VOLUME 132

JANUARY 2019

NUMBER 3

HARVARD LAW REVIEW

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ARTICLES

THE EFFECTS OF HOLISTIC DEFENSE ON CRIMINAL JUSTICE OUTCOMES

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CONTENTS

INTRODUCTION		.821
I.	BACKGROUND ON HOLISTIC DEFENSE	.825
	A. The Holistic Defense Model	.825
	B. Prior Research on Holistic Defense	.826
	C. How Might Holistic Defense Affect Criminal Justice Outcomes? A Typology of	
	Predictions	.830
II.	HOLISTIC DEFENSE AS PRACTICED IN THE BRONX	.833
	A. Local Indigent Defense Providers	.833
	B. Service Models Used by the Bronx Defenders, Legal Aid, and 18B Attorneys	. 834
	C. Potential Convergence of Service Models over Time	.844
	D. Perceptions from Other Criminal Justice Participants	.847
	E. Summary	.849
III.	EMPIRICAL METHODOLOGY: MEASURING THE EFFECTS OF HOLISTIC DEFENSE	.850
	A. The Case Assignment Process in Bronx Criminal Court	.851
	B. Data Sources	.854
	C. Natural Experiment	.857
IV.	HOLISTIC DEFENSE SIGNIFICANTLY IMPACTS CLIENT OUTCOMES	.862
	A. Pretrial Outcomes and Case Processing	. 862
	B. Immediate Case Outcomes	.865
	C. Future Criminal Justice System Involvement	.867
	D. Effects for Defendant Subgroups	.871
	E. Effects by Offense	.873
	F. Effects over Time	.874
	G. Nonexperimental Estimates	.877
V.	WHY DOES HOLISTIC DEFENSE WORK?	.879
CONCLUSION		.882
APPENDIX		.887

THE EFFECTS OF HOLISTIC DEFENSE ON CRIMINAL JUSTICE OUTCOMES

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Debates over mass incarceration emphasize policing, bail, and sentencing reform, but give little attention to indigent defense. This omission seems surprising, given that interactions with government-provided counsel critically shape the experience of the vast majority of criminal defendants. This neglect in part reflects our lack of evidence-based knowledge regarding indigent defense, making it difficult to identify effective reforms.

One approach that continues to gain support is holistic defense, in which public defenders work in interdisciplinary teams to address both the immediate case and the underlying life circumstances — such as drug addiction, mental illness, or family or housing instability — that contribute to client contact with the criminal justice system. Holistic defense contrasts with the traditional public defense model that emphasizes criminal representation and courtroom advocacy. Proponents contend holistic defense improves case outcomes and reduces recidivism by better addressing clients' underlying needs, while critics argue that diverting resources and attention from criminal advocacy weakens results. Although the holistic approach is widely embraced, there is no systematic evidence demonstrating the relative merits of the holistic approach.

This Article offers the first large-scale, rigorous evaluation of the impact of holistic defense on criminal justice outcomes. In the Bronx, New York City, a holistic defense provider (the Bronx Defenders) and a traditional defender (the Legal Aid Society) operate side-byside within the same court system, with case assignment determined quasi-randomly based on court shift timing. Using administrative data covering over half a million cases and a quasi-experimental research design, we estimate the causal effect of holistic defense on case outcomes and future offending. Holistic defense does not affect conviction rates, but it reduces the likelihood of a custodial sentence by 16% and expected sentence length by 24%. Over the ten-year study period, holistic defense in the Bronx resulted in nearly 1.1

^{*} Senior Behavioral Scientist and Director, Justice Policy Program, RAND Corporation. This project was supported by Award No. 2013-IJ-CX-0027 of the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this research are those of the authors and do not necessarily reflect those of the Department of Justice or RAND. We are grateful for the support of the National Institute of Justice and the assistance of the Legal Aid Society, the Bronx Defenders, the New York State Division of Criminal Justice Services (DCJS), and the New York State Office of Court Administration. We are also grateful for the thoughtful input from Kara Finck, John Hollway, Rebecca Widom, participants at the 2018 American Society of Criminology annual meeting, Andrew Davies, four anonymous reviewers, and the editors of the Harvard Law Review. Carolyn Cadoret provided invaluable data assistance. Data were provided by DCJS in the interest of information exchange. The opinions, findings, and conclusions expressed in this publication are those of the authors and not those of DCJS. Neither New York State nor DCJS assumes liability for this Article's contents or use thereof. Authors are listed alphabetically.

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2019]

million fewer days of custodial punishment. Holistic defense has neither a positive nor an adverse effect on criminal justice contacts one year postarraignment and beyond.

While holistic defense does not dramatically reduce recidivism, as some proponents have claimed, strengthening indigent defense apparently offers considerable potential to reduce incarceration without harming public safety. Accordingly, this promising model deserves future research — beyond the criminal justice system and in other jurisdictions — and a more prominent place in conversations about how to address mass incarceration.

INTRODUCTION

The vast majority of U.S. criminal defendants receive governmentprovided counsel,¹ so methods for organizing, staffing, and appointing indigent defense counsel have far-reaching effects on the criminal justice system. One recent promising development in indigent defense is the growing recognition that an indigent client may be best served by a team of professionals that addresses a range of the client's needs rather than simply a heroic solitary lawyer who represents a defendant solely at criminal trial.² This notion is embodied by the holistic defense model.

According to its proponents, the key insight of holistic defense is that to be truly effective advocates for their clients, defenders must adopt a broader understanding of the scope of their work with their clients. Defenders must address both the enmeshed, or collateral, legal consequences of criminal justice involvement (such as loss of employment, public housing, custody of one's children, and immigration status), as well as underlying nonlegal issues that often play a role in driving clients into the criminal justice system in the first place.³ To this end, holistic defender offices are staffed not only by criminal defense lawyers and related support staff (investigators and paralegals) but also by civil, family, and immigration lawyers as well as social workers and nonlawyer advocates, all working collectively and on an equal footing with criminal defense lawyers. This holistic model contrasts with the traditional public defense model, which focuses almost exclusively on criminal representation.

Proponents of holistic defense contend that it improves case outcomes and reduces recidivism by better addressing clients' underlying

¹ See CAROLINE WOLF HARLOW, BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, DEFENSE COUNSEL IN CRIMINAL CASES 1 (2000), https://www.bjs.gov/content/pub/pdf/dccc.pdf [https://perma.cc/5BT7-KYTN] (indicating rates of court-appointed counsel for criminal defendants).

² See James M. Anderson & Paul Heaton, Essay, *How Much Difference Does the Lawyer Make? The Effect of Defense Counsel on Murder Case Outcomes*, 122 YALE L.J. 154, 209 (2012) (discussing mythologization of the heroic single lawyer and risks of that approach).

³ The Center for Holistic Defense, BRONX DEFENDERS, https://www.bronxdefenders.org/ holistic-defense/center-for-holistic-defense/ [https://perma.cc/326E-SEKP].

[Vol. 132:819

needs and reasons for criminal justice involvement.⁴ In addition, holistic defense can anticipate and avoid potential collateral consequences of criminal justice involvement, such as loss of employment and housing, eliminating risk factors for future crime.⁵ Skeptics, in contrast, argue that diverting resources and attention from criminal advocacy may lead to worse case outcomes.⁶ Despite the fact that holistic representation has been embraced in many jurisdictions, there is virtually no systematic evidence demonstrating whether such representation delivers on its promises of better case outcomes or lower recidivism. A persistent problem has been isolating the contribution of holistic representation from the myriad of other factors operating in communities and the courts that shape what happens to indigent defendants once they enter the system.

In this Article, we provide the first rigorous, large-scale empirical evaluation of the holistic approach to indigent defense, adding to the nascent literature identifying "what works" in indigent criminal defense. In the Bronx, two institutional providers of indigent defense — the Bronx Defenders and the Legal Aid Society of New York ("Legal Aid") — exist side-by-side within the same court system, supplemented by individual criminal defense attorneys. The Bronx Defenders has been operating under a holistic defense model since its inception in 1997.⁷ Legal Aid also recognizes the importance of addressing collateral issues and clients' nonlegal needs, and recently has adopted elements of the holistic defense model. However, as one of the nation's oldest and largest indigent legal services providers,⁸ Legal Aid used a more traditional model throughout much of the study's observation period and, due to certain features of its organizational structure, continues to represent a *comparatively* traditional approach to criminal defense. Finally, individual criminal defense attorneys are appointed in cases with conflicts of interest. They represent the most traditional approach to criminal defense and typically have neither the resources nor the expertise to provide the range of services that the defender organizations can. Clients are assigned to the two defender associations through a rotating

⁴ See, e.g., J. McGregor Smyth, Jr., From Arrest to Reintegration: A Model for Mitigating Collateral Consequences of Criminal Proceedings, CRIM. JUST., Fall 2009, at 42, 44, 49.

⁵ McGregor Smyth, "Collateral" No More: The Practical Imperative for Holistic Defense in a Post-Padilla World... Or, How to Achieve Consistently Better Results for Clients, 31 ST. LOUIS U. PUB. L. REV. 139, 150 (2011).

⁶ See, e.g., Brooks Holland, Holistic Advocacy: An Important but Limited Institutional Role, 30 N.Y.U. REV. L. & SOC. CHANGE 637, 642–44 (2006).

⁷ Cara Tabachnick, *The Crime Report: Can the "Holistic Approach" Solve the Crisis in Public Defense?*, BRONX DEFENDERS (Mar. 8, 2011), https://www.bronxdefenders.org/can-the-holistic-approach-solve-the-crisis-in-public-defense-the-crime-report/ [https://perma.cc/UBW9-8W3N].

⁸ See LEGAL AID SOC'Y, http://www.legalaidnyc.org/[https://perma.cc/RN8M-FC4D] (stating that Legal Aid handles 300,000 cases per year and has been operating for over 140 years).

THE EFFECTS OF HOLISTIC DEFENSE

shift-assignment system that furnishes a natural experiment enabling rigorous measurement of the effect of the holistic defense approach.

Using administrative data covering over half of a million cases and a quasi-experimental research design, we estimate the causal effect of holistic representation on case outcomes and future offending in the Bronx.⁹ Holistic representation does not affect conviction rates, but it does reduce the likelihood of a custodial sentence by 16% and the expected sentence length by 24%. Over the ten-year study period, holistic representation in the Bronx has reduced custodial punishment sentences by nearly 1.1 million days, saving state and local taxpayers an estimated \$165 million on inmate housing costs alone. Holistic defense also increases the likelihood of pretrial release, and while this mechanically results in elevated pretrial arrest and nonappearance, as of one year postarraignment and beyond, holistic representation has no measurable effect on future criminal justice contacts, with estimates sufficiently precise so as to preclude modest positive or negative effects. These results suggest holistic representation does not dramatically reduce recidivism, but it does appear to offer considerable potential to reduce incarceration without adversely impacting public safety.

To better understand indigent defense in the Bronx, the holistic defense model, and how holistic defense works in practice, we also conducted semi-structured interviews with criminal justice stakeholders in the Bronx, including the Bronx Defenders, attorneys and social workers from Legal Aid, appointed private counsel, judges, and external service providers. Both the Bronx Defenders and Legal Aid describe their representation as "holistic," and the interviews suggest some degree of convergence in their goals and staffing models in recent years. Nevertheless, the interviews also revealed differences in their approaches to providing defense. Criminal defense attorneys at both organizations make referrals to civil attorneys when noncriminal issues such as risk of deportation or potential loss of public housing arise; however, the Bronx Defenders continuously assesses referral structure and referral success and models, trains, and evaluates interdisciplinary communication between advocates.¹⁰ The Defenders also organizes its office in interdisciplinary teams with leaders who, along with practice-area supervisors, monitor whether team members are communicating effectively and are identifying needs beyond their independent practice area.¹¹ Thus, the Defenders appears to embrace practices likely to facilitate the flow of information across different members of the defense team.

Although the precise explanation for the outcome differences across the two defender organizations remains uncertain, one explanation that

⁹ Our quantitative methodology is detailed in Part III, *infra* pp. 850–62.

¹⁰ Robin Steinberg, Heeding Gideon's Call in the Twenty-First Century: Holistic Defense and the New Public Defense Paradigm, 70 WASH. & LEE L. REV. 961, 991-94 (2013).

¹¹ See id. at 992-93.

[Vol. 132:819

seems consistent with both the qualitative and quantitative data is that the holistic approach may enable the criminal justice system to solve an information problem. Incarceration of some defendants may be necessary to protect public safety, but for other individuals it serves no corrective purpose and merely represents wasted resources. Given the large caseloads and assembly-line processing of criminal defendants in the Bronx — as in many, if not most, jurisdictions in the United States prosecutors and judges have difficulty identifying those defendants who could be treated leniently without creating future risk. Moreover, these prosecutors and judges tend to discount information from defense attorneys who have incentives to claim that every defendant represents a special case that justifies lenient treatment. Holistic defense, then, may function as a superior information-gathering mechanism, helping defense attorneys to identify persuasive mitigating features of their cases and then convey those features convincingly to prosecutors, judges, and juries.

More broadly, this study suggests that indigent defense has received too little attention in the broader discussion of criminal justice reform in the United States. Although interest groups and policymakers from all points along the ideological spectrum have expressed considerable concern about mass incarceration and the associated human and fiscal costs, much of the reform agenda has focused on areas such as policing, sentencing reform, and pretrial detention. Perhaps one reason indigent defense has achieved less prominence in the debate is policymakers' perception that providing better-quality representation might lead to acquittals of guilty defendants, undermining one of the core purposes of the criminal justice system. However, this study demonstrates that strengthening indigent defense can instead offer a means to reduce unnecessary and unproductive punishment that does not further society's goal of ensuring public safety. Given the promise of the holistic defense model, further research to assess its mechanisms of impact, scalability to other jurisdictions, and effects on outcomes outside of the criminal justice system is warranted.

In Part I of this Article, we provide background information on the holistic defense model and review the limited prior empirical research on holistic defense. In Part II, we discuss how closely the service models used by the Bronx Defenders, Legal Aid, and individual appointed counsel adhere to holistic defense principles, and we compare these indigent defense providers' models. In Part III, we describe our quantitative data sources and methodology. In Part IV, we describe the results of our quantitative analysis, that is, the causal effect of the holistic representation implemented by the Bronx Defenders on case outcomes and future offending. In Part V, we discuss potential implications of our findings for criminal justice policy and practice. In the conclusion, we propose next steps for future holistic defense research.

I. BACKGROUND ON HOLISTIC DEFENSE

A. The Holistic Defense Model

The holistic defense model emerged in the 1990s as a new paradigm for indigent defense.¹² Although the term "holistic defense" has been defined in a variety of ways and affixed to a range of different defender organizations, a few common elements emerge across the different definitions.¹³ Holistic defense as a philosophy views the criminal defense attorney as having a responsibility not only to provide representation in the current criminal case, but also to attempt to address the antecedent circumstances that lead clients to come into contact with the criminal justice system in the first place. Holistic defenders view their role as helping to address a broader range of client needs than the typical criminal defense attorney — certainly providing legal expertise in a criminal proceeding, but also assisting with other issues that can render clients vulnerable to future contact with the justice system. A holistic defender might help clients enroll in drug treatment, access mental health services, maintain employment, preserve housing, or file immigration applications. This approach contrasts with a more traditional indigent defense approach, which emphasizes the role of the defender as a legal and courtroom advocate who has responsibility for obtaining the best outcome for a client in a particular case, subject to ethical and other constraints.

Early adopters of the holistic model, such as the Neighborhood Defender Service of Harlem (NDS) and the Bronx Defenders, implemented a number of innovations in order to better align their day-today operations with the holistic philosophy. First, in order to address nonlegal needs of clients, these organizations require a different mix of staff than a traditional defenders' office. Holistic organizations tend to hire fewer criminal attorneys as a percentage of total staff and more civil attorneys and other professional personnel, such as social workers or mental health professionals.

Second, because their focus is on addressing a range of interlocking needs, holistic defender organizations are multidisciplinary. This approach can be manifest in a variety of ways: For example, a holistic defender typically assigns clients to a cross-disciplinary team of staff members (including criminal attorneys, civil attorneys, and social workers) who independently interact with the client, in contrast with a single attorney who draws upon ancillary services from investigators or social workers but who is the link between the office and the client. The mul-

¹² See id. at 962.

¹³ For background information on the subject of holistic defense, see generally Robin G. Steinberg, *Beyond Lawyering: How Holistic Representation Makes for Good Policy, Better Lawyers, and More Satisfied Clients*, 30 N.Y.U. REV. L. & SOC. CHANGE 625, 627–33 (2006).

tidisciplinary approach also informs training, which equips staff members with expertise in multiple fields. Moreover, holistic defense organizations place significant emphasis on building community relations, because they are dependent on community organizations to provide many of the ancillary services (for example, health care and housing assistance) their clients need.

A third difference concerns prioritization. The holistic paradigm attempts to optimize over a wider range of client outcomes, and in some cases these outcomes may be in conflict with one another. For example, a client held in pretrial detention might have a winnable case but face the loss of a job or housing if he remains in detention long enough for a hearing.¹⁴ Securing an acquittal might inflict more harm on the client in terms of overall quality of life than a quick guilty plea. As another example, a client might be given an opportunity to attend inpatient drug treatment in lieu of a conviction, but doing so would leave her with no way to care for a minor child, whereas accepting a conviction and fine would ensure continuity of child care, her biggest priority. The holistic model puts client priorities front and center, which means that these defenders may be more willing to sacrifice better outcomes in the criminal case if doing so would serve some other client interest.

While initially the term "holistic defense" was primarily used to describe entire defender organizations that subscribed to the model described above, recently the term "holistic representation" has been more widely applied, including to units within organizations or, in some cases, even individual attorneys. Today, holistic representation is often used to describe indigent defenders who share the basic goals of providing legal representation that considers a broader range of client needs, with particular emphasis on collateral consequences. Many, if not most, defender organizations today would view themselves as practicing some version of holistic defense, although a comparatively small number have implemented the staffing, training, and organizational changes described above.

B. Prior Research on Holistic Defense

The academic literature that discusses holistic defense is relatively small.¹⁵ Writing separately, Kyung Lee,¹⁶ Michael Pinard,¹⁷ J. McGregor

¹⁴ See Paul Heaton et al., The Downstream Consequences of Misdemeanor Pretrial Detention, 69 STAN. L. REV. 711, 713 & n.4, 781 (2017).

¹⁵ See Nadine Frederique et al., What Is the State of Empirical Research on Indigent Defense Nationwide? A Brief Overview and Suggestions for Future Research, 78 ALB. L. REV. 1317, 1340 (2015).

¹⁶ Kyung M. Lee, Comment, *Reinventing* Gideon v. Wainwright: *Holistic Defenders, Indigent Defendants, and the Right to Counsel,* 31 AM. J. CRIM. L. 367 (2004).

¹⁷ Michael Pinard, Broadening the Holistic Mindset: Incorporating Collateral Consequences and Reentry into Criminal Defense Lawyering, 31 FORDHAM URB. L.J. 1067 (2004).

Smyth,¹⁸ and Robin Steinberg¹⁹ provide baseline descriptions of the model and detail real-world examples of holistic defense, noting the potential of holistic defense to address collateral consequences of arrests and socioeconomic issues associated with recidivism. Pinard, Lee, and Brooks Holland present critiques of the model, citing potentially problematic aspects of holistic defense including resource constraints,²⁰ ethical dilemmas such as possible disagreements with clients regarding prioritization of liberty over other interests,²¹ and potential for conflicts of interest.²² While Pinard and Lee suggest that the holistic defense model may improve criminal representation in spite of potential barriers and ethical concerns,²³ Holland argues that the holistic model should be adopted with caution and that holistic advocacy should not be prioritized above traditional trial practice.²⁴ Steinberg, who founded the Bronx Defenders, addresses various criticisms of the model, and offers a characterization of the model as consisting of four "pillars" that has been influential in shaping discourse surrounding holistic defense.²⁵ Finally, Sarah Buchanan and Roger Nooe develop a model of the role of social work as part of holistic public defense and discuss some of the operational challenges in Knoxville, Tennessee.²⁶

Beyond this conceptual work, there have been relatively few evaluations of holistic defense programs,²⁷ and as of yet, there has been no large-scale, rigorous evaluation of the impact of holistic representation on criminal justice outcomes. Michele Sviridoff and her coauthors offered a first evaluation, comparing outcomes of a small sample of NDS clients arrested in Manhattan between July 1, 1990, and November 30,

²⁶ Sarah Buchanan & Roger M. Nooe, *Defining Social Work Within Holistic Public Defense: Challenges and Implications for Practice*, 62 SOC. WORK 333, 335–38 (2017).

²⁷ Lee et al., *supra* note 25, at 1232, 1235–37 (suggesting frameworks for process evaluations, impact evaluations, and cost-benefit analyses of holistic defense programs). With respect to impact evaluations, Lee et al. recommend examining short-term outcomes such as "rates of pretrial release, time spent in pretrial detention, conviction and dismissal rates, sentence types and durations, and usage of alternatives to incarceration" as well as long-term outcomes such as "rates of re-arrest, new convictions, probation violations, appeals, and petitions for postconviction relief." *Id.* at 1236.

¹⁸ Smyth, *supra* note 5.

¹⁹ Steinberg, *supra* note 10.

²⁰ Holland, *supra* note 6, at 642–44; Pinard, *supra* note 17, at 1089–91; Lee, *supra* note 16, at 405–08, 428.

²¹ Holland, *supra* note 6, at 646–48; Lee, *supra* note 16, at 424–26.

²² Holland, *supra* note 6, at 648-50.

²³ Pinard, *supra* note 17, at 1095; Lee, *supra* note 16, at 432.

²⁴ Holland, *supra* note 6, at 641–42, 646, 651–52.

²⁵ See Steinberg, supra note 10, at 986–1002; see also, e.g., MONT. CODE ANN. § 47-1-126 (2017) (establishing a holistic defense pilot project and stating that the project must be based on the four pillars of holistic defense); Frederique et al., supra note 15, at 1336; Cynthia G. Lee et al., The Measure of Good Lawyering: Evaluating Holistic Defense in Practice, 78 ALB. L. REV. 1215, 1218–19 (2015); Holistic Defense, HARRIS COUNTY PUB. DEFENDER'S OFF., http://harriscountypublicdefender. org/holistic-defense-2/ [https://perma.cc/P8DE-FGDQ].

1990, with all individuals who were arrested in Manhattan during the same period.²⁸ In a follow-up study, Susan Sadd and Randolph Grinc compared NDS clients to non-NDS clients similar in race, gender, age, and various criminal history metrics.²⁹ NDS clients had average sentences 100 days shorter than the control group; however, the study found no statistically significant differences in days in pretrial detention, release on recognizance rates, conviction rates, or dismissals.³⁰

More recent studies have typically involved limited samples and do not control for other factors, beyond representation type, that might affect case outcomes. For example, Cait Clarke and James Neuhard surveved a variety of holistic defender organizations and presented statistics suggesting that individual defendant outcomes improved and overall incarceration costs decreased.³¹ Informal evaluations of the Rhode Island Public Defender Office's Defender Community Advocacy Program (DCAP) also concluded that the program saved taxpayers millions of dollars in prison costs.³² Brooke Hisle, Corey Shdaimah, and Natalie Finegar conducted a process evaluation of the Neighborhood Defenders Program (NDP) in Baltimore and concluded from focus groups that clients believed the program assisted them with "social and economic concerns experienced outside [their] legal case[s]," but the authors did not present an outcomes analysis.³³ Most recently, Dana DeHart and coauthors examined the impact of holistic defense on legal outcomes in an unnamed southeastern judicial circuit.³⁴ Comparing cases before and after program implementation, and controlling for defendant demographics and some case characteristics, holistic representation was associated with an increased likelihood that defendants would be held on bond, convicted, or incarcerated.³⁵

²⁸ MICHELE SVIRIDOFF ET AL., VERA INST. OF JUSTICE, DEVELOPING AND IMPLEMENT-ING A COMMUNITY-BASED DEFENSE SERVICE: PILOT OPERATIONS OF THE NEIGHBOR-HOOD DEFENDER SERVICE OF HARLEM 63–76 (1991).

²⁹ SUSAN SADD & RANDOLPH GRINC, VERA INST. OF JUSTICE, THE NEIGHBORHOOD DE-FENDER SERVICE OF HARLEM: RESEARCH RESULTS FROM THE FIRST TWO YEARS 10 (1993).

³⁰ Id. at 13–18.

³¹ Cait Clarke & James Neuhard, Making the Case: Therapeutic Jurisprudence and Problem Solving Practices Positively Impact Clients, Justice Systems and Communities They Serve, 17 ST. THOMAS L. REV. 781 (2005).

³² See, e.g., MELANCA CLARK & EMILY SAVNER, BRENNAN CTR. FOR JUSTICE, COMMUNITY ORIENTED DEFENSE: STRONGER PUBLIC DEFENDERS 24 (2010).

³³ Brooke Hisle et al., Neighborhood Defenders Program: An Evaluation of Maryland's Holistic Representation Program, 2 J. FORENSIC SOC. WORK 122, 139 (2012).

³⁴ Dana DeHart et al., Improving the Efficacy of Administrative Data for Evaluation of Holistic Defense, 43 J. SOC. SERV. RES. 169, 169 (2017).

³⁵ Id. at 174–77.

Susan McCarter used a randomized control trial design to measure the effects of wraparound juvenile forensic social work services and holistic defense on recidivism and other outcomes in an unnamed large southeastern city.³⁶ She found that the services significantly improved youth functioning though no change was noted for recidivism or motions for review.³⁷ While the study is suggestive of the benefits of a holistic approach, the study was limited to juveniles and it is not clear the role that other aspects of holistic defense (apart from the wraparound services) played in the outcome.

To summarize, existing research on holistic defense has provided conceptual underpinnings for the model, but most fail to empirically establish the real-world effects of this approach in practice. Existing studies are limited in scope, do not adequately address the possibility that observed outcomes might represent influences other than the type of representation, and come to conflicting conclusions regarding the efficacy of the approach. This lack of a strong evidence base is notable given the growing acceptance of the holistic paradigm in indigentdefense circles. In a criminal justice system that is increasingly embracing evidence-based practice, the move toward holistic representation is occurring without much evidence.

The present study seeks to address this shortcoming,³⁸ offering a methodologically strong evaluation of the criminal justice impacts of a holistic defense program as practiced in a large urban jurisdiction over a considerable period of time. It extends a small but influential body of literature that seeks to apply rigorous methods of causal analysis to understand the effect of legal-service models on case outcomes. Examples of studies in this vein include work by David Abrams and Albert Yoon;³⁹ Radha Iyengar;⁴⁰ James Anderson and Paul Heaton;⁴¹ Douglas

³⁶ Susan Ainsley McCarter, Holistic Representation: A Randomized Pilot Study of Wraparound Services for First-Time Juvenile Offenders to Improve Functioning, Decrease Motions for Review, and Lower Recidivism, 54 FAM. CT. REV. 250, 252–53 (2016).

³⁷ Id. at 255–57.

³⁸ Also concerned with this shortcoming, the National Center for State Courts is currently conducting a multisite evaluation of holistic defense programs. *Indigent Defense Research*, NAT'L INST. OF JUST., https://www.nij.gov/topics/courts/indigent-defense/Pages/research.aspx [https:// perma.cc/5HL6-99MZ].

³⁹ 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, 1149–50 (2007) (taking advantage of random assignment within a public defender office in Las Vegas and finding that more experienced attorneys achieve better case outcomes for clients).

⁴⁰ Radha Iyengar, *An Analysis of the Performance of Federal Indigent Defense Counsel* 28 (Nat'l Bureau of Econ. Research, Working Paper No. 13187, 2007) (finding that clients represented by public defenders had significantly lower conviction rates and sentence lengths than clients represented by appointed counsel).

 $^{^{41}}$ Anderson & Heaton, *supra* note 2, at 154 (taking advantage of a natural experiment in Philadelphia to compare outcomes of defendants represented by appointed private counsel as opposed to public defenders).

[Vol. 132:819

Colbert, Ray Paternoster, and Shawn Bushway;⁴² and D. James Greiner, Cassandra Pattanayak, and Jonathan Hennessy.⁴³ A common finding across studies that use methodologically stronger research designs, such as quasi-experiments or randomized controlled trials, is that the attorney can exert substantial influence on case outcomes, separate from the legally relevant features of the case. A fairly unique feature of the present study is our ability to follow defendants for a substantial period of time following the resolution of the case, enabling us to assess impacts on not only the immediate proceeding, but also defendants' future path of criminal justice system contact.

C. How Might Holistic Defense Affect Criminal Justice Outcomes? A Typology of Predictions

Proponents of holistic defense argue that it is likely to improve outcomes in both the immediate case and in the future, while critics believe the approach suffers from important weaknesses. The limited empirical work to date on this topic is inconclusive. On a theoretical level, there are various possibilities for how holistic representation might operate in practice. Across these different possible models, there are varying predictions for what one would expect to observe empirically when analyzing the effect of holistic representation on criminal justice outcomes. Thus, understanding these models can offer insights into how one might interpret the empirical results below.

One possibility, which we might term a "no difference" model, is that in actual practice the approach is not substantively different from traditional representation. Such a situation might arise if there are practical or resource limitations that impede the full realization of the model — for example, if it is too difficult to get budgetary authority to meaningfully increase the share of nonattorneys in the office — or if traditional defenders are able to address collateral concerns in comparable ways within the context of the more traditional attorney-client relationship. Under this model, we would not expect to see measurable differences in outcomes across defender organizations that practice holistic representation versus those that do not.

A second possibility, which we might term a "better trial advocacy" model, is one in which the holistic approach allows for superior court-room representation — for example, by enabling attorneys to build better trust relationships with clients — but proves insufficient to address

⁴² Douglas L. Colbert et al., *Do Attorneys Really Matter? The Empirical and Legal Case for the Right of Counsel at Bail*, 23 CARDOZO L. REV. 1719, 1720 (2002) (discussing a study that found that defendants represented at bail hearings were 2.5 times as likely to be released on their own recognizance than were unrepresented defendants in Baltimore, Maryland).

⁴³ D. James Greiner et al., *The Limits of Unbundled Legal Assistance: A Randomized Study in a Massachusetts District Court and Prospects for the Future*, 126 HARV. L. REV. 901, 908 (2013) (examining the effects of traditional versus limited representation on outcomes of clients facing eviction from their housing units using a randomized controlled trial).

clients' underlying entrenched problems. Such a situation might also occur if the business-as-usual model largely applies, except that the holistic office attracts different types of attorneys than a traditional office, and these attorneys are more adept at trial advocacy. Under this model, we would expect the better courtroom advocacy to translate to superior case outcomes from the perspective of the client, such as increased pretrial release or lower conviction rates or sentences, but no enduring reduction in the likelihood of future contact with the criminal justice system. If better trial advocacy leads to fewer or shorter sentences, we might also expect a temporary increase in criminal activity in the short run due to a reverse incapacitation effect.

A third possibility — and the one highlighted by critics of holistic defense — is a "distraction" model. Under this model, holistic representation diverts resources and attention from trial advocacy, but the additional support services offered to clients prove to not be rehabilitative. In this scenario, we might expect to observe higher rates of pretrial detention (resulting in a net decrease in pretrial crime through incapacitation), higher conviction rates, and/or more frequent or longer sentences. Future crime is diminished in the short term as clients receive more punishment and are incapacitated.

A fourth possibility is that the additional services provided through holistic defense are helpful in addressing underlying circumstances that lead to criminal justice contacts, but that these services are provided at the expense of advocacy in the criminal case. This could occur if, for example, the need to hire additional support personnel but maintain budget neutrality leads to fewer criminal attorneys with higher caseloads, and these larger caseloads negatively impact advocacy. Under this "tradeoff" model, one would expect reductions in pretrial crime as defendants are less likely to be released and/or the rehabilitative services begin to take hold — more frequent convictions or longer sentences, and lower postadjudication crime through both incapacitation and rehabilitation.

A related but distinct possibility is a "better support only" model, where the proffered supports are effective at rehabilitation, but there is a neutral impact on trial advocacy. This could occur either because courts and prosecutors fail to recognize the beneficial nature of holistic defense, or because they do recognize that clients have been rehabilitated, but this is offset by diminished advocacy in other aspects, for example due to higher criminal attorney caseloads. This model offers somewhat similar empirical predictions to the preceding one, except that it predicts no effects on pretrial release and no change in conviction rates or sentences.

A final possibility is that the holistic approach functions as designed and as proponents have articulated, meaning that it enables attorneys to achieve more favorable outcomes in criminal cases, and it simultaneously serves to mitigate factors in defendants' lives that contribute to

[Vol. 132:819

contacts with the criminal justice system. This "full success" model offers ambiguous predictions regarding pretrial crime — better advocacy would increase pretrial release, which would tend to increase pretrial crime due to reverse incapacitation, but depending on how quickly the effects of the support services (for example, drug treatment or housing stabilization) were realized, some offsetting effects might also occur pretrial. With full success, conviction rates or sentences should decrease, which in the short run could lead to reverse incapacitation, which might again be offset by the mitigation work of the holistic defender. In the longer run, after any reverse incapacitation effects have run their course, the model would predict lower crime.

Table I summarizes the six models described above, along with their predictions regarding expected impacts across a range of criminal justice outcomes. Because no two models offer precisely the same predictions regarding criminal justice outcomes, examining the pattern of results in the analysis that follows can offer insights into which of these models seems most likely to apply to holistic defense, at least as practiced in the Bronx.

THE EFFECTS OF HOLISTIC DEFENSE

Predicted effect of holistic defense on: Convic-Pretrial Short-Long-Net tion Pretrial crime run run Model pretrial rate/ release given future future crime sentence release crime crime severity No 0 0 0 0 0 0 difference Better trial _ + 0 + + 0 advocacy Distraction -0 _ + 0 Tradeoff o/-+ Better o/o/-0 0 support only Full success o/-+/0/-+ +/0/-

Table 1: Alternative Conceptions of How HolisticDefense Might Operate in Practice

II. HOLISTIC DEFENSE AS PRACTICED IN THE BRONX

A. Local Indigent Defense Providers

In this section, we briefly discuss the structure of indigent defense in the Bronx to provide context for our examination of the holistic defense model. Legal Aid and the Bronx Defenders are the two institutional providers of indigent defense services in the Bronx. Legal Aid, the city's largest defense provider, began representing indigent criminal defendants across New York City's boroughs in 1879.⁴⁴ In 1994, Legal Aid went on strike and Mayor Rudolph Giuliani issued requests for proposals for other public defense agencies.⁴⁵ As a result, the city entered contracts with several new public defense providers, including the Bronx Defenders.⁴⁶

Legal Aid has three major practice areas: Civil, Criminal, and Juvenile Rights.⁴⁷ The Civil Practice addresses a wide variety of legal issues facing low-income families and individuals, including "housing,

⁴⁴ Geoff Burkhart, *Public Defense: The New York Story*, CRIM. JUST., Fall 2015, at 22, 23.

 ⁴⁵ Id. at 24.
⁴⁶ Id.

⁴⁷ Frequently Asked Questions About the Legal Aid Society, LEGAL AID SOC'Y, http://legalaid.org:80/en/las/aboutus/legalaidsocietyfaq.aspx [https://perma.cc/E4G6-JAK2].

[Vol. 132:819

benefits, disability, domestic violence, family issues, health, employment, immigration, HIV/AIDS, prisoners' rights and elderlaw."⁴⁸ The Criminal Practice provides representation in criminal trials, appeals, and parole revocation defense hearings.⁴⁹ The Juvenile Rights Practice represents children in child protective proceedings, juvenile delinquency proceedings, supervision proceedings, and appellate cases.⁵⁰ Legal Aid operates through a network of twenty-five offices in neighborhood- and courthouse-based locations across all five boroughs of New York City.⁵¹ Legal Aid's Civil and Criminal Practices share a neighborhood office in the Bronx, and the Juvenile Rights Practice's neighborhood office is nearby.⁵²

The Bronx Defenders, founded in 1997,⁵³ provides criminal defense, family defense, civil legal services, immigration representation, social work support, and advocacy to indigent individuals in the Bronx.⁵⁴ The Bronx Defenders' advocates include criminal defense attorneys, family defense attorneys, civil generalist attorneys, immigration attorneys, impact litigation attorneys, social workers, benefits specialists, investigators, community organizers, team administrators, civil legal advocates, immigration advocates, reentry advocates, and parent advocates.⁵⁵ All of these different advocates work out of the same office.⁵⁶

When a conflict exists that prevents Legal Aid and the Bronx Defenders from representing an indigent defendant in the Bronx, a private court-appointed attorney is assigned to the defendant pursuant to Article 18B of the County Law, the Assigned Counsel Plan.⁵⁷ These attorneys are often referred to as "18B attorneys."⁵⁸

B. Service Models Used by the Bronx Defenders, Legal Aid, and 18B Attorneys

To better understand how the various indigent defense providers in the Bronx operate, and in particular the key differences between the Bronx Defenders and Legal Aid, we conducted phone interviews from

⁵⁵ Id.

⁴⁸ Id.

⁴⁹ Id.

⁵⁰ Id.

⁵¹ Id.

⁵² Locations in the Bronx, LEGAL AID SOC'Y, http://www.legal-aid.org:80/en/las/findus/locations/thebronx.aspx [https://perma.cc/A84Y-UZWF].

⁵³ Tabachnick, *supra* note 7.

⁵⁴ Mission and Story, BRONX DEFENDERS, https://www.bronxdefenders.org/who-we-are/ [https://perma.cc/9XLK-CW9R].

⁵⁶ See Contact Us, BRONX DEFENDERS, https://www.bronxdefenders.org/contact/ [https:// perma.cc/WQ65-CVGF].

⁵⁷ Appellate Div., First Judicial Dep't, Supreme Court of the State of N.Y., *Assigned Counsel Plan (18B)*, NYCOURTS.GOV, http://www.courts.state.ny.us/courts/ad1/Committees&Programs/18B/index.shtml [https://perma.cc/7BBN-QXUJ].

⁵⁸ For more details about the case assignment process, see section III.A, *infra* pp. 851–53.

August 2017 to November 2017 with nine attorneys from the Bronx Defenders, seven attorneys and one social worker from Legal Aid, four private attorneys who serve as appointed counsel, three Bronx Criminal Court judges, two Bronx Criminal Court clerks, three representatives from other nonprofits that work within the Bronx criminal justice system, and two former criminal defense attorneys who practiced in the Bronx.⁵⁹ Topics covered in the interviews included the case assignment process, service models employed by each organization, collaboration between civil and criminal advocates, the importance of providing non-criminal defense services to criminal defense clients, community impacts, and success metrics. We also reviewed publicly available documents that provide insights into the staffing, budgets, and other operations of the various defense providers.

Robin Steinberg, the founder of the Bronx Defenders, defined four pillars of holistic defense:

- 1. seamless access to legal and nonlegal services that meet client needs;
- 2. dynamic, interdisciplinary communication;
- 3. advocates with an interdisciplinary skill set; and
- 4. a robust understanding of, and connection to, the community served.⁶⁰

Legal commentators and indigent defense service providers cite Steinberg's four pillars as the foundational principles of the holistic defense model.⁶¹ While the Bronx Defenders are well known for adopting and developing the holistic defense model, the Legal Aid attorneys we interviewed also characterized Legal Aid's model as holistic.⁶² Legal Aid attorneys did not mention Steinberg's four pillars or provide any other specific list elements that they believe comprise "holistic defense," but their description of Legal Aid's practice paralleled the four pillars to some extent, and two Legal Aid interviewees used the word "holistic" to describe the Legal Aid model.⁶³ However, advocates for Legal Aid and the Bronx Defenders have differing opinions on how similar their models are in practice. In this subsection, we discuss how closely the service models used by the Bronx Defenders, Legal Aid, and private counsel adhere to holistic defense principles by comparing these providers' service models.

⁵⁹ The Bronx County District Attorney's Office did not respond to our interview requests.

⁶⁰ Steinberg, *supra* note 10, at 963–64.

⁶¹ See sources cited supra note 25.

⁶² Telephone Interview with Attorney #2, Legal Aid Soc'y (Aug. 10, 2017).

⁶³ See id.; Telephone Interview with Attorney #3, Legal Aid Soc'y (Aug. 21, 2017).

[Vol. 132:819

I. Seamless access to legal and nonlegal services that meet client needs. — Criminal defense attorneys at both Legal Aid and the Bronx Defenders noted that they begin identifying client needs at arraignment. With respect to legal needs, the Bronx Defenders employs a checklist at arraignment to identify consequences of criminal justice involvement for a client's employment, housing, mental health, children, immigration status, student loans, public benefits, and other aspects of their life.⁶⁴ Legal Aid has an immigration checklist to ensure the criminal defense attorney at arraignment identifies any immigration issues that might arise.⁶⁵ Although Legal Aid does not have an arraignment checklist for nonimmigration collateral issues, criminal defense attorneys from Legal Aid noted that they interview clients about life circumstances that might be impacted by their criminal case — for example, the client's housing situation — at arraignment.⁶⁶

Some issues identified at arraignment require immediate involvement. For example, immigration referrals tend to be immediate because many clients face deportation after an arrest.⁶⁷ Criminal defense attorneys at both organizations noted that they also continue to identify legal and nonlegal client needs throughout the duration of the criminal case. For example, one Bronx Defender cited the example of a client working as a security guard who received a letter several weeks into his case saying that his security guard license might be suspended.⁶⁸ In this example, the criminal defense attorney made a referral a few weeks after the arrest because the need was not apparent at arraignment.⁶⁹ Another Bronx Defender attorney also noted that clients sometimes return to the organization after their criminal case concludes, seeking assistance with other legal needs.⁷⁰

Although 18B counsel reported that they do what they can to address the impacts of criminal justice involvement on their clients' immigration status, housing, employment, and other life outcomes, their ability to address these collateral consequences is very limited. As one 18B attorney remarked, 18B counsel get paid only for handling cases in criminal court.⁷¹ If a defendant is faced with noncriminal legal matters, there is little an 18B attorney can do, other than tell the client to try to hire a civil attorney or seek help from an institutional provider (that is, Legal Aid or the Bronx Defenders).⁷² 18B counsel are not permitted to appear

⁶⁴ Steinberg, *supra* note 10, at 988.

⁶⁵ Telephone Interview with Attorney #6, Legal Aid Soc'y (Sept. 6, 2017).

⁶⁶ Id.; Telephone Interview with Attorney #7, Legal Aid Soc'y (Sept. 7, 2017).

⁶⁷ Telephone Interview with Attorney #9, Bronx Defs. (Nov. 2, 2017).

⁶⁸ Id.

⁶⁹ Id.

⁷⁰ Telephone Interview with Attorney #4, Bronx Defs. (Oct. 2, 2017).

⁷¹ Telephone Interview with 18B Attorney #4 (Nov. 1, 2017).

⁷² Id.

THE EFFECTS OF HOLISTIC DEFENSE

in family court or civil court.⁷³ When an 18B attorney needs the assistance of experts, investigators, or interpreters in the criminal case, these services may be requested through an ex parte application to the court and the judge must also approve the use of the services.⁷⁴ This process is commonly referred to as "vouchering."⁷⁵ 18B counsel and criminal court judges reported that it is not easy for 18B counsel to get social workers, investigators, or other assistance through the vouchering process.⁷⁶

Attorneys from the Bronx Defenders have also noted that if a client has nonlegal needs their organization cannot address, the Bronx Defenders can quickly connect the client with churches, food pantries, shelters, and other service providers with which the organization maintains strong relationships.⁷⁷ Community members do not have to be inside the criminal justice system for the Bronx Defenders to help them get food stamps, healthcare, and better access to employment and housing.⁷⁸ Similarly, Legal Aid has established relationships with providers of nondefensive services, such as Esperanza, which connects clients aged nineteen and younger with counseling services, GED programs, educational services, and home visits.⁷⁹

With respect to providing clients with seamless access to services that address their legal and nonlegal needs, we identified two primary differences between the Bronx Defenders and Legal Aid. First, the team structure at the Bronx Defenders allows for easier referrals and more consistent monitoring of referral success. At the Bronx Defenders, teams of advocates from different practice areas physically sit together.⁸⁰ These teams include criminal defense,⁸¹ family defense, civil generalist, immigration, and impact litigation attorneys as well as social workers, investigators, team administrators, civil legal advocates, parent advocates,⁸² and immigration advocates.⁸³ Criminal defense attorneys report

⁷³ Id.

⁷⁴ See Telephone Interview with 18B Attorney #1 (Aug. 28, 2017).

⁷⁵ See id.

⁷⁶ *Id.*; Telephone Interview with 18B Attorney #2 (Sept. 26, 2017); Telephone Interview with Criminal Court Judge #3 (Sept. 13, 2017).

⁷⁷ Steinberg, *supra* note 10, at 989.

⁷⁸ Telephone Interview with Attorney #4, Bronx Defs., *supra* note 70.

⁷⁹ Telephone Interview with Attorney #5, Legal Aid Soc'y (Aug. 30, 2017).

⁸⁰ Telephone Interview with Attorney #2, Bronx Defs. (Aug. 10, 2017).

⁸¹ Each team typically has between five and seven criminal defense attorneys. Telephone Interview with Attorney #6, Bronx Defs. (Oct. 5, 2017).

⁸² "Parent Advocates assist and support parents who have open Family Court cases and are at risk of having, or who have had, their children removed and placed into foster care. They provide a strong voice for parents, and advocate for clients with the Administration for Children's Services (ACS) and other social service agencies." *Parent Advocate*, BRONX DEFENDERS, https://www.bronxdefenders.org/who-we-are/how-we-work/parent-advocate/ [https://perma.cc/VG3K-DF8M].

⁸³ Telephone Interview with Attorney #2, Bronx Defs., *supra* note 80.

[Vol. 132:819

that physical proximity to other attorneys and advocates facilitates referrals.⁸⁴ Teams have one or more team leaders, and advocates outside of the criminal defense practice and nonattorneys (for example, social workers and parent advocates) may serve as team leaders.⁸⁵ Team leaders, along with practice-area supervisors, monitor whether team members are communicating effectively and whether team members are identifying needs beyond their independent practice areas.⁸⁶ Team leaders collect reports on the referrals that each team member makes.⁸⁷

Although Legal Aid's civil attorneys and criminal defense attorneys do not sit in teams, criminal defense attorneys work closely with Legal Aid's noncriminal practice areas to address immigration, housing, employment, education, and other life issues that arise as a result of arrests and convictions.⁸⁸ Civil and criminal defense attorneys in the Bronx Office of Legal Aid are located in the same building, and Legal Aid attorneys noted that being located in the same building allows for frequent in-person communication between Civil Practice and Criminal Practice attorneys.⁸⁹

A practical consequence of the Bronx Defenders' team structure is that criminal defense attorneys at the Bronx Defenders have consistent access to civil attorneys, even if civil attorneys on their team have an independent caseload.⁹⁰ Criminal defense attorneys at the Bronx Defenders reported that advocates in other practice areas are almost always receptive to referrals, even when their independent caseload is already inundated.⁹¹ Advocates noted that sitting together in teams helps advocates with independent caseloads triage their cases. Because of physical proximity, advocates can talk about outcomes across all domains and communicate urgent tasks that need to be completed in each advocate's practice area.⁹² In addition, attorneys at the Bronx Defenders noted that because team leaders and practice-area supervisors are tasked with monitoring effectiveness and ease of referrals, and because

⁹² Id.

⁸⁴ Telephone Interview with Attorney #6, Bronx Defs., *supra* note 81.

⁸⁵ Id.

⁸⁶ Id.

⁸⁷ Id.

⁸⁸ Telephone Interview with Attorney #2, Legal Aid Soc'y, *supra* note 62.

⁸⁹ See Telephone Interview with Attorney #6, Legal Aid Soc'y, supra note 65.

⁹⁰ At the Bronx Defenders and Legal Aid, civil attorneys have caseloads independent of referrals they receive from criminal defense attorneys within their organization. *See* Telephone Interview with Attorney #3, Bronx Defs. (Oct. 2, 2017); Telephone Interview with Attorney #1, Legal Aid Soc'y (Aug. 8, 2017). For example, the family defense practice at the Bronx Defenders is on duty at family court and receives its own clients through this intake stream. Telephone Interview with Attorney #3, Bronx Defs., *supra*.

⁹¹ Telephone Interview with Attorney #9, Bronx Defs., *supra* note 67.

THE EFFECTS OF HOLISTIC DEFENSE

the organization in general focuses on making referrals as seamless as possible, teams can quickly respond to any barriers to referrals.⁹³

Although criminal defense attorneys at Legal Aid reported that civil attorneys are generally accessible, one criminal defense attorney at Legal Aid noted that occasionally, civil attorneys are busy with their independent caseloads and this might affect their ability to immediately address a criminal defense client's issues.⁹⁴ The interviewee noted that it might be better if there were some preferential access for criminal clients with collateral needs.⁹⁵ Another Legal Aid attorney reported that with respect to family court and housing issues, interactions may be less seamless and take a little more work, especially because ethical conflicts of interest sometimes arise.⁹⁶

The second notable difference between the Bronx Defenders and Legal Aid is that the Bronx Defenders uses social workers more frequently.⁹⁷ These social workers conduct psychosocial assessments, recommend treatment for clients experiencing substance abuse disorders or mental health problems, and collect mitigating information to contextualize the behavior that led to criminal justice involvement.⁹⁸ Attorneys at the Bronx Defenders and Legal Aid note that connecting clients with appropriate treatment sometimes allows them to reach creative plea deals and dispositions. For example, an assistant district attorney may accept a defendant's spending twelve weeks in anger management in place of jail or probation,⁹⁹ or if a defendant does well in a treatment program, the judge might consider a nonincarceration disposition.¹⁰⁰ According to Indigent Defense Organization Oversight Committee (IDOOC) reports, the Bronx Defenders uses social workers in a much higher proportion of its misdemeanor and felony cases. In fiscal years 2012 to 2013 and 2010 to 2011, Legal Aid used social workers in 1.8% and 0.8% of its misdemeanor cases and in 5.2% and 5.6% of its felony

⁹³ Id.

 $^{^{94}\,}$ Telephone Interview with Attorney #6, Legal Aid Soc'y, supra note 65.

⁹⁵ Id.

⁹⁶ Telephone Interview with Attorney #7, Legal Aid Soc'y, *supra* note 66. An example of such a conflict would be when Legal Aid represents children in family court and their parents end up in criminal court on another matter. *Id.*

⁹⁷ See Indigent Def. Org. Oversight Comm., Report of the Indigent Defense Organization Oversight Committee to the Appellate Division First Depart-Ment for Fiscal Years 2012–2013, at 9–10, 17 (2014) [hereinafter 2012–2013 IDOOC Re-Port]; Indigent Def. Org. Oversight Comm., Report of the Indigent Defense Or-Ganization Oversight Committee to the Appellate Division First Department for Fiscal Years 2010–2011, at 12, 17 (2012) [hereinafter 2010–2011 IDOOC Report].

⁹⁸ Steinberg, *supra* note 10, at 988.

⁹⁹ Telephone Interview with Attorney #8, Bronx Defs. (Oct. 27, 2017).

¹⁰⁰ Telephone Interview with Social Worker, Legal Aid Soc'y (Aug. 29, 2017).

[Vol. 132:819

cases.¹⁰¹ During these respective fiscal years, the Bronx Defenders used social workers in 20% and 25% of its misdemeanor cases and in 35% and 35% of its felony cases.¹⁰² The IDOOC also reports that the Bronx Defenders typically has a lower attorney-to-social worker ratio. Legal Aid's attorney-to-social worker ratio in the Bronx office was 9.7-to-1 in fiscal years 2010 to 2011.¹⁰³ During that same period, the Bronx Defenders' attorney-to-social worker ratio was 5-to-1.¹⁰⁴ The greater proportion and use of social workers at the Bronx Defenders suggest that, as compared to Legal Aid, the Bronx Defenders might be able to more easily connect clients with treatment for underlying issues, and that the organization has more manpower to collect and communicate mitigating information, which may contribute to less punitive sentencing.

Interdisciplinary communication. — Attorneys at the Bronx 2. Defenders and Legal Aid reported that criminal defense attorneys and civil attorneys within their respective offices communicate frequently. Attorneys at the Bronx Defenders noted that their office is physically designed to encourage advocates to go to a variety of the office's legal and nonlegal experts for advice and assistance.¹⁰⁵ The office has an open floor plan, and advocates sit with their teams, meaning that criminal defense advocates, civil advocates, social workers, and parent advocates are consistently in very close physical proximity.¹⁰⁶ Attorneys from the Bronx Defenders report that daily interactions with advocates from other practice areas change the kinds of referrals advocates make and improve communication among advocates.¹⁰⁷ For example, one criminal attorney at the Bronx Defenders noted that speaking with noncriminal defense advocates can trigger ideas for what noncriminal needs a client might have and can shape strategy with respect to a criminal case.¹⁰⁸ In Bronx Defenders attorneys' views, case strategy under this approach is more collaborative than under the traditional model, in which one advocate directs another advocate to help with a specific

¹⁰¹ 2012–2013 IDOOC REPORT, *supra* note 97, at 10; 2010–2011 IDOOC REPORT, *supra* note 97, at 12. Note that these percentages reflect Legal Aid's use of social workers in felony and misdemeanor cases across the Bronx County and New York County trial offices.

¹⁰² 2012–2013 IDOOC REPORT, *supra* note 97, at 17; 2010–2011 IDOOC REPORT, *supra* note 97, at 17.

¹⁰³ 2010–2011 IDOOC REPORT, supra note 97, at 12.

¹⁰⁴ *Id.* at 17. The Bronx Defenders reported that in fiscal year 2012 to 2013 its ratio temporarily increased to 9-to-1 due to increased attorney hiring, but indicated that the ratio was expected to decrease again in the future after additional social workers were hired. 2012–2013 IDOOC RE-PORT, *supra* note 97, at 17.

¹⁰⁵ Steinberg, *supra* note 10, at 992; Telephone Interview with Attorney #7, Bronx Defs. (Oct. 27, 2017).

¹⁰⁶ Steinberg, *supra* note 10, at 992.

¹⁰⁷ See, e.g., Telephone Interview with Attorney #6, Bronx Defs., supra note 81.

 $^{^{108}}$ Id.

task.¹⁰⁹ At Legal Aid, criminal defense attorneys and civil attorneys do not sit in teams; while Bronx Defenders attorneys sit together as a team and have daily face-to-face interactions that allow them to triage cases continuously and develop integrated case strategies, Legal Aid attorneys are not physically positioned in a way that encourages the same frequency of communication between criminal and civil advocates.¹¹⁰ However, in the Bronx office of Legal Aid, criminal defense attorneys sit in the same building as civil attorneys and on the same floor as social workers, facilitating regular communication.¹¹¹ Attorneys at the Bronx Defenders and Legal Aid also noted that in addition to in-person communications, there are frequent email and phone communications between civil and criminal advocates.¹¹² At Legal Aid, communication by text message is also common.¹¹³ Both organizations have casemanagement systems that allow all advocates working on a case to review information about all aspects of the case.¹¹⁴

One difference with respect to interdisciplinary communication is that the Bronx Defenders evaluates communication between team members. During regular team meetings, the Bronx Defenders will discuss examples of effective interdisciplinary communication.¹¹⁵ In addition, as noted above, teams have one or more team leaders who, along with practice-area supervisors, monitor whether team members are communicating effectively and identifying needs beyond their independent practice area.¹¹⁶

Another difference between the Bronx Defenders and Legal Aid is that civil, criminal, and nonlegal advocates at the Bronx Defenders routinely meet with clients as a team early in the case to allow a client to make well-informed decisions and set priorities.¹¹⁷ After this initial meeting, clients and teams communicate in a variety of ways tailored to

¹⁰⁹ Id.

¹¹⁰ In the Bronx office of Legal Aid, civil and criminal attorneys are in the same building, but not on the same floor. Telephone Interview with Attorney #7, Legal Aid Soc'y, *supra* note 66. At the Bronx Defenders, civil and criminal attorneys sit side-by-side. *See* Telephone Interview with Attorney #9, Bronx Defs., *supra* note 67 (explaining that a key feature of Bronx Defenders teams is that they physically sit together in rows of cubicles, which leads to face-to-face conversations about referrals).

¹¹¹ Telephone Interview with Attorney #7, Legal Aid Soc'y, *supra* note 66.

¹¹² See, e.g., Steinberg, *supra* note 10, at 992; Telephone Interview with Attorney #6, Bronx Defs., *supra* note 81; Telephone Interview with Attorney #8, Bronx Defs., *supra* note 99; Telephone Interview with Attorney #6, Legal Aid Soc'y, *supra* note 65; Telephone Interview with Attorney #7, Legal Aid Soc'y, *supra* note 66.

¹¹³ Steinberg, *supra* note 10, at 992; Telephone Interview with Attorney #6, Legal Aid Soc'y, *supra* note 65; Telephone Interview with Attorney #7, Legal Aid Soc'y, *supra* note 66.

¹¹⁴ Telephone Interview with Attorney #2, Bronx Defs., *supra* note 80; Telephone Interview with Attorney #5, Legal Aid Soc'y, *supra* note 79.

¹¹⁵ Steinberg, *supra* note 10, at 992.

¹¹⁶ Telephone Interview with Attorney #6, Bronx Defs., *supra* note 81.

¹¹⁷ Telephone Interview with Attorney #5, Bronx Defs. (Oct. 3, 2017).

[Vol. 132:819

client preferences.¹¹⁸ Meetings between Legal Aid criminal attorneys, civil attorneys, and criminal defense clients occur as needed, early in the case or later as collateral issues arise.¹¹⁹ Sometimes a criminal defense attorney at Legal Aid is able to obtain one-time, clear-cut advice on a collateral issue from an immigration attorney or other civil attorney.¹²⁰ In cases like this, the criminal attorney might then provide the advice to the client without setting up a meeting between the civil attorney and the client.¹²¹ However, if a client faces a complex issue, then the civil attorney, criminal defense attorney, and client might all meet as a group.¹²²

3. Advocates with an interdisciplinary skill set. — Both the Bronx Defenders and Legal Aid provide interdisciplinary training and shadowing opportunities for new attorneys. New advocates at the Bronx Defenders receive an introduction to all practice areas and training on how to collaborate with other advocates on issues outside the advocate's practice area.¹²³ Criminal defense attorneys at the Bronx Defenders spend time shadowing advocates from other practice areas¹²⁴ and receive continuous interdisciplinary training through weekly or biweekly trainings.¹²⁵ New criminal defense attorneys at Legal Aid also receive interdisciplinary training on topics such as immigration, housing, and employment.¹²⁶ Criminal defense attorneys at Legal Aid have often had the opportunity to gain experience in the organization's noncriminal legal disciplines, whether by working in other practice areas or cooperating closely with noncriminal attorneys.¹²⁷ Legal Aid also has a continuing legal education program, with a training offered every two to three months.¹²⁸ Many trainings address the collateral consequences of criminal cases, such as the rapidly changing immigration law landscape.¹²⁹

In contrast to attorneys at the Bronx Defenders and Legal Aid, 18B attorneys have limited formal training opportunities with respect to collateral consequences, and this training is not mandatory. One 18B attorney noted that the 18B administrator provides optional training on

¹¹⁸ Telephone Interview with Attorney #3, Bronx Defs., supra note 90.

¹¹⁹ Telephone Interview with Attorney #1, Legal Aid Soc'y, *supra* note 90; Telephone Interview with Attorney #3, Legal Aid Soc'y, *supra* note 63.

 $^{^{120}\,}$ Telephone Interview with Attorney #5, Legal Aid Soc'y, supra note 79. $^{121}\,$ Id.

¹²² Telephone Interview with Attorney #1, Legal Aid Soc'y, *supra* note 90.

¹²³ Telephone Interview with Attorney #6, Bronx Defs., *supra* note 81.

¹²⁴ Steinberg, *supra* note 10, at 995.

¹²⁵ Telephone Interview with Attorney #6, Bronx Defs., *supra* note 81.

 $^{^{126}\,}$ Telephone Interview with Attorney #7, Legal Aid Soc'y, supra note 66.

¹²⁷ Telephone Interview with Attorney #6, Legal Aid Soc'y, *supra* note 65.

 ¹²⁸ Telephone Interview with Attorney #7, Legal Aid Soc'y, *supra* note 66.
¹²⁹ Id.

THE EFFECTS OF HOLISTIC DEFENSE

collateral consequences once a year.¹³⁰ However, none of the 18B attorneys interviewed discussed attending trainings on collateral issues.

4. A robust understanding of, and connection to, the community served. — The Bronx Defenders and Legal Aid both undertake criminal justice reform efforts, know-your-rights campaigns, and community intake to better understand and connect with the communities they serve. The Bronx Defenders' community organizing component works with clients and residents of the Bronx on policing and criminal justice reform campaigns and has achieved reform of civil forfeiture and policing policies.¹³¹ The Bronx Defenders has also undertaken impact litigation related to stop and frisk, policing of nonaggressive panhandling, property forfeiture, and delays in criminal trials due to underfunding.¹³² In addition, the Bronx Defenders regularly conducts know-your-rights trainings, including trainings to assist community youth in navigating interactions with law enforcement.¹³³ To provide information about these trainings and other services, it hosts block parties with games for children and tables set up by community service providers.¹³⁴ The Bronx Defenders has a community intake center that allows any community member to walk into the office to ask questions and seek services, such as help with immigration or housing.¹³⁵ One attorney from the criminal defense practice noted that a lot of clients she meets for the first time at arraignment have had prior contact with the Bronx Defenders.¹³⁶ Many were assisted with noncriminal issues through community intake and already had a positive impression of the Bronx Defenders.¹³⁷

Legal Aid also undertakes efforts to better understand and serve the community. Legal Aid's Community Justice Unit travels to the communities that Legal Aid serves to conduct know-your-rights events and resource fairs.¹³⁸ In addition, community members can come into Legal Aid's offices and ask legal questions of the criminal and civil units during business hours.¹³⁹ Legal Aid attorneys volunteer within the community, coaching high school mock trial, speaking with students about

¹³⁰ Telephone Interview with 18B Attorney #4, supra note 71.

¹³¹ Telephone Interview with Attorney #9, Bronx Defs., *supra* note 67.

 $^{^{132}\,}$ Telephone Interview with Attorney #1, Bronx Defs. (Sept. 5, 2017).

¹³³ Telephone Interview with Attorney #9, Bronx Defs., *supra* note 67.

 $^{^{134}\,}$ Telephone Interview with Attorney #2, Bronx Defs., supra note 80.

¹³⁵ Telephone Interview with Attorney #1, Bronx Defs., *supra* note 132; Telephone Interview with Attorney #8, Bronx Defs., *supra* note 99.

¹³⁶ Telephone Interview with Attorney #8, Bronx Defs., *supra* note 99.

¹³⁷ Id.

¹³⁸ Telephone Interview with Attorney #7, Legal Aid Soc'y, *supra* note 66.

¹³⁹ Telephone Interview with Attorney #6, Legal Aid Soc'y, *supra* note 65; Telephone Interview with Attorney #7, Legal Aid Soc'y, *supra* note 66.

jobs in criminal justice, and teaching courses at community and city colleges.¹⁴⁰

In addition to work in the community, Legal Aid has several units and projects that have brought about reform in the Bronx and across New York City. Litigation filed by the Criminal Practice's Special Litigation Unit led to the requirement that New Yorkers be arraigned within twenty-four hours of arrest.¹⁴¹ The unit's impact litigation also played a significant role in the "reform of the draconian Rockefeller Drug Laws."¹⁴² In 2015, this same unit filed a federal class action to challenge arrests for trespass of residents and legitimate visitors in public housing developments.¹⁴³

One difference between the Bronx Defenders and Legal Aid with respect to connection to the community is that the Bronx Defenders continuously seeks formal community feedback. In order to get feedback directly from the community, the Bronx Defenders conducts client satisfaction surveys, organizes focus groups, and listens to anecdotal feedback from clients.¹⁴⁴ Through surveys, focus groups, and informal feedback, the Bronx Defenders seeks client input on criminal representation and the community's unmet legal needs.¹⁴⁵ Advocates at the Bronx Defenders note that client feedback has driven the Bronx Defenders' service model.¹⁴⁶ For example, the Family Defense Practice arose in response to the needs of parents who lost custody of their children during criminal cases and returned for assistance navigating family court.¹⁴⁷

C. Potential Convergence of Service Models over Time

Attorneys who practiced at Legal Aid before the Bronx Defenders was founded reported that Legal Aid has always addressed clients' legal and nonlegal needs.¹⁴⁸ These attorneys noted that during their entire tenure with Legal Aid, criminal defense attorneys worked with social

¹⁴⁰ Telephone Interview with Attorney #5, Legal Aid Soc'y, *supra* note 79; Telephone Interview with Attorney #6, Legal Aid Soc'y, *supra* note 65.

¹⁴¹ Telephone Interview with Attorney #2, Legal Aid Soc'y, *supra* note 62; *Civil Practice* at Legal Aid Helps Clients Suffering from Collateral Consequences of Arrest, LEGAL AID SOC'Y (Jan. 29, 2015), http://www.legal-aid.org/en/mediaandpublicinformation/inthenews/ civilpracticeatlegalaidhelpsclientssufferingfromcollateralconsequencesofarrest.aspx [https://perma. cc/2NQ6-JPFB].

¹⁴² LEGAL AID SOC'Y, *supra* note 141.

¹⁴³ Id.

¹⁴⁴ Telephone Interview with Attorney #1, Bronx Defs., *supra* note 132; Telephone Interview with Attorney #6, Bronx Defs., *supra* note 81; Telephone Interview with Attorney #8, Bronx Defs., *supra* note 99.

¹⁴⁵ See, e.g., Telephone Interview with Attorney #6, Bronx Defs., supra note 81.

¹⁴⁶ Telephone Interview with Attorney #1, Bronx Defs., *supra* note 132.

 $^{^{147}\,}$ Telephone Interview with Attorney #5, Bronx Defs., supra note 117.

¹⁴⁸ Telephone Interview with 18B Attorney #2, *supra* note 76; Telephone Interview with Attorney #1, Legal Aid Soc'y, *supra* note 90.

workers and civil attorneys to assist clients with a variety of noncriminal defense–related issues such as benefits and housing.¹⁴⁹ However, one Legal Aid attorney also indicated that approximately five years ago, Legal Aid's civil attorneys were relocated to the same building as their criminal defense attorneys.¹⁵⁰ The consolidation into a single physical location likely improved the ability of criminal defense advocates and other advocates to share information and collaborate on multidisciplinary strategies.

Advocates outside of Legal Aid perceive Legal Aid's model as becoming more holistic over time. An 18B attorney in the Bronx who previously worked at Legal Aid noted that although Legal Aid has long assisted clients with a variety of noncriminal defense-related issues, it appears to be increasingly connecting clients with other services to address those issues.¹⁵¹ The attorney hypothesized that these increasing connections to community services and programs are a result of the greater online presence of community service providers, which makes it easier for attorneys to learn about and connect clients with services.¹⁵² A nonprofit representative who works with Legal Aid and the Bronx Defenders on alternative sentencing options and connections to community programs reported that, in past years, the nonprofit's relationship with the Bronx Defenders was stronger because of its more "holistic approach."¹⁵³ The representative noted that around four or five years ago, he observed a cultural change in Legal Aid that has resulted in the nonprofit working with Legal Aid in much the same way as it works with the Bronx Defenders.¹⁵⁴ He reports that current Legal Aid attorneys routinely seek alternative sentencing options and make many referrals to the nonprofit.¹⁵⁵ The representative is not sure why the change in culture came about, but hypothesized that it might be the result of recent criminal justice reform trends.156

Attorneys at the Bronx Defenders observe that there has been a greater effort by heads of practice areas at Legal Aid to coordinate and collaborate on their cases and a greater attempt by criminal defense at-

¹⁴⁹ Telephone Interview with 18B Attorney #2, *supra* note 76; Telephone Interview with Attorney #1, Legal Aid Soc'y, *supra* note 90.

¹⁵⁰ Telephone Interview with Attorney #7, Legal Aid Soc'y, *supra* note 66.

¹⁵¹ Telephone Interview with 18B Attorney #2, supra note 76.

¹⁵² Id.

 $^{^{153}}$ Telephone Interview with Representative $\#_{\rm I},$ Nonprofit that Works Within the Criminal Justice System (Sept. 11, 2017).

¹⁵⁴ Id.

¹⁵⁵ Id.

¹⁵⁶ Id.

[Vol. 132:819

torneys to seek the assistance of noncriminal attorneys and social workers.¹⁵⁷ One attorney at the Bronx Defenders also noted that the Attorneyin-Charge of the Criminal Defense Practice at Legal Aid, in particular, has been focusing on training Legal Aid's criminal defense attorneys in noncriminal issues.¹⁵⁸ One Bronx Defenders attorney also noted that in the last few years, Legal Aid has become much more visible in terms of community presence, community organizing, and large-scale criminal justice reform efforts.¹⁵⁹ However, attorneys at the Bronx Defenders do not consider Legal Aid's service model to be fully "holistic" because civil and criminal attorneys do not sit together in teams and, from the Bronx Defenders' perspective, have at times not approached cases with unified strategies or policies across divisions.¹⁶⁰

Convergence may also have been facilitated by an important infusion of additional resources. In 2009, the New York legislature passed a law requiring the establishment of case caps for indigent defense attorneys in New York City, coupled with the infusion of new funding.¹⁶¹ An administrative order required all defender organizations to adhere to uniform caseload standards by 2014.¹⁶² These workload standards were advisory between enactment and March 31, 2014, but became binding after that.¹⁶³ Funding to reduce caseloads was provided through the New York Office of Court Administration.¹⁶⁴ By 2015, an additional \$55.6 million had been allocated to the city's institutional defenders, representing a 35.2% increase in the funds available to them.¹⁶⁵ If Legal Aid lawyers' caseloads indeed decreased, the added time afforded per case may have permitted greater attention to the collateral consequences of each case.

Moreover, there was growing recognition at Legal Aid of the critical role of social workers. In 2009, at Legal Aid's Bronx trial office, the

¹⁵⁷ Telephone Interview with Attorney #1, Bronx Defs., *supra* note 132; Telephone Interview with Attorney #2, Bronx Defs., *supra* note 80; Telephone Interview with Attorney #3, Bronx Defs., *supra* note 90; Telephone Interview with Attorney #6, Bronx Defs., *supra* note 81.

¹⁵⁸ Telephone Interview with Attorney #3, Bronx Defs., *supra* note 90.

¹⁵⁹ Telephone Interview with Attorney #2, Bronx Defs., *supra* note 80.

¹⁶⁰ Telephone Interview with Attorney #1, Bronx Defs., *supra* note 132; Telephone Interview with Attorney #2, Bronx Defs., *supra* note 80; Telephone Interview with Attorney #3, Bronx Defs., *supra* note 90.

¹⁶¹ John Eligon, *State Law to Cap Public Defenders' Caseloads, but Only in the City*, N.Y. TIMES (Apr. 5, 2009), https://nyti.ms/2Rrf4MI [https://perma.cc/QA7H-89CH].

¹⁶² INDIGENT DEF. ORG. OVERSIGHT COMM., GENERAL REQUIREMENTS FOR ALL OR-GANIZED PROVIDERS OF DEFENSE SERVICES TO INDIGENT DEFENDANTS § V.B.2(a) (2011), http://www.courts.state.ny.us/courts/adi/Committees&Programs/IndigentDefOrgOversightComm/ general%20_requirements.pdf [https://perma.cc/XB4C-9ZHU]; *see also* N.Y. COMP. CODES R. & REGS. tit. 22, § 127.7 (2010). We are indebted to Andrew Davies for bringing this to our attention.

¹⁶³ N.Y. COMP. CODES R. & REGS. tit. 22, § 127.7(c).

¹⁶⁴ See id. § 127.7(b).

 $^{^{165}}$ Melissa Labriola et al., Indigent Defense Reforms in Brooklyn, New York: An Analysis of Mandatory Case Caps and Attorney Workload 1 (2015).

attorney-to-social worker ratio was just 12.4-to- $1.^{166}$ A report found that Legal Aid used social workers in just 1% of misdemeanor cases and 3% of felony cases.¹⁶⁷ By 2011, the ratio had improved to 9.7-to-1 in the Bronx,¹⁶⁸ and by 2013, it had improved to 8.5-to- $1.^{169}$ These data also suggest that the practice models were converging.

D. Perceptions from Other Criminal Justice Participants

We interviewed three criminal court judges in Bronx County who discussed their observations of the criminal defense models employed by the Bronx Defenders and Legal Aid. One judge believed that advocates from the Bronx Defenders have elevated the level of defense practice in the Bronx by pushing other public defenders to be more cerebral and look at cases in a more holistic fashion.¹⁷⁰ Nevertheless, from his limited perspective, he said he could not opine about whether holistic defense in particular is "working" in terms of overall client outcomes.¹⁷¹ When the Bronx Defenders are assigned to arraignments, the judge explained, they do a "marvelous" job, but the calendar moves more slowly because their attorneys take so much time to interview thoroughly every client.¹⁷² In comparison, Legal Aid attorneys tend to be more experienced and handle cases more quickly and efficiently.¹⁷³ Legal Aid's ability to handle cases quickly and efficiently does not compromise the quality of the criminal defense they provide, according to the judge.¹⁷⁴ Indeed, the judge concluded that, from his observations, there is no meaningful difference between the quality of representation by Legal Aid and the Bronx Defenders.¹⁷⁵

A second judge stated that advocates from the Bronx Defenders tend to be very smart and energetic about trying to get the best possible outcomes for their clients.¹⁷⁶ If the judge had to name one weakness, it would be that defending the criminal case is not always their primary

 171 Id.

 $^{^{166}\,}$ See Indigent Def. Org. Oversight Comm., Report of the Indigent Defense Organization Oversight Committee to the Appellate Division First Department for Fiscal Years 2008–2009, at 12 (2010).

¹⁶⁷ Id.

¹⁶⁸ 2010–2011 IDOOC REPORT, *supra* note 97, at 12; *see also* DANIEL F. KOLB ET AL., THE LEGAL AID SOCIETY: AN ANALYSIS OF TIME AND RESOURCES NECESSARY FOR AN EFFEC-TIVE DEFENSE: INVESTIGATOR AND SOCIAL WORK SUPPORT 33 (2014) (discussing need for social worker and investigator support).

¹⁶⁹ 2012–2013 IDOOC REPORT, *supra* note 97, at 9–10.

¹⁷⁰ Telephone Interview with Criminal Court Judge #3, *supra* note 76.

 $^{^{172}}$ Id. This an ecdotal impression is confirmed in the empirical analysis below. See infra Table 2, p. 863.

¹⁷³ Telephone Interview with Criminal Court Judge #3, *supra* note 76.

¹⁷⁴ Id.

¹⁷⁵ Id.

¹⁷⁶ Telephone Interview with Criminal Court Judge #1 (Aug. 24, 2017).

[Vol. 132:819

concern.¹⁷⁷ The judge noted that criminal defense attorneys can get caught up in other facets of a client's life and lose sight of getting a good outcome in the criminal case.¹⁷⁸ According to the judge, if a criminal defense attorney fails to be a criminal defense attorney first and fore-most, "all is lost."¹⁷⁹ The judge opined that Legal Aid typically has more senior lawyers who are more practical but less energetic than the Bronx Defenders.¹⁸⁰

A third judge we interviewed believed strongly in the idea of holistic defense.¹⁸¹ In particular, he emphasized the prominent role that social workers play in the holistic model, mentioning how helpful they are in addressing issues like substance abuse, mental illness, and housing instability among young people.¹⁸² Both the Bronx Defenders and Legal Aid used social workers effectively in his experience.¹⁸³ As between the two institutions, he has not observed a difference in quality of overall criminal representation or nonlegal services.¹⁸⁴

We also interviewed other individuals who are or have been involved in providing service to criminal justice–involved individuals in the Bronx. One interviewee from a nonprofit that works within the criminal justice system felt that both the Bronx Defenders and Legal Aid were client focused.¹⁸⁵ Since each organization has internal units to address noncriminal consequences of criminal cases in areas like employment, immigration, and housing, the interviewee explained, the quality and breadth of representation depends on the individual attorney, not the organization.¹⁸⁶

Another interviewee from a criminal justice–related nonprofit acknowledged being more likely to refer clients to the Bronx Defenders if the client had immigration or child custody issues.¹⁸⁷ The interviewee commended Legal Aid's skilled criminal defense but believed that the Bronx Defenders model is better equipped to handle noncriminal consequences of criminal matters like losing welfare or housing.¹⁸⁸

A former criminal defense attorney who practiced in the Bronx described Legal Aid as having better institutional memory than the Bronx

 188 Id.

¹⁷⁷ Id.

 $^{^{178}~}Id.$

 ¹⁷⁹ Id.
¹⁸⁰ Id.

¹⁰⁰ Ia.

¹⁸¹ Telephone Interview with Criminal Court Judge #2 (Aug. 28, 2017).

 $^{^{182}}$ Id.

¹⁸³ Id.

¹⁸⁴ Id.

¹⁸⁵ Telephone Interview with Representative #2, Nonprofit that Works Within the Criminal Justice System (Sept. 18, 2017).

¹⁸⁶ Id.

¹⁸⁷ Telephone Interview with Representative #3, Nonprofit that Works Within the Criminal Justice System (Sept. 27, 2017).

Defenders.¹⁸⁹ When co-counseling cases with Legal Aid attorneys, the interviewee discovered that Legal Aid had an extensive database of motions, lines of cross-examination, and other templates for a wide range of scenarios.¹⁹⁰ The Bronx Defenders' written motion- and trial-practice resources did not appear to this interviewee to be as well-developed.¹⁹¹

E. Summary

In summary, criminal defense attorneys at the Bronx Defenders and Legal Aid address clients' legal and nonlegal needs through referrals to civil attorneys and social workers within their organizations and through relationships with community nonprofits. Although criminal defense attorneys at Legal Aid report that civil attorneys are generally responsive to the needs of their clients, the team structure and continuous evaluation of interdisciplinary referrals and communication at the Bronx Defenders allow for more robust collaboration between civil and criminal attorneys. In addition, the greater proportion and use of social workers at the Bronx Defenders suggest that, as compared to Legal Aid, the Bronx Defenders can more easily connect clients with treatment for underlying issues. Indeed, both organizations agree that connecting clients with appropriate treatment sometimes allows for nonincarceration plea deals and dispositions. Greater proportion and use of social workers also means that the Bronx Defenders has more manpower to collect and communicate mitigating information that may lead to less punitive sentencing. Both defender organizations appear to have considerable advantages vis-à-vis private appointed counsel in their ability to access support for their clients outside of criminal representation. 18B attorneys have difficulty securing nonlegal services to address their clients' noncriminal issues due to resource constraints and the requirement that the attorney request such services from the presiding judge.

With respect to serving and maintaining connections to the community, both the Bronx Defenders and Legal Aid undertake criminal justice reform efforts, know-your-rights campaigns, and community intake. However, unlike Legal Aid, the Bronx Defenders also seeks formal community feedback through the use of client-satisfaction surveys and focus groups.

Although interviews with advocates from the Bronx Defenders and Legal Aid revealed differences in how advocates collect information about and address noncriminal issues, judges and other third-party interviewees generally have not observed a meaningful difference in the quality of criminal defense representation provided by these organizations. Moreover, Legal Aid attorneys characterize their own approach

¹⁸⁹ Telephone Interview with Former Criminal Defense Attorney Who Practiced in the Bronx (Sept. 19, 2017).

¹⁹⁰ Id.

¹⁹¹ Id.

as being holistic. These views may in part reflect a convergence across the two organizations over time, as the Legal Aid Society has taken steps to enhance the interdisciplinary training of its attorneys and increase the physical proximity of its civil and criminal attorneys in the Bronx.

With reference to the different models of outcomes that holistic defense might achieve in practice discussed in section I.C, the interview responses are generally consistent with one of two views. Bronx Defenders and some other interviewees espoused a "full success" view while Legal Aid attorneys, several judges, and some service providers advanced the "no difference" view. Although one interviewee raised the possibility that focusing on concerns outside of the criminal case might adversely impact representation,¹⁹² in general there was little suggestion from the interviewees that the holistic approach as practiced in the Bronx might lead to worse criminal justice outcomes than a more traditional approach.

III. EMPIRICAL METHODOLOGY: MEASURING THE EFFECTS OF HOLISTIC DEFENSE

While our interviews revealed some similarities between the service models of the holistic and traditional defenders, there are also important differences in their philosophies and practices. Ultimately, the extent to which these differences in approach translate into outcomes in the criminal justice system is an empirical question, one to which we now turn.

To measure the effects of holistic representation, ideally, an observer would want a means of comparing what happens to a defendant or pool of defendants receiving holistic representation with what would have happened to those same individuals had they received traditional representation. Any difference in outcomes would represent the causal effect of holistic representation. In reality, of course, it is impossible to observe the same defendant represented in the same case by both types of counsel. As a result, we are forced to infer the effect of representation by instead comparing outcomes across defendants with and without holistic representation, and, to the extent possible, controlling for underlying differences between the two defendant populations other than counsel type. Because many factors other than counsel type differ across those with and without holistic representation, including potentially unobservable factors such as the degree of cooperation of the defendant, strength of the evidence in the case, and so forth, cleanly measuring the effect of representation free of other confounding factors is challenging. From a research standpoint, the ideal situation would be one in which counsel are randomly assigned, as random assignment would ensure that, on average, pools of defendants assigned to one type of counsel versus another should be comparable on other characteristics. However,

¹⁹² Telephone Interview with Criminal Court Judge #1, supra note 176.

as a practical matter, random assignment is often impossible in the field

due to logistical or ethical concerns. In the present study, we attempt to exploit features of the counsel assignment system in the Bronx that mimic random assignment in that they cause similarly situated defendants or pools of defendants to differ in whether they are assigned holistic versus traditional defenders. In particular, we take advantage of the Bronx Criminal Courts' system of assigning counsel based on rotating arraignment shifts, where different defender organizations handle arraignments on different days of the week.

A. The Case Assignment Process in Bronx Criminal Court

In New York City, the arraignment is typically the first judicial proceeding in a criminal case and generally occurs within twenty-four hours of arrest.¹⁹³ A judge, defense counsel, and assistant district attorney participate, the defendant is formally notified of the charges, and a bail determination is made.¹⁹⁴ Prior to the arraignment, the pretrial services agency interviews the defendant and collects information about the defendant's employment and salary.¹⁹⁵ This information is available to the judge at arraignment, who can then make a determination about indigency status.¹⁹⁶

Legal Aid and the Bronx Defenders receive most of their cases at arraignment.¹⁹⁷ On weekdays, there are three eight-hour arraignment shifts that cover the full twenty-four-hour period, with arraignment occurring in two courtrooms during the day and one courtroom in mornings and evenings.¹⁹⁸ Typically, on Saturdays, Sundays, and holidays, one courtroom operates one shift from 9:00 a.m. to 5:00 p.m. and another from 5:00 p.m. to 1:00 a.m.¹⁹⁹ The court averages around eighty to ninety arraignments a day, but there is a fair bit of day-to-day variability

¹⁹³ See Telephone Interview with Attorney #1, Legal Aid Soc'y, *supra* note 90; Telephone Interview with Criminal Court Clerk #1 (Sept. 19, 2017).

¹⁹⁴ N.Y. State Criminal Justice Handbook, N.Y.C. BAR, https://www.nycbar.org/new-york-statecriminal-justice-handbook [https://perma.cc/SK99-MQPU].

 $^{^{195}}$ FUND FOR MODERN COURTS, FROM ARREST TO APPEAL: A GUIDE TO CRIMINAL CASES IN THE NEW YORK STATE COURTS 12 (2005), http://moderncourts.org/wp-content/uploads/2013/10/criminal_court_guide.pdf [https://perma.cc/R8FU-L6UT].

¹⁹⁶ Id.

 $^{^{197}}$ Telephone Interview with Attorney #6, Bronx Defs., supra note 81; Telephone Interview with Attorney #2, Legal Aid Soc'y, supra note 62.

¹⁹⁸ Telephone Interview with Criminal Court Clerk #1, *supra* note 193.

¹⁹⁹ *Id.* One exception is that the court may open two courtrooms on Saturdays and Sundays if individuals have been sitting in jail for more than twenty-four hours. *Id.* This decision is made at the end of the week, typically on Fridays, and different agencies come together to determine if a second weekend courtroom should be opened. *Id.*

[Vol. 132:819

driven by arrest patterns.²⁰⁰ More arraignments tend to occur later in the week because of arrests for DWIs and other weekend conduct.²⁰¹

Either Legal Aid or the Bronx Defenders will be the primary organization assigned to each arraignment shift, and defendants appearing for arraignments during the shift get assigned to the primary organization absent special circumstances.²⁰² Currently, the Bronx Defenders is assigned to Sunday day and night; Monday day and night; Tuesday day; and Wednesday day.²⁰³ However, the arraignment shift schedule has changed over the years as the Bronx Defenders has grown and the Office of Court Administration and the City have sought to balance out the distribution of cases among the defender organizations.²⁰⁴

There are occasional departures from the default assignment system. If the primary organization has a conflict, the defendant will be assigned to the secondary organization (that is, the Bronx Defenders when Legal Aid is primary and Legal Aid when the Bronx Defenders is primary) or 18B counsel.²⁰⁵ If there are two codefendants, the primary organization takes one and the secondary the other, absent conflicts.²⁰⁶ But, if Legal Aid, the Bronx Defenders, or an 18B attorney has previously represented a particular codefendant, then they will take that codefendant.²⁰⁷

If there are three or more defendants, attorneys from the 18B panel will be assigned to the extra defendants, and as a general rule the 18B attorneys are appointed whenever conflicts prevent the primary and secondary organizations from providing representation.²⁰⁸ 18B counsel are also assigned when the defendant discharges his attorney or an attorney discharges the defendant, which can happen at any point during a

²⁰⁰ Id.

²⁰¹ Id.

²⁰² Telephone Interview with Attorney #1, Bronx Defs., *supra* note 132; Telephone Interview with Attorney #2, Bronx Defs., *supra* note 80; Telephone Interview with Attorney #2, Legal Aid Soc'y, *supra* note 62; Telephone Interview with Attorney #3, Legal Aid Soc'y, *supra* note 63; Telephone Interview with Criminal Court Clerk #1, *supra* note 193.

²⁰³ Telephone Interview with Attorney #8, Bronx Defs., *supra* note 99.

 $^{^{204}\,}$ Telephone Interview with Criminal Court Clerk #2 (Dec. 4, 2017).

 $^{^{205}}$ Telephone Interview with Criminal Court Clerk #1, *supra* note 193. For example, Legal Aid might represent a child in family court. *Id.* If the parent is arrested and comes in on an arraignment shift during which Legal Aid is the primary organization, then Legal Aid would hand off the parent to the Bronx Defenders. *Id.*

 $^{^{206}}$ Id. Generally, the primary organization decides which codefendants it will take and which to hand off. Id.

²⁰⁷ See id.

²⁰⁸ Telephone Interview with 18B Attorney #3 (Sept. 29, 2017); Telephone Interview with Criminal Court Judge #2, *supra* note 181.

case.²⁰⁹ 18B counsel might also be appointed in unique or emergency situations like a hospital arraignment.²¹⁰

Legal Aid and the Bronx Defenders practice vertical representation, meaning that the attorney whom a defendant meets at arraignment is almost always the defendant's attorney for the duration of the case.²¹¹ An 18B attorney whom a defendant meets at arraignment will also likely be the defendant's attorney for the duration of the case.²¹²

Appendix Table I provides basic summary information about case assignment in the Bronx, demonstrating two important patterns regarding case assignment. First, and unsurprisingly, defendants are much more likely to be assigned to a defender organization when it is covering the shift during which they are arraigned. Second, however, it is fairly common for defendants arraigned on shifts covered by the Bronx Defenders to ultimately be represented by Legal Aid. This occurs because Legal Aid is a much larger defender organization and many defendants have had prior contacts with the criminal courts.²¹³ When one organization has prior ties representing a client, this triggers an exception to the normal assignment mechanism.²¹⁴

Because of how the assignments are made, whether a particular defendant is assigned to the Bronx Defenders or Legal Aid largely depends on which day he or she is arraigned and/or to which courtroom he or she is assigned, factors that are unlikely to be directly related to case outcomes. Below we outline a more formal statistical framework that reflects this intuition.

 $^{^{209}}$ Telephone Interview with 18B Attorney #3, *supra* note 208. The general sentiment among 18B attorneys interviewed by RAND was that, because they get assigned to clients who have discharged their attorneys or have been discharged by their attorneys, 18B attorneys tend to have clients who are difficult to get along with and/or have difficult cases. *See, e.g.*, Telephone Interview with 18B Attorney #2, *supra* note 76.

²¹⁰ Telephone Interview with 18B Attorney #3, *supra* note 208.

²¹¹ Telephone Interview with Attorney #2, Bronx Defs., *supra* note 80; Telephone Interview with Attorney #2, Legal Aid Soc'y, *supra* note 62.

²¹² See Telephone Interview with 18B Attorney #3, supra note 208.

²¹³ Per their respective 2015 IRS Form 990 disclosures, Legal Aid handles approximately 231,000 criminal matters and the Bronx Defenders serves approximately 25,000 clients each year. *See* Legal Aid Soc'y, Form 990: Return of Organization Exempt from Income Tax, pt. 3, § 4a, at 2 (2015), https://static1.squarespace.com/static/59578aade110eba6434f4b72/t/5aa80188ec212dd645426202/ 1520959883459/2016_las_990.pdf [https://perma.cc/6RK5-LR2F]; Bronx Defs., IRS Form 990: Return of Organization Exempt from Income Tax, pt. 3, § 4a, at 2 (2015), https://www.guidestar.org/ FinDocuments/2016/133/931/2016-133931074-0e364ac9-9.pdf [https://perma.cc/T9B8-8KA6]. Ac-

cording to the Bureau of Justice Statistics, about 75% of felony defendants in large urban areas have a prior arrest. BRIAN A. REAVES, BUREAU OF JUSTICE STATISTICS, U.S. DEP'T OF JUSTICE, FELONY DEFENDANTS IN LARGE URBAN COUNTIES, 2009 — STATISTICAL TA-BLES 8 (2013), https://www.bjs.gov/content/pub/pdf/fdluc09.pdf [https://perma.cc/HT2U-F6NU].

²¹⁴ See Telephone Interview with Attorney #2, Bronx Defs., supra note 80.

B. Data Sources

The primary case-level data used in the analysis below were obtained from the New York Division of Criminal Justice Services (DCJS) and the New York City Office of Court Administration (OCA). We requested an extract of all records from the DCJS Computerized Criminal History (CCH) database involving individuals arraigned within Bronx County between 2000 and the present supplemented with Bronx arraignment data from OCA.²¹⁵ The CCH database includes all fingerprintable arrests that occur within the state of New York and is the data source used to generate rap sheets following arrest for arraignments in the state.²¹⁶ DCJS provided data covering over 2.8 million individual arrests involving nearly 400,000 distinct individuals.

In the analysis below, the unit of observation is a defendant/case pairing, and we initially restrict attention to cases where there was an arraignment between 2000 and 2014 and an initial disposition by October 2016,²¹⁷ leaving a pool of 940,546 observations.²¹⁸ We exclude the roughly 5% of Bronx criminal defendants who were not indigent and were represented by hired private counsel, as well as the <1% of cases where the DCJS file had missing data on counsel type. We then crosschecked the DCJS data with annual Bronx Defender caseload statistics published by the New York Court's Indigent Defense Organization Oversight Committee²¹⁹ as a data quality check. Comparison of the two sources suggest that from 2008 through the third quarter of 2012, the DCJS data under-recorded the number of cases assigned to the Bronx

²¹⁵ The final data file included arraignments through October 17, 2016.

²¹⁶ N.Y. State Div. of Criminal Justice Servs., Computerized Criminal History System Overview (on file with the Harvard Law School Library). Criminal citations, commonly referred to as Desk Appearance Tickets (DAT), generally require fingerprinting and are thus included in the CCH. *See* N.Y. CRIM. PROC. LAW § 160.10(1) (McKinney Supp. 2018).

 $^{^{217}}$ The data indicate that over 97% of cases resolve within 655 days — the shortest available follow-up period for any observation in the dataset — and that over 99% of cases resolve within three years.

²¹⁸ We compared the annual counts of cases in the DCJS data to the published caseload statistics for the Bronx in the annual reports of the Criminal Courts of the City of New York, N.Y.C. Criminal Court, *Annual Reports*, NYCOURTS.GOV, https://www.nycourts.gov/COURTS/nyc/criminal/annual-reports.shtml [https://perma.cc/ZB9Z-KNFQ], and observed close, but not perfect, agreement. Our annual felony case counts were generally within 1% of the published felony county count, but misdemeanor counts were typically around 90% of the published count, likely due to the exclusion from the CCH database of unclassified misdemeanors (for example DWI, criminal littering), which do not require fingerprinting. *See* N.Y. State Div. of Criminal Justice Servs., *supra* note 216.

²¹⁹ Appellate Div., First Judicial Dep't, Supreme Court of the State of N.Y., *Indigent Defense Organization Oversight Committee*, NYCOURTS.GOV, https://www.nycourts.gov/courts/AD1/Committees&Programs/IndigentDefOrgOversightComm/index.shtml [https://perma.cc/WS2K-CRQ3].
Defenders, so we omit those years in the analysis that follows.²²⁰ We also omit 4,556 cases (<1% of remaining sample) arraigned on a handful of days where there were unusually few arraignments recorded, reasoning that the court may have departed from the normal assignment process on such days.²²¹ The final analytic sample includes 587,487 individual defendant/case pairings initiated in the Bronx between 2000–2007 and 2012–2014.

Figure 1 reports average characteristics for the overall sample and shows the percent difference in each characteristic across individuals ultimately represented by the Legal Aid Society as compared to those represented by the Bronx Defenders, along with whiskers denoting a 95% confidence interval for the difference. For example, the 2.37% reported next to "Male" means that Legal Aid clients are 2.37% more likely to be male than Bronx Defenders clients. More detailed statistics underlying the figure can be found in Appendix Table 2.

Defendants in the sample are predominantly male, are overrepresentative of Black and Hispanic defendants, and have a somewhat higher average age than observed in some other contexts.²²² Nearly a third of defendants face felony charges, and nearly one in ten have been charged with a violent felony. Many defendants have experienced multiple contacts with the criminal justice system, with a typical defendant recording prior felony and misdemeanor arrests.

Figure I also demonstrates some notable differences across defendants represented by the two defender organizations. Bronx Defenders clients were more likely to face felony charges as well as violent and weapons charges; they were less likely to face drug charges. Clearly, any outcome comparison between holistic and traditional defender clients that failed to account for such charging differences would provide a misleading view of the effects of holistic representation. While charges are observable and can therefore be controlled for in an empirical analysis, the population differences shown in Figure I raise the possibility that there may be other, unobserved differences across defendants — for example, in case complexity — that might make it difficult to empirically isolate outcome differences due to holistic representation from other factors.

 $^{^{220}}$ We obtain similar results to those reported below if we include the entire sample, which may reflect some of the robustness properties of our empirical approach to misclassification. *See infra* note 226.

²²¹ For example, there were only three arraignments recorded on September 11, 2001 (World Trade Center attacks), and unusually low numbers of arraignments on October 29–31, 2012 (Superstorm Sandy), so cases arraigned on these dates are omitted from the analysis.

²²² See FED. BUREAU OF INVESTIGATION, AGE-SPECIFIC ARREST RATES AND RACE-SPECIFIC ARREST RATES FOR SELECTED OFFENSES, 1993–2001, at 51 (2003), https://ucr.fbi.gov/additional-ucr-publications/age_race_arrest93-01.pdf/view [https://perma.cc/2EY5-9R5F] (not-ing that nationally the average age of arrestees for Part I and Part II index crimes in 2001 was 27.5).

[Vol. 132:819



Figure 1: Comparison of Defendants Represented by Legal Aid Society vs. Bronx Defenders (BxD)

Note: Whiskers denote 95% confidence intervals for each difference.

As omnibus measures of case complexity, for each defendant we predicted the probability of conviction and the expected sentence length. To derive the predicted conviction rate, we estimated a probit model where the outcome was a dummy variable for conviction and the explanatory variables were 269 variables capturing demographics (age, gender, race, ethnicity), case characteristics (top charge, number of charges, arrest location), and prior criminal history.²²³ Using estimates from this probit model, we predicted the probability of conviction for each individual in the sample. Then, at the bottom of Figure 1, we compare the average prediction for those represented by the Bronx

²²³ Appendix Figure 1 shows the distribution of predicted values from this model. Predicted conviction probabilities range from around .2 to nearly 1, with appreciable numbers of defendants falling across the entire range, suggesting that the model meaningfully differentiates defendants, as would be expected given the large number of predictors, including key variables such as offense and charge count that have legal relevance in determining outcomes.

THE EFFECTS OF HOLISTIC DEFENSE

Defenders versus those represented by the Legal Aid Society. We followed a similar procedure using a Poisson (count) model to build predictions for the expected sentence length (including zeros).²²⁴

Clients of the traditional defender face higher predicted conviction rates but lower predicted sentence lengths, likely due to their overrepresentation of drug cases, which tend to be harder to disprove due to the availability of physical evidence but which also tend to carry shorter sentences. The practically and statistically significant differences in predicted sentence length suggest important noncomparabilities between the clients of the two types of public defenders.

Several important limitations of the data used for this analysis affect the interpretation of the results that follow. Although we have reliable sentencing data, we do not know the actual custody status of any particular defendant postadjudication, and so our analyses that look at posttrial crime will include both defendants still being held in state custody and those who were never convicted or who were released. A second limitation is that we do not observe the immigration status of defendants. Not only is ability to remain in the United States a plausible outcome of interest — as many defendants might pursue legal strategies based on potential immigration consequences — but it also shapes who is observable in the crime data postadjudication. Finally, our data include only measures of what happens in the criminal justice system, while the holistic model is designed to affect a wider range of outcomes such as family stability, housing, and economic outcomes. The analysis is thus limited to one particular set of outcomes across a much larger set of outcomes that one would ideally evaluate in understanding the overall impact of holistic defense.

C. Natural Experiment

To better account for possible nonrandom sorting of clients to defender organizations, we seek to identify a factor that affects which type of defender represents a particular client, but is otherwise unrelated to the quality of the case or other indicia of guilt or innocence. As discussed above, we exploit changes in shift assignments, which varied the organization assigned as primary for defendants arraigned on particular days of the week in an idiosyncratic manner. Figure 2 depicts the shift assignments over the sample period considered in this study.

In the first half of the 2000s, the Bronx Defenders' shift assignments were centered on Mondays and Tuesdays, with the holistic defender covering all Monday and Tuesday shifts by 2001. In 2005, the Bronx Defenders began taking Sunday shifts, although it was temporarily moved to Thursday and Friday shifts at the end of 2005 before reverting to the prior arrangement in 2006. Beginning in 2012, the Defenders

2019]

²²⁴ The Poisson model generated predictions that also could widely differentiate defendants.

[Vol. 132:819

added Wednesday and Thursday shifts and began covering all Sunday and Monday shifts. Figure 2 demonstrates that, with the exception of Saturday shifts, which have always been covered by the Legal Aid Society, the Bronx Defenders have received shift assignments on all days of the week at various points in time, and the determination of when they cover particular days has been idiosyncratic. This rotating shiftassignment pattern permits identification of the effects of holistic representation even when we control for day-of-week effects (to account for the likelihood that crimes committed on particular days of the week, such as weekends, can be qualitatively different from those committed on other days of the week, such as weekdays).

Figure 2: Evolution of Shift Assignments for the Bronx Defenders and Legal Aid Society



Figure 3 illustrates the value of controlling for day-of-week effects, comparing defendants arraigned on dates where the holistic defender was assigned to one or more shifts to defendants arraigned on dates where only the traditional defender was taking cases. Appendix Table 3 provides more detailed statistics underlying Figure 3. Given that crime patterns vary over the course of the week and over time and that Figure 2 reveals systematic differences in the likelihood of holistic representation both across days of the week and over time, the comparisons in Figure 3 are conditional on arraignment month and day of week.

Appendix Table 3 demonstrates that shift assignments have a large influence on eventual representation, with only a small number of defendants getting the holistic defenders on off-shift days (likely due to

2019]

prior representation), but more than a third of defendants obtaining holistic representation on on-shift days. For a few characteristics, such as ethnicity or the presence of drug charges, we observe statistically significant differences across the two groups of defendants. For most characteristics, however, there is no measurable difference, and in all cases the disparity between groups is practically small. A Kolmogorov-Smirnov test of the null hypothesis that the p-values shown in Figure 3 are distributed uniformly — as would be expected if the shifts were randomly assigned — yields a p-value of .041.

Figure 3: Comparison of Defendants Arraigned on Dates Wh	en
the Bronx Defenders Was and Was Not Taking Cases	

		Adjuste	ed % difference	e — arraigned oi	n non-BxD v	s. BxD days	
Defendant demographics				-0.047%			
Male							
Age (years)				-0.545% 1.38%			
Black							
Hispanic				-1.41%			
Current charge				1.20%			
Attempted							
Felony				3.31%	-		
Number of counts				4.02			
Top charge — drug				-1.36%	6		
Violent offense							
Violent felony				-0.828%			
Includes firearm charge				3.13%	,		
Includes weapon charge				-0.819%			
Includes drug charge				2.63%			
Prior arrests for				0.609%			
Felonies				_ _			
Misdemeanors				0.286%			
Drug offenses				1.24%			
Violent felonies				0.652%			
Weapons offenses				0.592%			
Crimes against minors				1.84%			
Predicted conviction rate				-0.283%			
Predicted sentence length (days))			2.1370			
	-30%	-20%	-10%	0%	10%	20%	30%

Adjusted % difference - arraigned on non-BxD vs. BxD days

Note: Whiskers denote 95% confidence intervals for each difference.

Given that there appears to be some possibility of residual imbalance in certain characteristics of defendants depending on the day they were arraigned, how confident should we be in the natural experiment? We see several reasons to expect that it is still likely to yield good causal estimates of the effect of holistic defense. First, none of the statistically significant differences shown in Appendix Table 3 appears large enough that one would expect, based on these differences, that there would be

[Vol. 132:819

an appreciable divergence in outcomes across the two pools of defendants. Examining predicted conviction rate and sentence length, two of the omnibus measures of case difficulty presented at the bottom of Appendix Table 3, provides more direct evidence in favor of this argument. These measures were generated taking into account a wide spectrum of defendant characteristics and asking what the expected outcomes for each defendant would be based upon the totality of those characteristics. Neither metric is statistically nor practically different between the two pools of defendants. This suggests that, despite the minor differences shown for some characteristics in Figure 3, the likely outcomes of the two pools of defendants would be very similar absent any sort of difference in the quality of their representation. Second, for the natural experiment to yield causal estimates appropriately, we require that the shift assignments be random not in some absolute sense, but rather conditional on other variables for which we control. We can directly observe many of the most important determinants of case outcomes (for example, prior criminal history and current charge) and directly control for these determinants in the analysis, lessening the potential for the natural experiment to fail. Put differently, the differences shown in Figure 3 are actually not likely to contaminate estimates of the outcomes, because we can directly control for such differences in the analysis. More problematic would be a situation in which both (a) there are unobserved (and therefore uncontrollable) differences across the two groups, and (b) these differences are large enough in practical terms to affect the outcomes under consideration appreciably. Figure 3 suggests that even if (a) might hold, (b) likely does not, because observed differences are practically small.

To measure the effects of holistic representation using the natural experiment, we estimate a linear instrumental variables (IV) regression model via two-stage least squares $(2SLS)^{225}$ where the unit of observation is a defendant in a particular case. Here, the outcome of interest is a criminal justice outcome, such as whether the defendant was convicted or how long the sentence given was. The primary explanatory variable of interest is an indicator for whether a particular defendant was represented by the holistic defender (Bronx Defenders). Defendants repre-

86o

²²⁵ See JOSHUA D. ANGRIST & JÖRN-STEFFEN PISCHKE, MOSTLY HARMLESS ECONOMET-RICS 113–218 (2009), for a more detailed description of IV models and 2SLS. While the binary nature of the endogenous variables and some outcomes might suggest the use of nonlinear models, in this case, because of the desirability of controlling for many time-fixed effects and fixed effects capturing the wide range of different charge patterns seen in the data, estimation using nonlinear models was not feasible. Section 4.6.3 of *Mostly Harmless Econometrics* highlights some of the advantages of the linear IV approach. *Id.* at 197–205.

THE EFFECTS OF HOLISTIC DEFENSE

sented by the traditional defender (Legal Aid Society) serve as the omitted comparison group.²²⁶ Because some indigent defendants are ultimately assigned to appointed counsel, we also include an indicator for representation by appointed counsel as an additional, separate control, although comparing the representation of public defenders with that of private appointed counsel is not a primary focus of the study.²²⁷

Given the concerns described above about the potential for nonrandom sorting across defendants, it seems plausible to imagine that case assignment might be correlated with unobserved factors that affect criminal justice outcomes, such as the difficulty of the case. To address this concern, we instrument for the holistic defense indicator using a set of two indicators: one signifying whether the case was arraigned on days when the holistic defender was assigned to all courtroom shifts, and another signifying whether the case was arraigned on days where the holistic defender was assigned to some but not all shifts (with the omitted comparison group being days in which the holistic defender was not taking primary assignments). We also instrument for private appointed counsel representation using the daily count of new arraignments, reasoning that day-to-day case volume is largely random, but on days with an unusually high volume of cases, the public defenders and court personnel might be more inclined to try to shift cases toward appointed attorneys as a means of balancing public defender caseloads.²²⁸ Appendix Figure 2 provides evidence in favor of this supposition, showing that appointed counsel tend to receive a higher fraction of cases when there are large numbers of arraignments on a particular day.

The IV regressions also control for a series of other factors that may influence case outcomes and that may also be correlated with representation type. These include defendant age at the time of the arrest, gender, race, and ethnicity; the number of arrest charges and detailed top

²²⁶ The use of an IV model could also help to address certain types of misclassification where the true organizational affiliation of the defender is misrecorded by the court. In other words, it removes biases that might arise due to some types of clerical errors.

²²⁷ Thus, the overall estimation strategy involves estimating three equations: a main equation for the effects of holistic representation and two equations for the endogenous variables, holistic representation and appointed counsel representation, each of which has three instruments (partial shift indicator, full shift indicator, and daily case count).

²²⁸ An alternative possibility is that these differences are solely driven by codefendant cases, which would be less ideal from a research design standpoint. Although we lack data on the frequency of codefendant cases in the Bronx, data from the 2014 National Incident-Based Reporting System reveal that only 3879 (3.26%) of the 119,124 recorded crime incidents occurring in large cities (>500,000 population) involved three or more co-offenders who were arrested. *See National Incident-Based Reporting System, 2014: Extract Files (ICPSR 36421)*, NAT'L ARCHIVE CRIM. JUST. DATA (Oct. 3, 2018), https://www.icpsr.umich.edu/icpsrweb/NACJD/studies/36421/summary [https://perma.cc/B3RK-2APV]. Given that 16% of defendants in our sample are represented by appointed counsel, it seems unlikely that appointed counsel assignments are driven primarily by codefendant cases.

charge (1211 different categories); prior arrests and convictions for misdemeanors, felonies, weapons offenses, drug offenses, violent felonies, and offenses involving children; arrest location; holiday (Christmas, Thanksgiving, Independence Day, Memorial Day, Labor Day, or New Year's Day) offenses; and fixed effects for arraignment day of week, day of month, and month of year. Conceptually, then, the regressions compare outcomes across two defendants with the same demographics, current charges, and prior criminal history who vary in the type of representation they receive due to the fact that they were arraigned on dates where different defender organizations were scheduled to take cases. The main requirement for these estimates to measure the causal effect of holistic representation is that, after controlling for the factors listed above, there be no systematic differences in case quality, culpability, or other unmeasured case characteristics between those arraigned during Defender shifts as compared to those arraigned during Legal Aid shifts.²²⁹ While this assumption is not directly testable, there is little reason to suppose that such systematic differences should exist, and Appendix Table 3 suggests that the two groups are highly similar on observable dimensions.

IV. HOLISTIC DEFENSE SIGNIFICANTLY IMPACTS CLIENT OUTCOMES

A. Pretrial Outcomes and Case Processing

We first consider whether holistic defense affects outcomes prior to case resolution. Table 2 reports the IV estimates of the effect of holistic defense on speed of case resolution and pretrial crime obtained using the statistical model described above. The first-stage estimates (Appendix Table 4) indicate a strong relationship between shift timing and holistic representation.

²²⁹ See Luc Behaghel et al., Robustness of the Encouragement Design in a Two-Treatment Randomized Control Trial 3-4 (Inst. for the Study of Labor, Discussion Paper No. 7447, 2013), http://ftp.iza.org/dp7447.pdf [https://perma.cc/W86D-XCM3] (describing other technical assumptions that must be met in order for 2SLS estimation to deliver causal estimates in a setting such as this — assumptions that are likely satisfied in the present situation).

THE EFFECTS OF HOLISTIC DEFENSE

Outcome	Mean for clients with traditional defender	Estimated effect of holistic representation	Change in outcome
Case resolved at arraignment	.308	012 (.011)	-3.8%
Log (case length)	2.70	.085* (.037)	8.9%
Bail and Pretrial Release			
Release on recognizance	.713	.023** (.008)	3.2%
Detained	.225	019 ^{**} (.007)	-8.6%
Bail amount (conditional)	\$3504	-216 (314)	N.S.
FTA and Pretrial Arrest			
Bench warrant issued	.214	.013* (.006)	5.9%
Any pre- adjudication arrest	.148	.019** (.005)	12.7%
Number of pre- adjudication arrests	.252	.038** (.013)	15.1%
Misdemeanors	.161	.023** (.009)	14.2%
Felonies	.091	.015* (.006)	16.7%
Violent felonies	.026	.003 (.003)	N.S.

Table 2: Effects of Holistic Defense on Pretrial Arrest,Failure to Appear, and Case Processing

Note: This table reports coefficient estimates from linear 2SLS regressions of the listed outcome on indicators for whether a defendant was represented by the holistic defender or private appointed counsel, with the omitted comparison group being defendants represented by the traditional public defender. The regressions instrument for these endogenous indicators using an indicator for arraignment on a date when the holistic defender was taking some but not all shifts, an indicator for arraignment on a date when the holistic defender was taking all shifts, and the daily number of arraignments involving new (<48 hours since arrest) cases. The unit of observation is a defendant in a case. For case resolution at arraignment, case length, failure to appear (FTA), and pretrial arrest, the sample size is 587,156. For release on recognizance and pretrial detention, the sample is limited to defendants who did not resolve their case at first appearance, resulting in a sample size of 428,815. The conditional bail amount analysis further limits the sample. Including only those defendants who had a nonzero bail set and trimming the top 0.5% of observations (bail >\$1,000,000) yields a sample size of 123,598. The regressions also control for defendant age at the time of the arrest, gender, race, and ethnicity; the number of arrest charges and detailed top charge (1211 different categories); prior arrests and convictions for misdemeanors, felonies, weapons

2019]

offenses, drug offenses, violent felonies, and offenses involving children; arrest location; holiday (Christmas, Thanksgiving, Independence Day, Memorial Day, Labor Day, or New Year's Day) offenses; and fixed effects for arraignment day of week, day of month, and month of year. Standard errors clustered on arraignment day are reported in parentheses. * denotes statistically significant difference, p<.o1. N.S. = not statistically significant.

The top rows of Table 2 consider two outcomes related to case processing: whether the case resolves at the initial arraignment (in which case pretrial detention is not a possibility) and how long the case takes to reach an initial disposition. Resolutions at arraignment are fairly commonplace and often involve either immediate guilty pleas or adjournments in contemplation of dismissal (which is generally viewed as a positive outcome from the perspective of the defendant), so an immediate resolution is neither obviously good nor obviously bad; in any case, the estimates suggest the frequency of this outcome is not affected by holistic representation. Holistic representation was, however, associated with a o% increase in the amount of time it takes to resolve a case. Although the precise explanation for this longer case adjudication time is unclear, one possibility is that holistic defenders strategically delay case resolution for some clients in order to allow them to begin drug treatment, secure employment, or engage in other positive actions that might lead to more lenient sentences. Another possibility is that the extensive, checklistbased screening process conducted by the holistic defenders lengthens the case.

We next examine bail and pretrial release for defendants who do not immediately resolve their cases. Holistic representation increases the likelihood that clients are granted release on recognizance by 2.3 percentage points (3.2%) and reduces overall rates of pretrial detention by 8.6%. For those of whom bail is required, holistic defense is associated with lower bail amounts, although this difference is not statistically significant.

Clients with holistic representation were more likely to be arrested during the pretrial period when measuring arrests using either the fraction of clients with a new arrest or the total number of arrests. Pretrial misdemeanor arrests increased by 14.2% and felony arrests increased by 16.7%, although there was no measurable increase in pretrial violent felony arrests. There is nothing in the holistic defense theory of action that would suggest that any support or services provided during the pretrial period should increase defendant contacts with the criminal justice system. Thus, some — and perhaps all — of the measured increase in pretrial arrests and failures to appear is likely attributable to clients' higher release rate coupled with their longer exposure time before cases are resolved, which would leave them more available time to accrue failures to appear or additional arrests through a reverse incapacitation effect.

THE EFFECTS OF HOLISTIC DEFENSE

B. Immediate Case Outcomes

We next turn to an examination of outcomes in the immediate case. First, we examine whether the charges at final case disposition were downgraded relative to the charges at arrest, where we define downgrades based upon the severity of the offense as defined under New York law.²³⁰ Charge downgrades provide one indicator of representation quality, as charge bargaining is an important tool used by defense attorneys to minimize punishment and sentences for their clients. Table 3 reports that approximately one-half of all defendants obtained charge downgrades and that there was a modest (2.7%) but statistically significant increase in this rate for those represented by the holistic defender.

Although holistic defenders were more successful at obtaining charge downgrades, there was no statistically significant effect on the overall conviction or guilty plea rates. Whatever benefits the holistic model carries for clients, they do not appear to extend to avoiding convictions altogether. However, Table 3 demonstrates that holistic representation has a statistically significant and practically large impact on punishment severity, reducing the likelihood of an individual defendant receiving a jail sentence by 3.9 percentage points (15.5%) and the average length of a custodial sentence (including those of zero days) by 9.5 days (23.5%). These are large effects, implying, for example, that there were roughly 4500 individuals in our sample who avoided jail sentences because they had access to holistic representation.

²³⁰ New York categorizes offenses by severity; there are three classes for misdemeanors (A, B, and unclassified) as well as five classes and two subclasses for felonies (A-I, A-II, B, C, D, and E). *Chapter 1: Criminal Justice System for Adults in NYS*, N.Y. STATE OFF. OF MENTAL HEALTH, https://www.omh.ny.gov/omhweb/forensic/manual/html/chapter1.htm [https://perma.cc/ 4FXF-CTZM]. We include those who were acquitted in this analysis and base the charge down-grade indicator on the top charge recorded at the time of case resolution.

[Vol. 132:819

Outcome	Mean for clients with traditional defender	Estimated effect of holistic representation	Change in outcome
Charge downgraded	.514	.014* (.007)	2.7%
Convicted	.744	.003 (.006)	0.4%
Guilty plea	.736	.005 (.006)	0.6%
Sentenced to jail	.254	039** (.006)	-15.5%
Sentence length (days)	40.2	-9.47** (3.62)	-23.5%

Table 3: Effects of Holistic Defense on Case Outcomes

Note: * denotes statistically significant difference, p<.05, ** denotes statistically significant difference, p<.01. See supra note accompanying Table 2, pp. 863-64.

For sentence length, the point estimate implies that over our ten-year sample period, holistic representation was able to avert nearly 1.1 *million* days of custodial sentence.²³¹ Prior research suggests that defendants throughout New York serve an average of about two-thirds of the assigned sentence²³² and, over the period in question, the daily custodial cost per inmate was about \$400 in city facilities²³³ and \$165 in state facilities,²³⁴ with about 78.8% of time served occurring in state

²³¹ Such aggregate calculations assume a similar effect of holistic representation for both those facing short sentences and those facing long sentences. As a robustness check, we predicted the expected sentence for each defendant based upon demographics, charge severity, and prior record and then re-estimated the model for the sample of 54,486 defendants with an expected sentence of above six months. For this sample, where the average actual sentence of traditional defender clients in the comparison group is 365 days, holistic representation was estimated to reduce sentence length by 123 days with a standard error of 103. Although not statistically significant due to the much smaller sample, these results indicate that it is not unreasonable to assume a 25% reduction in sentence length due to holistic representation even among those facing longer sentences.

²³² See MICHAEL REMPEL ET AL., JAIL IN NEW YORK CITY: EVIDENCE-BASED OPPORTU-NITIES FOR REFORM, at x (2017), https://www.courtinnovation.org/sites/default/files/documents/ NYC_Path_Analysis_Final%20Report.pdf [https://perma.cc/GKZ9-AQ6Z].

²³³ See Associated Press, Cost of Inmate in NYC Almost as Much as Ivy League Tuition, N.Y. DAILY NEWS (Sept. 30, 2013, 10:37 AM), http://www.nydailynews.com/new-york/cost-inmate-nyc-ivy-league-tuition-article-1.1471630 [https://perma.cc/JY9R-AZHQ]. We calculated the \$400 figure by adjusting the \$460 figure cited by the Associated Press for inflation. In particular, we used the Consumer Price Index (CPI) to estimate the city facilities' average custodial cost at the midpoint of our sample time period.

²³⁴ See VERA INST. OF JUSTICE, THE PRICE OF PRISONS: NEW YORK (2012), https://storage. googleapis.com/vera-web-assets/downloads/Publications/price-of-prisons-what-incarceration-costs-

facilities.²³⁵ Combining these numbers with those in Table 3, municipal and state authorities saved an estimated \$160 million in inmate housing costs alone during the study period due to holistic representation.²³⁶ Apparently, the staffing and organization of indigent defense services can have large impacts on the downstream costs of incarceration.

Although in theory we could use our research design to compare the effects of public defenders to private appointed counsel, as a practical matter, the estimates we obtain for private appointed counsel are highly imprecise and thus fairly uninformative, so we do not emphasize them in the discussion. For example, the 95% confidence interval for the estimated effect of private appointed counsel representation (as compared to the omitted comparison group of clients with the traditional public defender) on the conviction rate is -.06 to +.37 percentage points. For sentence length, the 95% confidence interval is -212 to +81 days. Therefore, we cannot rule out zero effects or appreciable positive or negative effects of private appointed counsel.

C. Future Criminal Justice System Involvement

An appealing argument for holistic defense that has spurred adoption in several jurisdictions is the notion that by addressing defendants' underlying problems, it can reduce later contact with the criminal justice system, thus improving public safety and reducing future criminal justice costs. To what extent does holistic defense reduce recidivism? To examine this question, we considered cumulative new arrests within one, two, three, five, and ten years postarraignment.²³⁷ The data include

taxpayers/legacy_downloads/the-price-of-prisons-40-fact-sheets-updated-072012.pdf [https://perma.cc/9X2J-2ZAY].

²³⁵ See REMPEL ET AL., *supra* note 232, at 97, 101 (showing that there are 7813 jail bed years for the 2013 cohort, *id.* at 97, and stating that the cohort's prison time amounted to 28,972 state prison bed years, *id.* at 101, yielding 28,972 / (7813 + 28,972) = 78.8% of total time served that is prison time); *see also id.* at 74–77 (corroborating the plausibility of the above breakdown).

²³⁶ The calculation is -9.47 (reduction in jail sentence) *times* 114,856 (the number of people in the sample represented by the Bronx Defenders, *see infra* Appendix Table 2, p. 888) *times* 2/3 (the amount of time actually served) *times* [.25 (share of time served spent in city facilities) *times* \$400 (cost per day in city facilities) + .75 (share of time spent in state facilities) *times* \$165 (cost per day in state facilities)] = \$162 million. Given that these are only rough calculations, we rounded down to \$160 million to be conservative.

²³⁷ The outcome of true interest in a recidivism analysis is actual criminal activity, but no perfect measure of this is available. In this project, we measured recidivism using arrests (as have many past researchers), recognizing this is an imperfect proxy. One commonly used alternative, convictions, seems less ideal here both because the time between criminal activity and conviction can be lengthy, particularly for more serious crimes (which would tend to limit the available follow-up period), and because representation in a prior case can affect future representation, meaning that any measured effects for conviction might confound the effects of multiple cases (and representations). Additionally, from the perspective of public defenders, who seek to limit the harms inflicted upon clients by the criminal justice system, arrests seem a useful metric, as collateral effects for clients flow from the moment of arrest, regardless of whether a conviction ultimately ensues.

[Vol. 132:819

arrests anywhere in New York State but exclude arrests in other jurisdictions. We measure recidivism from the time of arraignment rather than the time of case disposition to avoid interpretation issues that would arise given that Bronx Defender cases take longer to resolve. For earlier years, this means that we are measuring recidivism prior to the resolution of the case for some defendants. As the follow-up time increases, the sample size diminishes; however, even for the ten-year sample, there still remain over 380,000 defendant/case pairings.²³⁸

Table 4 reports results from the recidivism analysis. New arrests are fairly common in this sample, rising from an average of a bit over one per defendant in the first year postarraignment to over five arrests per defendant ten years out. There is no measurable effect of holistic representation on recidivism as measured by the overall arrest rate at any of the follow-up periods. Moreover, the estimates are sufficiently precise to rule out even modest shifts in either direction. In year one, for example, we can statistically reject increases in recidivism due to holistic representation of more than 7.7%, or decreases of more than 0.5%, and in year ten, we can statistically reject increases in new arrests of more than 3% or decreases of more than 10%.²³⁹ The null effects found in year one suggest that any impacts of holistic representation on pretrial arrest are short lived, and defendants with traditional representation quickly catch up in terms of additional police contacts, so ultimately there is no net impact of holistic representation on arrest.

No effect was seen on postarraignment arrests for specific types of offenses either. There is little indication that holistic representation measurably affects misdemeanor arrests, felony arrests, or violent felonies, and the estimates are generally precise enough to exclude practically important changes in these categories of crime. For example, we can statistically reject increases in felony arrests as of year five of greater than 3.1%.

²³⁸ If we estimate the one-to-five year impacts solely on the sample that is observed for all ten years, we obtain similar longitudinal patterns of effects as those suggested by the results in Table 4.

²³⁹ These results are net of any decreases in arrests that occur through deportations. If one of the two models were more successful at preventing deportations of clients, it would be harder for that model to demonstrate future crime reductions, as more defendants would remain available in the country to be arrested.

		Estimated effect of holistic representation on:			
Years since arraignment	Mean number of new arrests	All new arrests	New mis- demeanor arrests	New felony arrests	New violent felony arrests
ı (N=587,487)	1.14	.041 (.024) 3.6%	.027 (.020) 2.4%	.014 (.009) 1.2%	.000 (.004) 0.0%
2 (N=575,888)	1.95	.041 (.036) 2.1%	.039 (.029) 2.0%	.006 (.015) 0.3%	.004 (.006) 0.2%
3 (N=520,561)	2.62	.009 (.044) 0.4%	.024 (.036) 0.9%	.008 (.018) 0.3%	.004 (.007) 0.2%
5 (N=462,639)	3.76	041 (.066) -1.1%	.006 (.048) 0.2%	010 (.021) -0.3%	001 (.008) 0.0%
10 (N=382,181)	5.75	207 (.189) -3.6%	084 (.076) -1.5%	061* (.030) -1.1%	014 (.010) -0.2%

Table 4: Effects of Holistic Defense on Future Arrest

Note: This table reports estimates of the effects of holistic representation on overall crime and crime by offense seriousness across different follow-up periods. Each table entry reports results from a separate IV regression. Follow-up periods are measured relative to the arraignment's date, and outcomes are cumulative over the entire period in question. For each estimate, the implied percentage change in the outcome (relative to those with traditional representation) is reported below the standard error. * denotes statistically significant difference, p<.05. See supra note accompanying Table 2, pp. 863–64.

While the fact that holistic representation does not measurably reduce recidivism may seem disappointing at first glance, taken in concert with the results above, these findings suggest that the model may in fact have important benefits. Because holistic representation produces fairly sizable percentage reductions in custodial sentences and sentence length, other things being equal, we might expect to observe greater postarraignment crime from those with holistic representation through a reverse incapacitation effect.²⁴⁰ For example, using a research design based on the random assignment of sentencing judges, Michael Roach

²⁴⁰ Moreover, if holistic representation were better at averting deportation for clients, as some have suggested might be the case, this would leave a larger pool of holistically represented defendants available in the population for future arrest, which would tend to increase the number of arrests measured for the holistic population.

[Vol. 132:819

and Max Schanzenbach found that a 25% decrease in the sentence length should equate to a roughly 13% increase in recidivism as of three years postadjudication.²⁴¹ Instead, these defendants were released from prison without increasing recidivism and without compromising public safety. Although these findings could have a number of plausible explanations, one explanation is that the holistic approach better equips defense attorneys to identify clients who are less likely to recidivate and to bring the situations of those clients to the attention of the court. This explanation is consistent with the views expressed in many of our stakeholder interviews.

Appendix Table 5 reports results from two alternative specifications that assess the robustness of these main findings. First, we replicate the analysis performed previously but exclude the number-of-new-cases instrument, relying solely on the case-scheduling instruments, which are most plausibly unrelated to outcomes. Next, we implement a matching analysis. Using the model for predicting conviction probability and sentence length described previously, we obtain a predicted probability of conviction and sentence length for each defendant in the sample. We then include as controls in the IV model a full set of indicators for predicted probability of conviction (measured to the nearest tenth of a percent) and predicted sentence length (measured to the nearest day). This is a form of matching estimator as it in effect compares defendants only to those in the sample who are virtually identical in terms of expected outcomes, but who differ in their representation due to the schedule. As shown in the table, both alternative approaches yield estimates that are similar to the baseline.

These results suggest that strengthening indigent defense might be an underappreciated tool in the larger effort to address problems of mass incarceration in the United States. Opponents of decarceration often express concern that reducing the prison and jail population might lead to higher crime rates, as defendants who would have previously been held in custody are left on the streets. Based on the evidence supplied in the above discussion, holistic representation offers a means to appreciably reduce the use of prison and jail as punishment without fueling future crime.

²⁴¹ See Michael Roach & Max Schanzenbach, *The Effect of Prison Sentence Length on Recidivism: Evidence from Random Judicial Assignment* 18 tbl. 1 (Nw. Law & Econ., Research Paper No. 16-08, 2016), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2701549 [https://perma.cc/QLZ5-CJF5]. The average total sentence in Roach and Schanzenbach's sample was 9.02 months, *id.* at 18, meaning that a 25% reduction in sentence would be equal to a 2.255 month reduction. They reported a -.0147 decrease in the recidivism rate per month of additional sentence, *id.* at 22, indicating an expected increase in the recidivism rate of .033 percentage points from a 25% reduction in sentence. With an average three-year recidivism rate of .25, *id.* at 18, these figures yield a .033 / .25 = 13.2% increase in recidivism.

THE EFFECTS OF HOLISTIC DEFENSE

D. Effects for Defendant Subgroups

Is holistic representation more effective for certain types of defendants? To explore this question, we estimated IV regressions analogous to those presented previously but for particular subsets of the population defined by demographics and alleged criminal activity. The results of that analysis are presented in Table 5.

We first consider if impacts differ by whether the defendant was charged with a misdemeanor or a felony. Felony defendants represent about 30% of the overall sample. The first rows of Table 5 indicate that holistic representation reduced the pretrial detention rate by 5 percentage points for felony defendants. This decrease represents a 13%reduction relative to the baseline detention rate of 38.9% for this population. Estimated effects on pretrial detention for misdemeanor defendants were of similar magnitude in percentage terms, as this group is less likely to be detained overall, but were not significantly different from zero. The table also demonstrates that neither group experiences significant changes in conviction rates or future arrest rates. Both types of defendants experience measurable reductions in the likelihood of a jail sentence.²⁴²

²⁴² While the results for sentence length here may at first glance seem at odds with the baseline results, they reflect the fact that expected sentence length for felony defendants is much longer than that for misdemeanor defendants. In essence, these regressions focus only on a narrower subset of criminal justice outcomes than the overall sample, which has the effect of excluding useful identifying information from the analysis.

[Vol. 132:819

Subgroup	Detained pretrial	Any pretrial arrest	Convicted	Sentenced to jail	Sentence length (days)	New arrests through year 1	New arrests through year 5
Current charge severity							
Felony	050*	.014	038	041*	-6.87	005	009
(N=163,546)	(.020)	(.015)	(.022)	(.018)	(20.3)	(.016)	(.014)
Misdemeanor	011	.011	001	043**	.212	.007	011
(N=411,118)	(.007)	(.006)	(.007)	(.007)	(.713)	(.010)	(.007)
Prior criminal record							
No priors	008	.022**	.012	018**	.033	.037**	006
(N=291,887)	(.006)	(.008)	(.010)	(.005)	(4.04)	(.011)	(.010)
Priors	022	.013*	009	049**	-14.8**	.001	008
(N=282,744)	(.012)	(.006)	(.006)	(.010)	(5.44)	(010.)	(.006)
Gender							
Male	020**	.018**	.005	039**	-9.75*	.015	010
(N=475,896)	(.007)	(.006)	(.006)	(.007)	(4.14)	(.008)	(.006)
Female	009	.018*	008	040**	-8.33	.025	013
(N=98,748)	(.012)	(.009)	(.012)	(.010)	(4.43)	(.014)	(.014)
Race							
Non-black, non-Hispanic (N=31,473)	039 (.031)	010 (.022)	016 (.025)	061* (.029)	-22.0 (17.3)	.045 (.030)	010 (.033)
Black	022*	.021**	.005	043**	-6.88	.011	014
(N=265,495)	(.009)	(.007)	(.008)	(.007)	(5.11)	(010.)	(.008)
Hispanic, non-black (N=273,320)	016 (.009)	.020** (.007)	.002 (.008)	035** (.009)	-11.4* (5.32)	.021 (.011)	008 (.008)

Table 5: Effects by Charge Severity and Defendant Race, Gender, and Prior Criminal History

Note: This table reports estimates of the effects of holistic representation for particular subpopulations across a subset of outcomes from Tables 2–4. Each table entry reports results from a separate IV regression. * denotes statistically significant difference, p<.05, ** denotes statistically significant difference, p<.01. *See supra* notes accompanying Tables 2–4, pp. 863–64, 866, 869.

The final rows of Table 5 examine effects by gender and race/ethnicity of the client. Although the majority of defendants are male, the Bronx

Defenders represents a substantial number of female defendants, and most clients are Black or Hispanic. In general, we do not observe statistically or practically meaningful differences in the estimated effects of holistic representation across these various demographic subpopulations, suggesting that the impacts of holistic defense are widely experienced across different types of individuals involved in the criminal justice system. The estimates in Table 5 are not sufficiently precise to support meaningful statements regarding whether holistic representation affects racial disparities in incarceration.

E. Effects by Offense

We next consider whether holistic representation is more or less effective based on the top charge of the defendant. We focus on the six FBI Uniform Crime Reporting Program offense categories for which we observe at least 25,000 defendants in our sample; these six offense categories collectively account for over 75% of the defendants in the entire sample. Table 6 reports results disaggregated by offense type.²⁴³

We do not observe statistically significant impacts of holistic representation for those accused of assault, fraud/forgery, or weapons offenses. However, there are substantial impacts for those charged with larceny or drug offenses. For defendants in drug cases, the likelihood of a jail sentence decreases by 25% and the expected sentence length by 63%. For larceny defendants, holistic representation decreases the lengths of sentences by over 70% on average. Given the significant number of drug cases in the sample — nearly a quarter of a million these large measured impacts of holistic representation are of considerable import.

The pattern across different offenses shown in Table 6 comports with logic and seems consistent with prior research and interviewees' views regarding how an approach like holistic representation might shape case outcomes. For those accused of drug offenses, engagement with drugtreatment providers and social services to address each individual's underlying reasons for substance misuse can be a critical step toward reformation, and courts are more likely to extend leniency to those who demonstrate a desire to address their problems through such means. The team-based approach central to the holistic model enables attorneys to enlist the help of outside experts in understanding the extent of a client's substance involvement and simplifies the process of referring clients to treatment.

Similarly, the wraparound services offered under the holistic model to address concerns such as housing or employment stability may be particularly effective for those accused of larceny, as these are largely

²⁴³ We also examined the effect of holistic representation on the likelihood of a new arrest at one and five years postarraignment, but did not find statistically significant changes for any of the offense types.

offenses that arise due to poverty. Prosecutors and judges may also view themselves as having greater leeway to deal leniently with larceny offenders; this greater degree of discretion may make informed advocacy by the defense attorney particularly impactful. For violent or weapons offenses, it is less obvious how social services might be used to mitigate future risk, and judges and prosecutors may be less willing to offer leniency. Overall, the results in Table 6 indicate that holistic representation has very large impacts for charges that seem the most amenable to social service intervention.

Top Charge	Convicted	Sentenced to jail	Sentence length (days)
Drug (N=236,037)	.008 (.010) N.S.	069** (.013) -24.6%	-29.1** (7.57) -63.1%
Fraud/forgery (N=57,792)	02 I (.02 I) N.S.	.000 (.017) N.S.	-2.31 (2.09) N.S.
Simple assault (N=55,349)	.013 (.019) N.S.	02 I (.012) N.S.	5.14 (3.51) N.S.
Aggravated assault (N=30,651)	046 (.041) N.S.	055 (.030) N.S.	2.86 (28.0) N.S.
Larceny (N=28,987)	020 (.019) N.S.	042* (.020) -111.8%	-22.0* (8.59) -71.9%
Weapon (N=26,977)	.008 (.019) N.S.	001 (.026) N.S.	-5.72 (14.0) N.S.

Table 6: Effects by Offense Type

Note: This table reports estimates of the effects of holistic representation for defendants facing a top charge belonging to the listed offense type. Each entry reports results from a unique regression. * denotes statistically significant difference, p<.05, ** denotes statistically significant difference, p<.01. N.S. = estimated change not statistically significant. *See supra* note accompanying Table 2, pp. 863–64; *supra* note 243. For statistically significant impacts, the percent change relative to the average among those represented by the traditional defender is reported below each entry.

F. Effects over Time

Has the effect of holistic representation remained consistent throughout the study period, or is there evidence of variation over time? To explore that question, we reestimated the baseline model but allowed the effects of holistic representation to vary across three different time

periods: 2000–2003, 2004–2007, and 2012–2014. There is an important limitation to this analysis, however. Since the particular shift changes used to measure the causal impact of holistic representation are different in each time period, it is possible that some of the differences shown over time reflect how impacts are being measured, rather than true variation in the effect of holistic representation.²⁴⁴ We thus view the evidence below as suggestive but not dispositive regarding any intertemporal effects.

Table 7 reports the estimated effects of holistic representation across a range of outcomes. The final column in the table reports results from a statistical test of the hypothesis that there was no change over time in the impact of holistic representation for the given outcome. For most outcomes, there is little evidence of a change over time. One notable exception, however, is custodial sentences, where we observe large reductions due to holistic representation in the earlier years but limited evidence of a reduction in the most recent years, a difference that is statistically significant. The estimated coefficients on sentence length follow a similar pattern, with the largest point estimates observed in early years, although not statistically significant.

		stimated effect tic representati	-	P-value from test of
Outcome	2000–2003	2004–2007	2012–2014	H _o : early = middle = late
Detained	.012 (.016)	024** (.009)	009 (.015)	.064
Any pretrial arrest	003 (.012)	.016* (.008)	.014 (.011)	.324
Convicted	013 (.014)	009 (.008)	.02 I (.012)	.100
Custodial sentence	056** (.018)	043** (.009)	.001 (.013)	.010
Sentence length (days)	-12.3 (10.6)	-4.75 (4.75)	1.25 (6.75)	.548
Any arrest within 1 year	.005 (.017)	100. (000.)	.038* (.016)	.119
Any arrest within 5 years	.007 (.013)	010 (.006)	.000 (000.)	.217

Table 7: Effects over Time

Note: This table reports estimates of the effects of holistic representation, where the effects of holistic representation are allowed to vary over time. Each row reports coefficients from a

 $^{^{244}\,}$ We do not see a strong reason to expect different shift changes to yield different answers, but the ground truth remains unknown.

separate regression, and the entire sample is used for each regression. These specifications include six endogenous variables — an indicator for Bronx Defenders representation interacted with an indicator for 2000–2003, a Bronx Defenders indicator interacted with a 2004–2007 indicator, and a Bronx Defenders indicator interacted with a 2012–2014 indicator, plus three other indicators for appointed counsel interacted with these same three time periods. There are nine instruments, comprising the complete set of interactions between the partial Bronx Defenders shift indicator, all Bronx Defenders shifts indicator, and new case counts and indicators for the periods 2000– 2003, 2004–2007, and 2012–2014. The other control variables are as described for Table 2. * denotes statistically significant difference, p<.05, ** denotes statistically significant difference, p<.01. See supra note accompanying Table 2, pp. 863–64.

There are several potential explanations for this pattern. One possibility is that there has been an actual convergence in performance across the holistic and traditional defenders as Legal Aid attorneys have increasingly involved outside experts such as social workers and civil attorneys to address the collateral consequences of their clients' cases. Under this interpretation, the view expressed by many judges and Legal Aid attorneys in our interviews that there are few substantive differences across the two defender organizations today receives some support.

An alternative possibility is that this pattern is attributable to changes over time in how the holistic defenders operated. For example, due to a contract modification, the Bronx Defenders substantially increased its caseloads beginning in 2012, necessitating a ramp-up in hiring and training and temporarily reducing the ratio of available personnel such as investigators and social workers to attorneys.²⁴⁵ Some of the patterns shown in Table 7 may represent internal adjustments such as these.

A third possibility is that other changes within the criminal justice system and the community at large influence the efficacy of holistic representation. For example, if holistic representation is particularly effective at addressing substance-related offending, as suggested by Table 6, but the system as a whole moves toward decriminalizing minor drug offenses,²⁴⁶ this might narrow the scope for the holistic model to exert change. Alternatively, client preferences might evolve over time in a manner that favors non–criminal justice outcomes over criminal justice outcomes, in which case we might observe a convergence such as that suggested in Table 7. Unfortunately, the data do not provide a clear means of adjudicating across these possibilities, and reality may involve some combination of these possibilities or none at all.

²⁴⁵ 2012–2013 IDOOC REPORT, *supra* note 97, at 13–18.

²⁴⁶ Indeed, PREETI CHAUHAN ET AL., TRENDS IN ARRESTS FOR MISDEMEANOR CHARGES: NEW YORK CITY 1993–2016, at 40 (2018), http://misdemeanorjustice.org/wp-content/uploads/2018/01/2018_01_24_MJP.Charges.FINAL_.pdf [https://perma.cc/2VDQ-J23E], shows a dramatic decrease in arrests for theft and drug charges in the Bronx beginning in 2011.

G. Nonexperimental Estimates

A key advantage of the estimates presented above is that they exploit variation across defendants assigned to holistic representation that is plausibly unrelated to guilt or innocence or the underlying quality of the case, and thus are likely to represent the causal effect of holistic representation. Absent a source of quasi-experimental variation, a more conventional approach to evaluating the impact of holistic representation would be to use statistical techniques such as regression modeling to estimate the expected difference in outcomes associated with holistic representation, controlling for other factors related to the outcomes. Is this conventional approach adequate for measuring the effects of holistic defense?

In Table 8, we report estimates from linear regression models where we model the outcome in question (for example, whether the defendant received jail time) as a function of whether she was represented by the holistic public defender or by appointed counsel (with traditional public defense as the omitted comparison group), and also control for defendant demographics (age, gender, race), current case characteristics (detailed charge codes, number of counts, month, day of month, day of week, month/year, location), and prior criminal history. For ease of comparison, the table also reports the analogous quasi-experimental estimate from above. Because many defendants do not in fact end up being represented by the defender organization they would receive based solely on shift schedules (Appendix Table 1), and the final assignments depend on factors such as conflicts or dismissals that can be influenced by client or attorney behavior, there is potential for nonrandom sorting of defendants to attorneys. Comparing the traditional regression results to the quasi-experimental results offers one means of assessing whether such nonrandom sorting is relevant from an evaluation standpoint.

[Vol. 132:819

Outcome	Regression	Quasi-experimental
Outcome	estimate	estimate
	002	019**
Detained pretrial	(.002)	(.007)
	-0.84%	-8.63%
	012**	.013*
Bench warrant	(.002)	(.006)
	-5.57%	5.87%
	.001	.019**
Any pretrial arrest	(.002)	(.005)
	0.84%	12.7%
	077**	.085*
Log (case length)	(110.)	(.037)
	-7.40%	8.92%
	004	.014*
Charge downgraded	(.002)	(.007)
	-0.794%	2.67%
	.011 ^{**}	.003
Convicted	(.002)	(.006)
	1.44%	0.414%
	.014**	039**
Sentenced to jail	(.002)	(.006)
	5.53%	-15.5%
	5.80**	-9.47%**
Sentence length (days)	(1.13)	(3.62)
	14.4%	-23.5%

Table 8: Comparison Between Conventional and Quasi-Experimental Estimates of the Effects of Holistic Defense

Note: This table compares effects estimates from traditional regression modeling with those reported above in Tables 2-4 for the quasi-experimental IV models. In addition to indicators for representation by the holistic public defender or appointed counsel (with traditional public defense as the omitted comparison group), the regressions also control for defendant demographics (age, gender, race), current case characteristics (detailed charge codes, number of counts, month, day of month, location), and prior criminal history. Each entry comes from a separate regression or IV model. * denotes statistically significant difference, p<.01. See supra notes accompanying Tables 2-4, pp. 863–64, 866, 869.

Table 8 reveals that the conventional regression approach yields misleading estimates of the effects of holistic representation, erroneously suggesting that holistic representation increases conviction rates and sentences. Such a pattern would be consistent with an environment in which holistic defenders end up representing clients whose cases are less favorable than average in ways not fully accounted for with regression modeling; failure to account for such unobservable differences biases

estimates obtained via the conventional approach. To be credible, future research seeking to identify the effects of other indigent defense practices will need to address the problem of potential nonrandom sorting of clients to defenders.

V. WHY DOES HOLISTIC DEFENSE WORK?

The results presented in Part IV demonstrate that holistic representation impacts a range of criminal justice outcomes. Compared to similarly positioned defendants with traditional representation, those with holistic lawyers are less likely to be detained pretrial, no more or less likely to be convicted, less likely to receive custodial sentences, more likely to receive shorter sentences, and no more or less likely to accumulate new arrests — including violent arrests — up through ten years postarraignment. With reference to the models presented in section I.C, this pattern seems most consistent with the "better trial advocacy" model, under which holistic representation enables lawyers to more successfully advocate for client interests. However, this model does not fully resolve the underlying issues bringing clients into contact with the criminal justice system.

What is the connection between the Bronx Defenders' service model and our findings? Robin Steinberg, founder of the Bronx Defenders, argues that under the status quo, judges often make decisions without information about particular challenges that defendants face, such as recent job loss or alcoholism.²⁴⁷ The client-centered, holistic defense approach encourages advocates to better understand clients and their circumstances, enabling them to communicate this information to judges.²⁴⁸ Steinberg argues that when holistic defenders present mitigating information about individual clients to judges and prosecutors, they feel more comfortable with pro-defense decisions, such as pretrial release and nonincarceration sentences.²⁴⁹

Given that traditional attorneys could also obtain mitigating evidence and present it to judges and prosecutors — and indeed often do what can explain the superior performance of the holistic model? One possibility is that collecting the information necessary to present convincing mitigating stories of clients requires either different skills from those of the attorney — for example, a social worker's skill set — or more time than that available to the attorney in a traditional defender

²⁴⁷ Steinberg, *supra* note 13, at 633–34.

²⁴⁸ Id.

²⁴⁹ *Id.* This argument echoes the argument of Brandon Garrett's recent work on the decline of the death penalty, in which he contends that strong defense lawyering, including the presentation of mitigating evidence about defendants, is one of the main drivers of the decline in the imposition of the death penalty for capital offenses. BRANDON L. GARRETT, END OF ITS ROPE: HOW KILLING THE DEATH PENALTY CAN REVIVE CRIMINAL JUSTICE 106–31 (2017).

[Vol. 132:819

office. In altering the personnel mix within the office, the holistic model better matches team-member skills to the needs of the client, generating informational efficiencies. Indeed, Steinberg notes that gathering and communicating details about clients' lives is "part-in-parcel of the representation," though that information gathering often is done by social workers.²⁵⁰ The structure of interdisciplinary communication in a holistic defense team then allows the team's attorney to integrate the information into persuasive representation for the client.²⁵¹ Other data suggest that the Bronx Defenders' staffing makeup might have contributed to the results we found. One study found that the organization has a lower attorney-to-social worker ratio than Legal Aid and uses social workers in a much greater percentage of its misdemeanor and felony cases.²⁵²

Alternative explanations for the discrepancy in outcomes between holistic defenders and nonholistic defenders exist, but none as comprehensively explain the full pattern of results from the interviews and empirical analysis. For example, one possibility is that there is nothing inherent about the holistic model that affects outcomes, but instead, holistic defenders recruit more highly skilled attorneys, and this skill differential explains the different case outcomes. This account, if correct, would tend to limit the scalability of the holistic model.

However, several pieces of evidence seem at odds with such an account. First, while there are performance differences between the holistic and traditional defenders in the early period, these differences become minimal in the latest period (2012–2014) (Table 7). Since attorney quality is likely comparatively stable over time, we would not expect such a pattern if better recruiting primarily explains the results. This pattern does, however, make sense if holistic practices are important for case outcomes, because our interviews revealed that over time Legal Aid has embraced interdisciplinary methods used by the Bronx Defenders, including the integration of more social workers.²⁵³

Second, the holistic defenders have their biggest effect in drug cases and larcenies (Table 6). In distinguishing a high-quality recruit from an average one, most legal professionals would likely cite traits such as excellent trial advocacy, quick learning, creativity in crafting arguments,

²⁵⁰ Steinberg, *supra* note 13, at 634.

²⁵¹ Id.

 $^{^{252}}$ 2012–2013 IDOOC REPORT, *supra* note 97, at 9–10, 17 (showing that Legal Aid used social workers in 1.8% of misdemeanor and 5.2% of felony cases over the period studied, compared to the Bronx Defenders' respective rates of 20% and 35%); 2010–2011 IDOOC REPORT, *supra* note 97, at 12, 17 (finding that Legal Aid used social workers in 0.8% of misdemeanor and 5.6% of felony cases over the period studied and that its Bronx office had an attorney-to-social worker ratio of 9.7-to-1; over the same period, the Bronx Defenders used social workers in 25% of misdemeanor and 35% of felony cases and had a ratio of attorneys to investigators and social workers of 5-to-1).

²⁵³ See 2010–2011 IDOOC REPORT, *supra* note 97, at 12 (highlighting a proportional increase in the ratio of social workers to attorneys and the percentage of cases social workers were involved in during fiscal year 2010–2011, as compared to fiscal year 2008–2009).

or ability to identify the essential parts of a complex case. Superior handling of high-volume, run-of-the-mill cases would probably not be seen as an obvious indicator of quality, yet the largest effects occur in such cases. Stated differently, the effects of holistic defense are present for the types of crimes where holistic practices might most plausibly offer an advantage — cases where identifying and addressing a substanceabuse or economic issue might shift how the court sees a client — and are not obviously present for serious felonies or other types of cases where "elite" attorneys would seemingly offer the greatest advantage.

A second alternative to the information-centric explanation is that judges treat holistic defenders differently, and it is this differential treatment, rather than the actual staffing and organizational features of holistic defense, that explains outcomes. While not irrefutable, this account also seems unsatisfactory in light of some evidence presented above. First, in the interviews, the judges did not articulate strong distinctions between the two organizations, at least not in ways that might suggest that their advocates would be treated differently.²⁵⁴ Second, there are differences over time and across offenses in the measured impact of holistic representation. These differences seem hard to explain using judge behavior, as such an account would require judges to change preferences over time or show selective favoritism. Finally, if judges really do offer better treatment to holistic clients, that would be a finding in need of an explanation. Why do judges treat the holistic defenders differently? Do they make different arguments? Are they better trained or more professional? If so, then presumably there is something about the model itself that affects outcomes beyond judge preferences.

If holistic practices do make a difference in the outcomes of specific cases, why then does holistic representation not appear to generate lasting reductions in future criminal justice contacts for clients? One possibility is that clients' problems are sufficiently entrenched, such that whatever assistance is offered through the defense organization is ultimately incapable of fundamentally changing the client's trajectory with respect to the criminal justice system. Clients receive additional services through their holistic defenders, but the dosage is too small. Under this paradigm, a possible solution that might increase the efficacy of the holistic model would be to provide additional resources to enable the holistic defender and partner organizations to offer a more comprehensive suite of supportive services.

To a legal cynic, the lack of impact would reflect the fact that actions of the criminal justice system are divorced from the actual behavior of those caught within the system, instead reflecting other priorities of law enforcement agents, such as a desire to control certain groups or get reelected. In this view, the lack of lasting reductions in future criminal justice involvement has little to do with the actions of the defender or

²⁵⁴ See supra section II.D, pp. 847–49.

[Vol. 132:819

the client, but instead lies in the lack of responsiveness of the criminal justice system to true criminal behavior and vice versa. If the criminal justice system has little deterrent or rehabilitative effect on criminal behavior or criminals, and if its administrations of punishment are not well correlated with criminal behavior, we might expect little impact. If the legal-cynical view is correct, then the "better trial advocacy" model described above is perhaps the best that can be hoped for from public defense providers, as it reduces the harms inflicted by the criminal justice system on clients. Of course, on this view, the same effect could be achieved by simply reducing sentences.

A third possibility is that holistic representation serves more of a sorting function than a rehabilitative function. Here, the information-gathering role of the defender is paramount — some defendants require incapacitation in order to preserve public safety, but others do not, and judges and prosecutors have little means of identifying which defendants belong in which group, leading to overincarceration. In holistically constructing each defendant's case, the defense team more accurately identifies those defendants who can be released without any consequence to public safety and brings these situations to the attention of the court. The result would be a decrease in incarceration with no net change in crime.

These three possibilities are not mutually exclusive, and available data do not provide a clear way of adjudicating across them. Whatever the underlying explanation for the recidivism results, however, holistic defenders clearly are able to modify how judges and prosecutors view their clients in a way that generates shorter, less punitive sentences. This advantage at relaying information — essentially, clients' stories — to the court plausibly results from the increased specialization afforded by the team-based holistic model coupled with the interdisciplinary communication it emphasizes.

CONCLUSION

Our findings are relevant to at least three ongoing debates. First, and most obviously, we quantified the difference that holistic defense makes as compared to more traditional public defense practices. This contrast is relevant to jurisdictions that may be considering different approaches to providing defense services. Second, our findings suggest that improving the defense function may be an overlooked tool to reduce the problem of overincarceration. Finally, our findings add to the growing body of work that shows that defense counsel is an important factor in the outcome of cases. While this conclusion may seem obvious, it is a rebuttal to the notion that the facts of the case rather than the characteristics of the lawyer almost exclusively determine the outcome of the proceeding and provides important information about how outcomes are actually produced in criminal cases.

How should we provide indigent defense services?

While holistic defense is a promising approach in improving the efficacy of defense services, there has been limited research on its effectiveness.²⁵⁵ Taking advantage of the fortuity of the methods of assigning counsel in the Bronx, we were able to use a quasi-experimental research design to measure its causal effect. We found that representation by the Bronx Defenders reduces the likelihood of a custodial sentence by 16% and the expected sentence length by 24%. This points to a dramatically superior indigent defense service.

However, a key question is the extent to which the gains observed for the Bronx Defenders are replicable elsewhere.²⁵⁶ If the results shown in this paper primarily reflect "cream-skimming" of more talented advocates, the scalability of the holistic model may be limited. Alternatively, if the use of multidisciplinary teams with an emphasis on communication and information flow explains the improved case outcomes, then there is considerable potential for these methods to be more widely adopted.

There is substantial work yet to be done to further the adoption of holistic representation. For example, many defender organizations today consider themselves "holistic" because they take into account a range of client needs and outcomes both within and outside of the criminal justice system in their advocacy, yet they have not substantially adjusted their personnel mix, disciplinary training, approaches for staffing cases, or communication methods from what might be typical in a traditional defender office. The results here suggest that adopting the holistic philosophy without some of the underlying internal organizational and structural changes may not be sufficient to generate large changes in clients' case outcomes. For the holistic model to reach its full potential for improving the criminal justice system, we need a richer understanding of how to apply the model across the myriad of different communities and circumstances facing defenders of indigent clients today.

Another important objective for future holistic defense research is to evaluate the effect of holistic defense on outcomes beyond the criminal justice sphere. After all, a key purpose of holistic defense is to address

²⁵⁵ See supra section I.B., pp. 826-30 (discussing prior evaluations of holistic defense).

²⁵⁶ The Bronx Defenders themselves have demonstrated a commitment to replicating their model in other jurisdictions, launching a Center for Holistic Defense in 2010 that trains other defender organizations on holistic defense. *The Bronx Defenders Seek to Promote Holistic Defense*, CTR. FOR CT. INNOVATION (Apr. 27, 2010), https://www.courtinnovation.org/articles/bronx-defendersseek-promote-holistic-defense [https://perma.cc/6PDL-X78H].

[Vol. 132:819

a client's needs beyond their criminal case.²⁵⁷ Any legal services organization that has a contract with New York City is required to keep comprehensive data on public benefits and other non–criminal justice outcomes as well as report this information to the City.²⁵⁸ Researchers may be able to use data collected by the Bronx Defenders and other providers of indigent defense to evaluate the effects of holistic defense on noncriminal outcomes. Other administrative datasets — for example, earnings records or records of healthcare utilization — could also be analyzed using the same quasi-experimental approach employed here. Client satisfaction is another important measure of the success of a holistic defense program.²⁵⁹

Because of the potential for holistic defense to improve indigent defense nationwide, it is important to continue to build an evidence base. Evaluations of indigent defense programs allow public defenders to monitor and improve their performance, identify the features of the program that are associated with better client outcomes, ensure resources are properly allocated, and advocate for funding in an era when legislatures increasingly prefer that empirical data accompany funding requests.²⁶⁰

Can better defense counsel reduce incarceration?

Numerous scholars, policymakers, and activists have decried the U.S. system of mass incarceration²⁶¹ and highlighted a range of potential

²⁵⁷ Attorneys at the Bronx Defenders noted that in order to measure the impacts of holistic defense, the following outcomes should be examined: deportations prevented, housing retention, clients connected with Section 8 vouchers, return of clients' property, maintenance of static income through public benefits, and avoidance of removal of children from their homes/duration of foster care placements. Telephone Interview with Attorney #1, Bronx Defs., *supra* note 132; Telephone Interview with Attorney #4, Bronx Defs., *supra* note 70; Telephone Interview with Attorney #5, Bronx Defs., *supra* note 117; Telephone Interview with Attorney #6, Bronx Defs., *supra* note 81. The Bronx Defenders collects data on most of these outcomes. Telephone Interview with Attorney #1, Bronx Defs., *supra* note 132; Telephone Interview with Attorney #3, Bronx Defs., *supra* note 90. ²⁵⁸ Attorney with Attorney with Attorney with Attorney #3, Bronx Defs., *supra* note 90.

 $^{^{258}\,}$ Telephone Interview with Attorney #3, Bronx Defs., supra note 90.

 $^{^{259}}$ As noted in section II.B, *supra* p. 844, the Bronx Defenders conducts client satisfaction surveys. One Bronx Defenders attorney noted that a common misconception is that clients cannot distinguish between quality representation and good criminal case outcomes. Telephone Interview with Attorney #1, Bronx Defs., *supra* note 132. She noted that she has had clients facing life in prison who have told her that she had done the best possible job on their case. *Id.*

On the other hand, a representative from a nonprofit that works within the criminal justice system in New York City opined that clients should not be surveyed by the organization that is currently representing them, as the power dynamic can distort clients' responses. Telephone Interview with Representative #3, Nonprofit that Works Within the Criminal Justice System, *supra* note 187.

²⁶⁰ Lee et al., *supra* note 25, at 1232.

²⁶¹ See, e.g., MICHELLE ALEXANDER, THE NEW JIM CROW: MASS INCARCERATION IN THE AGE OF COLORBLINDNESS (2010); ERNEST DRUCKER, A PLAGUE OF PRISONS: THE EP-IDEMIOLOGY OF MASS INCARCERATION IN AMERICA 37–40 (2011); Adam Gopnik, *The Caging of America*, NEW YORKER, Jan. 30, 2012, at 72.

solutions. Much of the conversation has focused on areas such as policing, sentencing reform, and bail and pretrial detention, with much less attention afforded to indigent defense. Our results suggest that indigent defense deserves a more prominent place in discussions about how to address mass incarceration. Like a small number of prior studies, our study rigorously demonstrates the critical role that defense counsel can have in shaping case outcomes; however, unlike past work, it identifies a solution that improves the quality of defense with no apparent tradeoff in terms of downstream crime. Over the ten-year study period, holistic representation in the Bronx has resulted in nearly 1.1 million fewer days of custodial punishment. This finding suggests that improving defense counsel may be an overlooked tool for reducing overall incarceration.

While the results presented above are specific to one jurisdiction, they are of significant import for the criminal justice system as a whole. Although pioneered in the Bronx, the holistic model has spread to multiple other jurisdictions, and there are efforts underway in many traditionally oriented defender offices to move toward the holistic model.²⁶² To the extent that the results observed in the Bronx extend to other jurisdictions practicing holistic defense, the model could result in thousands or even tens of thousands of fewer custodial sentences each year, with all of the associated savings in both human and fiscal terms. Moreover, in jurisdictions that, unlike the Bronx, lack a well-functioning, highly capable traditional defender as an alternative to a holistic defender, the gains may even be larger.

As demonstrated here, the effects of different choices about how to organize and staff indigent defense are substantial and carry with them immense practical implications. As an illustration, closing Rikers Island has become a prominent issue in public discourse in part because of concerns about guards' use of force against inmates.²⁶³ New York City Mayor Bill de Blasio has put forth a plan to close the facility that would require reducing the city's jail population by 4400, from 9400 to 5000.²⁶⁴ If all New York City defendants received representation comparable to that offered by the Bronx Defenders, the estimates above suggest there would be roughly 3200 fewer custodial sentences each year. Apparently,

 $^{^{262}}$ See CTR. FOR HOLISTIC DEF, HOLISTIC DEFENSE SYMPOSIUM SUMMARY REPORT 1 (2014), https://www.bronxdefenders.org/wp-content/uploads/2014/09/2014HolisticDefenseSymposiumReport. pdf [https://perma.cc/2SJQ-PC35].

²⁶³ See Jose Olivares, Despite Scrutiny, Rikers Island's "Culture of Violence" Persists, Report Says, NPR (Nov. 30, 2017, 7:00 AM), https://www.npr.org/2017/11/30/559846083/despite-scrutinyrikers-islands-culture-of-violence-persists-report-says [https://perma.cc/8JZA-SK35]; Michael Schwirtz & Michael Winerip, Close Rikers Island? It Will Take Years, Billions and Political Capital, N.Y. TIMES (Mar. 2, 2016), https://nyti.ms/1TSAmtb [https://perma.cc/4REG-PTEZ].

²⁶⁴ N.Y.C. MAYOR'S OFFICE OF CRIMINAL JUSTICE, SMALLER SAFER FAIRER: A ROADMAP TO CLOSING RIKERS ISLAND 4–5, https://www1.nyc.gov/assets/criminaljustice/downloads/pdfs/Smaller-Safer-Fairer.pdf [https://perma.cc/D2UP-3VVQ].

much of the needed reduction might be accomplished through a concerted effort to improve indigent defense, and this without requiring large new expenditures by the city or generating additional crime as a result of the reduced incarceration.

What difference does the lawyer make?

We often claim, in the words of John Adams, to be "a government of laws, and not of men."²⁶⁵ Accordingly, just punishment should depend solely upon the circumstances of the offense and the culpability of the offender. Under no plausible theory of punishment should the happenstance of the institutional arrangement of indigent defense provider make any difference to the punishment inflicted upon the offender. Our findings are useful in measuring the extent to which we have not achieved that ideal and in quantifying the difference that the defense lawyer makes to the criminal justice process.

Relatedly, it would be advantageous for policymakers to have a tractable model of the criminal justice process that illuminates the effects of changing various policies or resource constraints. Such models do not yet exist because it has proven difficult to isolate the effect of one part of the criminal justice system from all the others. In this study, we were able to measure the effect of one portion of that system.

Numerous commentators and jurists have criticized the state of indigent defense services and have argued that the Supreme Court's jurisprudence in this area does not result in adequate counsel.²⁶⁶ To understand the effect of counsel and to weigh the importance of devoting resources to improving the quality of defense counsel, we must know how much difference the defense function makes. Our work shows that it matters quite a bit.

²⁶⁵ JOHN ADAMS, NOVANGLUS LETTER NO. 7 (1775), *reprinted in* THE POLITICAL WRIT-INGS OF JOHN ADAMS 38, 44 (George A. Peek Jr. ed., 2003) (emphasis omitted); *see* MASS. CONST. art. XXX.

²⁶⁶ See, e.g., Stephen B. Bright, Essay, Counsel for the Poor: The Death Sentence Not for the Worst Crime but for the Worst Lawyer, 103 YALE L.J. 1835, 1857–64 (1994); 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, 93 (1995) ("Directly contrary to its rhetoric in Strickland, the Court has effectively ensured that Gideon guarantees little more than the presence of a person with a law license alongside the accused during trial." (footnote omitted)); Bruce A. Green, Lethal Fiction: The Meaning of "Counsel" in the Sixth Amendment, 78 IOWA L. REV. 433, 500–07 (1993); Richard Klein, The Constitutionalization of Ineffective Assistance of Counsel, 58 MD. L. REV. 1433, 1446 (1999) ("[T]he Strickland Court interpreted the requirements of the Sixth Amendment's right to effective assistance of counsel in such an ultimately meaningless manner as to require little more than a warm body with a law degree standing next to the defendant." (footnotes omitted)); Richard L. Gabriel, Comment, 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).

THE EFFECTS OF HOLISTIC DEFENSE

Appendix

Appendix Table 1: Eventual Case Assignment by Type of Shift

	Days where Bronx Defenders are assigned:				
Share of defendants represented by:	No shifts Some shifts All shifts				
Bronx Defenders	1.4%	37.7%	53.9%		
Appointed counsel (18B)	17.4%	13.8%	15.7%		
Legal Aid Society	81.1%	48.5%	30.3%		
N	349,543	113,694	124,250		

Note: Numbers may not add to 100% because of rounding.

[Vol. 132:819

	Represent	ation type:		
Characteristic	Overall sample	Holistic (Bronx Defenders)	Traditional (Legal Aid Society)	% Difference (traditional vs. holistic)
Holistic representation	19.6%	100.0%	0.0%	N/A
Defendant demographics				
Male	82.8%	81.4%	83.4%	2.4%*
Age (years)	31.6	31.9	32.0	0.3%
Black	46.5%	45.8%	46.7%	1.9%*
Hispanic	48.0%	48.6%	47.7%	-1.9%*
Current charge				
Attempted	3.4%	4.0%	3.1%	-20.5%*
Felony	29.0%	26.5%	24.5%	-7.6%*
# of counts	1.08	1.07	1.07	0.6%
Top charge — drug offense	40.8%	34.9%	41.4%	18.4%*
Violent offense	18.3%	21.1%	15.9%	-24.7%*
Violent felony	8.4%	8.4%	6.5%	-22.1%*
Includes firearm charge	31.9%	1.7%	1.5%	-13.3%*
Includes weapon charge	10.7%	11.4%	9.6%	-16.4%*
Includes drug charge	45.1%	39.0%	45.8%	17.4%*
Criminal history				
Prior felony arrests	3.26	3.22	3.34	3.6%*
Prior misdemeanor arrests	5.18	5.57	5.37	-3.6%*
Prior drug arrests	3.52	3.57	3.62	1.4%
Prior violent felony arrests	.983	.972	.996	2.5%*
Prior weapon arrests	.803	.823	.806	-2.0%*
Prior arrests for crimes against minors	.192	.187	.193	3.2%*
Predicted conviction rate	72.2%	71.6%	73.4%	2.5%*
Predicted sentence length (days)	61.2	51.5	47.0	-8.8%*
N	587,487	114,856	376,393	

Appendix Table 2: Defendant and Case Characteristics by Type of Representation

Note: * denotes statistically significant difference, p<.01.

THE EFFECTS OF HOLISTIC DEFENSE

	Arraignment		
Characteristic	Bronx Defenders not taking cases	Bronx Defenders taking cases	% Difference (taking vs. not taking)
Holistic representation	1.4%	35.8%	N/A
Defendant demographics			
Male	83.3%	83.2%	0.0%
Age (years)	31.7	31.6	-0.5%*
Black	46.9%	47.5%	1.4%*
Hispanic	47.7%	47.0%	-1.4%*
Current charge			
Attempted	3.1%	3.1%	1.3%
Felony	31.7%	32.7%	3.0%*
# of counts	1.08	1.12	4.0%
Top charge — drug offense	42.5%	43.7%	2.6%*
Violent offense	17.5%	17.2%	-1.4%
Violent felony	8.8%	8.7%	-0.8%
Includes firearm charge	2.1%	2.2%	2.9%
Includes weapon charge	10.9%	10.8%	-0.8%
Includes drug charge	47.0%	48.2%	2.5%*
Criminal history			
Prior felony arrests	3.40	3.42	0.6%
Prior misdemeanor arrests	5.19	5.21	0.3%
Prior drug arrests	3.60	3.64	1.2%
Prior violent felony arrests	1.02	1.03	0.6%
Prior weapon arrests	.816	.821	0.6%
Prior arrests for crimes against minors	.202	.205	1.7%
Predicted conviction rate	73.4%	73.2%	-0.3%
Predicted sentence length (days)	68.4	69.7	1.9%
N	349,543	237,944	

Appendix Table 3: Defendant and Case Characteristics by Arraignment Schedule

Note: * denotes statistically significant difference, p<.01.

	Outcome represented by:	
Instrument	Bronx Defenders	Appointed counsel
Arraigned on date when BxD assigned some shifts	.296** (.006)	010** (.004)
Arraigned on date when BxD assigned all shifts	.481** (.010)	001 (.005)
# of new cases within past 48 hours	.0000519 (.0000633)	.005** (.0000446)
Mean of outcome variable	.196	.164
F-statistic on instruments	1129	8.66
Ν	587,156	587,156

Appendix Table 4: First Stage IV Results

Note: This table reports results from the first stage IV regressions where the two endogenous variables (indicators for final representation by the Bronx Defenders and appointed 18B counsel) are modeled as a function of the instruments (indicators for an arraignment on a day when the Bronx Defenders was covering some or all shifts — with days when the Bronx Defenders was covering no shifts as the omitted reference group — and the count of new cases arraigned within the past 48 hours). The regressions also control for defendant age at the time of the arrest, gender, race, and ethnicity; the number of arrest charges and detailed top charge (1211 different categories); prior arrests and convictions for misdemeanors, felonies, weapons offenses, drug offenses, violent felonies, and offenses involving children; arrest location; holiday (Christmas, Thanksgiving, Independence Day, Memorial Day, Labor Day, or New Year's Day) offenses; and fixed effects for arraignment day of week, day of month, and month of year. Standard errors clustered on arraignment day are reported in parentheses. * denotes statistically significant difference, p<.05, ** denotes statistically significant difference, p<.01.

Outcome	Excluding new cases instrument	Matching estimate
Bench warrant	.014* (.006)	.015* (.006)
Any pretrial arrest	.037** (.012)	.046** (.013)
Convicted	.006 (.008)	002 (.006)
Custodial sentence	032** (.008)	038** (.006)
Sentence length (days)	-8.12* (3.86)	-6.64* (2.99)
Any arrest within 1 year	.050 (.032)	.053* (.026)
Any arrest within 5 years	053 (.073)	054 (.072)

Appendix Table 5: Robustness Checks

Note: This table reports estimates of the effect of holistic defense obtained using variants of the baseline specification. The estimates in the first column of results are based upon IV models similar to those presented in Tables 4–6, but omitting the number-of-new-cases instrument. These models are identified because there are two endogenous variables (holistic representation and representation by appointed counsel) and two available instruments based on shift schedules. The second column of results estimates IV models that implement a matching-type estimator as described in the text. Each entry comes from a separate regression. * denotes statistically significant difference, p<.01. *See supra* note accompanying Table 4, p. 869.

[Vol. 132:819



Appendix Figure 1: Distribution of Predicted Values from Probit Model of Conviction

Note: In the probit model, the outcome is an indicator for whether a particular defendant was convicted, the unit of observation is a defendant/case pairing, and the predictors are: defendant age (63 categories), gender (3 categories, including missing), race (5 categories), and ethnicity (2 categories); top arrest offense (75 categories); arrest charge count (5 categories); whether that arrest charge included a hate crime, drug charge, firearm charge, weapon charge, charge involving a minor, or DWI/DUI; defendant's number of prior misdemeanor (11 categories), felony (11 categories), drug (11 categories), violent felony (11 categories), weapon (11 categories), and offense involving a minor (6 categories) arrests; number of prior felony (11 categories), misdemeanor (15 categories), firearm (3 categories), and violent felony (4 categories) convictions; and arrest location (15 categories).

Appendix Figure 2: Daily Case Volume and Appointed Counsel Assignment



Note: This figure plots the daily count of new cases — defined as arraignments occurring within o-2 days following arrest — against the share of cases that were assigned to appointed (18B) counsel. Each dot represents a calendar date, and the scatterplot includes a total of 3673 observations. A bivariate regression of the share of appointed counsel on the daily new case counts indicates a positive, statistically significant relationship between the two variables (p<.001).