysis, Present Status

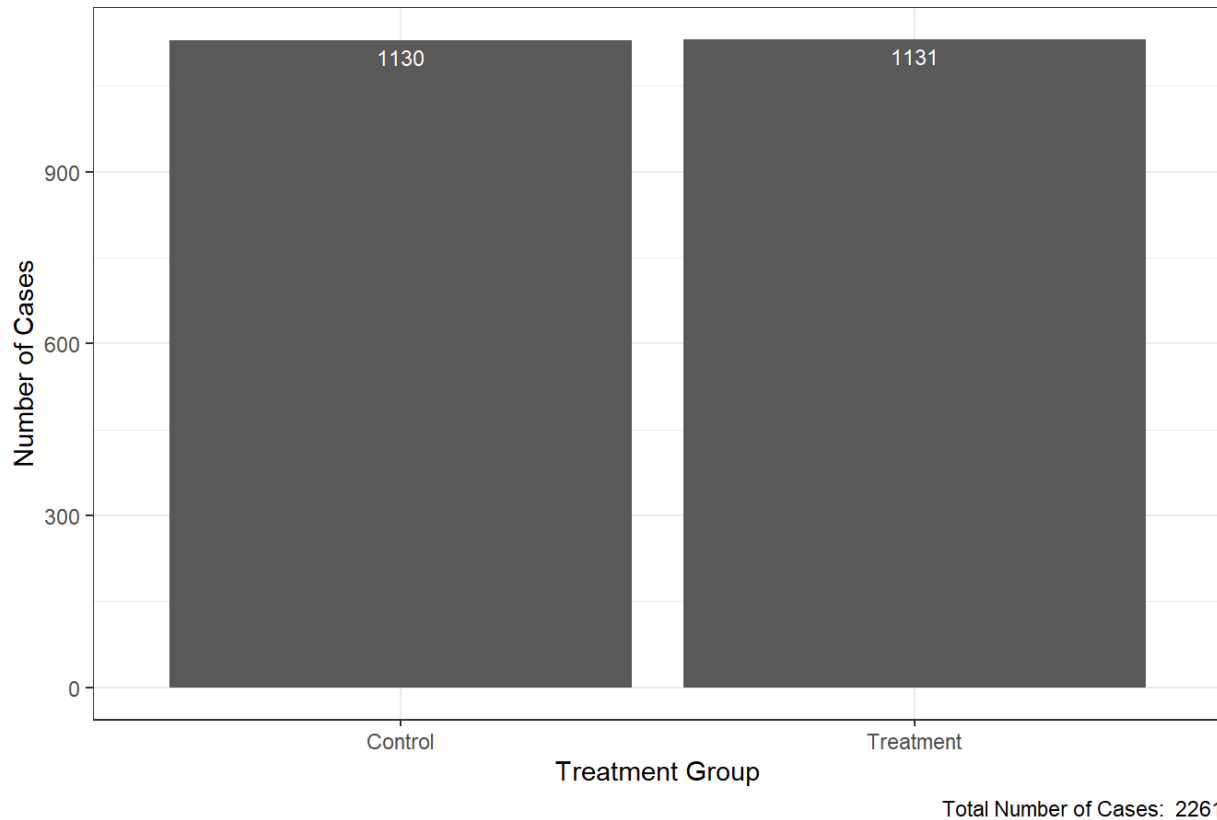
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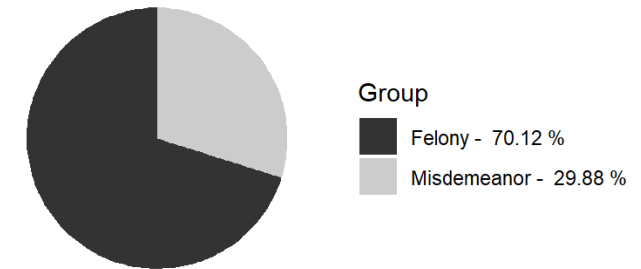
***Preliminary, could change!!***

# Case Counts and Randomization Information

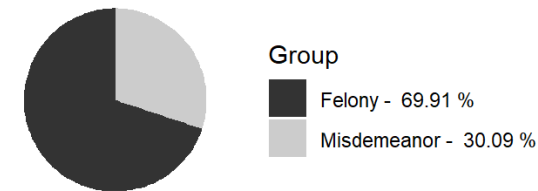
Number of Cases by Treatment Group



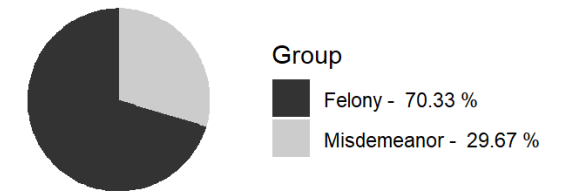
Distribution of Highest Charge



Treatment Cases



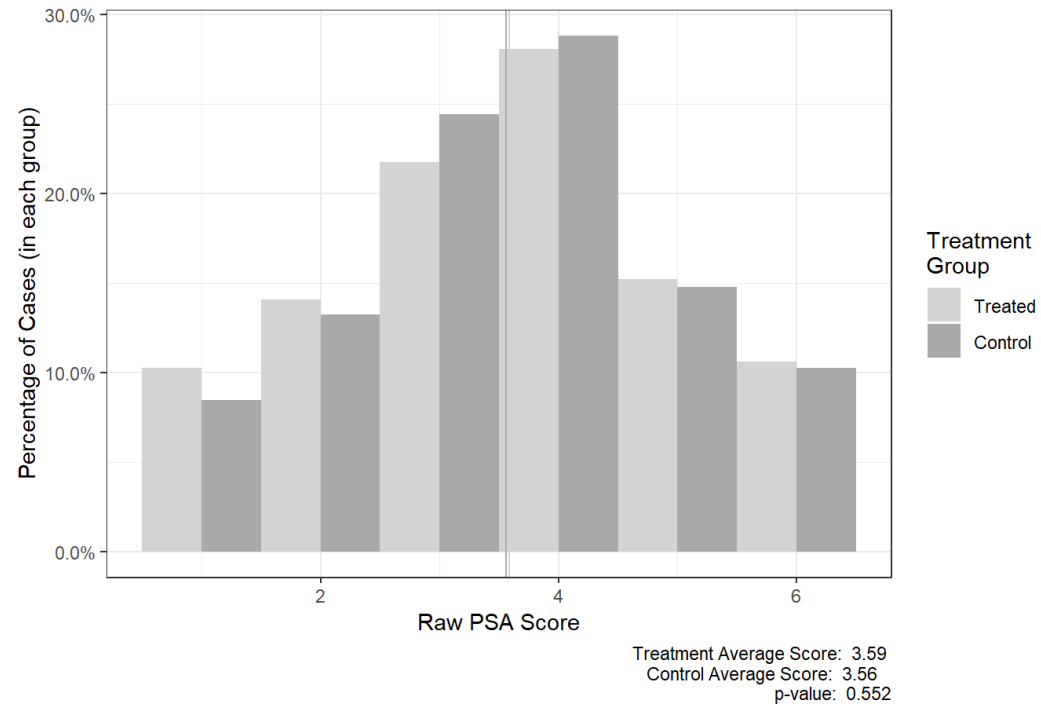
Control Cases



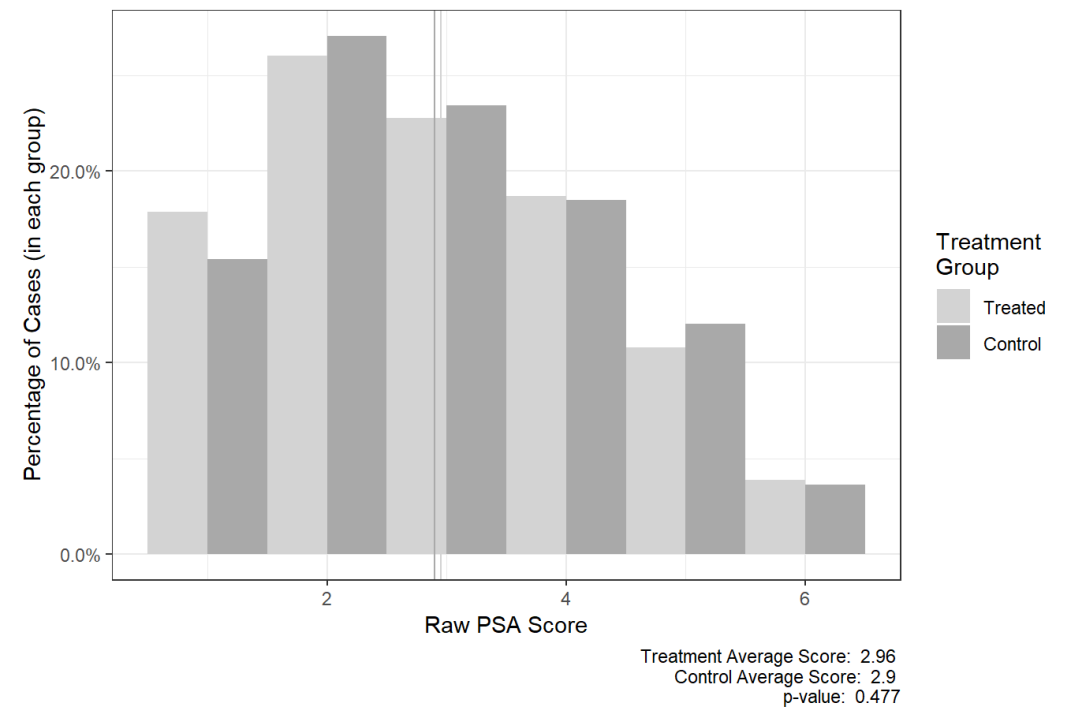
p-value: 0.829

# PSA-DMF Scores Across Study Groups

Distribution of PSA NCA Score Across Treatment Groups in Dane County



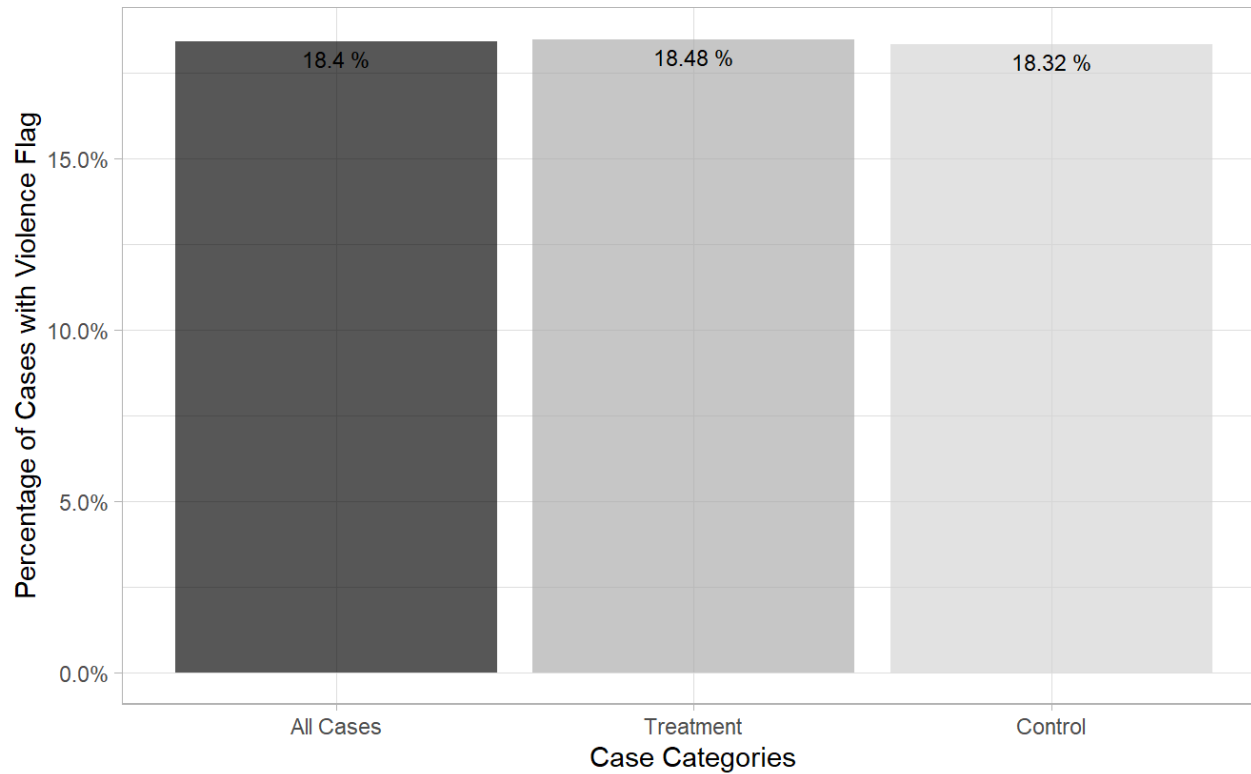
Distribution of PSA FTA Score Across Treatment Groups in Dane County



# PSA-DMF Scores Across Study Groups

Percentage of Cases with PSA Violence Flags in Dane County

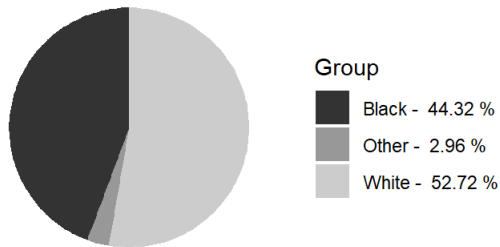
p-value= 0.957 ; 416 Total Instances



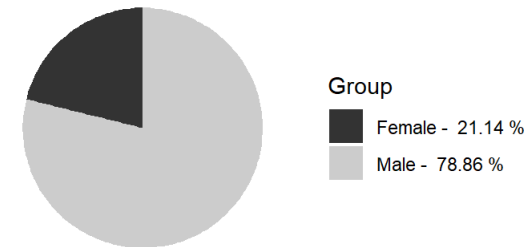
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# Demographic Information Across Randomization

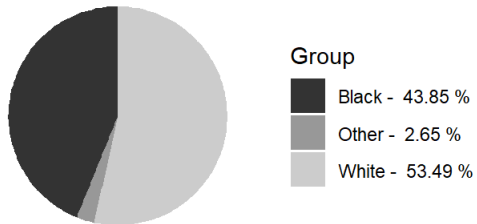
Distribution of Racial Demographic Counts



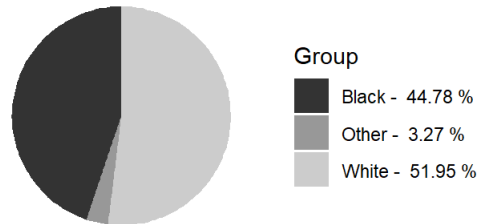
Distribution of Gender Demographic Counts



Treatment Cases

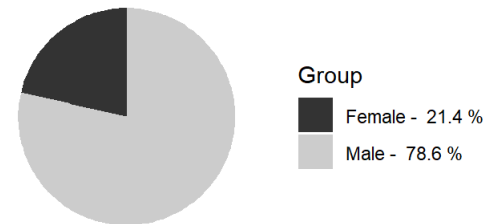


Control Cases

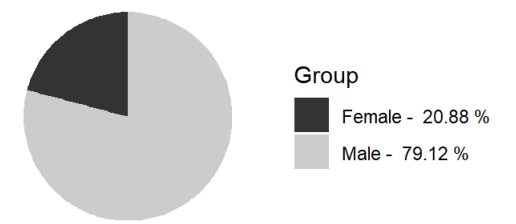


p-value: 0.64

Treatment Cases



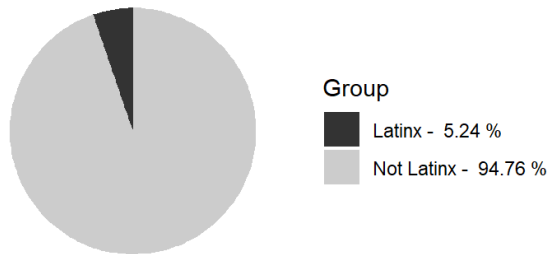
Control Cases



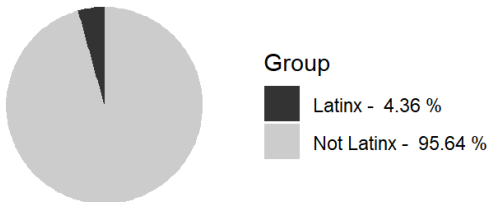
p-value: 0.766

# Demographic Information Across Randomization

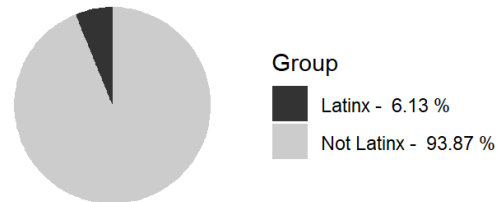
Distribution of Ethnicity Demographic Counts



Treatment Cases

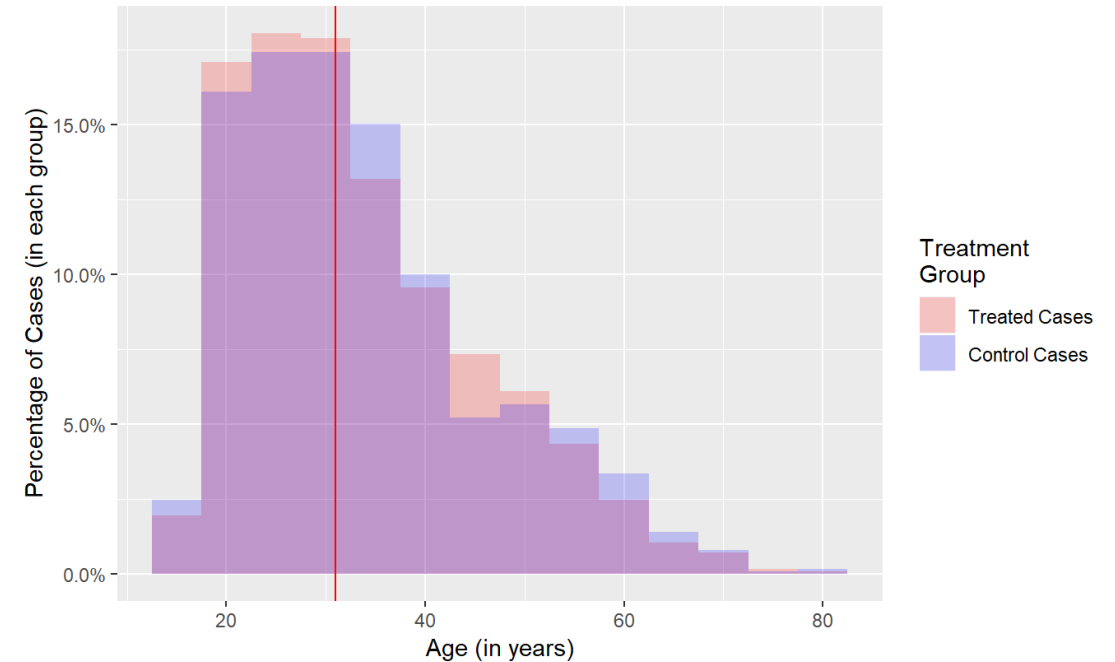


Control Cases



p-value: 0.059

Distribution of Age Across Treatment Status in Dane County



Treatment Median Age: 33.8  
Control Median Age: 33.6  
p-value: 0.349