Flat Fee Compensation, Lawyer Incentives, and Case Outcomes in Indigent Criminal Defense

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Abstract

To ensure fairness in criminal prosecutions, the Sixth Amendment guarantees the right to legal counsel for all defendants facing charges that may result in imprisonment. The majority of criminal defendants in the United States are in poverty and receive publicly financed legal defense from court-appointed attorneys, who are professionally obligated to provide zealous representation for their clients. This paper assesses whether paying court-appointed attorneys a flat fee per case instead of an hourly rate impacts the quality of legal representation for poor criminal defendants. I study this question in the context of a pilot program in North Carolina where six counties were mandated to change compensation for assigned counsel from statewide hourly rates to a flat fee for each case disposed. For my empirical analysis, I link two detailed administrative datasets containing the universe of criminal case records in North Carolina, as well as the universe of pay records of lawyers in the state that accepted indigent cases as assigned counsel. Using a difference-in-differences strategy, I find that defendants represented by lawyers paid under flat fees were 4.3 percentage points (10%) more likely to be convicted, 4.2 percentage points (10%) more likely to resolve a case through a guilty plea before trial, and 4.6 percentage points (35%) more likely to be incarcerated. I explore two potential mechanisms for this result: an intensive margin response on lawyer effort and selection of lawyers on the extensive margin. On the intensive margin, lawyers in the treated counties reported spending 11% fewer hours on indigent cases, disposed cases 42% sooner on average, and were 3.8 percentage points (34%) more likely to dispose a case on the same day as their first meeting with the defendant. I do not find evidence of changes in lawyer composition or migration following the switch to flat fee pay. This paper informs policy questions on funding and compensation for the provision of publicly financed criminal defense.

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1 Introduction

Defense lawyers serve as advocates and counsel for individuals facing criminal charges, and effective legal representation is critical to ensuring fairness and the protection of rights for those who interact with the United States criminal justice system. For this reason, the Sixth Amendment of the United States Constitution guarantees legal counsel for any individual who faces charges that could result in imprisonment, and governments are required to fulfill this constitutional right by providing a publicly financed defense lawyer for those in poverty, who represent 60% to 90% of all criminal defendants in the United States.[1] However, a persistent concern is that many indigent defense systems throughout the country discourage lawyers from providing effective representation, a requirement under the Sixth Amendment's right to counsel, and have failed to provide equitable treatment for those experiencing poverty, which strongly predicts future incarceration[2] and has contributed to racial disparities in criminal justice. Virtually every jurisdiction in the United States contracts with private lawyers as a primary or auxiliary system of indigent defense,[3] and many of these systems compensate lawyers according to a flat fee structure,[4] which has raised concerns among policymakers who believe flat fees may conflict with lawyers' professional and legal obligations to provide effective and zealous representation for their indigent clients.[5] Recent research has demonstrated empirically that defense lawyers influence case outcomes for indigent defendants,[6] and prior legal literature has noted that zealous advocacy from lawyers must be incentivized, as it rarely results from professional obligation or altruism alone.[7] However, there has been little empirical work on the motivations and incentives of court-appointed attorneys, and the impact of compensation structures on the quality of legal representation in indigent defense remains an open policy question.

[1] U.S. Department of Justice, Contracting for Indigent Services: A Special Report (April 2000), https://www.ojp.gov/pdffiles1/bja/181160.pdf. See also, Bureau of Justice Statistics, Defense Counsel in Criminal Cases (November 2000), https://bjs.ojp.gov/content/pub/pdf/dccc.pdf, which estimates that 82% of felony defendants in the 75 largest counties of the U.S. were represented by court-appointed attorneys. The National Legal Aid & Defender Association (NLADA) estimates that 80% of all criminal defendants are indigent and receive publicly financed legal representation. See, https://www.nlada.org/AmeriCorps-VISTA.

[2] See e.g., Brookings Institution, "Work and Opportunity Before and After Incarceration" (March 2018), https://www.brookings.edu/wp-content/uploads/2018/03/es_20180314_looneyincarceration_final.pdf

[3] Jurisdictions with a public defender office must contract with private lawyers if the office is unable to accept a case because of a conflict of interest or caseloads. In 2012, the Sixth Amendment Center estimated that the majority of jurisdictions relied on contracting with private lawyers as the primary system of indigent defense, based on a 2007 Bureau of Justice Statistics report and a 2012 Government Accountability Office report. See, https://sixthamendment.org/understanding-the-gao-report-on-indigent-defense/ and https://bjs.ojp.gov/content/pub/pdf/pdo07st.pdf. More recently, Geoffrey Burkhart cited this article in his testimony that the majority of jurisdictions in the U.S. rely on these "non-systems" for the provision of indigent defense. See, President's Commission on Law Enforcement and the Administration of Justice. Written Testimony of Geoffrey Burkhart (June 2, 2020). https://www.justice.gov/file/1318476/download

[4] According to the Sixth Amendment Center, the flat fee contract method is the most common method of delivering indigent defense in the United States. See, https://sixthamendment.org/the-right-to-counsel/national-standards-for-providing-the-right-to-counsel/abolishing-flat-fee-contracts-for-public-defense-services-aba-principle-8/

[5] Lawyers must provide zealous representation within the boundaries of the lawand this applies regardless of whether the defendant is (or is believed to be) guilty or innocent. See, the American Bar Association's *Model Rules for Professional Conduct*, Rule 1.3

[6] Specifically, these papers focus on the type of court-appointed attorney that an indigent defendant receives. See, e.g. Agan et al. (2021), Anderson and Heaton (2012), Fischer (2020), Iyengar (2007), Roach (2014), and Shem-Tov (2020)

[7] See, e.g. Carrington (1979)

In this paper, I assess whether compensation structures impact the quality of legal representation that court-appointed attorneys provide for indigent criminal defendants. I focus specifically on flat fee and hourly pay, the two primary compensation structure for lawyers in criminal cases.[8] I also focus on assigned counsel systems, a common form of indigent defense in which private lawyers contract with the government to represent indigent criminal defendants, and are appointed to cases on a rotational basis.

This paper overcomes two primary challenges to reliably studying this research question. First, it is difficult to find a suitable setting that allows for the estimation of the causal effects of compensation structures on the quality of representation in indigent defense. Jurisdictions typically use only one compensation structure for assigned counsel, and rarely change the administration of indigent defense and compensation methods for court-appointed attorneys, Further, it is difficult to find settings in which lawyers work on indigent defense cases under different compensation structures. To overcome this challenge, I examine a natural experiment in North Carolina, in which six counties were mandated as part of a pilot program to change compensation for assigned counsel to a schedule of flat fees for each case disposed, while other untreated counties continued to pay assigned counsel according to statewide hourly rates. Second, this project overcomes a challenge of combining an appropriate setting with comprehensive case-level administrative data containing detail on lawyer and defendant identities, defendant outcomes, and measures of lawyer effort. Toward this end, I obtained and linked two detailed administrative datasets North Carolina containing the universe of criminal case records in state, as well as the universe of compensation records for lawyers that accepted indigent cases as assigned counsel.

The main contribution of this paper is to use the quasi-experimental setting described above to estimate casual effects of switching from hourly to flat fee pay for court-appointed attorneys on the outcomes of indigent defendants, and exploring two potential mechanisms for this result: an intensive margin response on lawyer labor supply and selection of lawyers on the extensive margin. To estimate the causal effect of switching from hourly to flat fee compensation on lawyer effort and defendant outcomes in indigent cases, I use a difference-in-differences strategy that compares each outcome of interest in the treated counties with those in the non-treated counties, before and after the start of the pilot program.

[[Briefly discuss raw plots here]]

[[Provide summary of main results here]]

To complement my main difference-in-differences identification strategy, I also present event study graphs comparing outcomes of defendants in pilot counties with those in the non-pilot counties. These graphs show that during the periods before the pilot program, when court-appointed attorneys represent-

[8] In the United States, contingent pay – i.e. pay that is conditional on the outcome of a case – is illegal for lawyers in criminal cases. See, ABA Model Rules of Professional Conduct, Rule 1.5(d)

ing defendants in both groups were paid under statewide hourly rates, differences in defendant outcomes were stable. However, after the change in compensation structure to flat fees in the pilot counties, I find that the time to disposition for cases spikes downwards, while the conviction and guilty plea rates for defendants spike upwards. These graphs provide transparent visual evidence of the impact of switching from hourly to flat fee pay on lawyer effort and defendant outcomes.

My estimates are robust to a variety of sensitivity analyses that include additional control variables, use alternative empirical specifications, and examine alternative subsamples of my data. In addition, to address potential concerns with inference due to a relatively small number of treated counties, I implement a variant of Fisher's randomization test, similar to Buchmueller et al. (2011) and Cunningham and Shah (2018), and find that my results are robust to this methodology. [[Clean up this paragraph]]

To better understand how moving from hourly to flat fee pay impacts the quality of indigent defense, I examine effects of the policy change on different populations in the data. Some results of these heterogeneity analyses are noteworthy. First, I find that defendants represented by female lawyers are more likely to have favorable outcomes than those represented by male lawyers. In addition, I find that female lawyers respond less strongly in their effort response to the switch to flat fee pay than male lawyers do. Second, I find that after the switch to flat fees, male defendants were more likely to have adverse outcomes compared to female defendants, and that lawyers on average were more likely to exert less effort for male defendants compared to female defendants following the policy change. Finally, under flat fees, I find that minority defendants were more likely to have adverse outcomes compared to white defendants, and that lawyers on average were more likely to exert less effort for minority defendants compared to white defendants.

Related Literature

This paper contributes to multiple bodies of literature. First, it adds to the literature on compensation structures for indigent defense lawyers. Two prior papers study statewide changes in compensation: Schwall (2018) examines a statewide switch to a flat fee contract system in South Carolina, and Roach (2017) studies a statewide change in hourly rates for assigned counsel in New York. The main contribution of this paper is to provide the first quasi-experimental evidence on the effects of switching from hourly to flat fee pay for court-appointed attorneys on the quality of indigent defense. I find that lawyers spend approximately 11% fewer hours on cases under flat fees, but that defendants are more likely to be convicted, enter a guilty plea, and be sentenced to incarceration when they are represented by lawyers paid under flat fees. These results stand in contrast to Schwall (2018), who finds substantially larger

declines in lawyers' hours (50%), but no effect on defendant outcomes.

Next, this paper contributes to the economics literature on indigent defense. Much prior work in this field – such as Agan et al. (2021), Anderson and Heaton (2012), Fischer (2020), Iyengar (2007), Roach (2014), and Shem-Tov (2020) – have focused on comparing the impact of the type of court-appointed attorney on outcomes of indigent defendants. In particular, Agan et al. (2021) focuses on decomposing disparities in outcomes of criminal defendants that represented by private attorneys and assigned counsel, and finds that it is likely driven by moral hazard. The other papers study differences in defendant outcomes between those represented by public defenders and assigned counsel, and generally find that assigned counsel are more likely than public defenders to produce adverse outcomes for the defendants they represent. This paper expands the literature by focusing on how motivation and incentives can impact the quality indigent defense, specifically by focusing on hourly and flat fee compensation structures for assigned counsel through a quasi-experimental framework.

More broadly, this paper contributes to literature in labor and personnel economics that studies worker responses to payment structures. Much of this literature – such as Lazear (1986), Lazear (2000), Paarsch and Shearer (2000), and Shearer (2004) – have focused on whether worker output responds more to piece rate pay, compared to salaried or hourly pay, which do not vary with output produced. Empirical work in these papers focus on workers in blue collar or manual labor jobs, in which output is clearly measured in terms of units produced. On the other hand, Fama (1991) explains that impacts of compensation structures on effort and output in professional service jobs with intellectual tasks and intangible output are more difficult to study; thus, there has been less empirical work on this topic. My paper adds to this literature by examining a change in compensation structure in this type of career (legal work in indigent defense), and examining observable defendant outcomes as variables that could plausibly respond to changes in lawyer effort. In this sense, it is similar to Douven et al. (2019), who studies mental healthcare workers, and Ellis and McGuire (1986), who provide a theoretical discussion of capitated and fee-for-service reimbursement in Medicare.

Finally, this paper contributes to the literature on agents' social preferences and prosocial motivation in the provision of public services. Besley and Ghatak (2005) Besley and Ghatak (2018) provide a theoretical discussion, and Bandiera et al. (2005) ties this literature with compensation structures by studying how workers' social preferences interact with their choice of effort under relative incentive and piece rate compensation. Ashraf et al. (2020) provides experimental evidence that selection impacts performance in the delivery of public services.

This paper has policy relevance in light of the shortcomings of indigent defense in the United States and its weakened role in regulating prosecutorial discretion. Underlying criminal law in the United

States is the belief that truth and justice are optimally achieved under an adversarial system, where all relevant facts are likely be produced when the prosecution and defense advocate for their side before an impartial judge or jury. On one hand, prosecutorial discretion has been cited as the main source of excessive punishments and the mass incarceration of criminal defendants, who are overwhelmingly poor and disproportionately Black or Hispanic.[9] [[Maybe delete this]]

The remainder of the paper proceeds as follows. Section 2 provides background on indigent defense and the setting of this paper. Section 3 presents a simple theoretical model to illustrate how lawyer choose their level of effort under hourly and flat fee compensation structures, and how these responses may impact the outcomes of the indigent defendants they represent. Section 4 describes the data and empirical framework. Section 5 presents my main results. Section 6 contextualizes these results in the context of the prior literature, and discusses the costs to society from moving to flat fee compensation for assigned counsel. Section 7 concludes.

2 Institutional Setting

To assess whether compensation structures for court-appointed attorneys impact the quality of legal representation for indigent criminal defendants, I examine a pilot program in North Carolina where six counties were chosen to switch compensation for court-appointed attorneys from statewide hourly rates to a schedule of flat fees per case. In this section, I provide institutional background about indigent defense in North Carolina and describe the pilot program in more detail.

Indigent Defense in North Carolina

North Carolina provides an ideal setting for addressing the research question of this paper. As I describe in a later section, I exploit a natural experiment for my empirical analysis in which six counties were mandated to change compensation for assigned counsel from statewide hourly rates to a schedule of flat fees per case disposed. With respect to representativeness, North Carolina is the ninth largest state by population,[10] has a racially and socioeconomically diverse population – with racial diversity and poverty indices that are similar to those of the overall United States[11] – and has counties that use all of the main

[9] See, e.g. Pfaff (2017), Stuntz (2011), **?**

[10] In the 2020 Census, North Carolina's estimated population was 10,439,388.

[11] To measure racial and ethnic diversity in the United States, the Census Bureau uses a Diversity Index, which measures the probability that two randomly chosen individuals will be of different racial and ethnic groups. In the 2020 Census, the Diversity Index for the United States was 61.1%. The Diversity Index for North Carolina was 57.9%, which ranks 19th among the 50 states and the District of Columbia. See, https://www.census.gov/library/visualizations/interactive/racial-and-ethnic-diversity-in-the-united-states-2010-and-2020-census.html. Additionally, the U.S. Census Bureau estimates that 11.2% of the United States population were in poverty between 2018–2020. In North Carolina, the poverty rate was estimated to be 13.2% during this period, which is the 12th highest among the 50 states and the District of Columbia.

indigent defense systems that exist throughout the country. Finally, North Carolina is unusual among states in the data it keeps on the defendants and lawyers in every indigent criminal case filed in the state. I provide a detailed description of the administrative data from North Carolina that I use for my empirical analysis in Section 4 below.

Each of the 100 counties in North Carolina decides what system it will use to administer indigent defense. There are three main types of indigent defense systems in the United States, all of which are used by counties in North Carolina. First, governments with assigned counsel systems contract with private attorneys, who are appointed to indigent criminal cases through a system of rotation. Second, in contract counsel systems, governments contract with a lawyer or law firm that agrees to represent all indigent defendants in the jurisdiction over a specified period (e.g. 1 year) for a single flat fee. Finally, a public defender system is one in which salaried full-time government employees (public defenders) handle criminal cases involving indigent defendants in a given jurisdiction. However, public defender offices typically cannot accept all indigent cases in its jurisdictions. For example, conflicts of interest may arise in certain instances – such as cases with co-defendants, in which the public defender can only represent one of the defendants involved – or the public defender's office may be too busy to accept new cases. Counties with a public defenders office use either assigned counsel or contract counsel in these instances..

The most prevalent indigent defense system in North Carolina is assigned counsel, with 82 out of 100 counties using it as a primary or auxiliary system. 52 counties use assigned counsel as the only system of indigent defense, while 30 counties with a public defender's office use assigned counsel for cases that the PD office is unable to accept. The second more prevalent indigent defense system in North Carolina is a public defender; there are 35 counties in North Carolina that use this as the primary indigent defense system. Finally, the remaining counties use contract counsel. 13 counties use contract counsel as the primary indigent defense system, while 5 counties use conflict counsel for cases that the public defender is unable to accept.

Founded in August 2000, the North Carolina Office of Indigent Defense Services (IDS) is the state office that manages the provision of publicly financed legal defense for indigent defendants in criminal cases. Since its founding, IDS has made many changes to the administration of indigent defense in North Carolina, such as the implementation of attorney qualification standards for appointment, a state-wide hourly compensation schedule for private assigned counsel, and uniform methods for reporting payment and expenditures. [[indigent defense in the state is 100% funded by the state, IDS responsible for paying attorney fees, keep detailed records on indigent cases]]

Procedural Background

Adult criminal cases in North Carolina are resolved in one of two trial court divisions. District Court handles lower-level felony and misdemeanor cases, which account for approximately 93% of all criminal cases in the state. Second, Superior Court handles higher-level felony cases and appeals from District Court cases.

A defendant's interaction with the criminal justice system begins with arrest, after which they are taken to a local jail and booked.[12] For the next 48 hours, defendants remain in jail, after which they are brought before a magistrate for a bail hearing.

For indigent defendants in North Carolina, interactions with a defense lawyer in the criminal justice pipeline typically begins after their arraignment (first appearance before a judge), during which the judge informs defendants of their right to counsel. If defendants do not have the means to hire a private defense lawyer, they may request one. North Carolina does not [13]

[[More background - e.g. District vs Superior Court, how defendants are matched to lawyers in assigned counsel systems, who qualifies for court-appointed attorneys]]

Assigned Counsel

[[Assigned on system of rotation, generally cannot turn down cases unless there is an ethical conflict of interest, paid the same in all counties according to statewide hourly rates]]

Table 1 report statewide hourly rates for private assigned counsel in North Carolina. Hourly rates differ by the severity of the original charge.[14]

Uniform Fee Pilot Program

In July 2016, the North Carolina state legislature directed the Administrative Office of the Courts (AOC) and IDS to begin a pilot program that would implement flat fee compensation for assigned counsel in district court. For the pilot program, AOC and IDS were required to select one or more counties in six judicial districts, with at least two counties having small caseloads, two with medium caseloads, and two with large caseloads. Districts 10, 18, and 26 - which contain the cities Raleigh, Greensboro, High Point, and Charlotte - were to be excluded from consideration for the pilot. The state legislature's goal with the pilot program was to explore whether switching to flat fee compensation for assigned counsel statewide

[12] During the booking process, the detention facility takes photographs ("mugshots") and fingerprints of the defendants and records vital and identifying information of the defendants.

[13] Conversation with Mary Pollard, March 2021. Fischer (2020) also

[14] For example, if a defendant was originally charged with a Class D felony, but the charges were later reduced to a class E felony, the lawyer would still be paid an hourly rate of $75.

could reduce state spending on indigent defense and improve predictability of future state spending on indigent defense.

AOC and IDS were given discretion over setting the flat fee schedule and choosing the counties that would switch to flat fee pay as part of the pilot program. In order to reduce potential harm to defendants in the counties chosen for the pilot program, the flat fee schedule was according to statewide hourly averages for each type of criminal case.

The six pilot counties were chosen as follows. First, all counties in North Carolina with an assigned counsel system were ranked according to two metrics: the rate at which cases result in a non-conviction and the rate at which defendants were convicted on the highest charge. Next, a group of counties was chosen from the middle of this ranking; from this group, Davidson and Iredell counties were chosen as the two counties with "large" caseloads; Burke and Lincoln counties were chosen as the two with "medium"-sized caseloads; and Macon and Watauga were chosen as the two with "small" caseloads.

The Uniform Fee Pilot is ongoing as of February 2021.[15]

Lawyer Objectives

Lawyers accepting indigent cases as assigned counsel are contractors; their compensation according to hourly or flat fee rates described in Tables 1 and 2 reflects gross, rather than net, earnings, as they are responsible for covering expenses such as overhead costs, self-employment tax, health insurance, and retirement savings, which are typically covered by the employer for employed actors in the criminal justice system such as prosecutors and judges.[16]

Prosocial motivation is a primary reason why lawyers in North Carolina who choose to accept indigent cases as assigned counsel.

While many lawyers in North Carolina desire to run a practice consisting of only indigent criminal defense, this is financially unsustainable.[17]

[[Two main motivations - financial, prosocial]]

3 Conceptual Framework

In the previous section, I described two main sources of motivation for lawyers while working on a given indigent case. The first motivation is financial, as indigent cases are a source of income and comprise part of the casework that lawyers devote time toward as part of their full-time profession. The second

[15] http://www.ncids.org/home/Notice%20to%20Attorney_Rate%20Restoration%2003_2021.pdf
[16] Margaret Gressens. "FY19 Private Appointed Counsel (PAC), Effective Pay Rate Study" (March 2019).
[17] Conversation with Margaret Gressens, June 2021.

motivation is prosocial, as many lawyers choosing to accept indigent cases view the work as necessary for protecting the constitutional rights of defendants in need. In this section, I consider these lawyer motivations to construct a simple conceptual that formalizes how lawyers' respond in effort supplied in indigent criminal cases under hourly and flat fee compensation. Similar in spirit to Bandiera et al. (2005), Besley and Ghatak (2005), and Besley and Ghatak (2018), this model considers how social preferences, particularly prosocial motivation, interact with the switch from hourly to flat fee compensation to determine how lawyers choose effort, and how changes in effort can impact outcomes of the indigent defendants that these lawyers represent.

Setup

This simple model focuses on a lawyer i who works on a given indigent criminal case. The lawyer is being compensated for her work on the case, she was also chose to do so because of the social component of providing indigent defense. The lawyer's prosocial motivation is captured by θ_i, where $\theta = 0$ denotes no prosocial motivation, and $\theta = 1$ denotes the highest possible value of prosocial motivation. I assume that $0 < \theta_i < 1$, which rules out the possibility that lawyers may be antisocially motivated.

The lawyer chooses a true, unobserved level of effort $e_i > 0$ when working on the case. The lawyer's choice of e_i determines the number of observable hours $H_i = H_i(e_i)$ she spends on the case, where $\frac{\partial H_i}{\partial e_i} > 0$ and $H_i(\cdot)$ is strictly increasing. The number of hours the lawyer spends on a case is also determined by other underlying characteristics, such as ability and experience; for example, to achieve some level of legal "output," a lawyer with greater ability and/or experience may require less time than a lawyer with less experience and/or effort. Here, $H_i(\cdot)$ is specific to lawyer i, and holds fixed any underlying lawyer characteristic that may also influence the hours spent on the case.

As discussed above, the lawyers receives positive payoffs from two sources while working on the case. First, she obtains financial benefit Y_i^f from the amount she are paid for working on indigent cases. Compensation is $Y_i^f = w_H H_i$ under hourly rate w_H and $Y_i^f = w_F$ under flat fee w_F; the lawyer takes w_H and w_F as given. Second, the lawyer obtains prosocial benefit Y_i^p from the indigent defendant's case outcome, which directly enters her utility function.[18] Y_i^p is equal to the production function for the indigent defendant's outcome $X_i(e_i)$, where $\frac{\partial X_i}{\partial e_i} > 0$. I describe the lawyer's payoff function as follows:

$$u_i = (1 - \theta_i)Y_i^f + \theta_i Y_i^p - \gamma \frac{e_i^2}{2}$$

[18] In the context of Besley and Ghatak (2018), θ_i can be interpreted as altruism, in which agents are motivated by the payoffs of those who benefit from the agents' work. In contrast, agents with warm glow motivation receive positive utility from the effort they spend in producing higher payoffs for their beneficiaries. The predictions of the model remain the same when modeling θ_i as warm glow motivation rather than altruism.

Here, I assume that payoffs are a convex combination of the financial and prosocial benefits, weighed by prosocial motivation θ_i; lawyers with zero prosocial motivation receive positive payoffs only from the financial benefits of working on indigent cases, while lawyers that are purely prosocially motivated receive positive payoffs only from the outcome of the indigent defendant they represent. $\gamma\frac{e_i^2}{2}$ is the lawyer's cost of effort, where γ is the inverse of lawyer ability.

Hourly Compensation

Under hourly compensation, the lawyer is paid for the total number of hours she spends on the case, which is increasing in her choice of effort. To determine optimal effort under hourly compensation, the lawyer solves the following problem:

$$\max_{e_i} \quad (1-\theta_i)w_H H_i(e_i) + \theta_i X_i(e_i) - \gamma\frac{e_i^2}{2}$$

The lawyer's optimal level of effort solves the following first order condition under hourly compensation:

$$(1-\theta_i)w_H H_i'(e_i) + \theta_i X_i'(e_i) = \gamma e_i$$

Flat Fee Compensation

Under flat fee compensation, the lawyer is paid a fixed amount that does not vary with the hours or effort she chooses to spend on the case. The lawyer determines her optimal level of effort under flat fee compensation by solving the following problem:

$$\max_{e_i} \quad (1-\theta_i)w_H + \theta_i X_i(e_i) - \gamma\frac{e_i^2}{2}$$

The lawyer's optimal level of effort solves the following first order condition under flat fee compensation:

$$\theta_i X_i'(e_i) = \gamma e_i$$

Comparison of Optimal Effort Under Hourly and Flat Fee Pay

The difference in the first order conditions under hourly and flat fee compensation is that under the latter, lawyers have no incentive on the margin to supply effort to a case. How strongly lawyers change their behavior under flat fee compensation, compared to an hourly basis, will depend on their level of prosocial motivation θ. On one extreme, lawyers who are purely prosocially motivated ($\theta = 1$)

will exert the same amount of effort under both compensation structures. Conversely, lawyers with no prosocial motivation ($\theta = 0$) will exert zero effort on indigent cases under flat fee compensation. Under the assumption that $0 < \theta_i < 1$, this model predicts all lawyers will reduce effort to some extent, the magnitude of which depends on the θ of the pool of lawyers who accept indigent cases in North Carolina.

Effort e_i is unobservable. However, there are some observable proxies for effort that can be investigated empirically. First, as described above, hours $H_i(e_i)$ is strictly increasing in effort, and any significant changes in effort resulting from a switch from hourly to flat fee pay could be reflected in data on hours that lawyers report spending on cases. Another outcome that may be less subject to self-reporting bias is the days to disposition, or the number of days that has elapsed between case assignment and disposition; this can be defined similarly as a function of effort, $D_i(e_i)$, where $\frac{\partial D_i}{\partial e_i} > 0$. In particular, large reductions in effort resulting from the switch to flat fees could result in a rise of incidences where cases are disposed soon after or on the same day as the case assignment. I study these outcomes in my empirical analysis, which I discuss in a later section.

Defendant Outcomes

Above, I express defendant outcomes as a function of effort, $X_i(e_i)$. Similar to the discussion about hours $H_i(e_i)$, defendant outcomes can be influenced by variables other than a lawyer's choice of effort, such as the defendant's guilty, the quality of evidence against the defendant, and harshness/skill of the prosecutor. However, this model focuses on a single case, and $X_i(\cdot)$ treats these other factors as given.

This model predicts that switching from hourly to flat fee compensation will result in a decline in lawyer effort in indigent cases. Because $\frac{\partial X_i}{\partial e_i} > 0$, this model also predicts that indigent defendants will be more likely to experience adverse outcomes, such as conviction on the highest charge and incarceration, if their lawyer is paid a flat fee instead of on an hourly basis. In my empirical analysis, I study impacts of switching to flat fee compensation on defendant outcomes, as well as proxies for lawyer effort.

4 Empirical Framework

Data

My empirical analysis relies on linkages between two administrative datasets from North Carolina. First, I obtained administrative criminal records data from the North Carolina Administrative Office of the Courts. This dataset contains records at the charge level for the universe of criminal cases in North Carolina from January 2015 – June 2020. For each case, this dataset contains information on defendant

characteristics, including race and gender; case characteristics, such as information on the charge and charge severity; and case outcomes, such as whether the case was dismissed, convicted, or resulted in a guilty plea, and the type of sentence a defendant received in the event of a conviction. I link the two datasets by case identification number and county, which uniquely identify each case. The dataset contains cases in which the defendant received publicly financed legal counsel, as well as cases in which defendants hired a private defense lawyer.

Second, I obtained data from the North Carolina Office of Indigent Defense Services containing case-level compensation records for all lawyers who accepted criminal cases as assigned counsel in North Carolina between January 2015 – August 2021. For each case, this dataset contains information on the case identifier, the lawyer's name, the lawyer's bar identification number, the date of the lawyer's first meeting with the defendant, the date on which the case was disposed, the number of self-reported hours the lawyer spent on the case, and the amount the lawyer was paid for the case.

Finally, I obtained limited information on each lawyer's gender and bar license date from the lawyer directory of the North Carolina State Bar. I merge this information with the two administrative datasets above using the lawyer bar identification number, which uniquely identifies each lawyer.

Sample Construction

[[more - e.g. drop contract counsel, keep the 52 assigned-counsel only counties but drop Cabarrus and Rowan because they were flat fee over the entire period, keep all assigned counsel observations from the public defender counties that used assigned counsel as conflict counsel, drop felony cases because they can only be disposed, no tried, in District Court,]]

[[Main results - run as an unbalanced panel. But in a robustness check, try results with an unbalanced panel. Overall, the results don't change much.]]

Drop cases in treated counties that continued to be paid under hourly rates (approx. 10% of observations). Later, run an intent-to-treat analysis that keeps these observations, find that my results are robust to this specification.

[[Keep only Jan 2015 – Dec 2019 to account for sensoring, also account for COVID, which began early 2020]]

Descriptive Statistics

[[describe data - e.g. number of observations, number of observations per treated/non-treated group]]

Empirical Strategy

My empirical framework examines the impact of changing compensation for court appointed attorneys from an hourly to a flat fee per case basis on the time that lawyers spend on cases and the outcomes of the criminal defendants they represent. To do this, I use two empirical specifications. First, I estimate difference-in-differences models in which I compare within-county and within-lawyer changes in outcomes between the treated and control counties following the start of the pilot program. For my main analysis, I run regressions of the form:

$$Y_{ic\ell t} = \beta(Treat_c \times Post_t) + X_i + \alpha_c + \lambda_\ell + \tau_t + \epsilon_{ic\ell t} \tag{1}$$

where i indexes case, c indexes county, ℓ indexes lawyer, and t indexes time. $Y_{ic\ell t}$ is an outcome of interest, such as a measure of lawyer effort, or whether the defendant in a given case was convicted or incarcerated. $Treat_c$ is an indicator variable denoting whether a case was in a treated county, in which compensation for assigned counsel switched form hourly to flat fee. $Post_t$ is an indicator variable denoting whether a case was assigned to a court-appointed attorney following the start of the pilot program. X_{ct} is a set of indicator variables for case characteristics (severity of charge) and defendant demographics (race and gender). α_c is a county fixed effect, which accounts for time-invariant county characteristics for each county, such as the lawyer culture and attitudes toward crime. λ_i is a lawyer fixed effect, which accounts for time-invariant lawyer characteristics such as skill/ability and prosocial motivation. τ_t is a month-year fixed effect.[19] Following Bertrand et al. (2004), I cluster standard errors by county, the level at which treatment is assigned. In sample, there are a total of 80 clusters, with 6 treated and 74 untreated counties.

The coefficient of interest is β; this is the average treatment effect on the treated (ATT), and measures the average difference in the change in outcomes following the start of the pilot program between (1) the treated counties, which changed compensation for assigned counsel from an hourly to flat fee basis, and (2) the control counties, which remained under hourly compensation during the entire sample period.

Second, I use an event study specification to estimate the dynamic ATT of switching from hourly to flat fee pay. To do this, I run the following regression:

$$Y_{ic\ell t} = \sum_{j=H1\ 2015}^{H2\ 2019} \beta_j \Big[Treat_c \times \mathbb{1}(t = j, j \neq H2\ 2016) \Big] + X_i + \alpha_c + \lambda_i + \tau_t + \epsilon_{ic\ell t} \tag{2}$$

where $H1$ and $H2$ represent half years, and variables are defined similarly to the difference-in-differences

[19] e.g. January 2018

specification above.

The identifying assumption of this difference-in-differences specification is that average outcomes for both the pilot and non-pilot counties would have followed parallel trends in the absence of a change in compensation for assigned counsel from hourly rates to flat fees. Assumptions about counterfactual outcomes are fundamentally untestable. However, to provide support for the plausibility of the parallel trends assumption, I plot raw trends in the outcomes of interest between the treated and control counties, and also provide graphs of the estimates from the event study specification above.

Finally, there is a concern that inference may be unreliable due to a small number of treated groups in this setting. To address this potential concern, I implement a version of Fisher's randomization test (Fisher (1935)), similar to Buchmueller et al. (2011) and Cunningham and Shah (2018). To implement this test, I first randomly select 6 of the 80 counties in my sample into a placebo group, and repeat this process 1,000 times. Then, for each placebo group, I re-run Equation (1).

5 Results

In this section, I present results on the impact of switching from hourly to flat fee pay for assigned counsel on case outcomes of the defendants these lawyers represent.

Raw Plots

Figures 2 and 3 present raw plots of the measures of defendant outcomes and lawyer effort that I will be focusing on in this paper. I calculate averages of each outcome variable by treatment status and half year, and graph them as separate trends to assess whether the outcomes in the treatment and control groups (1) followed similar trends before the period in which the treatment occurred, and (2) diverged after the treatment began. Further, for each outcome of interest, I divide the raw average for each group and half year by each group's average in H2 2016 (the last untreated half year), so that all plotted values are relative to this time period. Figure 2 focuses on the following defendant outcomes: conviction, conviction on the highest original charge, guilty plea, guilty plea on the highest original charge, case dismissal, and incarceration. Figure 3 focuses on the following proxies for lawyer effort in indigent criminal cases: average self-reported hours per case, average days to disposition, and whether a lawyer disposed a case on the same days as the first meeting with the defendant.

The trends in Figure 2 suggest that from 2015 through 2016, when assigned counsel in all North Carolina counties were paid according to the same statewide hourly rates, raw trends for all defendant

outcomes were similar between the treated and control counties. However, in the periods following the start of the treatment, there is a divergence in trends of defendant outcomes between the treated and control groups. Rates at which defendants were convicted and entered guilty pleas increased in the treated counties relative to the control counties. Increases were even greater for the rate at which defendants were convicted on or entered guilty pleas for their highest original charge. In addition, the trends show that following the treatment, defendants in the treated counties experienced lower rates of case dismissal and higher rates of incarceration.

I observe analogous patters for the proxies of lawyer effort in Figure 3. From 2015 through 2016, raw trends for the three outcomes of interest – hours that lawyers reported spending on indigent cases, the number of days between case assignment and disposition, and whether a lawyer disposed a case on the same day as the first meeting with the defendant – followed similar trends. However, after the start of the treatment, the treated counties experienced a strong divergence in these outcomes; especially pronounced is the decline in the average number of self-reported hours and the number of days elapsed between case assignment in dismissal.

Taken together, Figures 2 and 3 provides supporting evidence for the validity of my difference-in-differences design, and suggests that moving from hourly to flat fee pay for assigned counsel resulted in an increase in adverse outcomes for the defendants they represented, and that one potential mechanism for this result may be a decline in lawyer effort in indigent cases. In the remaining discussion of my empirical results, I build off the suggestive evidence in these raw plots and assess whether any potential effect of the change in compensation structure on defendant outcomes and lawyer effort may have a causal interpretation.

Potential Threats to Identification

Next, I address three potential threats to identification in my empirical framework. Specifically, these address two potential ways that may change the interpretation of my results. The first are general equilibrium effects, in which behavioral responses actors in the criminal justice system other than indigent defense lawyers may have impact defendant outcomes following the switch to flat fee pay. The second is the possibility that changes in case composition in the treated counties are perhaps driving my results.

First, one possibility is that indigent defendants became aware of the pilot program and may have responded by hiring private lawyers. This response is plausible if defendants generally were aware of the pilot program, and were concerned that their court-appointed attorneys may exert less effort if they are paid a flat fee instead of an hourly wage. This scenario would result in a change in the composition

of indigent defendants in the treated counties, potentially resulting in bias in the estimates of my main results. However, the direction of the bias is ambiguous. If defendants who faced more serious charges or a higher probability of conviction were more likely to respond by hiring a private lawyer, then the composition of indigent defendants could become less culpable on average, perhaps decreasing the probability of an adverse case outcome. On the other hand, if marginal defendants – i.e. indigent defendants whose case outcome would be influenced by the quality of legal representation – were more likely to respond by hiring private lawyers, then the composition of indigent defendants would become more culpable on average, perhaps creating another source of an increased probability of an adverse outcome that is separate from the switch to flat fees. I assess whether this was the case in Table 4. In this analysis, I collapse my data to the county-quarter level to calculate the average rate at which criminal cases involved a private defense lawyer in each county-quarter. I don't find evidence that the switch to flat fees changed the percentage of cases involving private defense lawyers.

Next, one possibility is that any changes in defendant outcomes in the treated counties were from changes in case composition, rather than compensation schemes for lawyers. Table **??**

Tables 5 - 6 addresses this concern. Table 5 assesses whether a change in the number of criminal cases in the treated counties were perhaps driving my main results. For example, one scenario is that defendant outcomes became worse in the treated counties because there those experienced a large increase in criminal cases, resulting in indigent defense lawyers in the system becoming overloaded with work. To study this, I collapse my data to the county-quarter level, calculating the number of criminal cases within each county-quarter. These results suggest that there was no change in the number of criminal cases in the treated counties.

Next, Table 6 assesses whether my main results are being driven by changes in case composition. For example, one potential scenario is that around the same time as the start of the pilot program, the severity of crimes committed in the treated counties began increasing greatly, resulting in a change in the composition of indigent defendants where defendants now have a higher probability of conviction on average. These results suggest that there was no change in the rate of violent, property, and drug crimes being committed, nor is there an increase in felony the incidence of felony charges.

The result on felony charges also addresses a potential general equilibrium effect, in which prosecutors responded to the pilot program by changing their charging decisions. One potential scenario is that prosecutors, who according to the literature maximize their objective function by convicting criminal defendants, responded discretion over charging decisions, e.g. charging District Court cases with a more serious charges, or choosing to charge defendants with cases that take more time and effort for a lawyer to defend. However, as discussed above, my results suggest that this wasn't the case.

Defendant Outcomes

Tables 7 - 10 report difference-in-differences estimates of the impact of switching to flat fee compensation for assigned counsel on the following defendant outcomes: conviction, conviction on the defendant's highest original charge, guilty plea, guilty plea on the defendant's highest original charge, case dismissal, and incarceration.

Table 7 reports results on convictions. My estimates suggest that switching from hourly pay to flat fees resulted in a 4.3 to 4.4 percentage point increase in convictions, a 9.6% increase from the pre-period mean. Further, defendants were 3.5 percentage points more likely to be convicted on their highest original charge, a 13.7% increase from the pre-period sample mean. Table 7 reports results on guilty pleas. Similar to the previous set of results, my estimates suggest that switching from hourly pay to flat fees resulted in a 4.2 to 4.3 percentage point increase in guilty pleas, a 10.2% increase from the pre-period sample mean. Further, defendants were 3.6 percentage points more likely to plea guilty on their highest original charge, a 14.8% increase from the pre-period sample mean. Table 9 reports results on case dismissals and "favorable outcomes," defined as cases that resulted in either a dismissal or conviction on a lower charge. My estimates suggest that after switching to flat fees, defendants were 4.8 to 4.9 percentage points less likely to have a case dismissed, a 9.1% decrease from the pre-period sample mean. In addition, defendants were 3.9 to 4 percentage points less likely to have a favorable outcome, a 5.4% decrease from the pre-period sample mean. Finally, Table 10 reports results on incarcerations. My estimates suggest that after the switch from hourly pay to flat fees, defendants were 4.6 to 4.8 percentage points more likely to be incarcerated, a 34.6% increase from the pre-period sample mean.

Figure 4 contains event study graphs for the outcomes studied in Tables 7 - 10. In these graphs, I plot estimates and 95% confidence intervals of interactions between the indicator variable for pilot counties and the indicator variables for each half year from Equation (2). The graphs suggest that there are no differences in outcomes between the treated and control groups prior to the start of the pilot program, which providing further support for the validity of the parallel trends assumption. However, after the first treated period, the graphs suggest that outcomes of defendants diverged between the treated and control groups. The graphs suggest that defendants were more likely to be convicted, plea guilty to charges, and be incarcerated, and less likely to have a case be dismissed or end in a favorable outcome for the defendant.

Potential Mechanisms

Next, I discuss two potential mechanisms by which switching from hourly to flat fee pay for assigned counsel may impact defendant outcomes. First, changes in defendant outcomes may come from an intensive margin response from lawyers. Because lawyers no longer have an incentive on the margin to spend more time on indigent cases above their reservation hours under flat fees, lawyers may optimize by spending less effort on indigent cases when paid under flat fees instead of hourly rates. Second, defendant outcomes may be impacted by changes in the types of lawyers that choose to accept indigent cases.

Intensive Margin Response on Effort

I focus on three proxies for lawyer effort on indigent cases: reported hours per case, days to disposition, and whether a case was disposed on the same day as the lawyer's first meeting with the defendant. [[Explain why each outcome proxies for effort]] . However, there is a concern that hours may be subject to reporting bias because they are self-reported. As a result, I also examine days to disposition - defined as the number of days between the date of the lawyer's first meeting with the defendant and the date on which the case was disposed - which is less subject to reporting bias.

Tables 11 - 13 report difference-in-differences estimates for these three proxies for lawyer effort. Table 11 reports results on self-reported hours. My estimates suggest that switching from hourly pay to flat fees resulted in a 11.7% to an 11.9% decline in the number of hours lawyers reported spending on indigent cases. Table 12 reports results on days to disposition. My estimates suggest that switching from hourly pay to flat fees resulted in a 42.4% to 42.8% decline in the days between case assignment and dismissal - a decline in about 1.5 months. Finally Table 13 reports results on the probability of disposing a case on the date of the lawyer's first meeting with the defendant. My estimates suggest that lawyers were 3.8 percentage points more likely to dispose a case on the same day as their first meeting with the defendant, a 33.6% increase from the pre-period sample mean.

Figure 5 contains event study graphs for the outcomes studied in Tables 11 - 13. In these graphs, I plot estimates and 95% confidence intervals of interactions between the indicator variable for pilot counties and the indicator variables for each half year from Equation (2). The graphs suggest that there are no differences in outcomes between the treated and control groups prior to the start of the pilot program, which providing further support for the validity of the parallel trends assumption. However, after the first treated period, the graphs suggest that measures of lawyer effort diverged between the treated and control groups. The graphs suggest that lawyers on average spent less time on indigent cases, disposed of indigent cases more quickly, and were more likely to dispose a case on the same day as their first meeting

with the defendant.

Selection of Lawyers on the Extensive Margin

Next, I examine whether switching from hourly to flat fee pay changed the composition of lawyers choosing to accept indigent criminal cases. Tables 14 - 16 report ...

Heterogeneity

In the previous section, I presented evidence suggesting that switching from hourly to flat fee compensation for assigned counsel resulted in a higher probability of adverse outcomes for defendant outcomes, and that these effects were driven by reductions in lawyer effort. In this section, I use the individual-level lawyer and defendant information in my data to explore heterogeneity in these results across lawyer gender, defendant gender, and defendant race. To do this, I estimate Equation (1) separately for each group within these three categories. The results from this heterogeneity analysis are reported in Tables A1 – A30 and summarized in Figures 6 – 7, which plot the estimated coefficients and their 95% confidence intervals for each specification. For each graph, the specification associated with each result is labeled on the y-axis, values for the outcome of interest are labeled on the x-axis, and the red vertical line denotes the value of zero on the x-axis. The first specification plotted at the top of each graph is the estimate and 95% confidence interval (in a dashed line) from the estimation of Equation (1) for the entire sample in my main result. Below the main result are the estimates and confidence intervals for the results by lawyer gender, defendant gender, and defendant race.

There are some noteworthy patterns from this heterogeneity analysis. First, the results suggest that indigent defendants represented by female lawyers are less likely to experience adverse outcomes following the change in compensation from an hourly to flat fee basis. Specifically, compared to those represented by male lawyers, defendants represented by female lawyers are, on average, 57% less likely to be convicted, 37% less likely to be convicted on the highest original charge, 69% less likely to enter a guilty plea, 54% less likely to enter a guilty plea on the highest original charge, 44% more likely to have a case dismissed or result in conviction on a lower charge, and 22% less likely to be incarcerated. These differences are reflected in how male and female lawyers respond in the effort they supply in indigent cases. Compared to male lawyers, female lawyers on average respond with a 70% smaller decline in hours, a 78% smaller reduction in the time to case disposition, and are 59% less likely to dispose a case on the same days as their first meeting with the defendant. Interestingly, estimates of hours and time to disposition for female lawyers are not statistically different from zero.

Second, the results suggest that among indigent defendants, men are more likely than women to have adverse outcomes when their court-appointed attorney is paid under flat fees rather than an hourly rate. Specifically, compared to male defendants, female defendants are, on average, 37% less likely to be convicted, 38% less likely to be convicted on the highest original charge, 33% less likely to enter a guilty plea, 32% less likely to enter a guilty plea on the highest original charge, 29% more likely to have a case dismissed or result in conviction on a lower charge, and 59% less likely to be incarcerated. There is suggestive evidence that these differences may be attributable in part to differential responses in effort by court-appointed attorneys depending on whether they are assigned a male or female defendant. While the estimates and confidence intervals for lawyer hours largely overlap, the results suggest that when lawyers are assigned to a male defendant, they dispose of cases 11.3% days sooner on average and are 35% more likely to dispose a case on the same day as their first meeting with the defendant.

Finally, I study heterogeneity of results by defendant race. To do this, I categorize defendants into two groups – white defendants and minority (non-white) defendants.[20] The results suggest that minority defendants are more likely than white defendants to experience adverse case outcomes. Specifically, compared to whites, minorities are, on average, 7% more likely to be convicted, 76% more likely to be convicted on the highest original charge, 10% more likely to enter a guilty plea, 61% more likely to enter a guilty plea on the highest original charge, 33% less likely to have a case dismissed or result in conviction on a lower charge, and 12% more likely to be incarcerated. Similar to above, there is suggestive evidence that these differences may be attributable in part to differential responses in effort by court-appointed attorneys depending on whether they are assigned a white or minority defendant. While the estimates and confidence intervals for lawyer hours largely overlap, the results suggest that when lawyers are assigned to a minority defendant, they dispose of cases 6% days sooner on average and are 16% more likely to dispose a case on the same day as their first meeting with the defendant.

Robustness

Next, I assess whether my main results are sensitive to different empirical specifications or limiting the data to different subsamples. The results of my sensitivity analysis are reported in Tables A31 - A40 and summarized in Figures 8 – 9, which plot the estimated coefficients and their 95% confidence intervals for each specification. Similar to the graphical summaries of my heterogeneity analysis above, the estimate and 95% confidence interval of my main result, estimating Equation (1) for the entire sample, are at the top of each graph. Below the main result are the estimates and confidence intervals for each alternative

[20] About 87% of minority defendants in my sample are black.

specification.

I examine the following alternative specifications. First, I replace the county and lawyer fixed effects of my main specification in Equation (1) with lawyer-by-county fixed effects, which provide a more flexible specification that allows lawyers to be treated differently for each county they accept indigent criminal cases in. Second, I limit my sample to only the 50 counties in North Carolina that used only an assigned counsel system for the provision of indigent defense, just as the six treated counties in my sample do. Third, I limit my sample to only misdemeanor cases, which account for approximately 80% of all criminal cases resolved in District Court. In my final alternative specification, estimate Equation (1) using a balanced panel, in which I keep only the lawyers who accepted indigent cases at a given county during the majority of quarters in *both* the pre-period and the post period. There is a potential concern of selective attrition of lawyers following the switch from hourly to flat fee pay, which could potentially bias my main results on defendant outcomes and lawyer effort. Tables A31 - A40 and Figures 8 – 9 show that my main results are robust to these alternative specifications, and that the estimates and confidence intervals from the results using these alternative specifications largely overlap with those from my main results.

Randomization Inference

Finally, I address concerns about inference with a small number of treated groups by implementing a variant of Fisher's randomization test (Fisher (1935)) similar to those used by Buchmueller et al. (2011) and Cunningham and Shah (2018). I implement this test as follows. First, I randomly assign 6 of the 80 total counties in my sample into each placebo group. I repeat this step 1,000 times to generate 1,000 placebo groups because it is infeasible to calculate the test statistic for all possible combinations.[21] Let $g \in [1, 1{,}000]$ index each placebo group, and denote $Placebo_c^g$ as an indicator variable for whether county c is in placebo group g). For each placebo group g, I estimate the following variant of Equation (1):

$$Y_{ic\ell t} = \beta_g(Placebo_c^g \times Post_t) + X_i + \alpha_c + \lambda_\ell + \tau_t + \epsilon_{ic\ell t} \tag{3}$$

Finally, I compare my main results from the estimation of Equation (1) to the results from the estimation of Equation (3). The test statistic is ... and I calculate exact p-values following Imbens and Rubin (2015). With 1,000 placebo estimates, achieving significance at the 10%, 5%, and 1% levels requires that the estimate from my main results, β, be ranked within the top 100, 20, and 10 (respectively) in the distribution of placebo estimates β_g.

[21] Specifically, $\binom{80}{6} = 300,500,200$. In a simulation exercise, Imbens and Rubin (2015) find that exact p-values calculated from 1,000 simulations converges to that of 1,000,000 simulations.

Figures 10 – 11 summarize the results of this variant of Fisher's randomization test for each outcome of interest. Each figure plots a histogram of the placebo distribution, along vertical dashed lines which denote the 5% and 95% percentiles of this distribution. The solid vertical black line labels the estimate of β in Equation (1) for a given outcome of interest. Overall, I find that my results are robust to the randomization inference procedure.

For defendant outcomes Figure 10, my main results are on the tail of the distribution of the placebo results. My results on conviction on the highest original charge and guilty plea on the highest original charge are significant at the 5% level, the result for incarceration is statistically significant at the 1% level, and results for conviction, guilty plea, and conviction on a lower charge or case dismissal are significant at the 10% level. For lawyer effort, I similarly find that my main results are at the tail of the placebo distribution. Results for hours are significant at the 1% level, while results for days to disposition and whether a case was disposed on the day of the first meeting with the defendants are significant at the 5% level.

6 Discussion

Comparison of Results to Prior Literature

[[Briefly compare with Schwall's results (he finds a 50% decline in hours, but no impact on case outcomes)]]

[[For the other papers, compare results on defendant outcomes, e.g. conviction and incarceration]]

Costs of Switching to Flat Fees

[[Increased costs of incarceration associated with flat fees - this is already done]]

[[Future - look at impact of flat fees on the occurrence of misdemeanor appeals in Superior Court. If happening due to poor representation, then this can be a costly inefficiency]]

7 Conclusion

[[Summarize results and policy implications]]

References

Amanda Agan, Matthew Freedman, and Emily Owens. Is Your Lawyer a Lemon? Incentives and Selection in the Public Provision of Criminal Defense. *The Review of Economics and Statistics*, 103(2):1–16, 2021.

James Anderson and Paul Heaton. How Much Difference Does the Lawyer Make? The Effect of Defense Counsel on Murder Case Outcomes. *The Yale Law Journal*, 122(1):154–217, 2012.

Nava Ashraf, Oriana Bandiera, Edward Davenport, and Scott Lee. Losing Prosociality in the Quest for Talent? Sorting, Selection, and Productivity in the Delivery of Public Services. *American Economic Review*, 110(5):1355–1394, 2020.

Oriana Bandiera, Iwan Barankay, and Imran Rasul. Social Preferences and the Response to Incentives: Evidence from Personnel Data. *The Quarterly Journal of Economics*, 120(3):917–962, 2005.

Marianne Bertrand, Esther Duflo, and Sendhil Mullainathan. How Much Should We Trust Difference-in-Differences Estimates? *The Quarterly Journal of Economics*, 119(1):249–275, 2004.

Timothy Besley and Maitreesh Ghatak. Competition and Incentives with Motivated Agents. *American Economic Review*, 95(3):616–636, 2005.

Timothy Besley and Maitreesh Ghatak. Prosocial Motivation and Incentives. *Annual Review of Economics*, 10:411–438, 2018.

Thomas Buchmueller, John DiNardo, and Robert Valletta. The Effect of an Employer Health Insurance Mandate on Health Insurance Coverage and the Demand for Labor: Evidence from Hawaii. *American Economic Journal: Economic Policy*, 3(4):25–51, 2011.

Paul Carrington. The Right to Zealous Counsel. *Duke Law Journal*, 28:1291–1308, 1979.

Scott Cunningham and Manisha Shah. Decriminalizing Indoor Prostitution: Implications for Sexual Violence and Public Health. *The Review of Economic Studies*, 85(3):1683–1715, 2018.

Rudy Douven, Minke Remmerswaal, and Robin Zoutenbier. Do Altruistic Mental Health Care Providers Have Better Treatment Outcomes? *The Journal of Human Resources*, 54(2):310–341, 2019.

Randall Ellis and Thomas McGuire. Provider Behavior Under Prospective Reimbursement. *Journal of Health Economics*, 5(2):129–151, 1986.

Eugene Fama. Time, Salary, and Incentive Payoffs in Labor Contracts. *Journal of Labor Economics*, 9(1): 25–44, 1991.

Brett Fischer. Is There Racial Bias in Plea Bargaining – And Can Defense Attorneys Help Prevent It? 2020. Working Paper.

Ronald Fisher. *The Design of Experiments*. Edinburgh: Oliver and Boyd, 1935.

Guido Imbens and Donald Rubin. *Causal Inference for Statistics, Social, and Biomedical Sciences: An Introduction*. Cambridge, UK: Cambridge University Press, 2015.

Radha Iyengar. An Analysis of the Performance of Federal Indigent Defense Counsel. 2007. Working Paper.

Edward Lazear. Salaries and Piece Rates. *The Journal of Business*, 59(3):405–431, 1986.

Edward Lazear. Performance Pay and Productivity. *American Economic Review*, 90(5):1346–1361, 2000.

Harry Paarsch and Bruce Shearer. Piece Rates, Fixed Wages, and Incentive Effects: Statistical Evidence from Payroll Records. *International Economic Review*, 41(1):59–92, 2000.

John Pfaff. *Locked In: The True Causes of Mass Incarceration and How to Achieve Real Reform*. New York, NY: Basic Books, 2017.

Michael Roach. Indigent Defense Counsel, Attorney Quality, and Defendant Outcomes. *American Law and Economics Review*, 16(2):577–619, 2014.

Michael Roach. Does Raising Indigent Defender Pay Rates Improve Defendant Outcomes? Evidence from New York. *Applied Economics Letters*, 24(14):1025–1030, 2017.

Benjamin Schwall. Getting What You Paid For: How Payment Methods Affect Attorneys' Behaviors. 2018. Working Paper.

Bruce Shearer. Piece Rates, Fixed Wages and Incentives: Evidence from a Field Experiment. *The Review of Economic Studies*, 71(2):513–534, 2004.

Yotam Shem-Tov. Make-or-Buy? The Provision of Indigent Defense Services in the U.S. *Forthcoming, The Review of Economics and Statistics*, 2020.

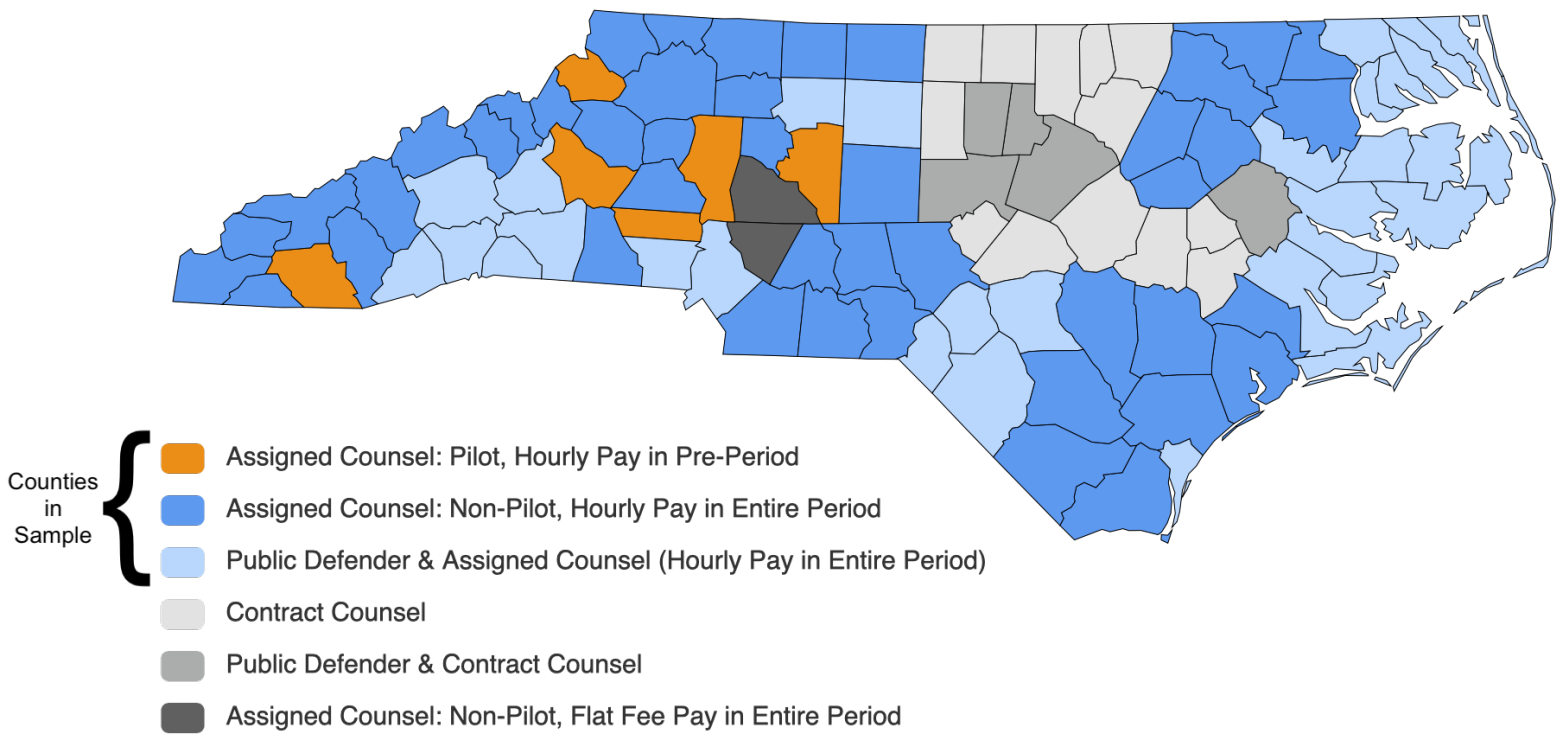
William Stuntz. *The Collapse of American Criminal Justice*. Cambridge, MA: Harvard University Press, 2011.

Table 1: Statewide Hourly Rates for Assigned Counsel in North Carolina

Case Type	Hourly Rate
Class A-D Felonies	$75
Class E-I Felonies	$60
All Other Cases	$55

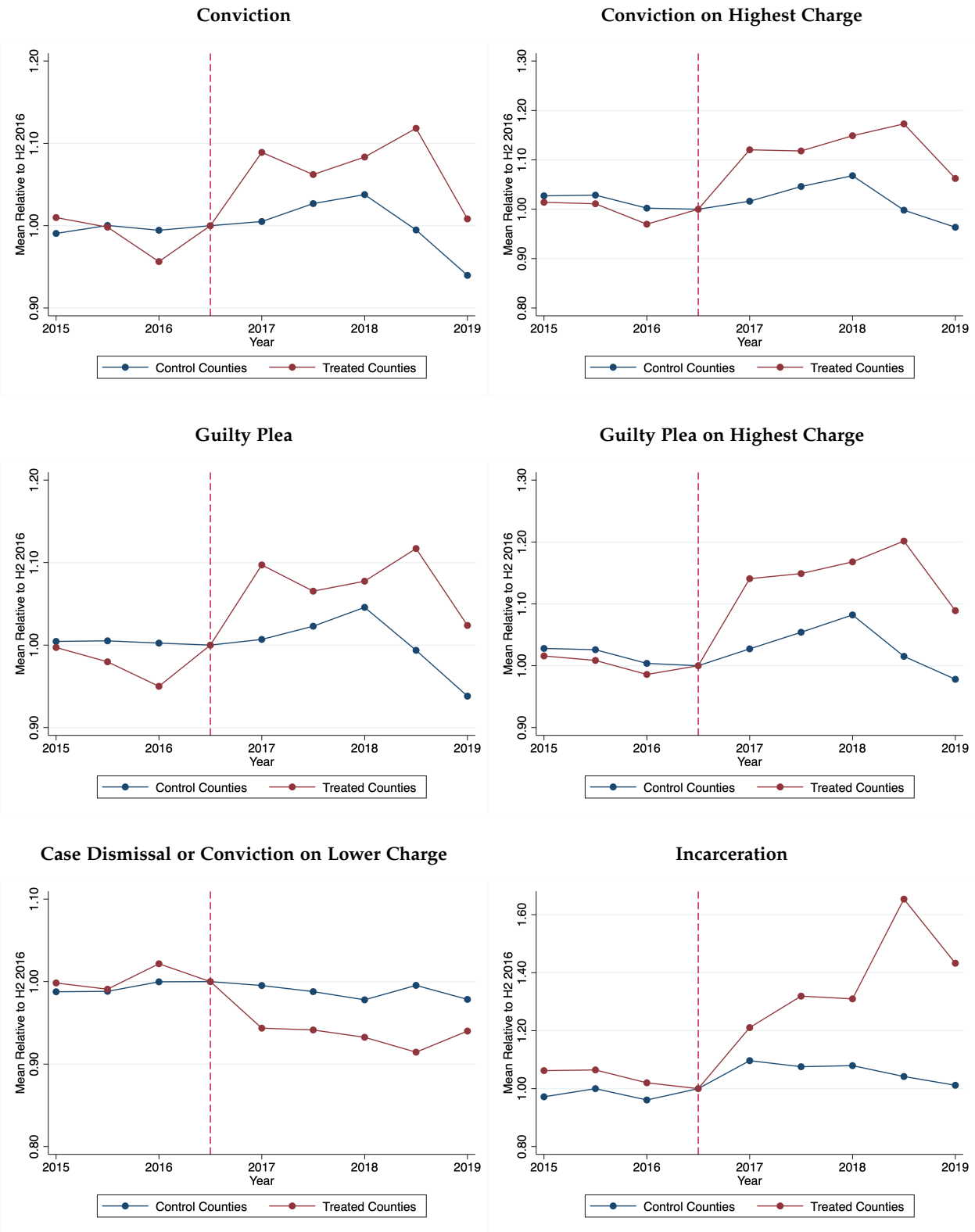
Source: North Carolina Office of Indigent Defense Services.

Figure 1: North Carolina: Indigent Defense Systems, by County



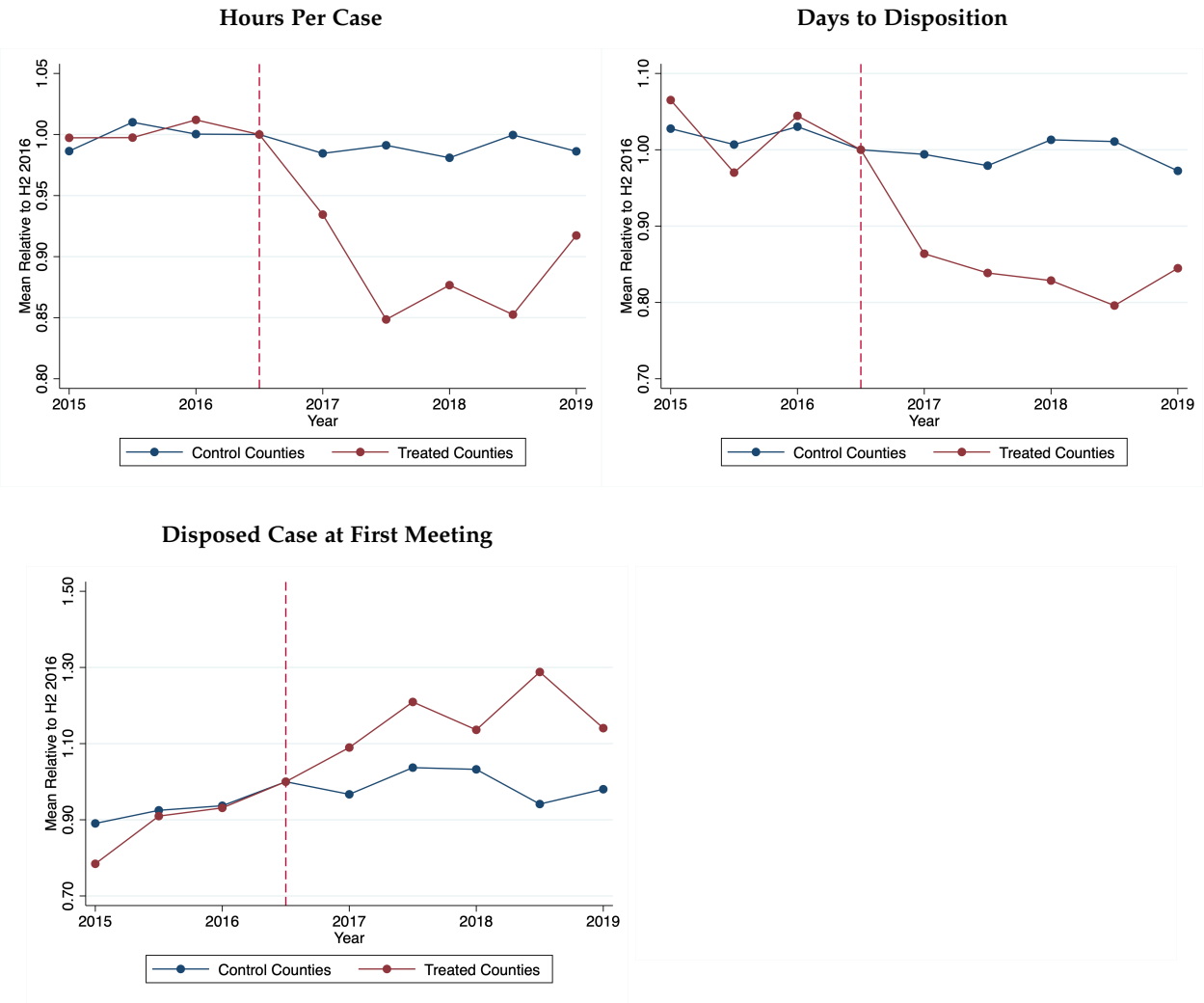
Source: North Carolina Office of Indigent Defense Services

Figure 2: Raw Plots: Defendant Outcomes



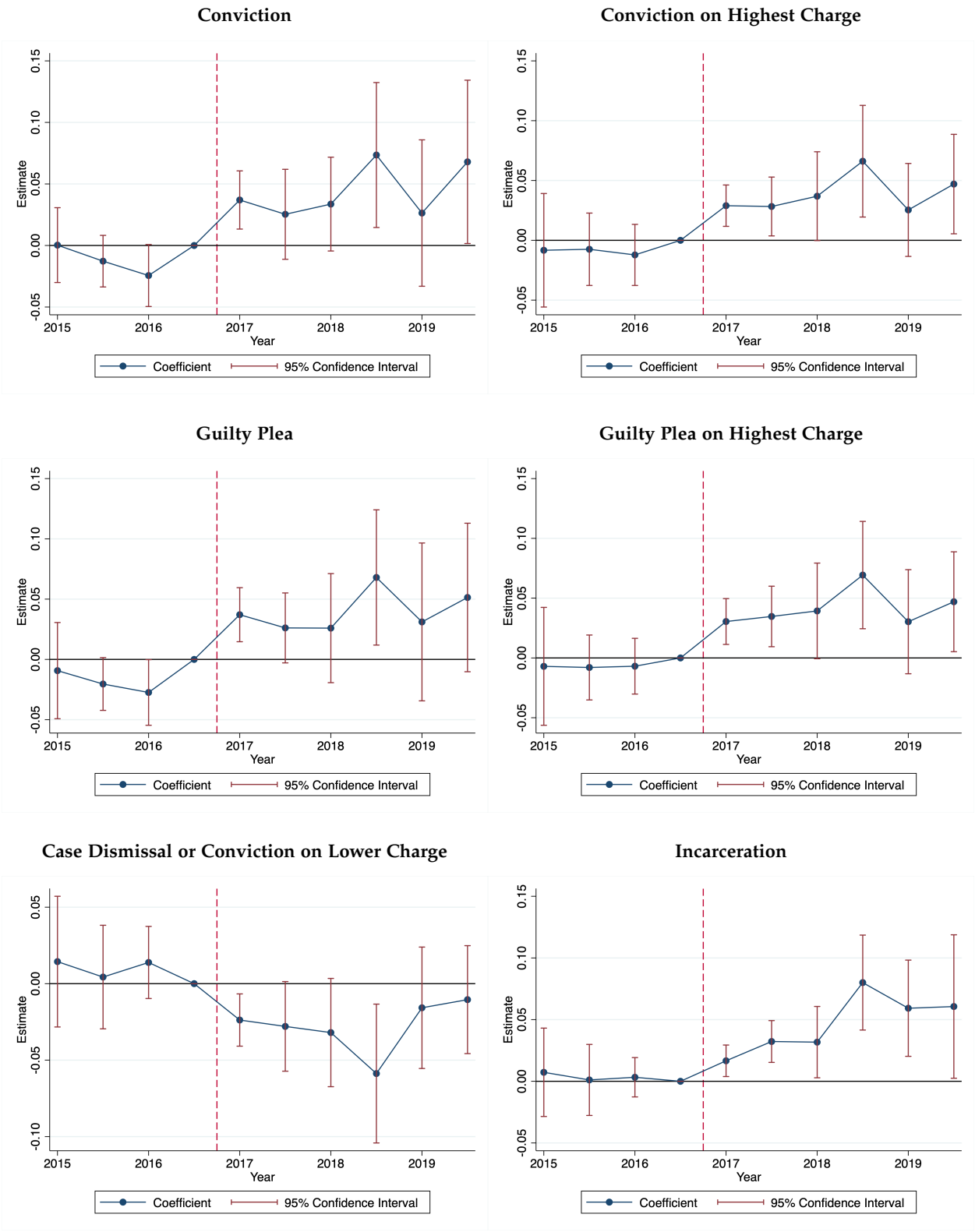
Source: North Carolina Administrative Data, 2015 – 2019

Figure 3: Raw Plots: Measures of Attorney Effort



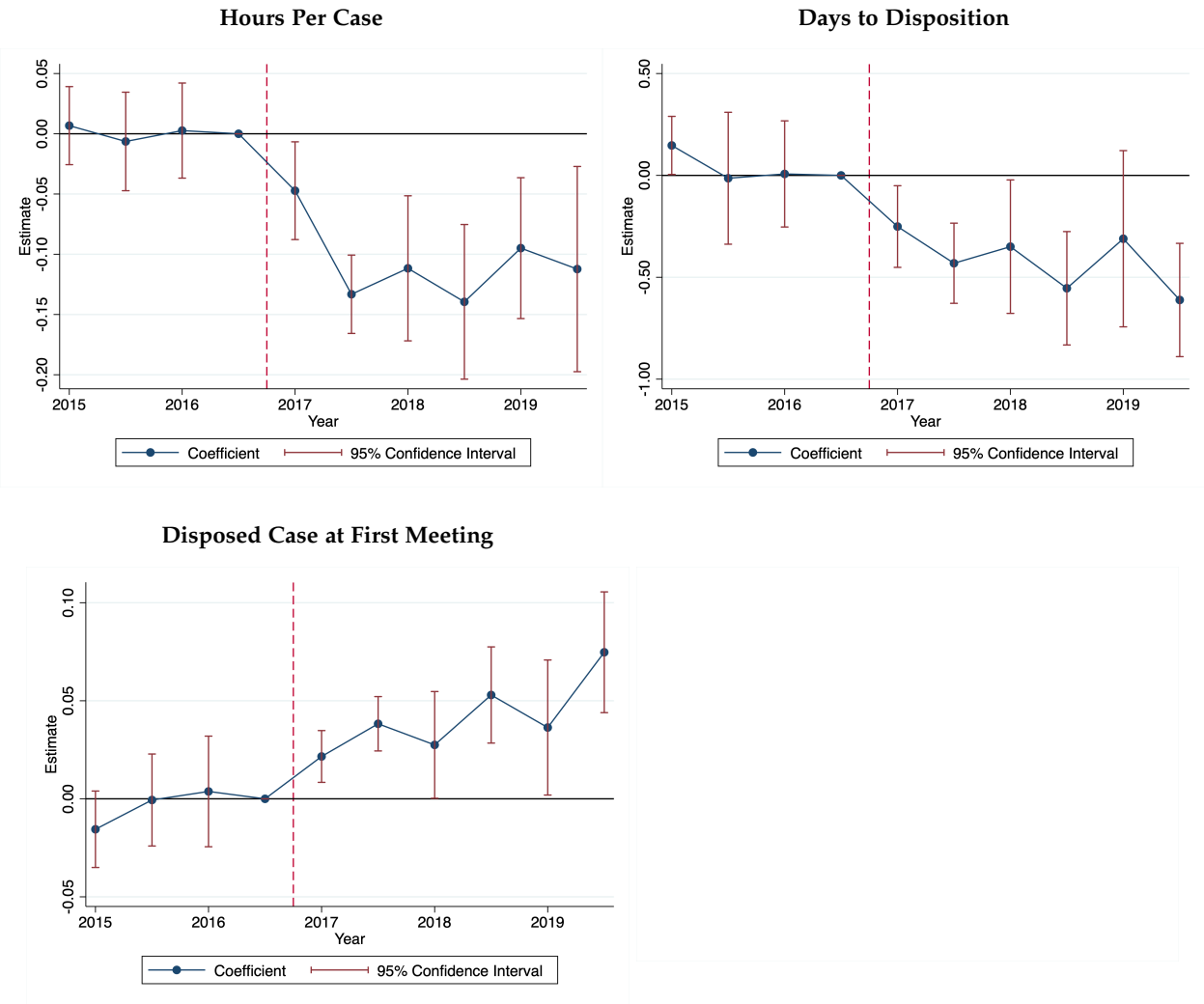
Source: North Carolina Administrative Data, 2015 – 2019

Figure 4: Event Study: Defendant Outcomes



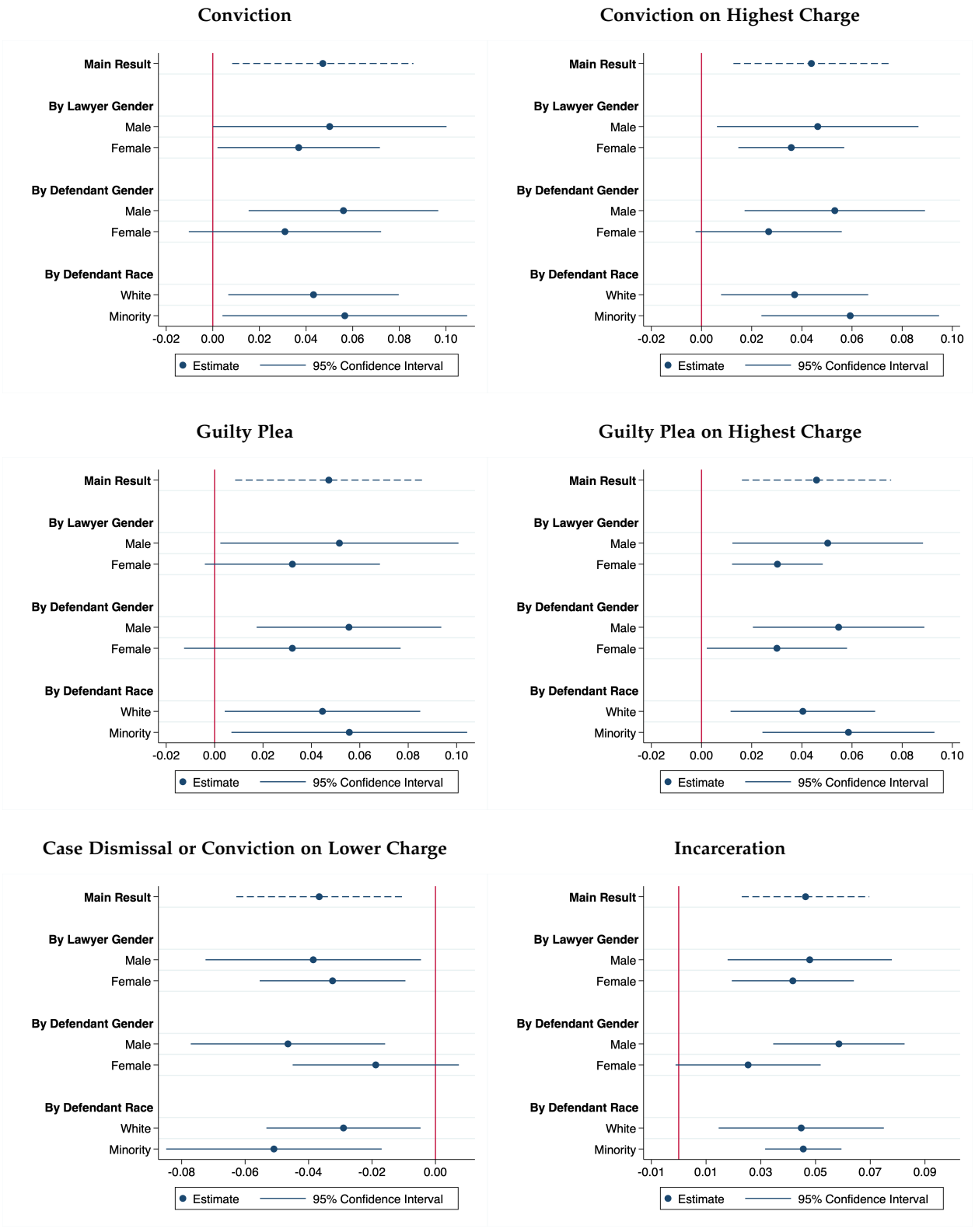
Source: North Carolina Administrative Data, 2015 – 2019

Figure 5: Event Study: Measures of Attorney Effort



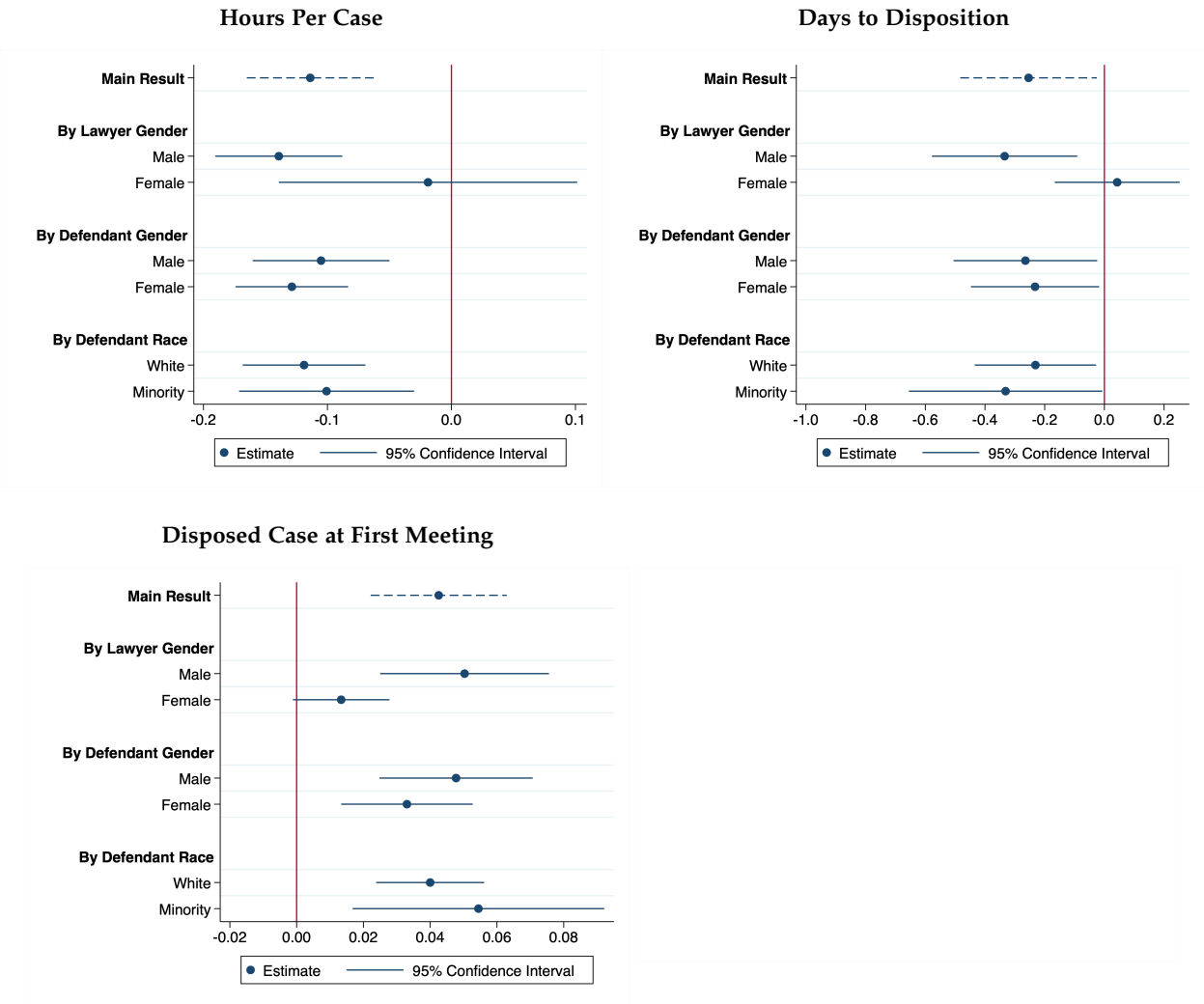
Source: North Carolina Administrative Data, 2015 – 2019

Figure 6: Heterogeneity Analysis: Defendant Outcomes



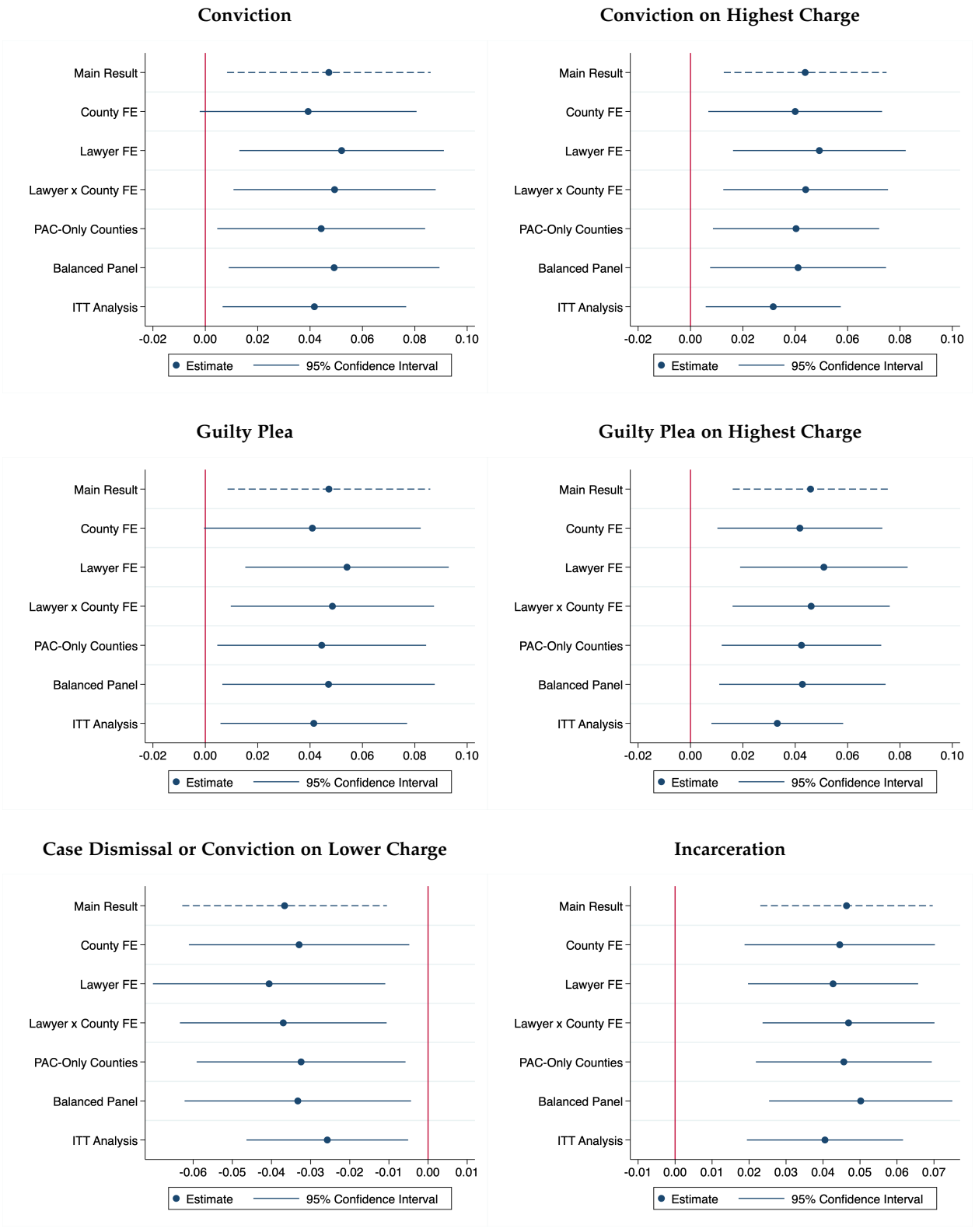
Source: North Carolina Administrative Data, 2015 – 2019

Figure 7: Heterogeneity Analysis: Measures of Attorney Effort



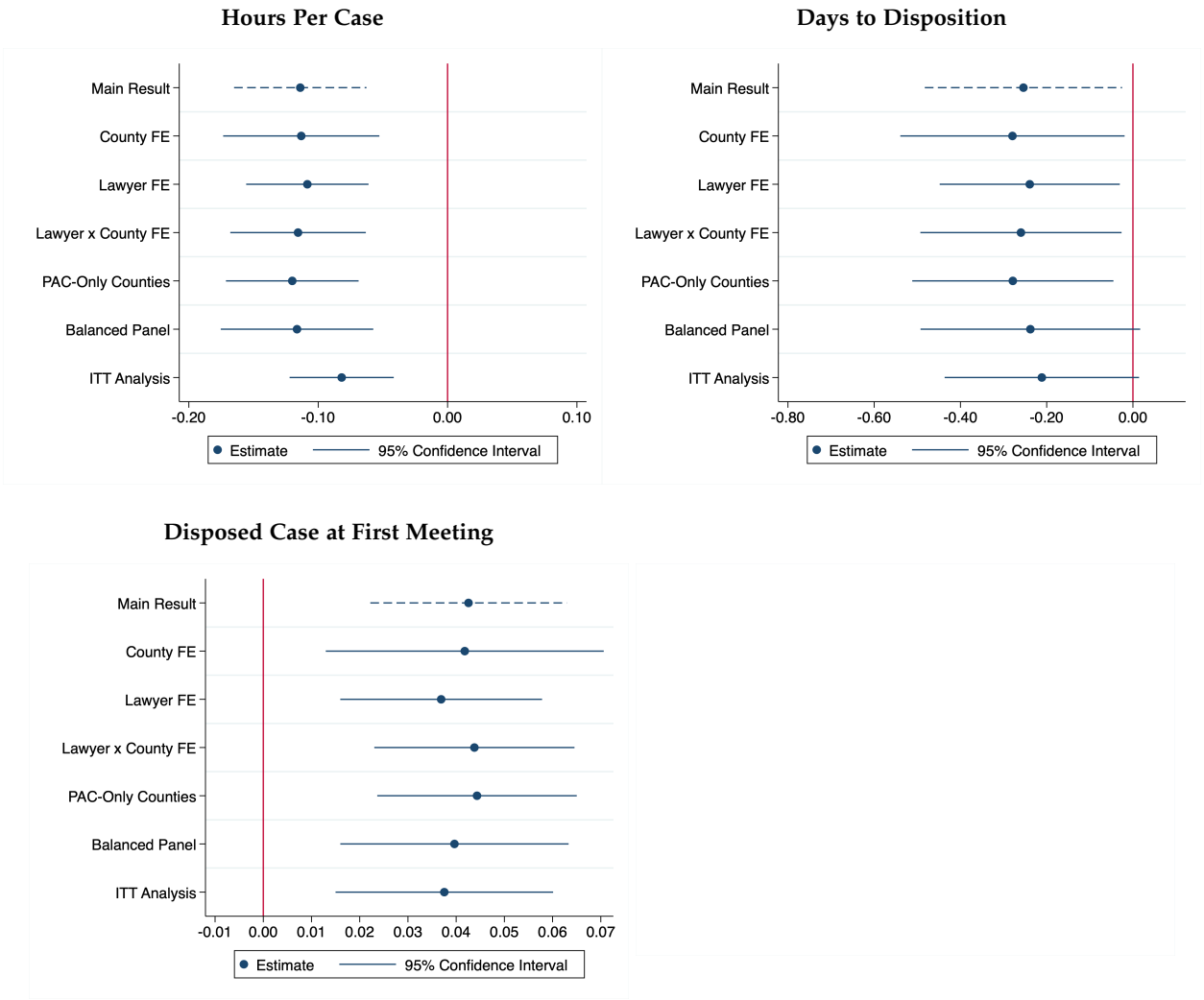
Source: North Carolina Administrative Data, 2015 – 2019

Figure 8: Robustness to Alternative Specifications: Defendant Outcomes



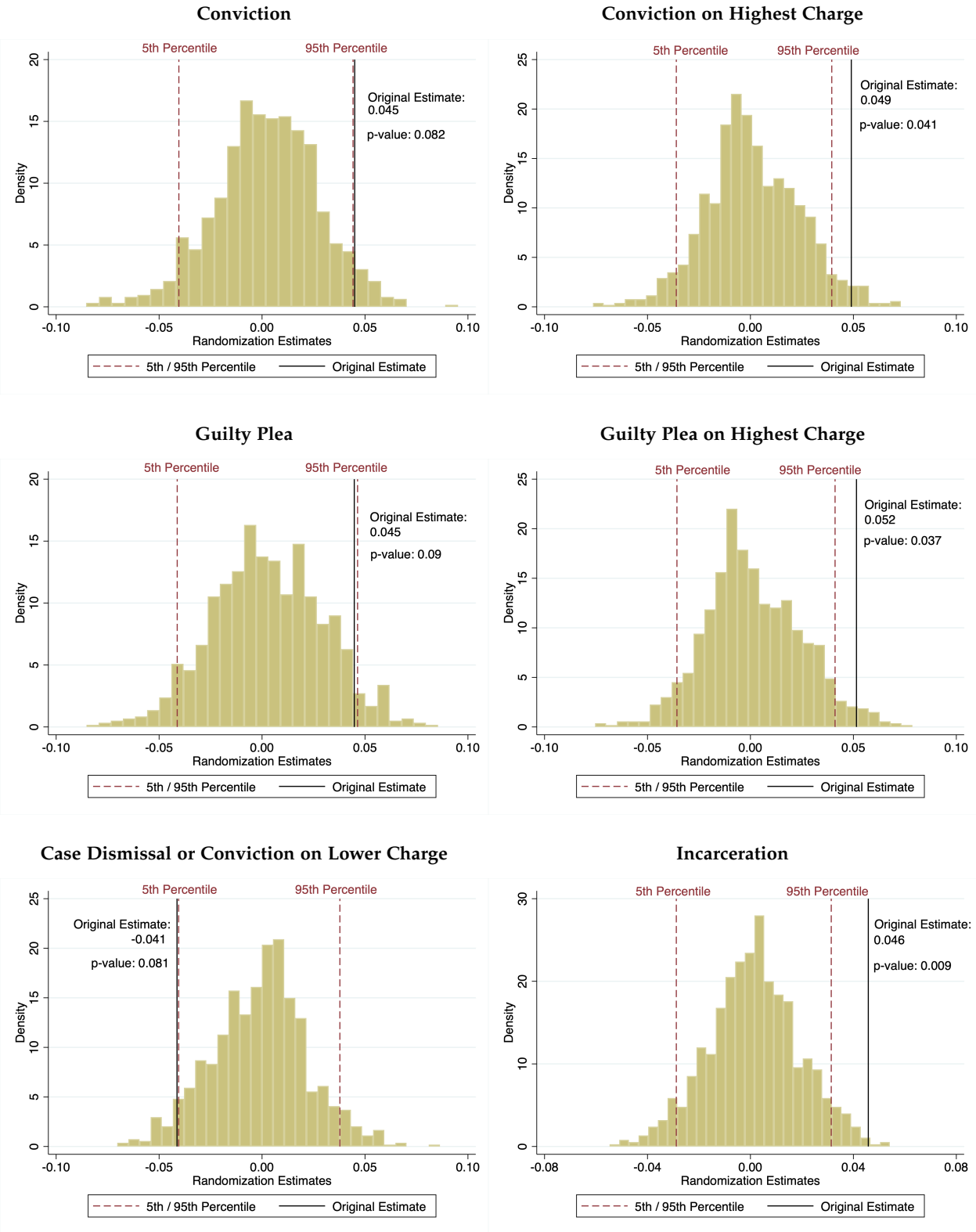
Source: North Carolina Administrative Data, 2015 – 2019

Figure 9: Robustness to Alternative Specifications: Measures of Attorney Effort



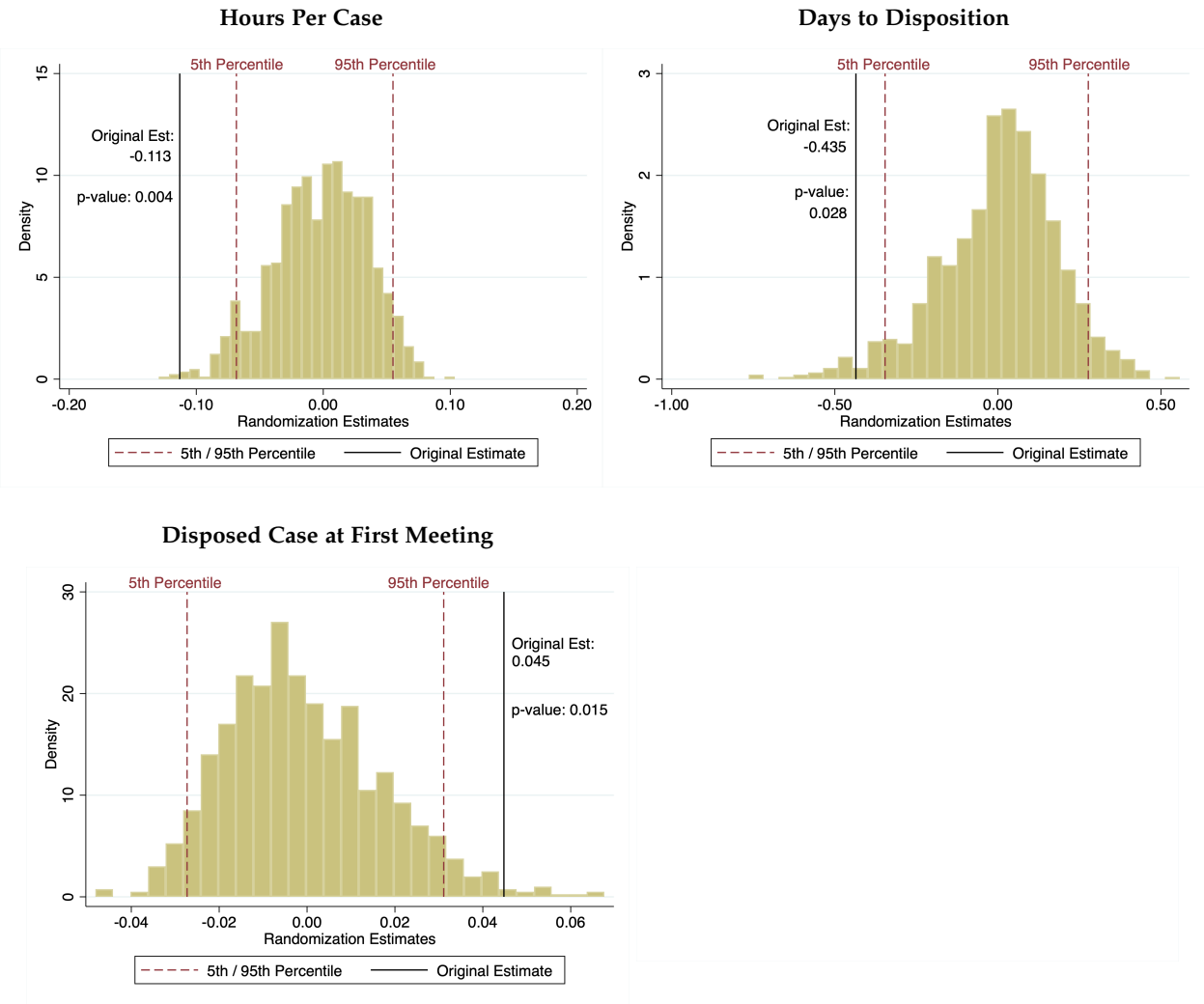
Source: North Carolina Administrative Data, 2015 – 2019

Figure 10: Randomization Inference: Defendant Outcomes



Source: North Carolina Administrative Data, 2015 – 2019

Figure 11: Randomization Inference: Measures of Attorney Effort



Source: North Carolina Administrative Data, 2015 – 2019

Table 2: Uniform Fee Pilot Fee Schedule

Case Type	Flat Fee Payment Per Case	Implicit Hours Under Hourly Schedule	Avg. Pre-Period Hours in Pilot Counties
Felonies			
Class A-D Felonies	$425	5.67	5.73
All Other Felonies	$230	3.83	4.73
Misdemeanors			
Class A1 Misdemeanors	$200	3.64	4.07
Class 1-3 Misdemeanors and Other Traffic Offenses	$185	3.36	3.30
DWI	$300	5.45	5.83

Source: Report on Model Fee Schedule March 15, 2018. North Carolina Office of Indigent Defense Services

Table 3: Summary Statistics

Variable	Pilot Counties (Treated Group)	Non-Pilot Counties (Control Group)	Difference in Means
Defendant			
Male	0.634	0.646	-0.012
Age	33.368	33.391	0.023
Asian	0.004	0.002	0.002
Black	0.213	0.371	-0.158
Hispanic	0.022	0.020	0.002
Indian	0.003	0.027	-0.024
Other Race	0.007	0.008	-0.001
White	0.744	0.566	0.178
Case			
Felony	0.231	0.213	0.018
Observations	28,316	194,854	–

Source: North Carolina Administrative Data, 2015 – 2019

Table 4: Share of Criminal Cases with Privately Retained Counsel

Dependent Variable:	Fraction of Total Cases with Private Counsel	
	All Cases	District Court Cases
Treat × Post	0.007 (0.010)	0.007 (0.010)
Observations	3,432	3,431

Source: North Carolina Criminal Records Data, January 2015 – December 2019
Notes:

1. For the results under "All Cases," I use data on cases that were in either District or Superior Court. For the results under the "District Court Cases," I limit the data to only cases in District Court.
2. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include county and month-year fixed effects. Standard errors are clustered at the county level.

Table 5: Number of Indigent Criminal Cases in Each County

Dependent Variable:	log Number of Monthly Cases per County	
	All Cases	District Court Cases
Treat × Post	-0.026 (0.033)	-0.031 (0.039)
Observations	3,432	3,431

Source: North Carolina Criminal Records Data, January 2015 – December 2019
Notes:

1. For the results under "All Cases," I use data on cases that were in either District or Superior Court. For the results under the "District Court Cases," I limit the data to only cases in District Court.
2. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include county and month-year fixed effects. Standard errors are clustered at the county level.

Table 6: Composition of Criminal Cases

Dependent Variable:	Fraction of Total Crimes by Type							
	Violent		Property		Drug		Felony	
	All	District Court	All	District Court	All	District Court	All	District Court
Treat × Post	-0.001 (0.006)	0.001 (0.005)	-0.001 (0.005)	-0.005 (0.004)	0.004 (0.005)	0.003 (0.006)	0.009 (0.008)	0.004 (0.008)
Observations	3,432	3,431	3,432	3,431	3,432	3,431	3,432	3,431

Source: North Carolina Criminal Records Data, January 2015 – December 2019
Notes:

1. For the results under "All Cases," I use data on cases that were in either District or Superior Court. For the results under the "District Court Cases," I limit the data to only cases in District Court.
2. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include county and month-year fixed effects. Standard errors are clustered at the county level.

Table 7: Impact of Flat Fee Lawyer Pay on Probability of Conviction

Dependent Var:	Conviction		Conviction on Highest Orig. Charge	
	(1)	(2)	(3)	(4)
Treat × Post	0.045**	0.045**	0.043***	0.045**
	(0.019)	(0.019)	(0.015)	(0.018)
Pre-Period Sample Mean	0.440	0.440	0.285	0.285
Demographic Controls		X		X
Observations	168,093	165,020	168,093	165,020

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table 8: Impact of Flat Fee Lawyer Pay on Probability of Guilty Plea

Dependent Var:	Guilty Plea		Guilty Plea on Highest Orig. Charge	
	(1)	(2)	(3)	(4)
Treat × Post	0.045**	0.045**	0.045***	0.047***
	(0.018)	(0.018)	(0.015)	(0.017)
Pre-Period Sample Mean	0.396	0.396	0.270	0.270
Demographic Controls		X		X
Observations	168,093	165,020	168,093	165,020

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table 9: Impact of Flat Fee Lawyer Pay on Probability of Case Dismissal and Favorable Outcome

Dependent Var:	Case Dismissal		Favorable Outcome	
	(1)	(2)	(3)	(4)
Treat × Post	-0.037**	-0.037**	-0.036**	-0.035**
	(0.017)	(0.016)	(0.015)	(0.013)
Pre-Period Sample Mean	0.539	0.539	0.695	0.695
Demographic Controls		X		X
Observations	168,093	165,020	165,020	168,093

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: "Favorable Outcome" refers to full or partial victories - specifically, case dismissals or conviction on a lower charge. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table 10: Impact of Flat Fee Lawyer Pay on Probability of Incarceration

Dependent Var:	Incarceration	
	(1)	(2)
Treat × Post	0.046***	0.048***
	(0.011)	(0.012)
Pre-Period Sample Mean	0.124	0.124
Demographic Controls		X
Observations	168,093	165,020

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table 11: Impact of Flat Fee Lawyer Pay on Hours Per Case

Dependent Var:	log of Hours Per Case	
	(1)	(2)
Treat × Post	-0.113***	-0.114***
	(0.026)	(0.025)
Pre-Period Sample Mean	3.726	3.726
Demographic Controls		X
Observations	167,702	164,638

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table 12: Impact of Flat Fee Lawyer Pay on Days to Disposition

Dependent Var:	log of Days to Disposition	
	(1)	(2)
Treat × Post	-0.415***	-0.429***
	(0.149)	(0.155)
Pre-Period Sample Mean	105.622	105.622
Demographic Controls		X
Observations	168,500	165,484

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table 13: Impact of Flat Fee Lawyer Pay on Probability of Disposing Case on Day of First Meeting with Defendant

Dependent Var:	Case Disposed on Day of First Meeting	
	(1)	(2)
Treat × Post	0.041***	0.042***
	(0.010)	(0.011)
Pre-Period Sample Mean	0.120	0.120
Demographic Controls		X
Observations	168,093	165,020

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table 14: Probability of Accepting Indigent Cases in District Court

Dependent Var:	Probability of Accepting Indigent Cases in District Court		
	All Lawyers Accepting Indigent Cases in Pre-Period	With Consistent Private Casework	No Consistent Private Casework
Treat × Post	-0.004	-0.089***	-0.057
	(0.038)	(0.031)	(0.043)
Observations	27,132	12,705	17,115

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: The data used in this analysis has been collapsed to the attorney-county-quarter level. "Consistent private casework" is defined as working privately retained cases for at least half of the counties over the entire sample period. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer and quarter-year fixed effects. Standard errors are clustered at the county level.

Table 15: Quarterly Cases Accepted by Lawyer

Dependent Var:	log of Quarterly Cases Accepted
Treat × Post	0.167
	(0.134)
Pre-Period Sample Mean	11.781
Observations	17,766

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: The data used in this analysis has been collapsed to the attorney-county-quarter level, and includes only lawyers that accepted indigent cases for more than half of the quarters in the sample. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and quarter-year fixed effects. Standard errors are clustered at the county level.

Table 16: Lawyer Composition

Dependent Var:	Number of Lawyers Accepting Indigent Cases, by County	Average Lawyer Years of Experience, by County
Treat × Post	-2.903	-0.026
	(1.774)	(0.132)
Observations	1,558	1,553

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: The data used in this analysis has been collapsed to the county-quarter level. Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include county and quarter-year fixed effects. Standard errors are clustered at the county level.

Appendix

A.1 Simple Theoretical Model

The state of North Carolina contracts with private lawyers to provide indigent defense services. Lawyers that choose to join appointment lists are matched to indigent cases through a system of rotation, and must accept any case that they are assigned to.

The payoff of lawyer j in indigent case i is given by:

$$u_{ij} = W_F + (W_H + \theta_j)H_{ij} - \gamma\frac{H_{ij}^2}{2}$$

where W_F is a flat component of compensation, W_H is an hourly component of compensation, θ_j is lawyer j's given level of prosocial motivation, H_{ij} is the number of hours that lawyer j chooses to spend on case i, and γ is the cost of effort in dollars.

There are three components to lawyer's payoff function. First, lawyers obtain utility from financial compensation for accepting each indigent case. Under flat fees, lawyers earn a fixed W_F for each case, an amount independent of hours spent. Under hourly pay, lawyers earn W_H for each hour they spend on each case. Both W_F and W_H are taken as given. The payoff function is flexible for the compensation structure in place; $W_H = 0$ under flat fees, and $W_F = 0$ under hourly pay. Second, lawyers obtain utility from "warm glow" motivation, defined similarly as in Besley & Ghatak (2005, 2018), for providing indigent defense as a public service. The utility from warm glow motivation is linear in hours, and depends on each lawyer's given level of prosocial motivation θ_j. I assume there are N lawyer types, such that $\theta_N > \theta_{N-1} > ... > \theta_1 > 0$. Third, lawyers incur a cost of effort $C(H)$ for time spent on indigent cases, where $CH \geq 0 \; \forall H$, $C'(H) > 0$, and $C''(H) > 0$. For simplicity, I assume that $C(H) = \gamma\frac{H^2}{2}$, where γ is the dollar cost of effort.

I use this setup to make the following predictions about the impact of switching from hourly pay to a flat fee per case on lawyer's intensive margin on effort in indigent cases and the selection of lawyers on the extensive margin:

Proposition 1: Under flat fees, lawyers have no financial incentive on the margin to spend time on indigent cases. As a result, lawyers determine the hours they spend on indigent cases only based on their underlying level of prosocial motivation $\theta_j > 0$.

Further, all lawyers will spend less time on a given indigent case under flat fees than they would under hourly pay; however, the percentage decrease in hours is greater for those with lower θ_j.

Proof of Proposition 1: The first order condition of u_{ij} with respect to H_{ij} yields $H_{ij}^* = \frac{1}{\gamma}(W_H + \theta_j)$. Under flat fees, $W_H = 0$, so a lawyer's optimal hours depends only on her given level of θ_j.

It is clear that H_{ij}^* is lower under flat fees ($W_H = 0$) than it is under hourly pay ($W_H > 0$). The percentage decrease in H_{ij}^* when moving from hourly pay to flat fees is:

$$|\%\Delta H| = \left| \frac{\frac{1}{\gamma}(\theta_j) - \frac{1}{\gamma}(W_H + \theta_j)}{\frac{1}{\gamma}(W_H + \theta_j)} \right| = \left| \frac{-W_H}{W_H + \theta_j} \right|$$

which is decreasing in θ_j.

The lawyer's payoff function can be used to construct a lawyer's participation constraint:

$$W_F + (W_H + \theta_j)H_{ij} - \gamma \frac{H_{ij}^2}{2} \geq \underline{u}_j$$

where $\underline{u}_j$ is the payoff from lawyer j's outside option. Lawyers will accept indigent case only if the payoff from doing so exceeds the payoff from their outside option.

Proposition 2: There exists an outside option with payoff $\underline{u}^C$ such that lawyers with $\underline{u}^C$ are just as willing to accept indigent cases under flat fees as they are under hourly pay.

Proof of Proposition 2: The optimal choice of hours derived above can be substituted into the participation constraint to get:

$$W_F + \frac{1}{2\gamma}(W_H + \theta_j)^2 \geq \underline{u}_j$$

which can be rearranged as:

$$\theta_j \geq \sqrt{2\gamma(\underline{u}_j - W_F)} - W_H$$

This expression describes how high a lawyer's level of prosocial motivation must be for her to be willing to accept an indigent case, given the compensation for indigent cases and the payoff of her outside option. Denote $\sqrt{2\gamma(\underline{u}_j - W_F)} - W_H$ as the *participation threshold*. Under flat fees, the participation constraint becomes $\theta_j \geq \sqrt{2\gamma(\underline{u}_j - W_F)}$; under hourly pay, it becomes $\theta_j \geq \sqrt{2\gamma(\underline{u}_j)} - W_H$. We want to know if there is a $\underline{u}^C$ such that lawyers are just as willing to accept indigent cases under flat fees as they are under

hourly pay, i.e. the participation thresholds for the two compensation structures are equal:

$$\sqrt{2\gamma(\underline{u}^C - W_F)} = \sqrt{2\gamma(\underline{u}^C)} - W_H$$

Through algebra, we obtain:

$$\underline{u}^C = \left(\frac{2\gamma W_F + W_H^2}{2W_H\sqrt{2\gamma}} \right)^2$$

Proposition 3: Among those who choose to take indigent cases (i.e. for whom the participation constraint is satisfied), lawyers with "good" outside options $\underline{u}^G > \underline{u}^C$ have higher levels of prosocial motivation than those with "bad" outside options $\underline{u}^B < \underline{u}^C$.

Proof of Proposition 3: Under flat fees, the participation constraint is $\theta_j \geq \sqrt{2\gamma(\underline{u}_j - W_F)}$, and $\underline{u}^G > \underline{u}^B$ implies $\sqrt{2\gamma(\underline{u}^G - W_F)} > \sqrt{2\gamma(\underline{u}^B - W_F)}$, i.e. the participation threshold is higher for lawyers with good outside options. Therefore, a higher θ_j is required to satisfy the participation constraint for lawyers with $\underline{u}^G$, compared to lawyers with $\underline{u}^B$; thus, lawyers with $\underline{u}^G$ will have, on average, a higher θ_j than those with $\underline{u}^B$.

Similarly, under hourly pay, the participation constraint is $\theta_j \geq \sqrt{2\gamma(\underline{u}_j)} - W_H$, and $\underline{u}^G > \underline{u}^B$ implies $\sqrt{2\gamma(\underline{u}^G)} - W_H > \sqrt{2\gamma(\underline{u}^B)} - W_H$. We reach the same conclusion as the case under flat fees above.

Proposition 4: Among lawyers with an outside option with payoff $\underline{u}^G > \underline{u}^C$ who choose to accept indigent cases under hourly pay, there are some lawyers for whom the participation constraint is no longer satisfied under flat fees. Therefore, some lawyers with $\underline{u}^G > \underline{u}^C$ who accepted indigent cases under hourly pay will no longer do so under flat fees.

Proof of Proposition 4: Following similar steps as in Proposition 2, we find that if $\underline{u}^G \geq \underline{u}^C$, then $\sqrt{2\gamma(\underline{u}^G - W_F)} \geq \sqrt{2\gamma(\underline{u}^G)} - W_H$, i.e. for lawyers with good outside options, the participation threshold under flat fees is higher than it is under hourly pay. Therefore, for lawyers with outside option $\underline{u}^G$, a higher θ_j is required to satisfy the participation constraint under flat fees than under hourly pay.

Proposition 5: Lawyers with an outside option $\underline{u}^B < \underline{u}^C$ who choose to accept indigent cases under hourly pay will continue to do so under flat fees. However, some lawyers with $\underline{u}^B < \underline{u}^C$ who chose not to accept indigent cases under hourly pay due to low θ_j will be willing to accept indigent cases under flat fees.

Proof of Proposition 5: Following similar steps as in Proposition 2, we find that if $\underline{u}^B < \underline{u}^C$, then $\sqrt{2\gamma(\underline{u}^B - W_F)} < \sqrt{2\gamma(\underline{u}^B)} - W_H$, i.e. the participation threshold under flat fees is lower than it is under hourly pay. Therefore, for lawyers with outside option $\underline{u}^B$, a lower θ_j is required to satisfy the participation constraint under flat fees than under hourly pay.

Proposition 6: Under flat fees, the pool of lawyers choosing to accept indigent cases will be, on average, less altruistic than it is under hourly pay.

Proof of Proposition 6: Follows from Propositions 4 and 5.

A.2 Appendix Tables and Figures

Table A1: Heterogeneity by Lawyer Gender: Conviction

	Dependent Var: Conviction					
	Main Result		Male Lawyers		Female Lawyers	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.045**	0.045**	0.048*	0.048**	0.031*	0.036**
	(0.019)	(0.019)	(0.025)	(0.024)	(0.017)	(0.017)
Pre-Period Sample Mean	0.440	0.440	0.440	0.440	0.440	0.440
Demographic Controls		X		X		X
Observations	168,093	165,020	125,922	123,709	42,171	41,311

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A2: Heterogeneity by Lawyer Gender: Conviction on Highest Original Charge

Dependent Var: Conviction on Highest Original Charge						
	Main Result		Male Lawyers		Female Lawyers	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.043***	0.045**	0.046**	0.047**	0.030***	0.034***
	(0.015)	(0.018)	(0.020)	(0.023)	(0.010)	(0.011)
Pre-Period Sample Mean	0.255	0.255	0.255	0.255	0.255	0.255
Demographic Controls		X		X		X
Observations	210,413	207,199	159,473	157,147	50,940	50,052

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A3: Heterogeneity by Lawyer Gender: Guilty Plea

Dependent Var: Guilty Plea						
	Main Result		Male Lawyers		Female Lawyers	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.045**	0.045**	0.050**	0.049**	0.025	0.029*
	(0.018)	(0.018)	(0.024)	(0.024)	(0.017)	(0.017)
Pre-Period Sample Mean	0.396	0.396	0.396	0.396	0.396	0.396
Demographic Controls		X		X		X
Observations	168,093	165,020	125,922	123,709	42,171	41,311

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A4: Heterogeneity by Lawyer Gender: Guilty Plea on Highest Original Charge

Dependent Var: Guilty Plea on Highest Original Charge						
	Main Result		Male Lawyers		Female Lawyers	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.045***	0.047***	0.050**	0.051**	0.024***	0.028***
	(0.015)	(0.017)	(0.019)	(0.022)	(0.009)	(0.010)
Pre-Period Sample Mean	0.270	0.270	0.270	0.270	0.270	0.270
Demographic Controls		X		X		X
Observations	168,093	165,020	125,922	123,709	42,171	41,311

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A5: Heterogeneity by Lawyer Gender: Case Dismissal

Dependent Var: Case Dismissal						
	Main Result		Male Lawyers		Female Lawyers	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.037**	-0.037**	-0.039*	-0.038*	-0.029*	-0.032*
	(0.017)	(0.016)	(0.022)	(0.021)	(0.017)	(0.018)
Pre-Period Sample Mean	0.539	0.539	0.539	0.539	0.539	0.539
Demographic Controls		X		X		X
Observations	168,093	165,020	125,922	123,709	42,171	41,311

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A6: Heterogeneity by Lawyer Gender: Case Dismissal or Conviction on Lower Charge

Dependent Var: Case Dismissal or Conviction on Lower Charge						
	Main Result		Male Lawyers		Female Lawyers	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.035**	-0.036**	-0.037**	-0.037*	-0.028**	-0.030**
	(0.013)	(0.015)	(0.018)	(0.020)	(0.012)	(0.012)
Pre-Period Sample Mean	0.695	0.695	0.695	0.695	0.695	0.695
Demographic Controls		X		X		X
Observations	168,093	165,020	125,922	123,709	42,171	41,311

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A7: Heterogeneity by Lawyer Gender: Incarceration

Dependent Var: Incarceration						
	Main Result		Male Lawyers		Female Lawyers	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.046***	0.048***	0.050***	0.050***	0.038***	0.041***
	(0.011)	(0.012)	(0.015)	(0.015)	(0.011)	(0.012)
Pre-Period Sample Mean	0.124	0.124	0.124	0.124	0.124	0.124
Demographic Controls		X		X		X
Observations	168,093	165,020	125,922	123,709	42,171	41,311

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A8: Heterogeneity by Lawyer Gender: Hours Per Case

Dependent Var: log of Hours Per Case						
	Main Result		Male Lawyers		Female Lawyers	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.113***	-0.114***	-0.139***	-0.140***	-0.024	-0.023
	(0.026)	(0.025)	(0.026)	(0.025)	(0.062)	(0.061)
Pre-Period Sample Mean	3.726	3.726	3.726	3.726	3.726	3.726
Demographic Controls		X		X		X
Observations	167,702	164,638	125,596	123,389	42,106	41,249

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A9: Heterogeneity by Lawyer Gender: Days to Disposition

Dependent Var: log of Days to Disposition						
	Main Result		Male Lawyers		Female Lawyers	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.415***	-0.427***	-0.535***	-0.540***	0.012	-0.017
	(0.152)	(0.158)	(0.168)	(0.179)	(0.120)	(0.114)
Pre-Period Sample Mean	105.622	105.622	105.622	105.622	105.622	105.622
Demographic Controls		X		X		X
Observations	168,093	165,020	125,922	123,709	42,171	41,311

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A10: Heterogeneity by Lawyer Gender: Case Disposed on Day of First Meeting with Defendant

Dependent Var: Disposed Case on Day of First Meeting with Defendant						
	Main Result		Male Lawyers		Female Lawyers	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.041***	0.042***	0.049***	0.050***	0.011	0.013*
	(0.010)	(0.011)	(0.012)	(0.013)	(0.007)	(0.007)
Pre-Period Sample Mean	0.120	0.120	0.120	0.120	0.120	0.120
Demographic Controls		X		X		X
Observations	168,093	165,020	125,922	123,709	42,171	41,311

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A11: Heterogeneity by Defendant Gender: Conviction

Dependent Var: Conviction						
	Main Result		Male Defendants		Female Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.045**	0.045**	0.055***	0.054***	0.027	0.029
	(0.019)	(0.019)	(0.020)	(0.020)	(0.019)	(0.018)
Pre-Period Sample Mean	0.440	0.440	0.440	0.440	0.440	0.440
Demographic Controls		X		X		X
Observations	168,093	165,020	106,177	104,800	61,780	60,078

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A12: Heterogeneity by Defendant Gender: Conviction on Highest Original Charge

Dependent Var:	Conviction on Highest Original Charge					
	Main Result		Male Defendants		Female Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.043***	0.045**	0.054***	0.056***	0.024*	0.024
	(0.015)	(0.018)	(0.018)	(0.020)	(0.014)	(0.018)
Pre-Period Sample Mean	0.285	0.285	0.285	0.285	0.285	0.285
Demographic Controls		X		X		X
Observations	168,093	165,020	106,177	104,800	61,780	60,078

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A13: Heterogeneity by Defendant Gender: Guilty Plea

Dependent Var:	Guilty Plea					
	Main Result		Male Defendants		Female Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.045**	0.045**	0.054***	0.053***	0.029	0.031
	(0.018)	(0.018)	(0.019)	(0.019)	(0.020)	(0.020)
Pre-Period Sample Mean	0.396	0.396	0.396	0.396	0.396	0.396
Demographic Controls		X		X		X
Observations	168,093	165,020	106,177	104,800	61,780	60,078

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A14: Heterogeneity by Defendant Gender: Guilty Plea on Highest Original Charge

Dependent Var: Guilty Plea on Highest Original Charge						
	Main Result		Male Defendants		Female Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.045***	0.047***	0.055***	0.058***	0.027**	0.027
	(0.015)	(0.017)	(0.017)	(0.019)	(0.013)	(0.017)
Pre-Period Sample Mean	0.270	0.270	0.270	0.270	0.270	0.270
Demographic Controls		X		X		X
Observations	168,093	165,020	106,177	104,800	61,780	60,078

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A15: Heterogeneity by Defendant Gender: Case Dismissal

Dependent Var: Case Dismissal						
	Main Result		Male Defendants		Female Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.037**	-0.037**	-0.046***	-0.046***	-0.021	-0.020
	(0.017)	(0.016)	(0.017)	(0.017)	(0.018)	(0.016)
Pre-Period Sample Mean	0.539	0.539	0.539	0.539	0.539	0.539
Demographic Controls		X		X		X
Observations	168,093	165,020	106,177	104,800	61,780	60,078

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A16: Heterogeneity by Defendant Gender: Case Dismissal or Conviction on Lower Charge

Dependent Var: Case Dismissal or Conviction on Lower Charge						
	Main Result		Male Defendants		Female Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.035**	-0.036**	-0.045***	-0.048***	-0.018	-0.016
	(0.013)	(0.015)	(0.016)	(0.017)	(0.013)	(0.016)
Pre-Period Sample Mean	0.695	0.695	0.695	0.695	0.695	0.695
Demographic Controls		X		X		X
Observations	168,093	165,020	106,177	104,800	61,780	60,078

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A17: Heterogeneity by Defendant Gender: Incarceration

Dependent Var: Incarceration						
	Main Result		Male Defendants		Female Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.046***	0.048***	0.060***	0.062***	0.023*	0.024*
	(0.011)	(0.012)	(0.011)	(0.012)	(0.013)	(0.014)
Pre-Period Sample Mean	0.124	0.124	0.124	0.124	0.124	0.124
Demographic Controls		X		X		X
Observations	168,093	165,020	106,177	104,800	61,780	60,078

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A18: Heterogeneity by Defendant Gender: Hours Per Case

Dependent Var: log of Hours Per Case						
	Main Result		Male Defendants		Female Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.113***	-0.114***	-0.107***	-0.109***	-0.124***	-0.123***
	(0.026)	(0.025)	(0.028)	(0.028)	(0.023)	(0.020)
Pre-Period Sample Mean	3.726	3.726	3.726	3.726	3.726	3.726
Demographic Controls		X		X		X
Observations	167,702	164,638	105,938	104,564	61,630	59,934

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A19: Heterogeneity by Defendant Gender: Days to Disposition

Dependent Var: log of Days to Disposition						
	Main Result		Male Defendants		Female Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.415***	-0.427***	-0.457***	-0.473***	-0.337**	-0.341**
	(0.152)	(0.158)	(0.167)	(0.169)	(0.135)	(0.147)
Pre-Period Sample Mean	105.622	105.622	105.622	105.622	105.622	105.622
Demographic Controls		X		X		X
Observations	168,093	165,020	106,177	104,800	61,780	60,078

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A20: Heterogeneity by Defendant Gender: Case Disposed on Day of First Meeting with Defendant

Dependent Var: Disposed Case on Day of First Meeting with Defendant						
	Main Result		Male Defendants		Female Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.041***	0.042***	0.046***	0.048***	0.031***	0.031***
	(0.010)	(0.011)	(0.012)	(0.012)	(0.009)	(0.010)
Pre-Period Sample Mean	0.120	0.120	0.120	0.120	0.120	0.120
Demographic Controls		X		X		X
Observations	168,093	165,020	106,177	104,800	61,780	60,078

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A21: Heterogeneity by Defendant Race: Conviction

Dependent Var: Conviction						
	Main Result		White Defendants		Minority Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.045**	0.045**	0.040**	0.041**	0.057**	0.056**
	(0.019)	(0.019)	(0.017)	(0.017)	(0.027)	(0.027)
Pre-Period Sample Mean	0.440	0.440	0.440	0.440	0.440	0.440
Demographic Controls		X		X		X
Observations	168,093	165,020	98,147	96,195	69,799	68,680

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A22: Heterogeneity by Defendant Race: Conviction on Highest Original Charge

Dependent Var:	Conviction on Highest Original Charge					
	Main Result		White Defendants		Minority Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.043***	0.045**	0.037**	0.039**	0.055***	0.061***
	(0.015)	(0.018)	(0.015)	(0.017)	(0.018)	(0.019)
Pre-Period Sample Mean	0.285	0.285	0.285	0.285	0.285	0.285
Demographic Controls		X		X		X
Observations	168,093	165,020	98,147	96,195	69,799	68,680

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A23: Heterogeneity by Defendant Race: Guilty Plea

Dependent Var:	Guilty Plea					
	Main Result		White Defendants		Minority Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.045**	0.045**	0.040**	0.041**	0.057**	0.055**
	(0.018)	(0.018)	(0.018)	(0.018)	(0.024)	(0.025)
Pre-Period Sample Mean	0.396	0.396	0.396	0.396	0.396	0.396
Demographic Controls		X		X		X
Observations	168,093	165,020	98,147	96,195	69,799	68,680

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A24: Heterogeneity by Defendant Race: Guilty Plea on Highest Original Charge

Dependent Var: Guilty Plea on Highest Original Charge						
	Main Result		White Defendants		Minority Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.045***	0.047***	0.040***	0.042**	0.055***	0.060***
	(0.015)	(0.017)	(0.014)	(0.017)	(0.017)	(0.019)
Pre-Period Sample Mean	0.270	0.270	0.270	0.270	0.270	0.270
Demographic Controls		X		X		X
Observations	168,093	165,020	98,147	96,195	69,799	68,680

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A25: Heterogeneity by Defendant Race: Case Dismissal

Dependent Var: Case Dismissal						
	Main Result		White Defendants		Minority Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.037**	-0.037**	-0.032**	-0.031**	-0.047*	-0.046*
	(0.017)	(0.016)	(0.015)	(0.014)	(0.028)	(0.027)
Pre-Period Sample Mean	0.539	0.539	0.539	0.539	0.539	0.539
Demographic Controls		X		X		X
Observations	168,093	165,020	98,147	96,195	69,799	68,680

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A26: Heterogeneity by Defendant Race: Case Dismissal or Conviction on Lower Charge

Dependent Var: Case Dismissal or Conviction on Lower Charge						
	Main Result		White Defendants		Minority Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.035**	-0.036**	-0.029**	-0.029*	-0.045**	-0.051***
	(0.013)	(0.015)	(0.013)	(0.015)	(0.018)	(0.018)
Pre-Period Sample Mean	0.695	0.695	0.695	0.695	0.695	0.695
Demographic Controls		X		X		X
Observations	168,093	165,020	98,147	96,195	69,799	68,680

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A27: Heterogeneity by Defendant Race: Incarceration

Dependent Var: Incarceration						
	Main Result		White Defendants		Minority Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	0.046***	0.048***	0.043***	0.045***	0.048***	0.049***
	(0.011)	(0.012)	(0.015)	(0.016)	(0.007)	(0.007)
Pre-Period Sample Mean	0.124	0.124	0.124	0.124	0.124	0.124
Demographic Controls		X		X		X
Observations	168,093	165,020	98,147	96,195	69,799	68,680

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A28: Heterogeneity by Defendant Race: Hours Per Case

Dependent Var: log of Hours Per Case						
	Main Result		White Defendants		Minority Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.113***	-0.114***	-0.118***	-0.119***	-0.100***	-0.103***
	(0.026)	(0.025)	(0.025)	(0.023)	(0.035)	(0.034)
Pre-Period Sample Mean	3.726	3.726	3.726	3.726	3.726	3.726
Demographic Controls		X		X		X
Observations	167,702	164,638	97,840	95,896	69,715	68,597

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A29: Heterogeneity by Defendant Race: Days to Disposition

Dependent Var: log of Days to Disposition						
	Main Result		White Defendants		Minority Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.424***	-0.428***	-0.409***	-0.412***	-0.469**	-0.477**
	(0.144)	(0.146)	(0.132)	(0.133)	(0.190)	(0.190)
Pre-Period Sample Mean	105.622	105.622	105.622	105.622	105.622	105.622
Demographic Controls		X		X		X
Observations	210,413	207,199	124,657	122,608	85,616	84,454

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A30: Heterogeneity by Defendant Race: Case Disposed on Day of First Meeting with Defendant

Dependent Var: Disposed Case on Day of First Meeting with Defendant						
	Main Result		White Defendants		Minority Defendants	
	(1)	(2)	(3)	(4)	(5)	(6)
Treat × Post	-0.415***	-0.427***	-0.364***	-0.377***	-0.538**	-0.559**
	(0.152)	(0.158)	(0.124)	(0.132)	(0.236)	(0.235)
Pre-Period Sample Mean	0.113	0.113	0.113	0.113	0.113	0.113
Demographic Controls		X		X		X
Observations	168,093	165,020	98,147	96,195	69,799	68,680

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A31: Robustness to Alternative Specifications: Conviction

Dependent Variable: Conviction														
	Main Results		County FE No Lawyer FE		Lawyer FE No County FE		Lawyer × County FE		PAC Counties Only		Balanced Panel		Intent-to-Treat Analysis	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Treat × Post	0.045** (0.019)	0.045** (0.019)	0.038* (0.020)	0.038* (0.019)	0.051*** (0.019)	0.053*** (0.018)	0.047** (0.019)	0.048** (0.019)	0.042** (0.019)	0.041** (0.019)	0.046** (0.019)	0.046** (0.019)	0.037** (0.017)	0.034** (0.016)
Pre-Period Sample Mean	0.440	0.440	0.440	0.440	0.440	0.440	0.440	0.440	0.440	0.440	0.440	0.440	0.440	0.440
Demog. Controls		X		X		X		X		X		X		X
Lawyer FE	X	X	X	X					X	X	X	X	X	X
County FE	X	X			X	X			X	X	X	X	X	X
Lawyer × County FE							X	X						
PAC Counties Only									X	X				
Balanced Panel											X	X		
ITT Analysis													X	X
Observations	168,093	165,020	168,192	165,122	168,093	165,020	167,792	164,721	124,550	122,206	126,032	123,740	175,442	172,242

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A32: Robustness to Alternative Specifications: Conviction on Highest Charge

Dependent Variable: Conviction														
	Main Results		County FE No Lawyer FE		Lawyer FE No County FE		Lawyer × County FE		PAC Counties Only		Balanced Panel		Intent-to-Treat Analysis	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Treat × Post	0.043*** (0.015)	0.045** (0.018)	0.040** (0.016)	0.041** (0.018)	0.049*** (0.016)	0.050*** (0.018)	0.043*** (0.016)	0.046** (0.018)	0.039** (0.016)	0.041** (0.018)	0.040** (0.016)	0.044** (0.019)	0.028** (0.013)	0.032** (0.015)
Pre-Period Sample Mean	0.285	0.285	0.285	0.285	0.285	0.285	0.285	0.285	0.285	0.285	0.285	0.285	0.285	0.285
Demog. Controls		X		X		X		X		X		X		X
Lawyer FE	X	X	X	X					X	X	X	X	X	X
County FE	X	X			X	X			X	X	X	X	X	X
Lawyer × County FE							X	X						
PAC Counties Only									X	X				
Balanced Panel											X	X		
ITT Analysis													X	X
Observations	168,093	165,020	168,192	165,122	168,093	165,020	167,792	164,721	124,550	122,206	126,032	123,740	175,442	172,242

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A33: Robustness to Alternative Specifications: Guilty Plea

Dependent Variable: Conviction														
	Main Results		County FE No Lawyer FE		Lawyer FE No County FE		Lawyer × County FE		PAC Counties Only		Balanced Panel		Intent-to-Treat Analysis	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Treat × Post	0.045**	0.045**	0.039**	0.039**	0.053***	0.054***	0.046**	0.046**	0.042**	0.041**	0.044**	0.044**	0.036**	0.033*
	(0.018)	(0.018)	(0.019)	(0.019)	(0.018)	(0.018)	(0.019)	(0.019)	(0.019)	(0.019)	(0.019)	(0.019)	(0.017)	(0.017)
Pre-Period Sample Mean	0.396	0.396	0.396	0.396	0.396	0.396	0.396	0.396	0.396	0.396	0.396	0.396	0.396	0.396
Demog. Controls		X		X		X		X		X		X		X
Lawyer FE	X	X	X	X					X	X	X	X	X	X
County FE	X	X			X	X			X	X	X	X	X	X
Lawyer × County FE							X	X						
PAC Counties Only									X	X				
Balanced Panel											X	X		
ITT Analysis													X	X
Observations	168,093	165,020	168,192	165,122	168,093	165,020	167,792	164,721	124,550	122,206	126,032	123,740	175,442	172,242

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A34: Robustness to Alternative Specifications: Guilty Plea on Highest Charge

Dependent Variable: Conviction														
	Main Results		County FE No Lawyer FE		Lawyer FE No County FE		Lawyer × County FE		PAC Counties Only		Balanced Panel		Intent-to-Treat Analysis	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Treat × Post	0.045*** (0.015)	0.047*** (0.017)	0.042*** (0.015)	0.043** (0.017)	0.051*** (0.016)	0.052*** (0.017)	0.046*** (0.015)	0.048*** (0.017)	0.041*** (0.015)	0.043** (0.017)	0.042*** (0.015)	0.045** (0.018)	0.030** (0.013)	0.033** (0.015)
Pre-Period Sample Mean	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270
Demog. Controls		X		X		X		X		X		X		X
Lawyer FE	X	X	X	X					X	X	X	X	X	X
County FE	X	X			X	X			X	X	X	X	X	X
Lawyer × County FE							X	X						
PAC Counties Only									X	X				
Balanced Panel											X	X		
ITT Analysis													X	X
Observations	168,093	165,020	168,192	165,122	168,093	165,020	167,792	164,721	124,550	122,206	126,032	123,740	175,442	172,242

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A35: Robustness to Alternative Specifications: Case Dismissal

Dependent Variable: Conviction														
	Main Results		County FE No Lawyer FE		Lawyer FE No County FE		Lawyer × County FE		PAC Counties Only		Balanced Panel		Intent-to-Treat Analysis	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Treat × Post	-0.037** (0.017)	-0.037** (0.016)	-0.030* (0.017)	-0.030* (0.017)	-0.041** (0.017)	-0.043** (0.017)	-0.040** (0.017)	-0.039** (0.016)	-0.034* (0.017)	-0.032* (0.016)	-0.039** (0.017)	-0.037** (0.016)	-0.025 (0.016)	-0.021 (0.015)
Pre-Period Sample Mean	0.539	0.539	0.539	0.539	0.539	0.539	0.539	0.539	0.539	0.539	0.539	0.539	0.539	0.539
Demog. Controls		X		X		X		X		X		X		X
Lawyer FE	X	X	X	X					X	X	X	X	X	X
County FE	X	X			X	X			X	X	X	X	X	X
Lawyer × County FE							X	X						
PAC Counties Only									X	X				
Balanced Panel											X	X		
ITT Analysis													X	X
Observations	168,093	165,020	168,192	165,122	168,093	165,020	167,792	164,721	124,550	122,206	126,032	123,740	175,442	172,242

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A36: Robustness to Alternative Specifications: Case Dismissal or Conviction on Highest Charge

Dependent Variable: Conviction														
	Main Results		County FE No Lawyer FE		Lawyer FE No County FE		Lawyer × County FE		PAC Counties Only		Balanced Panel		Intent-to-Treat Analysis	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Treat × Post	-0.035** (0.013)	-0.036** (0.015)	-0.032** (0.014)	-0.033** (0.016)	-0.039*** (0.015)	-0.040** (0.016)	-0.036** (0.014)	-0.037** (0.015)	-0.031** (0.014)	-0.032** (0.015)	-0.032** (0.014)	-0.035** (0.016)	-0.012 (0.012)	-0.019 (0.013)
Pre-Period Sample Mean	0.695	0.695	0.695	0.695	0.695	0.695	0.695	0.695	0.695	0.695	0.695	0.695	0.695	0.695
Demog. Controls		X		X		X		X		X		X		X
Lawyer FE	X	X	X	X					X	X	X	X	X	X
County FE	X	X			X	X			X	X	X	X	X	X
Lawyer × County FE							X	X						
PAC Counties Only									X	X				
Balanced Panel											X	X		
ITT Analysis													X	X
Observations	168,093	165,020	168,192	165,122	168,093	165,020	167,792	164,721	124,550	122,206	126,032	123,740	181,473	172,242

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A37: Robustness to Alternative Specifications: Incarceration

Dependent Variable: Conviction														
	Main Results		County FE No Lawyer FE		Lawyer FE No County FE		Lawyer × County FE		PAC Counties Only		Balanced Panel		Intent-to-Treat Analysis	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Treat × Post	0.046*** (0.011)	0.048*** (0.012)	0.044*** (0.013)	0.045*** (0.013)	0.041*** (0.011)	0.043*** (0.012)	0.047*** (0.011)	0.049*** (0.012)	0.046*** (0.011)	0.047*** (0.012)	0.050*** (0.012)	0.052*** (0.013)	0.041*** (0.011)	0.043*** (0.012)
Pre-Period Sample Mean	0.124	0.124	0.124	0.124	0.124	0.124	0.124	0.124	0.124	0.124	0.124	0.124	0.124	0.124
Demog. Controls		X		X		X		X		X		X		X
Lawyer FE	X	X	X	X					X	X	X	X	X	X
County FE	X	X			X	X			X	X	X	X	X	X
Lawyer × County FE							X	X						
PAC Counties Only									X	X				
Balanced Panel											X	X		
ITT Analysis													X	X
Observations	168,093	165,020	168,192	165,122	168,093	165,020	167,792	164,721	124,550	122,206	126,032	123,740	175,442	172,242

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A38: Robustness to Alternative Specifications: Hours Per Case

Dependent Variable: Conviction														
	Main Results		County FE No Lawyer FE		Lawyer FE No County FE		Lawyer × County FE		PAC Counties Only		Balanced Panel		Intent-to-Treat Analysis	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Treat × Post	-0.113*** (0.026)	-0.114*** (0.025)	-0.113*** (0.030)	-0.114*** (0.028)	-0.108*** (0.024)	-0.108*** (0.023)	-0.117*** (0.027)	-0.118*** (0.025)	-0.121*** (0.026)	-0.123*** (0.024)	-0.117*** (0.029)	-0.119*** (0.028)	-0.089*** (0.019)	-0.090*** (0.019)
Pre-Period Sample Mean	3.726	3.726	3.726	3.726	3.726	3.726	3.726	3.726	3.726	3.726	3.726	3.726	3.726	3.726
Demog. Controls		X		X		X		X		X		X		X
Lawyer FE	X	X	X	X					X	X	X	X	X	X
County FE	X	X			X	X			X	X	X	X	X	X
Lawyer × County FE							X	X						
PAC Counties Only									X	X				
Balanced Panel											X	X		
ITT Analysis													X	X
Observations	167,702	164,638	167,799	164,738	167,702	164,638	167,403	164,341	124,162	121,827	125,706	123,421	181,017	171,816

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A39: Robustness to Alternative Specifications: log of Days to Disposition

Dependent Variable: Conviction														
	Main Results		County FE No Lawyer FE		Lawyer FE No County FE		Lawyer × County FE		PAC Counties Only		Balanced Panel		Intent-to-Treat Analysis	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Treat × Post	-0.415*** (0.152)	-0.427*** (0.158)	-0.431** (0.183)	-0.450** (0.186)	-0.374*** (0.139)	-0.381** (0.146)	-0.429*** (0.156)	-0.442*** (0.163)	-0.448*** (0.153)	-0.466*** (0.160)	-0.405** (0.169)	-0.424** (0.176)	-0.330** (0.162)	-0.350** (0.175)
Pre-Period Sample Mean	105.622	105.622	105.622	105.622	105.622	105.622	105.622	105.622	105.622	105.622	105.622	105.622	105.622	105.622
Demog. Controls		X		X		X		X		X		X		X
Lawyer FE	X	X	X	X					X	X	X	X	X	X
County FE	X	X			X	X			X	X	X	X	X	X
Lawyer × County FE							X	X						
PAC Counties Only									X	X				
Balanced Panel											X	X		
ITT Analysis													X	X
Observations	168,093	165,020	168,192	165,122	168,093	165,020	167,792	164,721	124,550	122,206	126,032	123,740	181,473	172,242

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.

Table A40: Robustness to Alternative Specifications: Case Disposed on Day of First Meeting with Defendant

Dependent Variable: Conviction														
	Main Results		County FE No Lawyer FE		Lawyer FE No County FE		Lawyer × County FE		PAC Counties Only		Balanced Panel		Intent-to-Treat Analysis	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
Treat × Post	0.041*** (0.010)	0.042*** (0.011)	0.040*** (0.015)	0.042*** (0.015)	0.035*** (0.010)	0.035*** (0.011)	0.042*** (0.010)	0.043*** (0.011)	0.043*** (0.010)	0.044*** (0.011)	0.041*** (0.011)	0.042*** (0.012)	0.034*** (0.013)	0.035** (0.013)
Pre-Period Sample Mean	0.120	0.120	0.120	0.120	0.120	0.120	0.120	0.120	0.120	0.120	0.120	0.120	0.120	0.120
Demog. Controls		X		X		X		X		X		X		X
Lawyer FE	X	X	X	X					X	X	X	X	X	X
County FE	X	X			X	X			X	X	X	X	X	X
Lawyer × County FE							X	X						
PAC Counties Only									X	X				
Balanced Panel											X	X		
ITT Analysis													X	X
Observations	168,093	165,020	168,192	165,122	168,093	165,020	167,792	164,721	124,550	122,206	126,032	123,740	181,473	172,242

Source: North Carolina Administrative Data, January 2015 – December 2019
Note: Significance levels at the 1%, 5%, and 10% levels are denoted by ***, **, and *, respectively. All specifications include lawyer, county, and month-year fixed effects. The second specification includes indicator variables for defendant race, defendant gender, and the severity of the highest original charge. Standard errors are clustered at the county level.