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How Much Difference Does the Lawyer Make?

The Effect of Defense Counsel on Murder Case Outcomes

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Preface

About this Document

This working paper describes the results of a study to examine the effect of defense counsel on outcomes in murder prosecutions in Philadelphia. It was funded by Award Number 2009-IJ-0013, awarded by the National Institute of Justice, Office of Justice Programs. The opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the Department of Justice. The paper should be of particular interest to policymakers involved in indigent defense services and criminal justice system researchers interested in disparity in outcomes.

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JAMES M. ANDERSON & PAUL HEATON*

ABSTRACT

One in five indigent murder defendants in Philadelphia are randomly assigned representation by public defenders while the remainder receive court-appointed private attorneys. We exploit this random assignment to measure how defense counsel affect murder case outcomes. Compared to appointed counsel, public defenders in Philadelphia reduce their clients' murder conviction rate by 19% and lower the probability that their clients receive a life sentence by 62%. Public defenders reduce overall expected time served in prison by 24%. We find no difference in the overall number of charges of which defendants are found guilty. When we apply methods used in past studies of the effect of counsel that did not use random assignment, we obtain far more modest estimated impacts, which suggests defendant sorting is an important confounder affecting past research. To understand possible explanations for the disparity in outcomes, we interviewed judges, public defenders, and attorneys who took appointments. Interviewees identified a variety of institutional factors in Philadelphia that decreased the likelihood that appointed counsel would prepare cases as well as the public defenders. The vast difference in outcomes for defendants assigned different counsel types raises important questions about the adequacy and fairness of the criminal justice system.

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“The millstones of justice turn exceedingly slow, but grind exceedingly fine.”

-John Bannister Gibson (1780-1853), Pennsylvania Supreme Court Chief Justice.

INTRODUCTION

The idea that the inefficiencies and slowness of the justice system may somehow be justified by the system’s ultimate precision is a reassuring one. It suggests that the justice system’s vast creaky apparatus, for all its inefficiencies, will ultimately mete out the precise punishment that is necessary. It is also consistent with our goals of equal justice under the law¹ and the idea that we are ruled by law rather than men.²

In this Article, we examine one measure of the criminal justice system’s “fineness”—its sensitivity to defense counsel function.³ Under nearly every normative theory of punishment or criminal responsibility, the characteristics of the offender’s defense counsel should make no difference in the outcome of the process. Whether or not a defendant is found guilty and the extent to which the offender is sentenced to be punished should only depend upon facts about the offender and perhaps the possibility and need of deterring a particular crime.⁴ The effect of the individual lawyer (and the system for providing that lawyer) is pure “noise.”

Usually the effect of the lawyer is hard to measure because lawyers and clients select one another.⁵ It is difficult to determine whether the

¹ The idea of equal justice under the law can be traced to Thucydides’s account of the funeral oration of Pericles of 431 BC. Thucydides, *HISTORY OF THE PELOPONNESIAN WAR* 145 (Rex Warner trans. 1954).

² Massachusetts Constitution, ARTICLE XXX (1780) (John Adams). *See also* Brian Tamanaha, *ON THE RULE OF LAW* 47 (2004).

³ In earlier work, one of us looked at another measure of the “fineness” of the criminal justice process-- the effect of the individual judge on the length of sentences. James M. Anderson, Jeff Kling & Kate Stith, *Measuring Inter-Judge Sentencing Disparity: Before and After the Federal Sentencing Guidelines* 42 *J. LAW & ECON.* 271 (1999); for an updated look at this form of disparity, *see* Ryan W. Scott, *Inter-Judge Sentencing Disparity after Booker: A First Look*, 63 *STAN L. REV.* 1 (2010); *see also* Jaya Ramji-Nogales, Andrew I. Schoenholtz, & Philp G. Schrag, *Refugee Roulette: Disparities in Asylum Adjudication*, 60 *STAN. L. REV.* 295 (2007) (finding vast disparities in outcomes among immigration judges and asylum officers); Kate Stith, *The Arc of the Pendulum: Judges, Prosecutors, and the Exercise of Discretion*, 117 *YALE L.J.* 1420 (2008) (discussing change in control of sentencing discretion).

⁴ Attorney General Robert H. Jackson pithily expressed the intuitive unfairness of disparity: “It is obviously repugnant to one’s sense of justice that the judgment meted out to an offender should depend in large part on a purely fortuitous circumstance...” U.S. ATTORNEY GENERAL, ANNUAL REPORT 5-6 (1940). He was referring to inter-judge sentencing disparity but a nearly identical argument could be made with respect to the “fortuity” of an indigent defendant’s assigned counsel.

⁵ For attempts to measure the effect of lawyers by compensating for the selection problem, *see* Thomas H. Cohen, *Who’s Better at Defending Criminals? Does Type of Defense Attorney Matter in Terms of Producing Favorable Case Outcomes?* (2011) <http://ssrn.com/abstract=1876474> (finding that defendants with assigned counsel receive

results obtained by a particular lawyer are attributable to the lawyer or simply to the characteristics of cases that the lawyer takes. Of course, most lawyers and clients act as though lawyers affect outcomes – lawyers brag about their abilities,⁶ wealthy clients hire lawyers with the best reputation, and students compete to get into the best law school possible.⁷ But because of this selection effect it is usually impossible to isolate and measure the magnitude of the effect of the lawyer and the system for providing that lawyer.⁸

less favorable outcomes than defendants with public defender or private counsel); Talia Roitberg Harmon & William S. Lofquist, *Too Late for Luck—A Comparison of Post-Furman Exonerations and Executions of the Innocent*, 51 CRIME & DELINQUENCY 498 (2005) (finding evidence that attorney skill affected outcome of capital cases); See Inga L. Parsons, "Making it a Federal Case": A Model for Indigent Representation, 1997 ANN. SURV. AM. L. 837 (1997) (reprinted in 52 CRIM. L. REP. (BNA) 2265, 2285, 2294 (1993), which found that the overall level of representation provided by federal defender organizations—including federal public defenders and community defense organizations—was "excellent" and could serve as a model for other states and nations); Joyce S. Sterling, *Retained Counsel versus the Public Defender: The Impact of Type of Counsel on Charge Bargaining*, in THE DEFENSE COUNSEL 167 (William F McDonald ed., 1983) (finding that defendants with retained attorneys did not obtain better outcomes); Robert V. Stover & Dennis R. Eckart, *A Systematic Comparison of Public Defenders and Private Attorneys*, 3 AM J CRIM L 265 (1975) (finding comparable performance between public defenders and private attorneys); Pauline Houlden & Steven Balkin, *Costs and Quality of Indigent Defense: Ad Hoc vs. Coordinated Assignment of the Private Bar within a Mixed System*, 10 JUST SYS J 159, 170 (1985) (method of assigning attorneys did not affect outcomes); Pauline Houlden & Steven Balkin, *Quality and Cost Comparisons of Private Bar Indigent Defense Systems: Contract vs. Ordered Assigned Counsel*, 76 J CRIM L & CRIMINOL 176, 199 (1985) (little difference in performance of private and public attorneys); Stuart S. Nagel, *Effects of Alternative Types of Counsel on Criminal Procedure Treatment*, 48 IND L J 404, 424 (1973) (retained counsel provide some benefits in outcomes compared to public defenders, but also have disadvantages); Morton Gitelman, *The Relative Performance of Appointed and Retained Counsel in Arkansas Felony Cases—An Empirical Study*, 24 ARK L REV 442, 450 (1971) (while the performance of particular lawyers did not differ depending on whether they were appointed or retained, defendants with appointed counsel had worse outcomes overall than defendants with retained counsel); Jennifer Bennett Shinall, *Slipping Away from Justice: The Effect of Attorney Skill on Trial Outcomes*, 63 VAND. L. REV. 267 (2010) (finding that prosecutor skill made more difference in outcomes than defense skill); for anecdotal evidence of disparity, see Jack B. Weinstein, *The Role of Judges in a Government of, by, and for the People: Notes for the Fifty Eighth Cardozo Lecture* 30 CARDOZO L. REV. 1, 49-50 (2008) discussing the gap in quality between federal public defenders and court appointed (Criminal Justice Act panel) attorneys); see also Richard A. Posner & Albert H. Yoon, *What Judges Think of the Quality of Legal Representation*, 63 STAN L. REV. 317, 318 (2011) ("What is missing is a comprehensive evaluation of legal representation... we lack a good understanding of how lawyers influence case outcomes.").

⁶ See also Richard Birke & Craig R. Fox, *Psychological Principles in Negotiating Civil Settlements*, 4 HARV. NEGOT. L. REV. 1, 17-18 (1999) (surveys showing that most lawyers (like others) believe themselves to be above average).

⁷ David S. Abrams & Albert H. Yoon, *The Luck of the Draw: Using Random Case Assignment to Investigate Attorney Ability*, 74 U.CHI. L. REV. 1145, 1148 (2007).

⁸ For important exceptions see Abrams & Yoon, *supra* note 7 (using random case assignment within public defender office to measure effect of attorney); Radha Iyengar,

One might even hope for the sake of the accuracy and fidelity of the criminal justice system—the fineness of the millstones of justice—that the differences in outcomes between lawyers are minimal.⁹ This is particularly true in the most serious cases where the public interest in reliable adjudication is at its highest. Perhaps the resources of the state are marshaled in such a way and the facts established so clearly by the government that what the defense lawyer does makes little difference—those guilty of the such a serious act as taking another’s life are reliably and accurately punished irrespective of their lawyer.¹⁰ It would be reassuring if the criminal justice system were this reliable.

In this Article, we take advantage of a natural experiment that allows us to measure the difference that the defense counsel function makes in the most serious cases. In Philadelphia, since April 1993, every fifth murder defendant is sequentially assigned at the preliminary arraignment to public defenders. The other four defendants are assigned to appointed counsel. This allows us to isolate the effect of the “treatment”—defendants represented by the public defenders with the “control”—defendants represented by appointed counsel by using an instrumental variables approach in cases from 1994-2005.

The differences in outcome are striking. Compared to appointed counsel, public defenders in Philadelphia reduce the murder conviction rate by 19%. They reduce the probability that their clients receive a life sentence by 62%. Public defenders reduce overall expected time served in prison by 24%.

An Analysis of the Performance of Federal Indigent Defense Counsel (NBER Working Paper, No. 13187, June, 2007) (using random case assignment between federal public defenders and appointed attorneys in federal court to measure differences in outcome attributable to attorney; finding that federal public defenders provide better outcomes for clients); Michael Roach, *Explaining the Outcome Gap between Different Types of Indigent Defense Counsel: Adverse Selection and Moral Hazard Effects* (2011) <http://ssrn.com/abstract=1839651> (using jurisdictions that appear to use random assignment to find that appointed counsel provides worse outcomes than public defenders due to adverse selection of attorneys willing to take appointments). Although these papers provide important evidence on the influence of attorneys on case outcomes, the studies don’t focus on serious crimes due to sample size limitations. Given that much of the jurisprudence regarding the availability and adequacy of counsel has been driven by serious cases (for example, the right to counsel was first established in *Powell v. Alabama*, which required counsel for capital defendants over 30 years before *Gideon v. Wainwright*), it seems desirable to understand how attorneys affect outcomes in the most serious cases.⁹ On our desire to believe that the world is just, see Melvin Lerner, *THE BELIEF IN A JUST WORLD* (1980); see also Deborah L. Rhode, *ACCESS TO JUSTICE* 122 (2004) (“Getting what you pay for’ is an accepted fact of life, but justice, we hope, is different, particularly in criminal cases.”)

¹⁰ See Posner & Yoon, *supra* note 5 at 343 (reporting federal district judge who believed that survey “understated the extent to which the facts – not the lawyers – are perceived by the jurors and result in a substantially correct verdict. My observation over my many years is that the jurors get it right if the judge presides fairly and judiciously.”)

This suggests that the defense counsel function makes an enormous difference in the outcome of cases, even in the most serious of cases where one might hope that it would matter least.

Our findings, from the 5th largest city in the United States, raise questions regarding the fundamental fairness of the criminal justice system and whether it provides equal justice under the law. The findings also raise questions as to whether current commonly-used methods for providing indigent defense satisfy Sixth Amendment legal tests for effective counsel and Eighth Amendment prohibitions against arbitrariness in punishment. More generally, the strong impact of the defense counsel system suggests that the criminal justice system is quite sensitive to the characteristics of the professionals involved. Policymakers may wish to consider efforts taken in other fields, like medicine, to increase reliability by reducing the system's dependence on the skill and performance of an individual professional.

I. BACKGROUND ON INDIGENT DEFENSE IN PHILADELPHIA

In 2000, Philadelphia had a murder rate of 21 per 100,000 people, 12th largest among large U.S. cities.¹¹ Most murder defendants, approximately 95%, are unable to afford to hire private counsel and are therefore provided counsel by the county as required by the Sixth Amendment.¹²

In Philadelphia, a non-profit public defender organization, the Defender Association of Philadelphia, has long represented nearly all indigent defendants charged with all offenses – except for murder.¹³ The origins of this division of cases are somewhat murky, but the division apparently arose in the late 1960s or early 1970s as a way to maintain the private homicide defense bar and judges' power to appoint lawyers to these cases.¹⁴ In the mid-1980s, the Defender Association proposed representing some defendants accused of homicide, but the Philadelphia Bar Association opposed the measure and no change occurred.¹⁵ After a change in bar and court leadership, the existing system began, and on April 1, 1993, the Defender Association began to represent one out of every five murder defendants.¹⁶ The other four out of five defendants continue to be represented by counsel in private practice appointed by a judge ("appointed counsel") and paid by the county.

¹¹ Federal Bureau of Investigation, CRIME IN THE UNITED STATES 2000 (2001).

¹² Pennsylvania is unique among the states in that the individual counties are solely responsible for the costs of indigent defense. In every other state, the state itself either funds a state-wide public defender program or contributes to the costs of county public defender programs. Holly R. Stevens, Coleen E. Sheppard, Robert Spangenberg, Aimee Wickman, & Jon B. Gould, *State, County, and Local Expenditures for Indigent Defense Services Fiscal Year 2008*, AMERICAN BAR ASSOCIATION STANDING COMMITTEE ON LEGAL AID AND INDIGENT DEFENDANTS BAR INFORMATION PROGRAM (2010).

¹³ Cases in which there is a conflict of interest are assigned to appointed counsel.

¹⁴ Interview #7.

¹⁵ Interview #1.

¹⁶ Interview #3.

While some features of Philadelphia's indigent defense system are fairly unique, the basic approach of utilizing a mix of both public defenders and appointed counsel to represent indigent defendants is relatively common in the U.S. In 2000, a survey of indigent defense systems conducted by the Bureau of Justice Statistics revealed that 80% of large U.S. counties employed both public defenders and appointed private attorneys as defense counsel in felony cases.¹⁷

The homicide unit of the Defender Association consists of a group of ten experienced public defenders who have considerable experience practicing in the Philadelphia court system.¹⁸ Every case is staffed with teams of two lawyers and one or more investigators and mitigation specialists as needed. All staff are salaried. The unit also has its own limited set of funds to hire expert witnesses directly without having to seek approval and funding from a judge, as appointed attorneys are required to do.¹⁹

Defendants not represented by the Defender Association are assigned counsel by one of the judges from the Philadelphia Court of Common Pleas who each take turns assigning counsel in murder cases.²⁰ During the study period, Philadelphia required lawyers who wish to accept potentially capital cases to have special qualifications, based on the number of serious cases they tried and the number of capital cases at which they had assisted. In potential capital cases, two lawyers were appointed, one to be responsible for the guilt phase of the case and the other to be responsible for the penalty phase of the case.

Counsel appointed in murder cases—both capital and non-capital—in Philadelphia receive flat fees for pre-trial preparation—\$1333 if the case is resolved prior to trial and \$2000 if the case goes to trial. The \$2000 also includes the first half-day of trial. While on trial, lawyers receive \$200 for three hours of court time or less, and \$400/day for more than three hours.²¹ Court appearances for continuances are not reimbursable.

¹⁷ Carol DeFrances & Marika Litras, *INDIGENT DEFENSE SERVICES IN LARGE COUNTIES 1999* (Bureau of Justice Statistics, 2001).

¹⁸ See Testimony of Judge Carolyn Engel Temin to Senate Judiciary Subcommittee on the Constitution Hearing entitled "The Adequacy of Representation in Capital Cases" (April, 8, 2008) (contrasting "outstanding representation" provided by Defender Association with appointed counsel who "do not necessarily provide what I consider effective counsel").

¹⁹ See also Hillary E. Freudenthal, *THE EFFECT OF INDIGENT DEFENSE SYSTEMS ON ADMINISTRATION OF THE DEATH PENALTY: A CASE STUDY OF PHILADELPHIA COUNTY*, 84-85 (April 2001) (Unpublished Thesis, Princeton University Department of Sociology) (on file with author noting relative effectiveness of Defender Association attorneys).

²⁰ Historically, the ability to assign counsel was considered an attractive "plum" to distribute among friends and political supporters. See text accompanying notes 76 to 84 below.

In 2004, the Pennsylvania Supreme Court instituted a state-wide requirement that counsel in capital cases must have "served as lead or co-counsel in a minimum of 8 significant cases" and take a certain number of special capital continuing legal education courses. See PA. R. CRIM. P. 801.

²¹ Interview #1, 6, 10.

Philadelphia's reimbursement rates for appointed attorneys are considered extremely low. Stephen Bright, former director of the Southern Center for Human Rights, called Philadelphia's fee schedule "outrageous, even by southern standards."²² Both capital and non-capital murder cases take numerous hours to prepare.²³ One examination of non-capital murder cases in federal court found that the median number of hours to prepare was 436 hours, and the attorney cost per case from 1998-2004 was \$42,148, which resulted in the hourly wage being approximately \$96/hour.²⁴ In capital cases during the same period, the median attorney hours were 2013, and the cost was \$273,901, which resulted in the hourly wage being approximately \$136/hour.²⁵

Philadelphia's fee schedules have also been criticized for creating perverse incentives.²⁶ Counsel has no financial incentive to prepare for trial since there is a flat rate for preparation time. In addition, counsel may have an incentive to take a case to trial so that she can make as much in five days of trial as on all the time necessary for preparation. Numerous interviewees noted that because there is no cap on the number of cases that can be accepted by counsel, the relatively few counsel who are willing to take appointed cases take on many more cases than they could adequately prepare.²⁷

In short, the conditions in Philadelphia lead to an excellent test of how much the defense counsel function matters to outcomes. For reasons of local institutional history, the appointed counsel system seems very likely to result in comparatively poor defense counsel function. This allows us to test our hope that, as one federal judge put it, "facts – not the lawyers... result in the substantially correct verdict."²⁸

²² Joseph A. Slobodzian, *Pennsylvania Supreme Court Urged to Consider how Philadelphia Pays Death-Penalty Lawyers*, Philly.com June 9, 2011, http://articles.philly.com/2011-06-09/news/29638728_1_death-penalty-lawyers-death-penalty-capital-cases *In N.Y. County Lawyers' Association v. State*, 196 Misc. 2d 761 (N.Y. Supreme Court, 2003), the court found fees of \$40 per hour in court and \$25 per hour out of court inadequate and ordered payment of \$90/per hour. *See generally*, Rebecca A Desilets, Robert L. Spangenberg, & Jennifer W. Riggs, RATES OF COMPENSATION FOR COURT-APPOINTED COUNSEL IN CAPITAL CASES AT TRIAL: A STATE-BY-STATE OVERVIEW (2007).

²³ American Bar Association, GUIDELINES FOR THE APPOINTMENT AND PERFORMANCE OF DEFENSE COUNSEL IN DEATH PENALTY CASES (2003).

²⁴ Jon B. Gould & Lisa Greenman, REPORT TO THE COMMITTEE ON DEFENDER SERVICES JUDICIAL CONFERENCE OF THE UNITED STATES UPDATE ON THE COST AND QUALITY OF DEFENSE REPRESENTATION IN FEDERAL DEATH PENALTY CASES at x (2010).

²⁵ *Id.*

²⁶ Motion to Require the Commonwealth to Provide Constitutionally Adequate Attorney Fees for the Defense of the Above-Captioned Capital Trials, or in the Alternative, to Precluded the Commonwealth from Seeking the Death Penalty, Commonwealth v. McGarrell CP-51-CR0014623-2009.

²⁷ *See* text accompanying notes 93 to 101 *infra*.

²⁸ Posner & Yoon, *supra* note 5, at 343.

II. QUANTITATIVE ANALYSIS OF THE PERFORMANCE OF PUBLIC DEFENDER VERSUS APPOINTED COUNSEL

A. *Data and Sample Construction*

Murder defendants are initially charged in Municipal Court before being tried in the Court of Common Pleas. Our basic dataset includes a sample of 3,412 defendants charged with murder²⁹ between 1994 and 2005 in Municipal Court. These data were provided to us by the Philadelphia Courts (First Judicial District of Pennsylvania). For each record, we observed identity of the defendant, basic demographics (race, gender, and age), charges, attorney of record, and outcome. The Philadelphia Courts also provided us a separate database with similar information tracking Court of Common Pleas cases that corresponded to these municipal cases, and a database tracking changes in attorney assignments over time for a subset of defendants.³⁰ We supplemented these databases by collecting both the Municipal Court and Court of Common Pleas dockets for all of the cases in our sample from the Pennsylvania Judiciary's on-line docket database³¹ and, as necessary, using data from the dockets to supplement information missing from the Philadelphia Court database.³²

After eliminating 46 defendants with missing data or ambiguous information on counsel assignment and 193 individuals (5%) of the sample who were ineligible for appointed counsel based on lack of indigency, we were left with 3,173 defendants. To identify individuals who were initially assigned to the public defender based on the 1-in-5 rule, we relied on logs provided to us by the public defender tracking the defendants in their murder cases, including both defendants initially assigned to the public defender and replacement defendants.³³ Of the 1043 individuals listed in the public defender logs, we were able to find matches for 1027 (98%) in the murder case records provided by the Philadelphia courts.³⁴ We also eliminated 16 records involving cases that

²⁹ 18 Pa Cons. Stat. § 2502 (2010).

³⁰ Prior to 2003, the Philadelphia court records were maintained using a mainframe system that did not allow for the storage of complete attorney history records, meaning that we cannot track the full attorney history for most of our sample.

³¹ Pennsylvania's Unified Judicial System, THE PENNSYLVANIA JUDICIARY'S WEB APPLICATION PORTAL, <http://ujportal.pacourts.us> (last visited August 11, 2011).

³² For example, one key variable available in the dockets (but not the files we received from the Philadelphia Courts) is the defendant's ZIP code of residence, which we use below to consider neighborhood characteristics.

³³ Replacement defendants were defendants who would have normally been assigned to appointed private counsel based on preliminary arraignment, but who were assigned to the public defender by court appointments staff prior to appointing private counsel. This process is described in further detail below.

³⁴ Because the public defender case logs did not contain any unique identifiers present in our other databases, we matched cases based upon the name of the defendant and the timing of the case.

had not yet been resolved, that were missing Court of Common Pleas records, or that contained other data anomalies, leaving us with a total of 3,157 defendants.

One conceptual issue that arises in measuring the effects of representation is how to determine who represented a defendant who may have had multiple attorneys over the course of a case. One approach would be to count anyone who was represented by the public defender at any point in the process as having had public defender representation, but a drawback of that rule is that it would include as public defender clients a large number of defendants initially assigned to the public defender who had essentially no interaction with the public defender, because they were quickly reassigned once a conflict of interest was identified.

The best approach would be to assign representation based upon the identity of counsel at the time the murder charge was resolved. Unfortunately, because our attorney history data are incomplete for most of our defendants, our ability to identify who was representing a defendant at case resolution is limited.³⁵ Moreover, if public defenders represent defendants at earlier stages of the case, such as at a preliminary hearing, they can arguably exert some influence over the outcome of the case even when defendants are ultimately represented by other counsel. As a compromise, we measure representation by the public defender based upon the identity of the attorney at the formal arraignment.³⁶ This approach has the advantage of measuring representation at the same point of case progression for all cases and at a point at which the attorney could have influenced case outcomes. An obvious drawback is that, to the extent that defendants change attorneys subsequent to the formal arraignment, our definition fails to account for such changes. This happens very infrequently so representation at the formal arraignment makes an excellent proxy for representation at disposition.³⁷

The number of defendants (1043) in the public defender logs are greater than the one in five from our sample because it includes all those defendants initially assigned to the public defender that it subsequently lost due to conflict or hiring of private counsel and the replacement defendants that it subsequently received to replace these defendants.

³⁵ New counsel are almost always assigned to handle direct appeals and post-conviction litigation. As a result, data on the most current attorney may not properly capture the attorney assignment at the time of adjudication.

³⁶ We can observe this information for all of our cases in the Municipal Court docket sheets.

³⁷ The Defender Association, by policy, refuses to accept cases in which appointed counsel handled the preliminary hearing, so there is almost no post-formal arraignment crossover from appointed counsel to the public defender. According to Paul Conway, the director of the Defender Association Homicide Unit, there were two cases since the Unit was founded in which the public defender took over a case that was represented by appointed counsel at the preliminary hearing. Slightly more common, but still rare, is the case in which a defendant represented by the public defender at the formal arraignment is represented at trial by either appointed counsel (if a conflict of interest is identified after the preliminary hearing) or privately retained counsel (if the defendant hires an attorney). Interview with Paul Conway, August 26, 2011.

We also constructed synthetic criminal histories for each defendant by extracting information from the Pennsylvania Court of Common Pleas docket sheets for each prior case involving that defendant.³⁸ These criminal histories are likely to be fairly complete, but they only include offenses that occurred in Pennsylvania, that generated a court record, and that occurred after electronic recordkeeping was instituted in each county in the state.³⁹ Although it seems likely that there is at least some prior criminal activity that is not captured in available court dockets, we have no basis to suspect that the pattern of missing information would correlate with attorney assignment.

Our sentencing data report a maximum and minimum sentence for each defendant, and also identify life and death sentences.⁴⁰ Because life and death sentences are qualitatively different from other sentences, we consider these outcomes individually.

Ideally, we would also like to calculate an overall effect on length of incarceration. This is complicated by the fact that there are not numeric sentences for those sentenced to life and death. Because of this issue, we consider two alternative measures of incarceration length as outcomes. First, we consider average sentence, which we define as the midpoint of the reported maximum and minimum sentences for those given numeric sentence. For those sentenced to life or death, we set the average sentence equal to 40 years, an admittedly arbitrary choice but one which seems sensible given that the bulk of those sentenced in life are in their early 20's, and life sentences in Pennsylvania carry no possibility of parole.

Alternatively, to avoid the necessity of imputing an arbitrary sentence length for those sentenced to life or death, we also calculate the expected time served in prison and use this as an additional outcome measure for length of incarceration. To do this, we turn to data from the National Corrections Reporting Program (NCRP). The NCRP includes individual-level information about state prison admissions and releases (including deaths) for participating states, and includes information about alleged offenses, sentencing, and time served. For the years between 1999 and 2003, the NCRP includes records for 15,721 defendants who were released from prison after serving a sentence for a murder conviction. For each combination of age at prison admission/sentencing outcome, we compute the average time served across prisoners in our NCRP sample, which includes data from states other than Pennsylvania, and then apply that average to Philadelphia defendants who fall into that same

³⁸ The Pennsylvania Courts assign a unique identifier to each defendant, which allowed us to obtain prior case records for a given individual even when they involved an alias.

³⁹ For Philadelphia, case records are available going back to 1968, and for most counties case records are available back to at least the early 1980's.

⁴⁰ For 172 individuals in the sample, information about the length of the sentence was missing. Incidence of missing sentencing information is uncorrelated with initial assignment to the public defender.

age/sentence combination.⁴¹ For example, among those in the NCRP with 30-year sentences imposed at age 22-24 who were released or died in prison between 1999 and 2003, the average actual time served was 16.1 years, suggesting a newly convicted 23-year-old murder defendant with a 30-year sentence might expect to spend around 16 years behind bars. For life sentences we only use NCRP data for prisoners who died in prison because life sentences in Pennsylvania do not carry the possibility of parole.⁴² This approach offers a data-driven method for deciding how much incarceration to assign to those with life and death sentences. Conceptually, the expected time served in prison can be thought of as the response that a defendant might receive from a well-informed attorney if the defendant asked, immediately after receiving a particular sentence, how long he could expect to actually spend behind bars.

A drawback of using NCRP data to project actual time served is that because these projections require data on complete sentences, they require us to use individuals who were mostly sentenced during the 1980's and early 1990's. Because of growth of truth-in-sentencing laws and declines in mortality among prison inmates, the actual time served for individuals in our sample from Philadelphia will be greater than time served in the NCRP, meaning that our projections likely represent lower bounds on future time served. However, there is no reason to suspect that the bias towards under-projection of time served inherent in our approach will differentially affect defendants represented by appointed as compared to the public defender. As a result, we can use these projections to correctly measure the percentage difference in expected time served for defendants represented by the public defender.

B. *Methods*

Counsel Assignment and the Preliminary Arraignment Process

Figure One presents a flow chart illustrating the processing of murder cases in the Philadelphia courts. Shortly after arrest, defendants accused of murder receive a preliminary arraignment. This usually occurs by videoconference before an arraignment court magistrate. The magistrate reviews the information about the defendant compiled by the court's

⁴¹ Sentencing outcomes are acquittal, life, death, or a maximum sentence of 0, 1, 2, 25 years, 26-29 years, 30 years, 31-34 years, 35 years, 36-39 years, 40 years, 41-49 years, 50 years, 51-59 years, 60 years, or 60+ years. Age cells are defined by defendants aged 18 and under, 19-21, 22-24, 25-27, 28-30, 31-35, 36-40, 41-45, 46-50, and 50+.

⁴² We treat death verdicts as equivalent to life sentences for the purposes of these calculations. We recognize, of course, that death sentences are very different but we did this for ease of modeling. Since only three death row inmates have been executed in Pennsylvania since 1976, all of whom voluntarily waived their appeals, this treatment has some descriptive accuracy as well.

pretrial unit to determine if the defendant can afford counsel.⁴³ If, in the magistrate's judgment, the defendant is unlikely to be able to afford counsel in a case with a murder charge, the magistrate appoints either the Defender Association of Philadelphia or a to-be-determined appointed counsel to represent the defendant. In 90-95% of cases, it is clear that the defendant cannot afford private counsel.⁴⁴ The default is to assign counsel. These hearings typically take approximately two to three minutes.

The Criminal Law Clerk maintains a log book. Every fifth defendant with a murder charge is assigned to the public defender.⁴⁵ The other four defendants are not immediately assigned counsel but the names are sent to court appointments for assignment to a court-appointed counsel.⁴⁶

After assignment, there is some "crossover" between "treatment" (Defender Association defense counsel) and "control" ("appointed counsel") groups. Some defendants hire private defense counsel who replace either appointed counsel or the public defender. In some cases assigned to the public defender, it is determined subsequent to the initial assignment that there is a conflict of interest and that the public defender cannot represent the defendant. When that occurs, the case is assigned to appointed counsel and the public defender receives another "replacement" case that had been assigned to appointed counsel at the preliminary arraignment. The goal is to ensure that the public defender ends up with 20% of cases per its contract despite the fact that some defendants change counsel subsequent to initial assignment. While these replacement cases are nominally random, there is no mechanism comparable to the rotation at preliminary arraignment to ensure that they are, in fact, randomly selected. However, because these diversions occur after the initial 1-in-5 randomization, they are not problematic for our analysis and we need not assume that replacement cases are randomly selected.

If compliance with random assignment were perfect, so that everyone initially assigned appointed counsel were ultimately represented by appointed counsel, and similarly for the public defender, the causal impact

⁴³ Interview and e-mail exchange with Richard McSorley, Supervisory Trial Commissioner, Philadelphia Court of Common Pleas (April 7, 2011).

⁴⁴ *Id.*

⁴⁵ *Id.*

⁴⁶ *Id.* There are two important exceptions to this procedure. The public defender cannot represent multiple co-defendants in the same case or defendants with whom the public defender has had certain prior interactions (such as defending a victim or witness) because of conflict of interest rules. If one defendant is processed through preliminary arraignment court and assigned to the public defender, and then a co-defendant on the same charge later comes through and would be assigned to the public defender, that assignment is skipped. Similarly, if at the time of preliminary arraignment the public defender identifies another conflict of interest, the case is reassigned. The public defender is also sometimes assigned appeals cases from the Capital Habeas Unit; when one of these cases is assigned, the public defender's next turn in the assignment rotation for new cases is sometimes skipped. This explains why the data show less than 20% of murder cases as being assigned to the public defender at the preliminary arraignment.

of public defender representation could be computed simply as the difference in mean outcomes across those represented by the public defender versus those with appointed counsel. However, in actual practice later representation varies from the assignment for numerous reasons. In some situations, such as cases involving multiple defendants, individuals initially assigned to the public defender must be appointed counsel to avoid conflicts of interest. When defendants are able to hire a private lawyer, it often occurs after they progress partway through the adjudication process before being able to assemble the financial means to pay for a private attorney, at which point they replace their appointed or public defender counsel with hired counsel.

It is possible that this “crossover” (or imperfect compliance as it would be called in a clinical trial) is correlated with the identity of counsel and characteristics of the case. Suppose, for example, that defendants with very serious cases with public defenders are more likely to hire private counsel than defendants with equally serious cases with appointed counsel. Simply comparing the mean outcomes between defender-assigned and appointed counsel assigned in that instance would be misleading because the case mix would not be comparable -- the public defenders would be left with a less serious case mix.

Similarly, the operation of conflict of interest rules might also change the mix of cases. Because a conflict of interest is imputed to other attorneys in the organization, and because the public defender represents nearly all other criminal defendants, the public defender is much more likely to be conflicted out of a case than appointed counsel for any given witness. Suppose cases with numerous witnesses (in which the Defender is more likely to be conflicted out) are more serious than cases with fewer witnesses. Once again, the case mixtures are no longer equivalent and the results of a simple comparison in outcomes are not valid.

To deal with this problem of crossover or imperfect compliance we employ an instrumental variables (IV) analysis. We use the initial random assignment as an instrumental variable for the later representation. The IV method permits us to exploit the randomness of initial assignment to estimate the causal impact of public defender representation.⁴⁷ It essentially isolates the portion of variability in outcomes that is attributable to the initial random assignment. In estimation, this is achieved by regressing the case outcomes of interest on the predicted legal representation at arraignment, where the predicted value is determined by a first-stage regression of representation at arraignment on the legal representation at the point of random assignment (plus all other controls in the model). This allows us to estimate the impact of public defender representation even when there is non-random sorting of defendants across

⁴⁷ See Guido Imbens & Joshua Angrist, *Identification and Estimation of Local Average Treatment Effects*, 62 *ECONOMETRICA* 467 (1994). For a technically rigorous yet accessible primer on the use of instrumental variables, see Joshua D. Angrist and Jorn-Steffan Pischke, *MOSTLY HARMLESS ECONOMETRICS* 113 (2009)

different types of attorneys subsequent to the initial assignment, because we use only the variation in legal representation status attributable to random assignment, not the actual representation. Because of this randomization, even if a non-representative subset of defendants switch counsel after the initial step in the process, we can still identify two groups of defendants—namely, those who were and were not initially assigned to the public defender—for whom the expected average sentence is the same except for the fact that they end up with different types of counsel. The IV approach compares the average outcomes across these groups (rather than groups based upon actual realized representation) and then scales this difference by the groups' difference in representation. This allows us to control for the fact that there may be non-random sorting (e.g. by seriousness of case) between the time of initial assignment of attorney type at the preliminary arraignment and the time that the defendants' cases are ultimately resolved.

The key requirement required for the IV analysis to deliver valid causal estimates is that the instrumental variable—in this case, initial counsel assignment—affects eventual representation but is otherwise uncorrelated with case outcomes. If the initial assignment of counsel is truly random, as we assume, this requirement will be satisfied. Fortunately, it is possible to examine the validity of this assumption directly using available data. In particular, if counsel is assigned randomly, we would expect those assigned to appointed counsel and those assigned to the public defender to appear similar on observable characteristics determined prior to counsel assignment.

In Table One, we summarize the characteristics of our sample, reporting average characteristics of defendants initially assigned to appointed counsel (column I) and the public defender (column II). We also report the t-statistic and associated p-value for a test of the null hypothesis of equal means across the two groups. The first row of the table indicates that of those who were initially assigned appointed counsel, 15% were ultimately represented by the public defender at their municipal court arraignment. Many of these cases represent individuals who normally would have been given court appointed counsel based on the one-in-five assignment rule, but who were instead diverted to the public defender in order to provide replacement cases for clients initially assigned to the public defender who had subsequently found other representation. Only 59% of those initially assigned public defenders retained their public defenders through the municipal court arraignment. In other words, almost half of those assigned public defenders ultimately were represented by other attorneys, either due to conflicts or voluntary hiring of an outside attorney. Although substitutions away from the initial assignment were fairly commonplace, the t-test indicates that the initial assignment satisfies the first requirement of an instrument, namely, that it affects eventual representation.

The next rows of Table One report average demographics by initial assignment. Age, race, and gender are comparable across the two groups of defendants.

Although available case records contain no additional direct demographic information, another way to assess the comparability of the background characteristics of defendants is to examine the population characteristics of the ZIP codes in which they reside. The next rows of Table One compare economic and social characteristics of the residential ZIPs of indigent defendants using data drawn from the 2000 Census. If the randomization is compromised so that certain types of defendants are more likely to receive Defender Association attorneys, we might expect to observe different neighborhood backgrounds for these defendants. A drawback of examining ZIP code characteristics is that ZIP information is missing for almost a third of the sample, although, as indicated in Table One, rates of data availability are similar across the two groups.

Indigent homicide defendants are drawn disproportionately from disadvantaged areas. For example, 56% of households in the ZIP code of a typical defendant were female-headed, versus 22% for the city as a whole and 12% nationally. Unemployment rates in the defendants' ZIPs were more than 2-1/2 times the city average. Although homicide defendants are clearly drawn from an unrepresentative sample of the city's neighborhoods, differences in the neighborhood characteristics of those assigned appointed versus public attorneys are negligible.⁴⁸

Our criminal history data provide another way to assess the comparability of the two groups of defendants. As indicated in Table One, average criminal involvement appears slightly higher among those assigned to the public defender, although none of the differences is statistically significant except for that for prior theft charges. Given that prior criminal history is one of the strongest predictors of case outcomes,⁴⁹ the fact that the two groups of defendants appear largely balanced in their prior criminal involvement is reassuring.

The next rows of Table One summarize the characteristics of these defendants' cases, including number and nature of charges and number of defendants involved in the case. Because attorney assignments are made prior to the formal arraignment, in theory the charge composition could adjust based on attorney characteristics. For example, if prosecutors believe that public defenders are likely to beat weapons or conspiracy charges, they may drop or decline to file such charges once they see that a

⁴⁸ One way to more formally assess whether attorney assignment is correlated with ZIP code of residence is to regress an indicator for whether an individual was initially assigned to the public defender on a full set of indicator variables for individual ZIP codes, and then test for the joint significance of the indicators. With such a test we fail to reject the hypothesis that ZIP code is unrelated to attorney assignment (p-value=.59).

⁴⁹ Brian D. Johnson, *The Multilevel Context of Criminal Sentencing: Integrating Judge- and County-Level Influences*, 44 *CRIMINOLOGY* 259 (2006); John Kramer & Darrell Steffensmeir, *Race and Imprisonment Decisions* 34 *THE SOCIOLOGICAL QUARTERLY* 357 (1993).

particular defendant is represented by a public defender. As a practical matter we see little evidence of important differences in case characteristics by initial assignment, although there appears to be a slightly lower rate of weapons charges for defendants initially assigned public defenders.

There are statistically significant differences across the two populations across a handful of characteristics, such as prior theft, but even in the absence of true differences, looking across this many characteristics, we would expect to observe some statistically significant differences due to sampling variation alone. One way to assess whether the overall pattern of group differences shown in Table One provides evidence of non-random assignment to examine the distribution of p-values in the table. Under the null hypothesis of random assignment, we would expect these p-values to be uniformly distributed between 0 and 1. A Kolmogorov-Smirnov test⁵⁰ applied to the 35 defendant characteristics listed in Table One that were determined prior to assignment of counsel yields a p-value of .17, indicating that we cannot reject the null hypothesis of random assignment.⁵¹

Of course, data-based tests of the independence of an instrument are limited to the available data. It is always possible that the proposed instrument is actually related to the outcome in other ways that are unobservable in our data. It is therefore important to examine the actual mechanism of the instrument.

Here, interviews with the Philadelphia court staff indicate that the assignment process is almost completely mechanical and ministerial—little human judgment (and possible conscious or unconscious biases) is involved.⁵² A log book is kept by the clerk of the arraignment court and every 5th defendant with a murder charge that comes through is assigned to the public defender. This is additional evidence of the independence of our instrument.

C. Results

We find significant differences in the outcomes of the defendants represented by the Defender Association and appointed counsel. Table Two reports defendant outcomes by initial attorney assignment.

⁵⁰ The Kolmogorov-Smirnov test is a non-parametric statistical test designed to test whether the observed cumulative distribution of a random variable corresponds to a hypothesized reference distribution.

⁵¹ The ZIP code measures may be correlated with one another, as might the measures capturing prior criminal history. However, we also fail to reject the null hypothesis of randomization if we conduct Kolmogorov-Smirnov tests excluding the ZIP code characteristics or the prior case history variables.

The listed variables along with a full set of ZIP code fixed effects are also jointly insignificant (p-value=.37) in a regression where the dependent variable measures the initial attorney assignment.

⁵² McSorley interview, *supra* note 43.

Given that the two groups of defendants appear largely similar in terms of demographics, prior criminal involvement, and observable case characteristics, absent any effects of counsel, it seems reasonable to expect similar outcomes across the two groups. In the first row, for example, of the 2,677 defendants that were originally assigned appointed counsel, 80.1% were found guilty of any charge; the comparable number for defendants originally assigned to the public defender was 79.2%. The low t-statistic and p-value that is greater than .05 for this characteristic indicate that we cannot reject the null hypothesis that guilt rates are equal across the two groups.

However, we observe statistically significant and practically large disparities in some outcomes across the two groups. For all of the sentencing measures except for death verdicts—which, even among this population, are quite rare—those assigned to the public defender achieved better outcomes for the defendants they represented. Particularly notable is the seven percentage point difference in the likelihood of receiving a life sentence and the difference in expected time served. The greater than one year difference in expected time served is large relative to overall expected time served of around 11 years.

One potential explanation for these differences in outcomes is that public defenders might use different strategies for determining whether to take cases to trial than appointed attorneys, particularly given that these two sets of attorneys have different financial incentives for trial. The bottom rows of Table Two indicate that defendants randomized to the public defender are appreciably more likely to plead guilty in their cases than those initially assigned appointed attorneys.

The simple comparisons in Table Two strongly suggest that public defender representation is associated with improved case outcomes. To estimate the casual impact of representation by the public defender, we turn to the instrumental variable (IV) analysis. In Table Three we report IV regression estimates of the impact of public defender representation on a range of outcomes, where the unit of observation is a murder defendant.⁵³ Each entry in the table reports the results from a separate regression. The first entry in the table, for example, indicates that using model IV1, representation by the public defender is estimated to reduce the likelihood a defendant is found guilty of any charge by 2 percentage points relative to representation by appointed counsel, but this difference is not statistically significant. Column IV1 estimates a simple linear IV model with no controls; this is equivalent to dividing the mean difference in outcomes reported in Table Two by the mean difference in representation (.44). Column IV2 adds to the IV regressions controls for defendant race, gender, age and age squared; year of case; and indicators for the number of defendants; total number of charges; presence of a

⁵³ We also estimated non-linear version of these specifications (IV Poisson models for count outcomes and bivariate probit models for binary outcomes) and obtained similar results. We report results from linear models for simplicity.

weapons or conspiracy charge; and total prior charges and prior arrest for assault, aggravated assault, weapons offenses, drug offenses, burglary, robbery, and theft. If randomization was successful, as is suggested by Table One, inclusion of additional controls in the regression model is not strictly required to obtain an unbiased estimate of impact of public defender representation. However, controlling for additional covariates may yield more precise estimates of attorney impacts, and the controls may also be helpful for addressing any unrecognized departures from randomization. Because model IV2 includes a comprehensive set of controls and identifies the effect of public defender representation using the broadest set of cases, it is our preferred specification, although in general we obtain similar effects estimates whether we do or do not control for other factors.

Column IV3 adds a set of indicator variables for each case as additional controls. This essentially identifies the impact of public defender representation by comparing the outcomes for co-defendants who were involved in the same case, where one defendant was assigned to a public defender and other defendants were assigned appointed counsel. The main advantage of such a within-case analysis is that it ensures balance of factors determined at the case level—such as the quality of witnesses, investigative effort by the police, etc.—across those with different types of representation, even when such factors may be unobservable. The primary drawback of the models with case-level indicators is that these models appreciably reduce our sample size, since in essence this approach excludes the 2,061 cases involving a single defendant from the analysis and focuses only on those cases with several defendants who differ in their initial assignment. Because of the smaller sample, these estimates are less precise than those using the full sample.

For all of our IV specifications, we first consider a series of outcome measures that capture guilt—namely, whether the defendant was found guilty of any charge (either at trial or because of a plea arrangement), the number of guilty charges, and whether the defendant was found guilty of murder. Although estimates of the impact of public defender representation on guilt for any charge are negative, these estimates are modest relative to the overall guilt rate of about 80%, and none are statistically significant. More striking are disparities in murder conviction rates—specification IV2, our preferred specification, demonstrates that those represented by public defenders are 11 percentage points less likely to be convicted of murder, a 19% decline relative to the conviction rate among those with appointed counsel of 56.5% (see Table 1). This difference is statistically significant.

We next turn to sentencing outcomes. The two most severe penalties for murder are life in prison, which in Pennsylvania carries no possibility of parole, and death. Representation by the public defender reduces the probability of receiving a life sentence by 16 percentage points (column IV2), or a remarkable 62%. This reduction in life sentences can be

observed in both the full sample and when limiting the analysis to trials with multiple defendants.⁵⁴

While no defendant represented by the public defender at trial has ever received the death sentence, our estimates of the effect of a defendant being represented by the public defender on receiving the death sentence are small. However, because fewer than 2% of defendants receive a death sentence, our estimates are highly imprecise.⁵⁵ The 95% confidence interval for these estimates encompasses values that would imply either a substantial reduction or a substantial increase in the probability of receiving a death sentence due to public defender representation. Thus, these data preclude drawing conclusions about the efficacy of public defender in avoiding death sentences.⁵⁶

We next turn to an analysis of sentence length and expected time served. We find substantial and highly statistically significant impacts of public defender representation on average sentence length. The causal impact of public defender representation on sentence length is a 6.4 year reduction (IV2), which represents a 31% decline relative to the mean sentence length for those assigned appointed counsel of 20.9 years.⁵⁷

For those who are not sentenced to life imprisonment or death, we also examine minimum and maximum sentences. The IV point estimates for these outcomes are negative and sizable, but only marginally statistically significant. The magnitudes of the estimated impacts, however, are large, implying a greater than one year reduction in minimum sentences and a more than three year reduction in maximum sentences. It appears that public defenders are successful at both reducing the likelihood of the most extreme sanctions and reducing the severity of less extreme sentences.

The final row of Table Three uses expected time served as the outcome, where expected time served is calculated using the NCRP as

⁵⁴ One illustration of the effectiveness of the Defender Association attorneys is the fact that, in the 89 cases involving two defendants, one of whom was represented by the public defender and one of whom had appointed counsel, 16 defendants represented by the appointed attorneys were acquitted of all charges, versus 25 among those represented by the public defender.

⁵⁵ This is not simply a result of using a linear model; similar results are obtained with a bivariate probit analysis.

⁵⁶ Because no client represented by the public defender at trial has ever been sentenced to death and because more than seventy-four defendants represented by private or appointed counsel have been sentenced to death since 1994, most interviewees with whom we discussed this were surprised by this finding. Because death sentences are comparatively very rare events, occurring in only 1.3% of cases, our analysis is unable to detect a difference. A disadvantage of the IV approach is that because it isolates the variation attributable to the initial assignment, it has less power than a situation in which the IV approach was not necessary – if, for example, there was no post-assignment crossover and we could simply compare the average sentences that resulted from each group.

⁵⁷ As might be expected, when we assign a sentence length of 30 years rather than 40 years to those sentenced to life or death, the point estimates are a bit smaller, but remain highly statistically significant. Since this alternative approach also lowers overall average sentence lengths, the implied percentage impact of the public defender on sentence length remains at about -30%.

described above. Our analysis reveals statistically significant and practically large impacts of public defender representation on expected time served—the IV2 estimate of -2.6 implies that individuals represented by public defenders are expected to spend more than 2-1/2 fewer years in prison than otherwise similar defendants represented by appointed counsel.⁵⁸ This represents a 24% reduction in expected sentence. The magnitude of this effect in percentage terms is roughly comparable to our estimated impacts using average sentence length as an incarceration measure.

As a comparison, Iyengar finds that public defenders in federal cases reduce expected sentences by 16% relative to private assigned counsel.⁵⁹ Abrams and Yoon, who exploit the random assignment of defense attorneys to felony cases in Clark County, NV, find that attorneys with ten years of experience obtain sentences that are 1.2 months (17%) shorter.⁶⁰ Although both papers provide persuasive evidence that more experienced public defenders improve outcomes, our analysis suggests that, at least in murder cases in Philadelphia, attorneys may have an even larger impact than is suggested by past results.

By way of contrast, the column of Table Three labeled *OLS* presents estimates of the impact of public defender representation on outcomes that use ordinary least-squares (OLS) regression analysis that adjusts for observable differences in characteristics between those with private appointed counsel versus those with public defenders. This is the primary approach used in past studies of the impacts of public versus appointed counsel.⁶¹ Its primary flaw is that it ignores the effect of post-assignment non-random sorting – the fact that defendants who start out with the public defender and move to appointed counsel and vice-versa are not random.

The OLS approach does provide some evidence that public defenders attain superior outcomes to their appointed counterparts—for example, using OLS public defenders are estimated to reduce the number of guilty charges by .2 and reduce the probability of receiving a life sentence by five percentage points. However, differences between the OLS and IV estimates are noticeable for many outcomes. For example, properly accounting for non-random sorting to attorneys triples the estimated impacts of public defender representation on life sentences and increases the reduction in expected time served by two years. OLS estimates suggest public defenders do not affect murder convictions, whereas the more credible IV results show a strong effect.

To provide further insight into why OLS and IV estimates differ, in Appendix Table One we report coefficient estimates from a regression

⁵⁸ Although the specification including case fixed effects is not statistically significant, it is also somewhat imprecise, and indeed we cannot statistically reject equivalence between this estimate and the estimates in columns IV1 and IV2.

⁵⁹ See Iyengar, *supra* note 8.

⁶⁰ Yoon & Abrams *supra* note 8.

⁶¹ See *supra* note 5 for citations.

model where the dependent variable is an indicator for whether a defendant was represented by a public defender at the formal arraignment and the explanatory variables capture defendant demographics and prior criminal history.⁶² These regressions provide insight into which types of defendants are ultimately most likely to keep their public defenders through the resolution of their cases. The appendix table demonstrates that those ultimately represented by public defenders are indeed a non-random subset of the total population—for example, older defendants are slightly more likely (2%) to remain represented by the public defenders. Defendants with past or current weapons charges are less likely (-8%) to be ultimately represented by public defenders. Given this clear evidence of sorting based on observable characteristics, it seems reasonable to expect that sorting may also occur along dimensions that are unobservable to us but that may affect how cases are ultimately decided.⁶³ These patterns demonstrate the difficulty of cleanly measuring attorney effects using traditional regression methods that cannot readily account for defendant sorting behavior.

One question raised by the large disparity in outcomes shown in Table Three is the extent to which these differences reflect superior performance by public defenders in plea negotiations versus trials. Although the data clearly indicate public defenders must perform better at something, ideally one might wish to isolate whether the difference results from better handling of plea negotiations, better handling of trials, or both. Unfortunately, the usual notion of whether a public defender is “better”—i.e., for a given defendant and fact pattern, does the public defender achieve a lower sentence in a trial (or plea negotiation)?—cannot be measured using the available data. This is because whether a person pleads guilty or goes to trial is not randomly determined, but rather reflects a selection process involving the attorney, the client, and the prosecutor, so we cannot simply re-analyze the subset of cases that involves guilty pleas or trials to measure the effect of attorney type on that particular class of case.⁶⁴ Put differently, even if, for any given defendant, public defenders are worse at both plea negotiations and trial representation, it would still be possible for public defenders to get shorter than average sentences for their clients if there is heterogeneity across defendants in expected benefit of going to trial and public defenders are simply better at sorting appropriate defendants to pleas versus trials.

We can, however, examine whether there appear to be systematic differences in how different types of attorneys handle cases. Table Four presents estimates of the impact of public defender representation on two

⁶² We employ a probit regression model and report average marginal effects in the table. Estimation using a linear model provides very similar results.

⁶³ For example, defendant aptitude may affect both choice of attorney and the quality of his case.

⁶⁴ This would re-introduce the selection bias that we seek to eliminate by exploiting the random assignment of attorneys.

measures of case handling—whether or not the defendant waives a jury trial—a strategy typically used to reduce the likelihood of a death sentence – and whether the defendant pleads guilty to at least some charges.⁶⁵ While use of waiver trials does not vary across the two types of attorneys, clients of public defenders are 21 percentage points (or 76%) more likely to plead guilty than clients of appointed private attorneys. These differences in willingness to plea bargain may at least in part explain the shorter sentences obtained by Defender Association attorneys for their clients.

Because public defender representation does not affect the overall guilt rates, as shown in Table Three, but does appreciably increase the share of cases that plea bargain, we know that the conviction rate must be lower among cases taken to trial by public defenders attorneys than among cases taken to trial by private appointed counsel. This pattern might occur because public defenders are better at ensuring that cases with superior prospects for acquittal proceed to trial, or it may be that public defenders are better at arguing cases.

III. EXPLANATIONS FOR THE DIFFERENCE IN OUTCOMES

Why the stark difference in outcomes? In order to better understand the reasons for the difference in outcomes, we undertook qualitative interviews, a review of past research on this issue, and a review of cases.

First, we find the difference is most likely attributable to defense counsel. It is theoretically possible that the difference in quantitative outcomes that we observe is the result of differences in the way that a defendant with an attorney of a particular type (public defender or appointed counsel) is treated by the prosecutor or judge rather than by any difference in the actions or inactions of the attorney. However, we found no evidence of this in the qualitative interviews we conducted and think it is unlikely.

Instead, we find the causes of the difference in outcomes are attributable to defense counsel. These, in turn, can be understood as ranging from longer-term systemic and institutional causes to more immediate differences in the treatment of individual cases.

We find that, in general, appointed counsel have comparatively few resources, face more difficult incentives, and are more isolated than public defenders. The extremely low pay reduces the pool of attorneys willing to take the appointments and makes doing preparation uneconomical. Moreover, the judges selecting counsel may be doing so for reasons partly unrelated to counsel's efficacy. In contrast, the public defenders' financial and institutional independence from judges, the steady salaries provided to attorneys and investigators, and the team approach they adopt avoid many of these problems. These longer-term institutional differences lead to the

⁶⁵ These estimates have been obtained using the same methods and control variables as those in Table Two.

more immediate cause of the difference in outcomes—less preparation on the part of appointed counsel.

These problems are not new. For almost twenty years, commentators have noted many of the same problems with the representation provided by appointed counsel in Philadelphia. In a series of ten newspaper articles in 1992 and 1993, journalist Frederic Tulsy documented a system of providing indigent defense in murder cases in Philadelphia that was flawed by (1) conflicts of interest, (2) lack of compensation, (3) poor training, and (4) few standards.⁶⁶ In 2001, Hilary Freudenthal conducted a series of quantitative analyses and qualitative interviews and chronicled a similarly dysfunctional system in an unpublished undergraduate paper.⁶⁷

To understand whether the situation has meaningfully changed since this previous research, we conducted structured qualitative interviews with twenty appointed counsel, judges, and current and former public defenders⁶⁸ and reviewed cases in which Philadelphia counsel were found ineffective in capital murder cases. We found that while the situation has improved recently in some respects, many of the same underlying problems remained and are the most probable explanation for our finding a sharp difference in the outcomes of cases during our study period (1994-2005).

We emphasize that the problems identified with appointed counsel do not reflect every appointed counsel in every case. Most respondents noted that some appointed counsel could perform well in many cases. Similarly, our data analysis only reflects the outcomes of defendants represented by appointed counsel and public defenders *on average*. Appointed counsel might produce better outcomes than the public defender for any particular defendant.

⁶⁶ Frederic N. Tulsy, *Proposal Aimed at Lawyers of Indigent Criticized*, PHILADELPHIA INQUIRER, June 16, 1993, at B2; Frederic N. Tulsy, *Legal Panel Endorses New Rules*, PHILADELPHIA INQUIRER, April, 21 1993, at B1, B4; Frederic N. Tulsy, *A Step for Indigent Defense*, PHILADELPHIA INQUIRER, April 12, 1993, at B1, B3; Frederic N. Tulsy, *Working for Better Legal Help for Poor*, PHILADELPHIA INQUIRER, December 27, 1992, at B1, B6; Frederic N. Tulsy, *Lawyers Back Plan for Defense of the Poor*, PHILADELPHIA INQUIRER, December 18, 1992, at B10; Frederic N. Tulsy, *Lawyers' Fees Get New Look*, PHILADELPHIA INQUIRER, December 9, 1992, at A1, A6; Frederic N. Tulsy, *Lawyers Balk at Plan for Flat Fees*, PHILADELPHIA INQUIRER, September 25, 1992, at B10; Frederic N. Tulsy, *Report: Money Woes Affect Trials' Fairness*, PHILADELPHIA INQUIRER, September 23, 1992, at B1, B4; Frederic N. Tulsy, *Big-Time Trials, Small-Time Defenses*, PHILADELPHIA INQUIRER, September 14, 1992, at A1, A8; Frederic N. Tulsy, *What Price Justice? Poor Defendants Pay Cost as Courts Save on Murder Trials*, PHILADELPHIA INQUIRER, September 13, 1992, at A1, A18-19.

⁶⁷ Freudenthal, *supra* note 19.

⁶⁸ We identified subjects by the “snowball” method by asking respondents for the names of other attorneys. Overall, we interviewed three judges, four current or recent Defender Association lawyers, and thirteen counsel who took appointments at some point during the study period. On most topics, there was broad consensus on the reasons that defender-represented defendants were generally likely to fare better than those represented by appointed counsel and we are confident that we achieved saturation within the population of respondents.

A. Conflicts of Interest

An adversarial system of criminal justice relies upon zealous representation of the parties in order to reach a reliable outcome — hence the traditional ethical obligations of counsel to avoid any direct conflict of interest or anything that might impair the lawyer’s independence and ability to zealously advocate the client’s interests.⁶⁹ Similarly, the American Bar Association recommends that appointed counsel systems be independent of judges in order to protect the zealous advocacy of counsel.⁷⁰ Unfortunately, both judges and defense counsel in Philadelphia face potential conflicts of interest in the appointment, payment and representation process that may help explain why the defender-represented defendants fared better.⁷¹

Appointments in Philadelphia have long been controlled by the judges of the Philadelphia Court of Common Pleas. When a lawyer is needed, court administration determines whose turn it is to next appoint the attorney and contacts that judge's chambers. That judge provides the name of the attorney.⁷² The appointing judges include those who are assigned to the civil division and thus do not try criminal cases.

Respondents indicate that judges face several potential conflicts of interest. The first is fiscal. Because Pennsylvania is the only state in which each county is solely responsible for funding indigent defense without any assistance from the state,⁷³ every dollar that is spent on indigent defense by the county comes directly from the court budget. Judges must therefore weigh indigent defense costs against many needs, including probation officers, and treatment courts.⁷⁴

⁶⁹ See ABA Model Rules of Professional Conduct. For example, the prohibition on outside investment in law firms in Rule 5.4 is justified on the grounds that it might impair the independent decision making of attorneys.

⁷⁰ American Bar Association, TEN PRINCIPLES OF A PUBLIC DEFENSE DELIVERY SYSTEM 2 (2002) (“The public defense function, including the selection, funding and payment of defense counsel is independent. . . . Removing oversight from the judiciary ensures judicial independence from undue political pressures and is an important means of furthering the independence of public defense.”)

⁷¹ Stephen Bright noted the endemic conflicts of interest in appointed counsel systems: “This is a system riddled with conflicts. A judge’s desire for efficiency conflicts with the duty to appoint indigent defense counsel who can provide adequate representation; a lawyer’s need for business. . . . [discourages vigorous] advocacy. And later, if there is a claim of [in]effective assistance, the judge who appointed the lawyer is the one to decide the claim.” Stephen B. Bright, *Testimony Before the Senate Committee on the Judiciary*, FEDERAL NEWS SERVICE, June 27, 2001, at 6.

⁷² This appointment “wheel” is unrelated to the system by which a case is assigned to a judge for trial.

⁷³ Holly R. Stevens, Colleen E. Sheppard, Robert Spangenberg, Aimee Wickman, Jon B. Gould, STATE, COUNTY AND LOCAL EXPENDITURES FOR INDIGENT DEFENSE SERVICES, FISCAL YEAR 2008 5, 55 (2010).

⁷⁴ Interview #17. According to some lawyers, judges would use unspent funds for indigent defense on other judicial branch needs. Interview #9 (surplus funds went into general operating into court system). See also Freudenthal, *supra* note 19 at 65 (according

Apart from the direct pecuniary costs of paying for defense counsel, judges may also have conflicts of interest in appointing counsel that will require too much judicial time and energy. Thus judges have incentives to appoint counsel who file fewer pre-trial motions, ask fewer questions during voir dire, raise fewer objections, and present fewer witnesses.⁷⁵ Quite apart from reducing the expenditures paid to counsel, this also allows judges to process more cases in less time.⁷⁶

Historically, judges have also purportedly assigned cases to lawyers with whom they had political connections.⁷⁷ A former chairman of the Philadelphia Bar Association criminal justice section explained that the system of appointments had developed because “judges wanted to pay back supporters for their political help.”⁷⁸ Another lawyer explained, “The homicide appointment system is largely a patronage system.”⁷⁹ In 2001, Freudenthal made similar findings, noting that appointments are used by judges as political favors.⁸⁰

Today, opinion is mixed with respect to whether political considerations continue to play a role in the appointments with most respondents indicating that this played much less of a role than in the past. One interviewee disagreed, explaining: “The appointments process is still political. If the judge is Republican, they appoint the next guy on the list

to defense counsel, indigent defense funds used for other court expenditures, including politically appointed courtroom staff).

⁷⁵ See Freudenthal, *supra* note 19 at 67 (noting “broad perception that judges prefer lawyers who move cases along without spending ‘excessive’ time on motions and requests” and quoting lawyer who explained, “We’ve got a huge backlog problem here, and many of the judges just want you moving cases.”)

⁷⁶ Interview # 16 (Judges are under tremendous pressure to process cases quickly and “nobody wants to rock the boat” by appointing lawyers that are too aggressive); Interview #15 (same).

⁷⁷ See Tulsky, *What Price Justice?* *supra* note 66 at 2 (“Judges have traditionally kept hold of the power to appoint attorneys and have often assigned lawyers with connections. Big criminal cases have been handed out to relatives and friends of judges.”) See also Tulsky, *Legal Panel Endorses New Rules Changes*, *supra* note 66 (quoting lawyer: “[Judges] view appointments as a prerogative they wanted to keep.”).

⁷⁸ See Tulsky, *Big-Time Trials* *supra* note 66, at 3 (quoting Steven A. Morley); Tulsky noted that “Philadelphia’s poor defendants often find themselves being represented by ward leaders, ward committeemen, failed politicians, the sons of judges and party leaders, and contributors to the judges’ election campaigns.” *Id.* *Big-Time Trials*, *supra* note 66. “The Philadelphia homicide appointment system is ... a political device enabling individual judges with the opportunity to appoint favored lawyers to cases in which a decent appointment fee can be earned.” quoting Stuart H. Shuman; *id.* (recounting instances of ineffective lawyering in murder cases by appointed counsel with political connections).

⁷⁹ *Id.* *Big-Time Trials*, *supra* note 66 at 5, quoting Robert E. Welsh. The lawyer who received the most homicide appointments in the period examined by Tulsky was a former judge who had been removed from the bench for taking money from the Roofers Union and then misleading the FBI. He represented defendants in an extraordinary sixty-two homicide cases, including capital cases, over a two-year period. *Id.* at 2. See also Tulsky, *A Step for Indigent Defense*, *supra* note 66 at 2 (frequently appointed counsel was arrested for overbilling the city for indigent defense work).

⁸⁰ See Freudenthal, *supra* note 19 at 67.

they get from the party. Democratic judges aren't any better."⁸¹ According to this respondent, this occurs even for lawyers that other judges identify as clearly incompetent: "In one case, the homicide calendar judge saw that the lawyer was hopeless and contacted the judge who appointed the guy and told him not to appoint him again. It didn't make any difference. The [judge] appointed the same guy again."⁸²

However, most interviewees thought that blatant political considerations in the appointment of counsel were much less common today, in part because fewer attorneys wanted the appointments.⁸³ Most interviewees thought that most judges tried to appoint reasonably competent lawyers, but even respondents that were generally positive about appointed counsel admitted that not every appointed counsel did a good job.⁸⁴

This system of appointment may also create incentives on the part of lawyers who wish to continue to receive appointments. Aware of the caseload and fiscal pressures faced by judges, appointed lawyers may be more hesitant to request numerous experts or to represent defendants in time-consuming ways.⁸⁵ Appointed lawyers whom we interviewed, however, denied that their actions were influenced by these considerations and emphasized their professional obligations to zealously represent their clients.

In contrast, public defenders, on a fixed salary and not beholden to judges for future appointments, lack these particular incentives.⁸⁶ They may, of course, face other constraints.

B. *Compensation for Lawyers, Investigators, and Experts*

Another ongoing problem, also documented by both Tulsy, in 1992 and Freudenthal, in 2001, is the compensation paid to appointed attorneys for representation, investigators, and experts in murder cases. Counsel appointed in murder cases—both capital and non-capital—receive flat fees for pre-trial preparation—\$1333 if the case is resolved prior to trial and \$2000 if the case goes to trial. The preparation fee also includes the first three hours of trial time. While on trial, lawyers receive \$200 for three hours of court time or less, and \$400/day for more than three hours.⁸⁷

⁸¹ Interview #8.

⁸² *Id.*

⁸³ Interview #15.

⁸⁴ Interview #17.

⁸⁵ Interview #16; *see also* Freudenthal *supra* note 19, at 67 (quoting one lawyer as speculating that "they are routinely appointed because they don't make trouble, they try cases quickly, they don't do a huge amount of prep, they don't bill huge. They've figured out what's acceptable to the court.")

⁸⁶ Interview #8 (noting that salary permits aggressive representation by Defender Association attorneys).

⁸⁷ Interview #1, 6, 10; Instructions, First Judicial District of Pennsylvania Trial Division Attorney Payment Voucher, 30-1084D (Rev. 4/09).

These compensation amounts and structure creates several problems. First, the overall amounts of compensation are very low compared to other jurisdictions and compared to what most attorneys could earn in the private sector. By contrast, attorneys appointed to criminal cases in federal court earn \$125/hour in non-capital cases and \$185/hour in capital cases. As a result, many respected criminal defense attorneys refuse to be on the list to accept court appointments. Interviewees, including appointed counsel, note that while some of the lawyers who are willing to take appointments are good, some are not.⁸⁸

Consistent with microeconomic theory, some counsel that take appointed cases do it either because it makes up for the lack of other, better-paying work⁸⁹ or because they receive other benefits from it. For many appointed counsel, this other benefit is an enjoyment of murder trials and being involved in what one lawyer called “significant” cases.⁹⁰ One explained: “I’d do it for next to nothing, and the judges know this.”⁹¹

Second, as a result of the compensation being low in each case, attorneys who do take homicide appointments generally take many more of them than it would be possible to handle well. One interviewee explained:

The way the system is built, it is very difficult for someone who wants to do a good job to get the money and time to be able to use best practices. Very hard for them to bill all that and get paid for it.⁹²

Another respondent who formerly took appointments explained that, “I think of [appointed counsel] as dray horses. You crack the whip they pull

⁸⁸ Interview #4 (noting that “mostly political hacks” get appointments and further noting that many of these lawyers are “hopeless” and despite required training, “they make the same mistakes, again and again”); Interview #19 (“Over time, there has been an ever diminishing pool of hacks who were willing to take these cases”); *see* Freudenthal, *supra* note 19, at 70 (quoting lawyer, “There are a lot of lawyers I know who would be good advocates in these cases who won’t take it because it’s too much time and almost no money, in terms of the time you have to spend”); *id.* (noting “lawyers must consider the possibility that their bills will be cut”); *see also* Roach, *supra* note 8 at 46 (finding that as outside options for higher quality attorneys improve, quality of attorneys willing to take appointments declines).

⁸⁹ Interview #12 (while private clients more lucrative, appointed work is steady income in business).

⁹⁰ Interview #11 (“I love doing this”; court administration “has private bar over a barrel” because sufficient number of lawyers willing to accept appointments despite low compensation).

⁹¹ Interview #15.

⁹² Interview #4; *see also* Freudenthal, *supra* note 19, at 71 (quoting lawyer as saying, “Anyone who takes a capital case under the Philadelphia system of paying lawyers basically has to commit ethical violations and go into court basically unprepared in many areas.”)

the wagon. Some better than others, but none at the level I think is required.”⁹³

The American Bar Association Guidelines for Counsel in Capital Cases notes that a study of federal capital trials found that “total hours per representation in capital cases that actually preceded trial averaged 1889.”⁹⁴ If two appointed counsel in Philadelphia worked similar hours, they would receive compensation of just over \$2 an hour.⁹⁵

Third, the fee structure, with its flat rate for preparation with additional payments for trial, creates no marginal incentives to prepare for trial and incentives to take cases to trial. As a result, interviewees noted that appointed counsel do relatively little preparation and are more likely to take cases to trial.⁹⁶

In particular, interviewees note that Defender Association counsel spend much more time in preparation with defendants, building trust. This trust is important for developing an effective defense, particularly in the penalty phase of a capital case, which often requires the defendant to candidly discuss personal family background, including neglect and abuse.⁹⁷ The trust also increases the ability of an attorney to convince an often young defendant that the best course of action is to agree to a plea bargain or waive a jury.⁹⁸

Some appointed counsel were critical of the Defender Association for meeting with the client repeatedly in an effort to persuade defendants to plead guilty rather than take the case to trial.⁹⁹ One lawyer who took appointments candidly admitted that he thought “time with the client was highly overrated.”¹⁰⁰ He contrasted the Defender’s time-intensive efforts to persuade clients to plead to his general willingness to accept a client’s desire to go to trial at face value.¹⁰¹

⁹³ Interview #16.

⁹⁴ See American Bar Association, *supra* note 23, at 40.

⁹⁵ In 1992, Tulsy reviewed twenty capital cases and found that the lawyers were paid, on average, \$6399 per case. See Tulsy, *What Price Justice*, *supra* note 66, at 2. In only one of them were there two lawyers involved. Lawyers also often complained of their bills, submitted after the trial was finished, were substantially cut. See Tulsy, *Report: Money Woes Affect Trials’ Fairness*, *supra* note 66, *passim*.

⁹⁶ Interview #19, Interview #11; Interview #4. Ten years ago, Freudenthal noted the same dynamic and quoted one lawyer explaining why he doesn’t spend time convincing defendants to accept a plea: “It could be hours and hours and hours with them, with the family, because you have to get the family involved. I mean, talk about preparation time – that could eat up your \$1700 right there;” see Freudenthal *supra* note 67, at 76. See also Roach, *supra* note 8 at 50 (finding that moral hazard related to compensation structure may affect appointed counsel behavior)

⁹⁷ Interview #4.

⁹⁸ See Freudenthal, *supra* note 19, at 75 (noting that public defenders, in contrast to appointed counsel, invest time in convincing defendants to plead guilty when they think it best).

⁹⁹ Interview #11.

¹⁰⁰ Interview #11 (“I’m not their friend or father or brother. I’m their lawyer”).

¹⁰¹ In this respect, appointed counsel could be viewed as more traditionally adversarial than the public defenders. To the extent we value the public jury trial for its public

Fourth, and finally, compared to the public defender, appointed lawyers are also limited in their ability to hire expert witnesses, investigators, and mitigation specialists. The ABA recommends that in a capital case, a defense team is formed that includes lawyers, investigators, mitigation specialists, and expert witnesses.¹⁰² Expert testimony is critical, particularly in the penalty phase of a capital trial, to present and explain the life-long mental health significance of trauma that is often found in the background of capital defendants. Mitigation specialists, often trained social workers, are also an important part of a capital team and are specialists at identifying and documenting mitigating evidence about the defendant's life.

At the public defender, mitigation specialists are part of the defense team from the start, meeting with the client and the client's family. Similarly, the public defender does not require court approval in order to hire an expert. Every homicide client is routinely examined by a defense mental health expert to help the lawyers understand whether there is an affirmative defense and develop mitigating evidence.

In contrast, appointed counsel have to seek judicial permission and funding to hire experts or investigators. While interviewees indicate that this is now much more freely granted, in the past, during our study period, judges sometimes denied these requests.¹⁰³

C. *Relative Isolation*

Another factor that distinguishes the public defenders from the appointed counsel is the degree of isolation on the part of the appointed counsel. Most are sole practitioners, operating out of single-person law offices. In non-capital cases, they represent the defendant alone. In potentially capital cases, two lawyers are appointed – one to be primarily responsible for the guilt phase of the case and the other the penalty phase of the case but coordination between the two lawyers appointed varies.

expressive functions, the fact that defendants represented by appointed counsel are more likely to go to trial may provide some third-party benefits. But as our quantitative results show, whatever theoretical benefits this might provide comes at substantial cost to the client in likelihood of conviction of murder and sentence.

¹⁰² See American Bar Association *supra* note 23, at 28 (“The defense team should consist of no fewer than two attorneys qualified in accordance with Guideline 5.1, an investigator, and a mitigation specialist.”)

¹⁰³ See Freudenthal, *supra* note 19, at 77 (quoting lawyer: “The courts are often willing to give you an expert for \$500. You can get two experts total for various things, so you sort of have to pick and choose. You might get an investigator for \$500 – and you might be able to get a little more money, but they’ll give a fight – it’s not guaranteed. And maybe, let’s say you need a pathologist. Maybe they’ll give you a pathologist for another nickel. I don’t know which doctor – we’re talking a pathologist is going to do any significant amount of work for \$500 or even \$1000. I mean, any good medical expert is a minimum of \$2500 per day, and the court will never give that to you – ever. It’s just not going to happen. But let’s say you’ve got a case in which you need a pathologist, you need an investigator, you need a ballistics expert, you need a fingerprint expert – I’ve had cases like that. They’re just not going to do it.”)

In contrast, the public defender's homicide unit is a group of twelve attorneys, three investigators, and three mitigation specialists, housed in an office of approximately 215 attorneys.¹⁰⁴ In every case, capital and non-capital, two public defenders work the case up together. This reduces the risk of the inevitable human error on the part of one attorney affecting the overall representation in a way that is detrimental to the client.

One appointed attorney described one way this could manifest itself: "you get defense lawyer syndrome – you think your defense theory of the case is much stronger than it actually is."¹⁰⁵ As a result, appointed counsel could be more eager to take the case to trial than was justified by the actual strength of the defense case.¹⁰⁶ The public defender's team approach to representation reduces the risk of these errors because no individual professional is solely responsible for the case.

Some interviewees also suggest that appointed counsel are slow to adopt new strategies or keep up with relevant case law developments, patterns that might also arise from isolation.¹⁰⁷ One interviewee reports that a Department of Justice-funded national capital case seminar in Philadelphia attracted lawyers from all over the country, but none of the lawyers who accepted homicide appointments in Philadelphia attended.¹⁰⁸ Even on the same case, the two lawyers who are now appointed to potentially capital cases do not always communicate with one another to develop a central consistent theme for the case.¹⁰⁹ Ten years ago, Freudenthal noted a similar isolation among appointed counsel.¹¹⁰ However, some appointed counsel disputed the suggestion that they were isolated and suggested that they maintained networks of colleagues at the criminal justice center with whom they discussed cases.¹¹¹

Some interviewees believed that appointed counsels' skill as trial lawyers was equal or greater to that of the public defenders whom they

¹⁰⁴ E-mail communication with Paul Conway, Chief of Homicide Unit for Defender Association. July 27, 2011.

¹⁰⁵ Interview #14.

¹⁰⁶ See Zev J. Eiger & Yair Listokin, *Do Lawyers Really Believe Their Own Hype and Should They?: A Natural Experiment*, available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1640062 (2011) (showing that law students are more likely to believe in the merits of their side's position in moot court cases even when positions are randomly assigned and reviewing studies demonstrating optimism bias among attorneys).

¹⁰⁷ Interview #4 (describing an attempt to train appointed counsel on new jury voir dire techniques and noted that appointed counsel were repeatedly making the same errors.)

¹⁰⁸ Interview #4.

¹⁰⁹ Another interviewee explained: "Organizationally, private lawyers have no sense what other lawyers are doing. No team meetings; no sense there is thematic approach to cases." Interview #4.

¹¹⁰ See Freudenthal, *supra* note 19, at 63 (quoting appointed lawyer: "I think one of the problems of the quality of justice is that we're not talking to each other – that we're not sharing information.") *Id.* at 63 (noting several lawyers echoing assertion, "William Penn tried a case in 1600 and lawyers have been trying cases the same way ever since.")

¹¹¹ Interview #10; Interview #16.

criticized as elitist.¹¹² Yet even these interviewees admitted that not every lawyer taking appointments was as qualified or able as themselves and that the payment scale made spending much time preparing cases thoroughly uneconomical. On this view, the appointed counsel's pride as professionals and skill as lawyers made up for the failure of the courts to pay them to adequately prepare.¹¹³

We also found failure to prepare in our review of forty capital cases in which appointed counsel in Philadelphia has been found ineffective over the last 16 years.¹¹⁴ While some of these cases were tried prior to our study period, they serve as additional evidence of a longstanding pattern of appointed counsels' failure to prepare.

In short, longitudinal qualitative evidence over the last twenty years identifies systemic and institutional reasons for the difference in outcomes observed in Section II. Compared to the public defenders, appointed counsel may be impeded by conflicts of interest on the part of both the appointing judges and the appointed counsel, extremely limited compensation, incentives created by that compensation, and relative isolation. Based on our qualitative interviews, we believe that these systemic causes result in appointed counsel generally spending less time with defendants and investigating and preparing cases less thoroughly. Moreover, the inevitable human error in judgment is less likely to be caught by another member of the defense team because appointed counsel are primarily operating individually in contrast to the public defender's more team-based approach.

¹¹² Interview #10; Interview #11.

¹¹³ Interview #10.

¹¹⁴ See e.g. *Kindler v. Horn*, 542 F.3d 70 (3d Cir., 2008) (granting habeas relief for ineffectiveness assistance of counsel in failing to investigate and present mitigating evidence); *Bond v. Beard*, 539 F.3d 256, 289 (3d Cir. 2008) (“We do not question [defense counsel’s] dedication or zeal in representing Bond but here no amount of good intentions makes up for his lack of experience and preparation,” affirming finding of ineffective for failing to investigate and present substantial mitigating evidence); *Commonwealth v. Ramos*, Jan. Term, 1999, No. 0089 (Phila. C.P. Apr. 17, 2008) (ineffective assistance of counsel for failing to investigate and present mitigating evidence); *Commonwealth v. Carson*, (Phila. C.P. Apr. 1, 2008) (penalty-phase relief for ineffective assistance of counsel for failing to investigate and present mitigating evidence); *Holland v. Horn*, 519 F.3d 107 (3d Cir. 2008) (granting a new sentencing hearing as a result of counsel’s ineffectiveness in failing to obtain the appointment of a mental health expert and present available mental health mitigating evidence); *Commonwealth v. Brooks*, 839 A.2d 245 (Pa. 2003) (new trial granted for ineffectiveness of counsel in failing to prepare for trial where appointed counsel never met with defendant prior to trial and sole contact was a single pretrial telephone conversation of less than 1/2-hour; court finds trial counsel *per se* ineffective for failing to meet with a capital client before trial); *Commonwealth v. O’Donnell*, 740 A.2d 198 (Pa. 1999) (court expresses “serious doubts regarding counsel’s effectiveness during the penalty phase of Appellant’s trial” where “entire defense presentation during the penalty phase took only four pages to transcribe” – “it is difficult to disagree with Appellant that a defense which amasses only four pages of transcript simply does not reflect adequate preparation or development of mitigating evidence by counsel representing a capital defendant in a penalty phase hearing”).

IV. IMPLICATIONS OF THE PERFORMANCE DISPARITY BETWEEN THE PUBLIC DEFENDER AND APPOINTED COUNSEL

A. *Constitutional Implications*

The Sixth Amendment theoretically guarantees the effective assistance of counsel. In *Strickland vs. Washington*,¹¹⁵ the Supreme Court held that in order to show a violation of this right, a defendant must show that (1) the attorney at trial provided deficient performance; and (2) there was a reasonable likelihood that the defendant was prejudiced by the attorney's deficient performance. Whatever the merits of this oft-criticized doctrinal framework,¹¹⁶ our findings suggest that *Strickland* (and its application by the lower courts) permit an enormous and troubling chasm between different types of counsel.

The Eighth Amendment, unlike the Sixth Amendment, has been interpreted to prohibit arbitrariness.¹¹⁷ Perhaps the most disturbing aspect of our analysis is the fact that we identify a factor—whether or not a defendant is initially assigned to the public defender—that has an important impact on case outcomes but that is completely unrelated to the culpability of the defendant. The fact that a defendant's time imprisoned may dramatically change as a function of the ordering in which cases are brought raises troubling questions about the fairness and arbitrariness of the current system for assigning representation in Philadelphia.

B. *Method of Providing Counsel to Indigents*

Our findings also bear on the questions of the best way to provide indigent defense. While ostensibly these results might seem to imply that public defenders are superior to appointed counsel, it is important to recognize that in this analysis public defender representation is confounded with a number of additional factors, such as differences in attorney compensation, which may themselves independently affect the

¹¹⁵ 466 U.S. 668 (1984).

¹¹⁶ See, e.g. Bruce Green, *LETHAL FICTION: THE MEANING OF "COUNSEL" IN THE SIXTH AMENDMENT* (1993); Stephen B. Bright, *Counsel for the Poor: The Death Sentence Not for the Worst Crime But for the Worst Lawyer*, 103 *YALE L.J.* 1835 (1994); Richard L. Gabriel, *The Strickland Standard for Claims of Ineffective Assistance of Counsel: Emasculating the Sixth Amendment in the Guise of Due Process*, 134 *U. PA. L. REV.* 1259 (1986). William S. Geimer, *A Decade of Strickland's Tin Horn: Doctrinal and Practical Undermining of the Right to Counsel*, 4 *WM & MARY BILL RTS J* 91, 95 (1995) (arguing that Supreme Court has undermined indigent defendants' right to counsel); Barbara A. Babcock, *Fair Play: Evidence Favorable to an Accused and Effective Assistance of Counsel*, 34 *STAN L REV* 1133, 1135-36 (1982) (using analogy to fair play in sports to develop criteria for demands of adversary system).

¹¹⁷ In *Furman v. Georgia*, 408 U.S. 238 (1972) (*per curiam*), the Supreme Court held that all existing capital punishment statutes were unconstitutional because the arbitrariness of the use of the death penalty violated the Eighth Amendment.

quality of counsel and therefore the disparity in outcomes. We cannot separately disentangle the effects of public defender versus appointed counsel from the other differences in characteristics across these two types of attorneys.

For example, two factors that were cited by interviewees as important differentiators between public defenders and appointed counsel in Philadelphia were the use of integrated teams by the public defender and the larger amount of case preparation by public defenders, which is in part related to their financial incentives. In theory one could organize an indigent defense system that relies solely on private appointed attorneys but that requires coordinated teams in more serious cases and offers incentives for careful case preparation, which might allow appointed counsel in such a system to achieve results comparable to those of public defenders. Similarly, the appointed versus public defender distinction is not necessarily relevant for providing access to dedicated funds beyond the discretion of judges for investigators, psychologists, and other case support personnel. An indigent defense system could provision such funds no matter the type of attorney used for defense.

Nevertheless, some factors that may contribute to disparity in case outcomes are likely to be directly affected by the choice to organize indigent defense through a public defender's office. It seems plausible to expect that the relative isolation experienced by appointed counsel noted above by interviewees seems less likely to occur in public defender offices, where opportunities to share information with colleagues and engage in collective training activities are likely to be greater. Thus, along some dimensions it seems reasonable to expect that the choice of whether to organize an indigent defense system using appointed counsel versus public defenders will have direct impacts on the defense counsel function.

CONCLUSION

Consider the following thought experiment: suppose the 2,459 defendants in our sample represented by appointed counsel had been represented instead by Defender Association counsel? Based on the results in Table Two, we would expect 270 defendants who were convicted of murder to have been entirely acquitted of this charge with Defender Association representation. Three hundred ninety-six individuals who received life sentences would have been spared a life sentence. In aggregate, we would expect the time served by the 2,459 defendants for the crimes observed in our data to decrease by 6,400 years.¹¹⁸

¹¹⁸ Such calculations require us to assume that the size of the public defender pool does not have a direct effect on outcomes. This assumption might be violated under some models of court behavior. For example, if judges or prosecutors wish to ensure that the overall average sentence across murder defendants remains at some fixed number of

Prison costs for these crimes would also be affected. Recent estimates place the cost of incarcerating a prisoner for one year in Pennsylvania at roughly \$32,000 so a decrease of 6,400 years would reduce prison costs for these crimes by over \$200 million.¹¹⁹

In short, we find that the defense counsel (and the system for providing him or her) makes a vast difference in the outcome of murder cases in Philadelphia.¹²⁰ Our qualitative interviews suggest that the causes of this disparity are incentive structures created by the appointment system and a resulting failure of appointed counsel to prepare cases as thoroughly as the public defender.

Perhaps the stark difference in outcomes attributable to counsel should come as no surprise. Effective counsel is a prerequisite to the assertion of nearly every other right. As the Supreme Court observed, “it is through counsel that all other rights of the accused are protected: Of all the rights that an accused person has, the right to be represented by counsel is by far the most pervasive, for it affects his ability to assert any other right he may have.”¹²¹ Representation of counsel is the right to all other rights.¹²²

As such, legislatures, (or here local government, including the courts), can effectively undermine court-mandated procedural rights by failing to provide resources to enforce them.¹²³ In this way, as the late William J.

years, increasing the number of people represented by Defender Association attorneys would lead to changes in the sentences received by a Defender Association clients.

¹¹⁹ Jack Wagner, *Fiscal and Structural Reform--Solutions to Pennsylvania's Growing Inmate Population*, Auditor General's Special Report 3 (January 2011). However, it is unclear whether Defender Association representation reduces or increases overall prison costs, because incarceration may itself affect future crime (and future incarceration) through deterrence or incapacitation.

¹²⁰ *A priori*, we might have expected defense counsel to make the *least* difference in murder cases because the state expends the most resources and has the highest stakes in a reliable outcome.

As a result of local institutional history there may be reasons to think that the gap in outcomes between defendants represented by public defenders and appointed counsel may be smaller in other cities where appointed counsel have more resources, are better funded etc. There is no *a priori* reason to think, however, that the criminal justice system in Philadelphia is any more *sensitive* to counsel than other jurisdictions, though this is ultimately an empirical question.

¹²¹ *Penson v. Ohio*, 488 U.S. 75, 84 (1988); see also *Cuyler v. Sullivan*, 446 U.S. 335, 343 (1980) (“Unless a defendant charged with a serious offense has counsel able to invoke the procedural and substantive safeguards that distinguish our system of justice, a serious risk of injustice infects the trial itself.”)

¹²² To provide a concrete example of this in Philadelphia, the Supreme Court has provided the capital defendant the theoretical right to “life-qualify” the jury to ensure that every juror is able to consider and give effect to mitigating evidence in the penalty phase of a capital trial. *Morgan v. Illinois*, 504 U.S. 719 (1992). Yet one interviewee noted that many appointed counsel, unlike Defender Association counsel, did not regularly do so. Interview #10.

¹²³ The indigent defense system in Philadelphia is a product of many actors including the legislature, local government, and the courts.

Stuntz has noted,¹²⁴ the legislature can profoundly shape the actual practice of constitutional criminal procedure despite its nominally being the province of the courts. Our findings can be understood as a rough measure of the results of this strategy in one jurisdiction.

Even completely apart from abstract concerns about justice, the rule of law and the Constitution, the level of disparity in our findings show a system that is highly dependent upon the lawyer. Any such system is highly sensitive to the inevitable human error.¹²⁵ Other professions and industries, from engineering to aviation to medicine to car manufacturing, appear to be far ahead of the law in trying to design systems that are not as dependent upon the happenstance of the characteristics of the individual professional to reach a reliable outcome.¹²⁶ The Defender Association, perhaps inadvertently, has adopted some of the risk reduction methods employed in these other fields: standardized preparation, and a team approach to accomplishing the task and minimizing the effect of an individual human error.¹²⁷

Other professions have adopted quality assurance methods in an effort to minimize error and increase efficiency rather than to any commitment to justice or the rule of law. Ironically, the legal profession's lofty commitments to these abstractions may have obscured its concrete failures to achieve more reliable practices—practices that would help achieve the more abstract goals. In this respect, the legal profession may have much to learn from efforts in other fields to develop reliable processes.¹²⁸

¹²⁴ William J. Stuntz, *The Uneasy Relationship Between Criminal Procedure and Criminal Justice*, 107 YALE L.J. 1, 12 (1997).

¹²⁵ See Donald M. Berwick, *Continuous Improvement as an Ideal in Health Care*, 320 N. ENGL J. MED 53-56 (1989) (calling for application of industrial techniques of quality improvement to healthcare); Institute of Medicine, *TO ERR IS HUMAN: BUILDING A SAFER HEALTH SYSTEM* (Linda T. Kohn, Janet M. Corrigan & Molla S. Donaldson eds., National Academy Press 2000) [hereinafter *TO ERR IS HUMAN*] 49 (urging focus on systems rather than individual actors to reduce errors); Patrice L. Spath, ed., *ERROR REDUCTION IN HEALTHCARE* (2000) (same); Lucian L. Leape, *Error in Medicine*, 272 JAMA 1851,1854 (1994); cf. Charles Perrow, *NORMAL ACCIDENTS: LIVING WITH HIGH RISK TECHNOLOGIES* (1984) (noting inevitability of human error in complex systems).

¹²⁶ See e.g. Atul Gawande, *THE CHECKLIST MANIFESTO* (2009) (calling for use of checklists to minimize human error in medicine; chronicling other attempts to do same). One partial explanation for the disparity is the Defender Association's practice of assigning two lawyers to a case which has the effect of reducing the consequences of an individual's inevitable error. See also James M. Doyle, *Learning from Error in American Criminal Justice* 100 J. CRIM L. & CRIMINOLOGY 109 (2009) (calling for criminal law to view wrongful convictions as organizational accidents and to create, like medicine and aviation, a culture of safety).

¹²⁷ It is telling that one of appointed counsel's criticisms of the public defender is that they are too reluctant to take cases to trial. Interview #10. From a risk management perspective, trials are unpredictable and risky.

¹²⁸ For example, *Strickland v. Washington* focuses on the "ineffectiveness" of a particular individual lawyer – blaming an individual for an error. Compare to Institute of Medicine, *TO ERR IS HUMAN* supra note 125, at 5 ("The focus must shift from blaming individuals for past errors to a focus on preventing future errors by designing safety into the system.")

We often claim, in the words of John Adams, to be “a government of laws, not of men.”¹²⁹ To further this end, *Gideon* extended the right of counsel so that “every defendant stands equal before the law.”¹³⁰ Ideally, the vagaries of counsel should make no difference in the outcome of a proceeding in our justice system. The criminal justice system should mete out fine justice like Justice Gibson’s grindstone. Our findings suggest how far from this goal we are.

¹²⁹ Massachusetts Constitution, ARTICLE XXX (1780).

¹³⁰ *Gideon v. Wainwright*, 372 U.S. 335, 344 (1963).

Table One: Characteristics of Indigent Philadelphia Homicide Defendants by Initial Representation Assignment

Characteristic	Average for Individuals Assigned Appointed Counsel (N=2677) (I)	Average for Individuals Assigned Defender Association (N=480) (II)	T-Stat (I)-(II)	P-Value
Defended by public defender	.155 (.362)	.592 (.492)	-18.58	.000
Defendant Demographics				
Male	.929 (.257)	.948 (.222)	-1.70	.089
Black	.732 (.443)	.744 (.437)	-0.53	.594
Age (years)	25.7 (9.6)	26.3 (10.3)	-1.10	.271
ZIP Code Characteristics (N=1764)				
% living in Philadelphia	95.3 (0.2)	94.1 (0.2)	0.86	.389
% female-headed households	55.7 (0.1)	54.9 (0.1)	0.91	.363
% of adults with less than HS	35.3 (0.1)	34.6 (0.1)	0.91	.363
Median household income	25,918 (8,796)	26,631 (9,342)	-1.15	.252
Missing ZIP code data	32.3 (0.5)	29.8 (0.5)	1.09	.276
Prior Criminal History				
Number of prior counts for:				
All crimes	9.98 (13.65)	10.57 (12.86)	-0.92	.358
Aggravated assault	0.52 (1.04)	0.47 (0.87)	1.16	.247
Robbery	0.38 (0.90)	0.44 (0.95)	-1.28	.200
Simple assault	0.85 (1.51)	0.89 (1.37)	-0.68	.500
Weapons offenses	1.81	1.82	-0.05	.961

	(3.13)	(3.01)		
Burglary	0.20	0.21	-0.33	.744
	(0.66)	(0.61)		
Theft	1.54	1.87	-1.90	.058
	(3.33)	(3.54)		
Drug offenses	1.43	1.45	-0.15	.878
	(2.60)	(2.82)		
Ever charged with:				
Any offense	.648	.679	-1.32	.188
	(.478)	(.467)		
Aggravated assault	.309	.314	-0.25	.801
	(.462)	(.465)		
Robbery	.238	.252	-0.65	.516
	(.426)	(.434)		
Simple assault	.418	.444	-1.08	.279
	(.493)	(.497)		
Weapons offenses	.432	.447	-0.61	.545
	(.495)	(.498)		
Burglary	.130	.149	-1.07	.286
	(.336)	(.356)		
Theft	.385	.440	-2.23	.026
	(.487)	(.497)		
Drug offenses	.379	.371	0.34	.732
	(.485)	(.484)		
Current Case Characteristics				
Number of charges filed	5.13	4.94	1.75	.080
	(2.16)	(2.13)		
Number of murder counts	1.07	1.05	1.34	.181
	(0.30)	(0.24)		
Any weapons charge	.833	.773	2.94	.003
	(.373)	(.419)		
Any conspiracy charge	.468	.421	1.91	.057
	(.499)	(.494)		
Number of defendants in case	1.69	1.70	-0.15	.880
	(1.33)	(1.46)		

Note: Standard errors are in parentheses.

Table Two: Case Outcomes by Initial Representation Assignment

Characteristic	Average for Individuals Assigned Appointed Counsel (N=2677) (I)	Average for Individuals Assigned Defender Association (N=480) (II)	T-Stat (I)-(II)	P-Value
Case Outcomes				
Guilty of any charge	.801 (.399)	.792 (.406)	0.43	.664
Number of guilty charges	2.36 (1.83)	2.24 (1.80)	1.31	.189
Guilty of murder	.565 (.496)	.543 (.499)	0.89	.371
Average sentence (years)	20.9 (17.9)	18.1 (17.0)	3.28	.001
Minimum sentence (conditional)	8.45 (10.00)	7.67 (8.99)	1.46	.145
Maximum sentence (conditional)	18.6 (21.4)	17.0 (19.7)	1.37	.172
Life sentence	.262 (.440)	.195 (.397)	3.32	.001
Death sentence	.013 (.112)	.013 (.112)	0.04	.968
Expected time served (years)	10.97 (7.67)	9.81 (7.43)	3.05	.002
Case Handling (N=3133)				
Waiver trial	.263 (.000)	.270 (.000)	-0.33	.742
Plead guilty	.281 (.000)	.384 (.000)	-4.28	.000

Note: Conditional minimum and maximum sentences do not include individuals sentenced to life imprisonment or death. Sample size is 3133.

Table Three: Estimated Impacts of Defender Association Representation on Case Outcomes

Outcome	IV1	IV2	IV3	OLS
Guilty of any charge	-.020 (.046)	-.037 (.046)	-.070 (.073)	-.030 (.018)
# charges guilty	-.271 (.206)	-.243 (.200)	-.436 (.301)	-.202** (.079)
Guilty of murder	-.051 (.057)	-.110* (.056)	-.111 (.071)	.011 (.021)
Life sentence	-.153** (.046)	-.161** (.046)	-.209** (.062)	-.046* (.018)
Death sentence	-.001 (.013)	-.001 (.013)	-.005 (.019)	-.009 (.005)
Average sentence length (years)	-6.53** (1.99)	-6.42** (1.92)	-3.10 (2.70)	-1.93** (0.73)
Minimum sentence, conditional (years)	-1.72 (1.18)	-1.55 (1.17)	-1.49 (1.92)	-0.13 (0.47)
Maximum sentence, conditional (years)	-3.52 (2.56)	-3.03 (2.57)	-5.35 (4.59)	-0.32 (1.01)
Expected time served	-2.63** (0.86)	-2.61** (0.85)	-0.75 (1.35)	-0.68* (0.33)
Include controls?	N	Y	Y	Y
Include case fixed effects?	N	N	Y	N

Note: The IV coefficients estimated in the first three columns are estimated by using legal representation at the preliminary arraignment as an instrument for later representation. Conditional minimum and maximum sentences do not include individuals sentenced to life imprisonment or death. * denotes an estimate that is statistically significant at the two-tailed 5% level, ** at the 1% level.

Heteroskedasticity-robust standard errors are reported in parentheses.

Table Four: Estimated Impacts of Defender Association Representation on Case Handling

Outcome	IV1	IV2	IV3	OLS
Waived jury trial	.017 (.051)	-.018 (.049)	-.038 (.057)	-.017 (.020)
Plead guilty	.236** (.055)	.213** (.053)	.176* (.073)	.135** (.021)
Include controls?	N	Y	Y	Y
Include case fixed effects?	N	N	Y	N

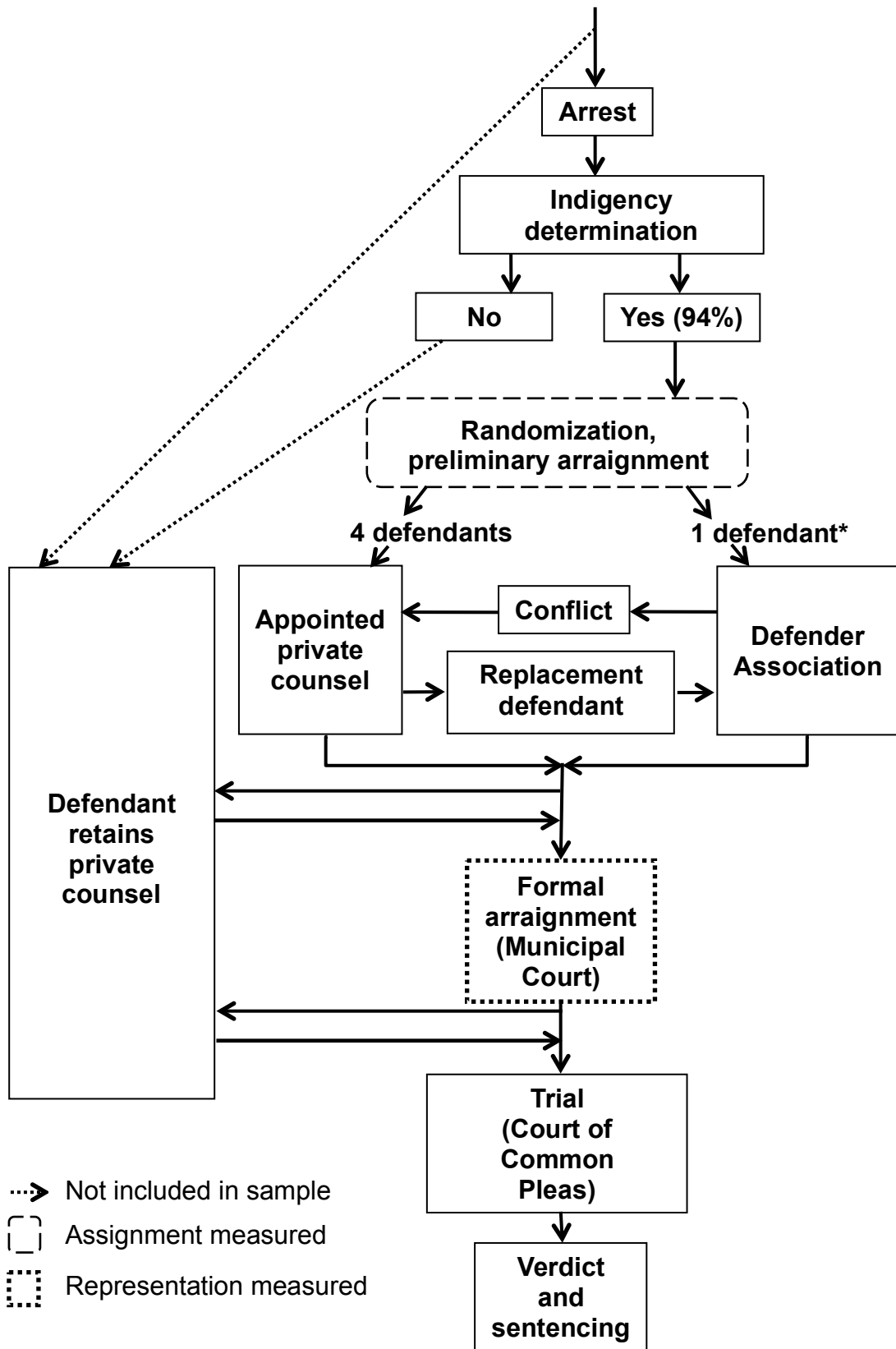
Note: * denotes an estimate that is statistically significant at the two-tailed 5% level, ** at the 1% level. Heteroskedasticity-robust standard errors are reported in parentheses.

Appendix**Appendix Table One: Predictors of Eventual Defender Association Representation at Formal Arraignment**

Explanatory Variable	Estimate
Male	-.018 (.032)
Black	-.014 (.017)
Age	.002* (.001)
# charges in current case	.007 (.004)
Current case includes weapons charge	-.086** (.023)
Current case includes conspiracy charge	-.154** (.018)
# defendants in current case	-.009 (.008)
# prior criminal charges for defendant	-.001 (.001)
Defendant had prior assault charge	.060* (.028)
Defendant had prior aggravated assault charge	-.023 (.024)
Defendant had prior weapons charge	-.058** (.020)
Defendant had prior drug charge	-.006 (.017)
Defendant had prior robbery charge	.027 (.027)
Defendant had prior theft charge	.031 (.022)
Defendant had prior burglary charge	.043 (.026)

Note: This table reports marginal effect coefficient estimates from a probit regression where the outcome variable is a 0-1 indicator for a defendant who was ultimately represented by a Defender Association attorney (mean=.221) and the explanatory variables are defendant demographics and prior criminal history and current case characteristics. The regression also includes year fixed effects as additional unreported controls. The sample size is 3157.

Appendix Figure One: Case Processing in Philadelphia Courts



* Occasionally the homicide unit of the Defender Association is assigned cases outside of this process, such as new trials or penalty phases from habeas appeals. When such an outside case is assigned, the next normally scheduled defendant that would go to the Defender Association based on the 1-in-5 randomization is sometimes skipped and assigned to appointed counsel.

Appendix Figure Two: Distribution of Expected Time Served Based on Sentencing Outcome by Type of Representation

