

The efficacy of prosecutor-led, adult diversion for misdemeanor offenses

Viet Nguyen

Department of Criminology, University of Pennsylvania

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Criminal records can produce collateral consequences that affect access to employment, housing, and other outcomes. Adverse collateral consequences may be particularly acute for adults with limited professional capital and social networks. In recent years, there has been an expansion of prosecutor-led diversion programs that attempt to curb the effect of collateral consequences. However, the expansion of diversion programs may lead to net-widening if these programs simply substitute for cases that would have otherwise been dismissed. This study assesses the impact of an adult, misdemeanor diversion program on long-term recidivism outcomes and the future amount of court-imposed fees and sanctions. The misdemeanor diversion program reduced conviction rates but produced a short-term net-widening effect by drawing in defendants whose cases would normally have been dismissed. The net-widening effects were curtailed over the longer term as the program significantly increased expungement rates. The results were driven by younger defendants. Implications of this study for theories of criminal desistance and policies around expunging criminal records are discussed.

Correspondence:

Viet Nguyen, Department of Criminology, University of Pennsylvania

558 McNeil Building, 3718 Locust Walk, Philadelphia, PA 19104-6286

Email: vhnguyen@sas.upenn.edu

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INTRODUCTION

The 1967 Report of the President's Commission on Law Enforcement and Administration of Justice urged prosecutors to identify and divert individuals to community resources for whom the full criminal disposition was not appropriate (President's Commission on Law Enforcement and Administration of Justice, 1967). A proliferation of diversion programs across the United States occurred following this recommendation. Between 1974 and 1976, the number of pretrial diversion programs expanded almost three-fold (Bellassai, 1978). These early diversion programs were heavily influenced by the political orientation of the 1960s which stressed institutions and structural factors as barriers to rehabilitation (Hillsman, 1982). This political orientation created the ambitious expectation that diversion should change defendants' dispositional outcomes, their behavior in educational and vocational areas, and their likelihood of future arrests (Hillsman, 1982). Evaluations on the first wave of diversion programs found limited evidence that diversion participants fared better than defendants undergoing the traditional process (Baker & Sadd, 1979; Rovner-Pieczenik, 1970; Mullen, 1974; Pryor, Kluess, & Smith, 1978). These evaluations raised concerns that diversion created a "net-widening" effect which dragged more people under formal social control (Austin & Krisberg, 1981). Moreover, these evaluations highlighted the methodological challenges of identifying an appropriate control group and accounting for selection bias that can stem from prosecutorial discretion or how the program screens for eligible defendants (Roesch, 1978; Zimring, 1974). The lack of empirical support lowered enthusiasm for diversion programs and made the programs vulnerable to budget cuts in the late 1970s (Feeley, 1983).

In the past couple of decades, the appeal of diversion programs has re-emerged, coinciding with a change in the orientation of diversion programs. Current diversion programs are often run out of prosecutors' offices, focus on mitigating the negative effect of conviction on employment,

and are meant to preserve resources for more serious and complex cases (Davis, Reich, Rempel, & Labriola, 2021). In today's context, the potential collateral consequences of a criminal record are amplified through the combination of easier access to criminal record databases and the development of more stringent policies that exclude people with criminal records from specific occupations, educational opportunities, and housing (Lageson, 2016; Jacobs, 2015). Consequently, even a misdemeanor conviction can trigger a little under 3,000 collateral consequences that adversely affect access to conventional education, work, and housing opportunities (National Inventory of Collateral Consequences of Conviction, 2021). These changes highlight the need to understand how contemporary prosecutor-led diversion programs operate and whether they lead to better outcomes.

This study provides a rigorous, quasi-experimental evaluation of the efficacy of a prosecutor-led misdemeanor diversion program for adult defendants. I focus on Philadelphia's Accelerated Misdemeanor Program (AMP), a program with simple, sparse features that emphasizes minimizing both short-term and long-term interactions with the criminal justice system. This program was introduced in 2010 and was open to defendants charged with a non-violent misdemeanor and who had no prior convictions in the past ten years. The bare-bones design of this diversion program makes it easier to assess whether changes in long-term outcomes stem from diversion as opposed to rehabilitation conditions like drug treatment that are often imposed in more intense diversion efforts. Under AMP, diverted individuals are required to complete 12-18 hours of community service and pay the associated court fees within 5 to 10 weeks. The prosecutor's office will then submit the case records to be expunged for participants who complete the program. Being prosecutor-led, the program is positioned to divert individuals at an earlier stage of criminal court processing and reduce the amount of criminal justice contact. Taken

together, AMP operates like a “second-chance” diversion program where defendants are re-oriented towards a pro-social sanction for a brief period and have the opportunity to quickly exit the criminal justice system without a criminal record. I use a difference-in-differences design, comparing eligible defendants to ineligible defendants before and after the introduction of the program to estimate the effect of diversion on recidivism outcomes, future fees, future sanction time, and expungement rates. In addition, I examine whether the creation of AMP produced a net-widening effect by assessing whether dismissal rates decreased.

AMP improved defendants’ recidivism outcomes and lowered the use of formal sanctions. I find that misdemeanor diversion reduced five-year reconviction rates by an estimated 8 percentage points, which translates into a 35 percent reduction relative to the mean recidivism rate for eligible defendants. Over a five-year period, eligible defendants experienced an estimated 45 percent reduction in sentenced supervision time and a 38 percent reduction in court fees. AMP decreased the use of formal sanctions by 8 percentage points. However, AMP also lowered dismissal rates by an estimated 13 percentage points, indicating a net-widening effect. One mechanism that could explain the improved recidivism outcomes is the 18 percentage point increase in expungement rates that may have prevented defendants from becoming ensnared in the criminal justice system.

From a theoretical standpoint, the findings underscore the need to not only examine diversion’s net-widening effect, but also its possible longer-term, *net-narrowing* effect. Net-widening occurs when a new form of social control is introduced and draws more people under social control, as would be the case for people who receive diversion instead of having their case dismissed. But diversion programs can include options to expunge one’s case record conditional on completion. Thus, diversion may lead to longer-term, *net-narrowing* if people exit the criminal

justice system without a criminal record. When sentenced to a formal sanction, people pick up a criminal record that can follow them for an extensive period. People whose cases are dismissed still face the “shadow” of their arrest record. Accordingly, diversion programs with an expungement channel can produce a net-narrowing effect by eliminating the “shadow” of a case record and reducing the time required to expunge the case record. Traditionally, assessments of diversion programs have focused on the immediate net-widening effect, but the net-narrowing component is also critical to understanding the longer-term efficacy of diversion programs. Under this new conceptualization, AMP had a longer-term, net-narrowing effect and a reduction in recidivism despite initiating a short-term net-widening effect of keeping the defendants under the supervision of the court.

AMP’S PROGRAM FEATURES AND THEIR THEORETICAL UNDERPINNINGS

AMP’s program features aim to decrease criminal justice contact and mitigate collateral consequences through three mechanisms: the use of community service in lieu of probation or jail time, an expedited process through the court system, and the expungement of case records following diversion completion. These mechanisms address labeling theory’s concern that the criminal justice system can produce criminogenic effects. Labeling theory predicts that formal sanctions or repeated contact with the criminal justice system labels an individual as a deviant and produces negative stigma (Becker, 1963; Lemert, 1951). Subsequently, the reaction of agents of formal social control and informal social audiences to labeled individuals can lead to the stabilization of a deviant career or secondary deviance (Lemert, 1967). While labels do not guarantee secondary deviance, several intervening mechanisms make secondary deviance more likely: whether the label is made public, whether the labeled individual is excluded from normal

routines, whether the labeled individual alters his identity, and whether deviant others support the labeled individual (Paternoster & Iovanni, 1989).

Individuals holding criminal records can experience immense and prolonged stigmatization. Expungement seekers, even those with higher levels of human capital or stronger networks, express high levels of frustration and report that their criminal record consistently undermines opportunities and stratifies them to low-paying jobs with tenuous job security (Ispalanda & Loeffler, 2016). People with a criminal record actively avoid family and pro-social engagements, such as being a school volunteer, because they are concerned that others will discover their record (Lageson, 2016). Problematically, overcoming these forms of negative stigma requires a non-trivial amount of time and effort. Denver and Ewald (2018) interviewed individuals with criminal records who petitioned for a review of their application for security occupational licenses after an initial denial; individuals who demonstrated post-conviction trustworthiness were more likely to have their petitions approved. Individuals typically demonstrated meaningful change through references or stable work histories (Denver & Ewald, 2018). These scenarios present a conundrum where criminal records prevent access to pro-social institutions, but at the same time, the demonstration of positive change is required for access to more opportunities.

Diversion programs like Philadelphia's AMP can provide protective measures against negative stigma and the adoption of a deviant identity. AMP's alternative processing lowers the number of potentially negative reactions by criminal justice actors and redirects the individual into the community. A handful of empirical studies suggest that community service used in place of incarceration can produce lower recidivism rates but not when community service substitutes for electronic monitoring (Andersen, 2015; Wermink, Blokland, Nieuwbeerta, Nagin, & Tolleenaar,

2010; Killias, Gillieron, Kissling, & Villettaz, 2010). Critically, successful participants can retain a clean record and maintain access to conventional opportunities.

While labeling theory explains how traditional processing can lead to persistent criminal behavior, it does not fully articulate how AMP can reduce crime through desistance. Theories of desistance provide a framework for understanding how AMP can facilitate long-term reductions in recidivism. Paternoster and Bushway's identity theory (2009) argues that desistance stems from an individual's conscious decision to adopt a non-deviant identity. At any given time, individuals see their working self (i.e., the current identity) and future self. The future self is composed of a positive self that carries one's aspirations, and a negative self that holds one's fear of what one could become. Individuals unsatisfied with their working identity will change their preferences and social networks to be more compatible with a conventional identity. Structural supports, such as family, friends, and employment, help individuals maintain the conventional identity (Paternoster & Bushway, 2009). Accordingly, when individuals face the opportunity to join AMP or the possibility of being traditionally processed by the criminal justice system, they may be forced to confront their two selves. The latter path with the possibility of a criminal record can be perceived as the negative self that motivates change. The conscious decision to join AMP and actively complete community service hours can catalyze the process of moving towards a non-deviant identity. Once an individual completes the program and expunges the case record, individuals can leverage structural supports to retain a conventional non-criminal identity.

Placing a heavier emphasis on external social controls rather than human agency, Sampson and Laub's theory of age-graded informal social control argues that pathways to crime and conformity are mediated by key institutions of social control (Sampson & Laub, 1993). While some traits of delinquency are stable over time, variation in adult informal social control and social

capital influences crime and deviance. Individuals make subconscious “side bets” with institutions of informal social control; individuals eventually realize that their stake in these various pieces of informal social control outweighs the benefits of criminal behavior (Laub & Sampson, 2003). For example, when an individual is married, their time is restructured and they may develop pro-social ties with the other side of the family making crime costlier. In contrast, formal sanctions can “knife off” individuals from pro-social institutions. They can act as turning points that shift individuals into more criminogenic trajectories (Laub, Sampson, & Sweeten, 2006). Thus, the key causal processes for desistance are the structural opportunities that give rise to turning points in an individual’s life. AMP’s expungement program may influence changes in structural opportunities (e.g., education, employment, housing) that help reduce recidivism.

Conversely, AMP is a more lenient sanction compared to traditional probation. If individuals perceive lower levels of deterrence, recidivism rates may increase since individuals are less concerned about the sanctions. The decrease in deterrence would operate in the opposite direction of the previously listed labeling and desistance mechanisms. It is unclear which underlying mechanisms have more influence.

CRIMINAL RECORDS AND OPPORTUNITIES

There is a wide range of literature that illustrates how criminal justice system involvement weakens people’s attachment to structural supports or institutions of informal social control. Education and employment can help people attain financial stability and make it more costly to engage in illicit activities, but criminal justice sanctions can block these key opportunities. More than 70 percent of colleges require applicants with felony records to disclose their criminal history, and the rejection rate for applicants with records is nearly 2.5 times higher (Stewart & Uggen,

2020). When individuals are arrested or convicted, their probability of enrolling in college is reduced or delayed (Widdowson, Siennick, & Hay, 2016; Lovenheim & Owens, 2014). Similarly, a majority of employers ask questions about applicants' criminal histories (Vuolo, Lageson, & Uggen, 2017). Across multiple experimental audit studies, the presence of a misdemeanor or felony record reduced job callbacks (Pager, 2003; Uggen, Vuolo, Lageson, Ruhland, & K. Whitham, 2014; Leasure, 2019; Ahmed & Lang, 2017; Baert & Verhofstadt, 2015). In addition, the adverse effects of a criminal record on job callbacks were larger for African-Americans (Pager, 2003; Uggen, Vuolo, Lageson, Ruhland, & K. Whitham, 2014).

Criminal records also affect people's ability to secure housing, receive public assistance, and participate in pro-social activities. Surveys with landlords reported that the majority of landlords would not rent to individuals with prior records (Clark, 2007; Helfgott, 1997). Experimental audits show that landlords and agents were less likely to accept individuals with prior records (Evans, 2016; Evans, 2015; Leasure, 2019). States that imposed bans on receiving public assistance due to a prior felony drug conviction showed poorer recidivism rates, lower parole completion rates, and higher arrest rates (Yang, 2017; Tuttle, 2019; Sohoni & Piatkowska, 2021; Thompson, 2013). The negative effect of a criminal record even seeps into multiple pro-social activities. For instance, approximately 1 of every 40 adults are disenfranchised due to a current or prior felony conviction (Uggen, Larson, & Shannon, 2016). Minority females who disclosed being on parole were less likely to match with others on online dating applications (Evans, 2019). A prior conviction can block opportunities in various domains. The key causal process to desistance may be an individual's conscious change to conventional identity or an individual's growing engagement in pro-social institutions. Regardless of the temporal order of the causal processes, AMP's program features suggest that it can assist with the desistance process

by lowering the chance of establishing a criminal record and thus maintaining access to opportunities in pro-social institutions.

EMPIRICAL EVIDENCE OF PROSECUTOR-LED DIVERSION

There are many different kinds of adult diversion programs that occur at the stage of arrest, pre-trial, jail, or through specialty courts, but these programs tend to target specific populations, such as offenders with mental illness and substance abuse issues, with programming to address their underlying needs (Collins, Lonczak, & Clifasefi, 2019; Taxman, 2010; LePage & May, 2017; Broner, Lattimore, Cowell, & Schlenger, 2004; Brown & Gassman, 2013; Brian, Steadman, Dupuis, & Morris, 2009; Hall, A., Prendergast, Roll, & Warda, 2009; Huck & Morris, 2017; Kopak, Coward, Frost, & Ballard, 2015; Redlick, Liu, Steadman, Callahan, & Robbins, 2012). This section focuses on recent prosecutor-led diversion programs that target a broader population and utilize limited programming. The main goal of these approaches is to give defendants a second chance rather than match them with specific resources (Johnson, Davis, Labriola, Rempel, & Reich, 2020). The current empirical evidence on prosecutor-led diversion programs ranges from null effects to positive effects.

Rempel et al. (2018) conducted a multi-site evaluation of 16 prosecutor-led diversion programs, and for a subset of these sites, they analyzed the impacts of the programs on public safety and costs¹. Across these sixteen programs, prosecutors commonly reported that the goals of

¹ The 16 diversion programs include: Chittenden County's (VT) Rapid Intervention Community Court Project, Philadelphia's (PA) Small Amount of Marijuana Program, Philadelphia's (PA) Accelerated Misdemeanor Program, Philadelphia's (PA) Accelerated Rehabilitative Disposition, Cook County Drug School, Cook County Misdemeanor Diversion Program, Cook County Felony Diversion Program, Hennepin County's (MN) Operation De Novo (Property and Drug Diversion), Milwaukee County's (WI) Diversion Program, Milwaukee County's (WI) Deferred Prosecution Program, Dallas County's Memo Agreement Program, City of Los Angeles' Community Justice Initiative, Maricopa County's Treatment Accountability for Safer Communities Adult Prosecution Program, Phoenix City's Project ROSE, San Diego City's Beach Area Community County, San Francisco's Neighborhood Courts.

the diversion programs were to reduce collateral consequences, to provide rehabilitation, to provide a measure of restorative justice, to bolster administrative efficiency, and to reduce recidivism. Using propensity score matching, Rempel et al. (2018) found that the two-year re-arrest rates were higher for only one out of the five programs when comparing diversion participants to similarly situated defendants. For the remaining four programs, the odds ratio of re-arrest fell between 0.56 and 0.79.² Altogether, the differential estimated savings per case ranged between \$600 - \$2,300 for three of the evaluated programs (Rempel, et al., 2018).

Labriola et al. (2018) evaluated the second iteration of Cook County's Misdemeanor Deferred Program which incorporated a risk assessment tool and found non-significant improvements in two-year re-arrest rates (Labriola, Ramdath, Kerodal, & Ashmini, 2018). The null results could stem from a small sample size, but it could also be a product of the diversion conditions where most participants were assigned to two case management appointments (Labriola, Ramdath, Kerodal, & Ashmini, 2018). Along the same lines, Orwat et al. examined Cook County's Felony Deferred Prosecution program for first-time, non-violent felony offenders and found null results for overall 18-month re-arrest rates; the results were marginally positive for women who showed a 22% re-arrest rate compared to 28% re-arrest rate for women in the control group (Orwat, Stemen, George, Cossyleon, & Key, 2019; George, et al., 2015). However, the study constructed the control group from eligible individuals who were not referred which could introduce selection bias stemming from prosecutor discretion. Many of the studies note the shortcomings of using propensity-score matching and call for more rigorous research designs to estimate the effects of adult diversion programs.

² The programs evaluated for recidivism include: Cook County's Drug School, Cook County's Misdemeanor Diversion Program, Chittenden County's Rapid Intervention Community Court Project, Milwaukee County's Diversion Program, and Milwaukee County's Deferred Prosecution Program.

Mueller-Smith and Schnepel (2021) provide one of the more rigorous studies of adult diversion with a research design that moves beyond matching. Using a regression discontinuity design, the study exploits two natural experiments, a penal code reform and a failed ballot initiative for expanding jail capacity, in Harris County, Texas that altered the provision of deferral agreements for felony offenders. Deferred adjudications of guilt placed defendants under a period of community supervision, but the defendants are never legally convicted. Diversion reduced the probability of any future conviction by 45% and reduced the total number of future convictions by 75%. Individuals also improved their total earnings over a ten-year follow-up period by 93% and quarterly employment rates by 49%. The improvement in outcomes was largest for individuals who had the highest predictive risk of recidivism; these individuals tended to be younger, African-American, and have prior misdemeanor convictions. Their findings strongly suggest that the stigma associated with a felony conviction plays a key role in the difference in outcomes (Mueller-Smith & Schnepel, 2021). On the other end of the spectrum, Agan et. al examined the effect of prosecuting nonviolent misdemeanor offenses and found that non-prosecution of misdemeanor offenses for marginal defendants reduced the likelihood of a new criminal complaint over the next two years (Agan, Doleac, & Harvey, 2021). To the author's knowledge, this study contributes to the literature by providing the first rigorous evaluation of prosecutor-led, adult diversion for misdemeanor offenses that does not rely on matching.

POLICY CONTEXT

Philadelphia's Accelerated Misdemeanor Program (AMP) is a post-charging diversion program created for defendants charged with a non-violent misdemeanor and who have no prior convictions in the past ten years. AMP began as a pilot program in July 2010 and fully expanded in January 2011. The program is offered at the discretion of the District Attorney's Office. There

are two channels for entering the program. The assistant district attorneys (ADAs) responsible for charging can review the case and offer AMP, or the defense can request AMP which the ADAs can agree to. If the defendant agrees to participate in AMP, no plea is entered and the case is maintained in pre-trial status. The program then requires the defendant to complete 12-18 hours of community service and pay the associated court costs within five to ten weeks. Defendants have multiple progress listings scheduled at one of four police districts across Philadelphia where they update a judge on the number of community service hours completed and the amount of court fees or restitution paid. If the defendant successfully completes the program, the District Attorney's Office withdraws from prosecution. The District Attorney's Office automatically submits the records to be expunged for participants who successfully complete the program. If the defendant does not complete the program in the allotted time, the judge can provide an extension. Moreover, defendants who fail to complete the program are not automatically sanctioned. ADAs can request for AMP to be revoked, but the judge determines whether a formal sanction is applied. AMP is less burdensome than many of the diversion programs that have previously been evaluated; it does not require any form of treatment, service participation, or a longer period of supervision. The program's focus on misdemeanor offenders with essentially no prior convictions has the potential to prevent a significant share of defendants from accumulating a criminal record and forming a criminal identity.

It is important to note that AMP was not the only diversion option for first-time misdemeanor offenders during the study period. AMP launched as one of many diversion programs between 2010 and 2015. For example, in June of 2010, the District Attorney's Office created the Small Amount Marijuana diversion program for individuals arrested with 30 grams or less of marijuana, a misdemeanor offense. Before the creation of AMP, individuals charged with misdemeanors

could be diverted to Accelerated Rehabilitation Disposition (ARD). ARD participants are required to be under probation supervision between 6 months to 2 years, complete community service, and pay the associated court fees and restitution. Like AMP, successful participants can expunge their record with opposition. The main difference is that ARD participants are placed under probation supervision which reflects a traditional sentence, and the imposed restitution tends to be twice as high as the average AMP case. I discuss later how these changes and sanction options inform the study's research design, sample selection, and the interpretation of the results.

DATA

To evaluate the program, the study uses data from the Preliminary Arraignment Reporting System (PARS), the District Attorney's Office Case Management System (DAOCMS), and the Administration of Pennsylvania Courts' Common Pleas Case Management System (CPCMS). PARS provides data on arrests that includes the arrest date, offense, and offense grade (felony/misdemeanor). DAOCMS contains case information including demographics (age, gender, race), case listings, offenses, offense grades, dispositions, diversion program types, and sentences. CPCMS contains case information, but it also provides supplemental information such as diversion participation date, diversion rejection date, or diversion failure date for cases. In addition, CPCMS contains the amount of court fees, fines, and restitution. Finally, I examine whether expunged cases are cleared from the CPCMS data. One concern with studying diversion using administrative data is that data on people who complete the program and expunge the case record might be missing. I overcome this issue by using internal DAOCMS data which keeps track of the information even after a case is expunged. This allows me to assess missing CPCMS data as an indicator for expungement, a critical measure.

The units of analysis are misdemeanor cases³ opened between June 2009 and September 2011⁴. I drop some cases from the study. First, I exclude cases transferred to a different jurisdiction. Since criminal history data is only available starting in 1999, I restrict my sample to individuals aged 18 to 27 in order to have full criminal histories for the 10 years prior to the date that a case is opened. To account for the expansion of other diversion programs during the study period, the sample excludes cases that contain charges for possession of small amounts of marijuana. This allows the study to focus on the effect of AMP without capturing the effect of other diversion programs. The final study sample consists of 4,179 misdemeanor cases. These cases are disposed of with a jail or probation sentence, dismissal/withdrawal, diversion, or conviction with no further penalty.

Based on these data, I construct several measures. I create dummy variables to capture whether a case was created on or after July 2010, when AMP started. I create an indicator for whether a case is eligible for AMP based on the current offense and the individual's criminal history. As described below, my main analyses use difference-in-differences where I compare the relative change in outcomes of eligible cases to ineligible cases. All misdemeanor offenses are eligible for AMP except for driving under the influence, domestic violence, assault with injury, possession of a weapon, indecent assault, indecent exposure, corruption of a minor, contraband, animal-related offenses, and terroristic threat offenses. Individuals are eligible for AMP if they are charged with an eligible misdemeanor and have no prior record within the past 10 years⁵.

³ These are cases that only contain misdemeanor charges. Cases with felony charges are excluded from the sample since they were never eligible for AMP.

⁴ I stop my observation period in September 2011, which is the year in which AMP II, a more arduous diversion program, was created. Restricting the sample to cases opened prior allows the study to focus on just the effect of AMP.

⁵ Criminal history is calculated in relation to the date the case is opened. Fundamentally, people with a prior conviction, juvenile adjudication, diversion case, or no contest plea are disqualified. One exception is that individuals with misdemeanor adjudications older than 3 years can still participate in AMP. Individuals with a recent history of arrest

Conversely, individuals are ineligible for AMP if they have a prior record within the past 10 years or are charged with an ineligible misdemeanor, such as simple assault.⁶ While the two groups are not comparable on their lead offense and criminal history, the analysis focuses on the *relative* change between the pre and post period for defendants who are eligible for AMP to defendants who are ineligible for AMP. As long as no other event differentially affects AMP-eligible defendants and AMP-ineligible defendants contemporaneously with the introduction of AMP, any change in outcomes can be attributed to AMP.

The following recidivism measures were calculated as dummy variable indicators if the event occurred within a five-year window: arrests, convictions, and convictions or any diversion case. Recidivism measures can reflect behavioral changes among defendants, system changes among legal actors, or both. The rearrest measure provides a stronger indicator of behavioral changes. The two reconviction measures reflect both behavior and legal changes as conviction or diversion decisions are more likely to be influenced by legal actor discretion. Due to the expanded diversion capacity, a person arrested in the post-period has a higher likelihood of having their case disposed of with a new diversion case rather than a new conviction. If the conviction measures fail to adjust for diversion, recidivism could be underestimated, especially for the AMP-eligible group. Criminal justice resource usage is measured with three measures: the sum of sentenced jail time, the sum of sentenced probation time, and the sum of court fees over the five-year recidivism

are disqualified from AMP as indicated by a 3-year prior felony arrest measure and 1-year prior misdemeanor arrest measure. Any prior violent arrest or conviction automatically disqualifies the individual.

⁶ First-time offenders charged with a non-eligible misdemeanor offense are excluded from the comparison group (n=2,427). The dispositions for this group are eventually affected by the creation of the domestic violence diversion program in 2011. As a result, this group of individuals would not be an appropriate comparison group because they experience another intervention. Similarly, defendants (n=1,844) charged with an eligible misdemeanor who had an ineligible, non-violent criminal history experienced about an 18 percentage point uptake of AMP. I restrict the comparison group to misdemeanor cases that are highly unlikely to receive any diversion. These cases are charged with an ineligible offense and have a recent conviction or prior violent arrest/conviction or cases charged with an eligible offense and have a prior violent arrest/conviction.

window⁷. The start date for the recidivism and criminal justice resource usage measures varies based on how the case is disposed. The recidivism window begins on the individual’s projected release date for those sentenced to jail, on the diversion program start date for those who are diverted, and on the disposition date for the remainder of cases sentenced to probation or dismissed.

Table 1 presents criminal history, lead charge, and demographics for the AMP-eligible and AMP-ineligible group. The AMP-eligible group primarily consists of drug and property offenders. The AMP-ineligible group consists of a broader group of offense types, and it contains defendants charged with domestic violence, simple assault, and weapon offenses. As expected, they also have a more serious criminal history. Defendants in the AMP-ineligible group are also more likely to be Black, male, and older.

TABLE 1 Criminal History, Lead Charge, and Demographics

Variable	AMP-eligible	AMP-ineligible
Lead Charge – Mean		
Domestic Violence	0.00	0.32
Drugs	0.53	0.12
DUI	0.00	0.31
Other	0.17	0.18
Property	0.31	0.06
Arrest History – Average Count		
Misdemeanor Arrest 10 Years	0.20	1.36
Felony Arrest 10 Years	0.10	2.78
Violent Arrest 10 Years	0.00	1.02
Juvenile Adjudication History – Average Count		
Misdemeanor Adjudication More Than 3 Years Ago	0.02	0.41
Misdemeanor Adjudication Less Than 3 Years Ago	0.00	0.06
Felony Adjudication 10 Years	0.00	0.32
Conviction History – Average Count		

⁷ Court fees include any court fees, fines, and restitution. The court costs of the current case are excluded. In the difference-in-differences models, I take the logged value of the resource usage measures plus 1.

Misdemeanor Conviction 10 Years	0.00	0.96
Felony Conviction 10 Years	0.00	0.58
Violent Conviction 10 Years	0.00	0.34
Demographics – Mean		
Black	0.39	0.65
Asian	0.01	0.04
Male	0.67	0.83
Female	0.32	0.17
Age	22.27	22.9

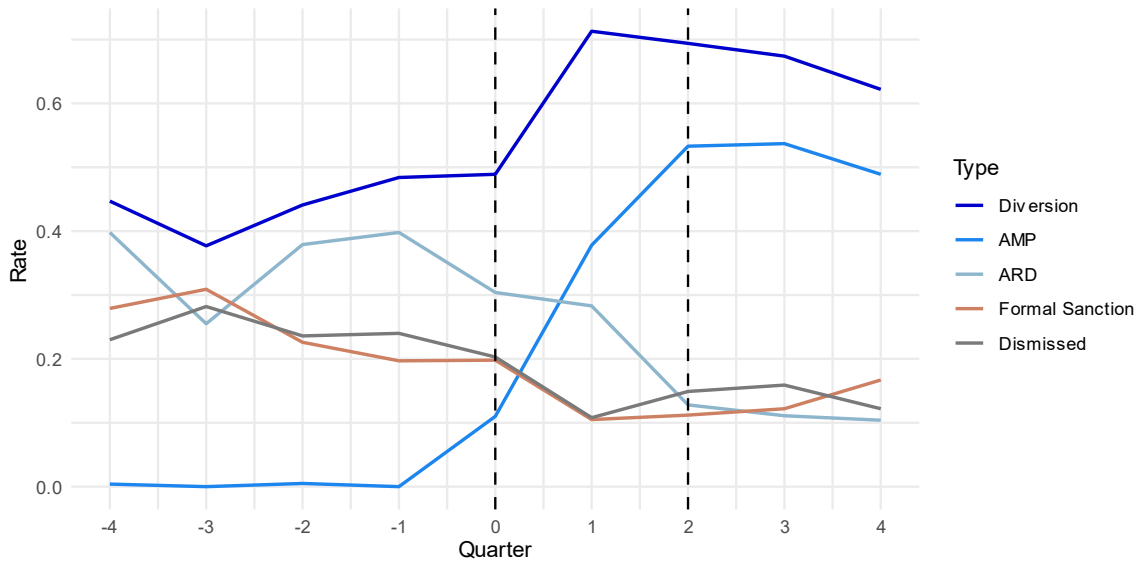
Notes: The “Other” lead charge category for defendants in the AMP-ineligible group is composed primarily of simple assault and weapon offense.

Data source: 4,179 cases from July 2009 – September 2011.

CHANGES IN DISPOSITION

The implementation of AMP drastically changed case dispositions. Figure 1 shows the prevalence of different types of disposition for the AMP-eligible defendants. The overall diversion rate increased from about 40 percent of cases to roughly 65 percent of cases. The diversion trend was driven by substantial uptake in AMP and a sizeable decrease in ARD. ARD served as the primary diversion option prior to AMP and operated like traditional probation with an expungement channel. In the pilot period, AMP accounted for 25 percent of cases. By the end of the full period, AMP accounted for almost half of the dispositions. Cases were also less likely to be sentenced to jail/probation or dismissed in the post period. Conversely, Figure 2 shows the disposition rates for the AMP-ineligible defendants. The comparison group of ineligible AMP cases revealed no major differences with how their cases were processed in the pre-period versus the post-period. As expected, based on institutional features, their cases were rarely diverted, either before or after AMP was introduced. Cases were evenly given a formal sanction or dismissed.

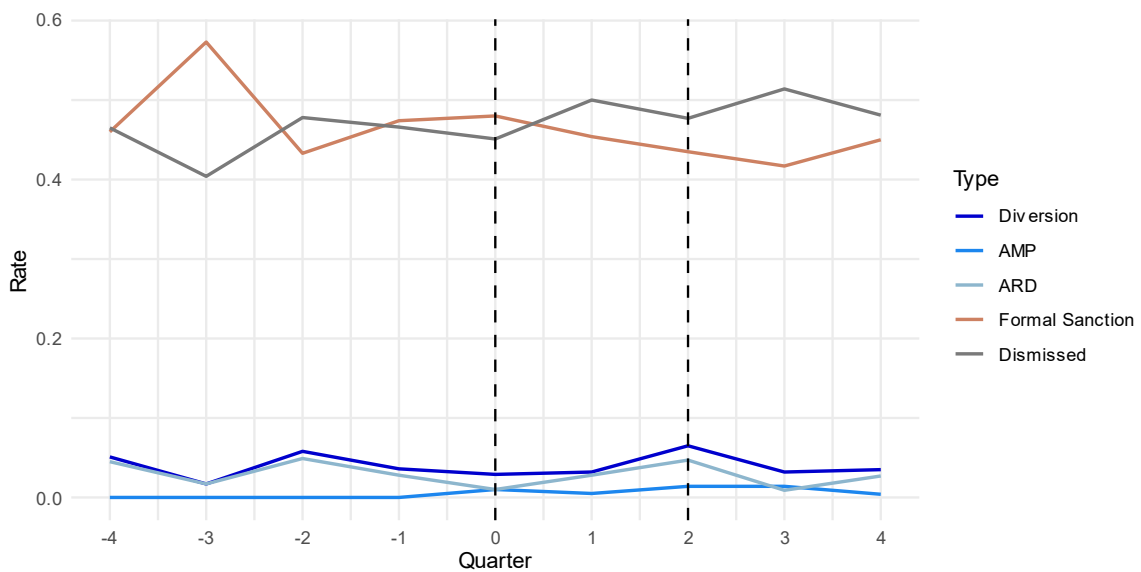
FIGURE 1 AMP participation drastically grew for AMP-eligible defendants. Half of the defendants entered the program during the full expansion period.



Notes: The figure shows the disposition rates by quarter for defendants who are eligible for AMP. The first dashed vertical line indicates the beginning of the pilot period. The second dashed vertical line indicates the start of the full expansion period.

Data source: 2,218 AMP-eligible cases between July 2009 - September 2011.

FIGURE 2 Dispositions were similar across the pre and post period for AMP-ineligible defendants.



Notes: The figure shows the disposition rates by quarter for defendants who are ineligible for AMP. The first dashed vertical line indicates the beginning of the pilot period. The second dashed vertical line indicates the start of the full expansion period.

Data source: 1,961 AMP-ineligible cases between July 2009 – September 2011.

METHODOLOGY

People who are eligible for diversion programs generally have less serious cases and fewer priors (as shown in Table 1), both of which are correlated with lower recidivism, even in the absence of diversion. They may also differ in terms of characteristics that are unobservable to the analyst (such as holding a job or having stable housing) that make them less likely to reoffend. Because of this selection, simply comparing people who participate in AMP to people who do not would bias estimates of program effectiveness, likely leading us to over-estimate its effectiveness.

To obtain causal estimates of the effects of diversion on recidivism, I use a difference-in-differences design, where I compare average changes in outcomes for defendants who are eligible for AMP to average changes in outcomes for defendants who are ineligible for AMP, before versus after the program was introduced. The difference-in-differences approach allows me to account for time-invariant differences between the two groups—such as different priors or different levels of housing stability— and for temporal differences that affect both groups in the same way—such as differences in policing patterns or in economic conditions (Wildeman & Andersen, 2020; Wildeman & Andersen, 2017). The key assumption for the study design to obtain unbiased estimates is that in the absence of the creation of the AMP program, the difference between the treatment and comparison group would be constant over time (Angrist & Pischke, 2009). While the assumption cannot be fully tested, I check for violations of this assumption by reviewing for parallel trends in outcomes between the two groups in the pre-period. If there were differential

trends, this might indicate that other factors were differentially affecting both groups; and so, any post-AMP changes in outcomes could either be attributed to AMP, or to these prior factors.⁸

The difference-in-differences model is listed below in Equation (1). I use OLS for my difference-in-differences models to facilitate an easier interpretation of the results.⁹ *Outcome* captures dispositions, recidivism measures, the amount of future sentenced time and fees, and the expungement rate. *Post* is set to 1 if the individual's case is opened after the implementation of AMP. *Eligible* is set to 1 if the case is eligible for AMP. Importantly, all AMP-eligible defendants are considered to be treated, regardless of whether they participate in AMP. X_i is a vector of individual-level control variables including race, age, and gender. β_3 is the coefficient of interest; it captures the effect of having AMP as a sanction option.

$$Outcome_i = \beta_0 + \beta_1 Post_i + \beta_2 Eligible_i + \beta_3 Post_i * Eligible_i + \gamma X_i + \varepsilon_i \quad (1)$$

AMP was scaled up over time; 26% of eligible defendants received AMP between July 2010 and December 2010, compared to 52% after December 2010. Equation (2) shows a difference-in-differences model where the estimates in the post-period are broken down by the pilot period and full expansion period. *Pilot* is set to 1 if the case is opened in the pilot period. *Full* is set to 1 if the case is opened in the full expansion period. The difference-in-differences estimates are the coefficients of the interaction term, β_4 and β_5 .

$$Outcome_i = \beta_0 + \beta_1 Pilot_i + \beta_2 Full_i + \beta_3 Eligible_i + \beta_4 Pilot_i * Eligible_i + \beta_5 Full_i * Eligible_i + \gamma X_i + \varepsilon_i \quad (2)$$

⁸ I review the parallel trends assumption and find that trends are similar between the treatment and comparison groups in the pre-period. I use the equation below to see if the parallel trends assumption was violated which is the equivalent of having ∂_g be statistically different from zero when g is equal to -4 through -2.

$Outcome_i = \beta_0 + \beta_1 Eligible_i + \sum_{g=-4, g \neq -1}^4 \alpha_g Quarter_g + \sum_{g=-4, g \neq -1}^4 \partial_g Quarter_g * Eligible_i + \gamma X_i + \varepsilon_i$. Figures A1-A5 show the parallel trends for dispositions and recidivism outcomes.

⁹ I conduct the same analyses using a logit model and the results are substantively the same.

In addition to looking at the effect of diversion on recidivism, I study whether diversion led to net-widening because prosecutors are now offering diversion to defendants whose cases would previously have been dismissed. To do so, I define dummy variables equal to one if a case was dismissed or received a formal sanction, respectively. These two dispositional outcomes reflect whether diversion cases in the post-period are being drawn from cases that previously would have been dismissed or sentenced to jail/probation. A negative estimate for dismissal would indicate that the treatment group experiences a net-widening effect as cases in the post-period are dismissed at a lower rate. On the other hand, a negative estimate for formal sanctions indicates that AMP is diverting cases away from traditional criminal justice processing.

RESULTS

Table 2 presents the difference-in-differences estimates. Column 1 of Table 2 shows the estimate of β_3 from equation (1) or the estimates for the entire-post period. Column 2 and 3 of Table 2 show β_4 and β_5 of equation (2) or the estimates for pilot period and full expansion period respectively. Panel A of Table 2 shows the effect of AMP on dispositions and expungements. The dispositional changes closely match the time trends in Figure 1. Diversion rates increased by a relative 21 percentage points ($p < 0.001$), AMP participation increased by 40 percentage points ($p < 0.001$), jail/probation sentence rates decrease by 8 percentage points ($p < 0.01$) and the dismissal rates drop by 13 percentage points (< 0.001). At the same time, the expungement rate increased by 16 percentage points ($p < 0.001$). When the estimates are broken down by the pilot and full expansion period, the broad dispositional changes are quite similar, but the key change is that AMP increased by 51 percentage points in the full expansion period as opposed to 25 percentage points in the pilot period.

The dispositional changes highlight a few major changes to how cases are handled. First, overall diversion rates increased due to the creation of AMP. AMP replaced ARD as the primary diversion option in the full expansion period. ARD requires individuals to serve six months to two years of probation and pay higher court fees. As a result, individuals experienced a lighter-touch diversion experience where the conditions required individuals to complete community service rather than undergo probation supervision. Second, it takes six months for AMP uptake to peak and stabilize. This highlights that we should pay particular attention to estimates in the full expansion period where AMP uptake is highest since the treatment dosage was higher then. Third, the decrease in dismissed cases indicates a net-widening effect where cases that previously would have been dismissed are now being drawn into diversion. Fourth, despite the net-widening effect, the expungement rate continues to increase indicating a net-narrowing effect. To briefly summarize, AMP shifted the majority of defendants from receiving probation supervision to receiving misdemeanor diversion within a short time frame.

TABLE 2 Difference-in-differences estimates for dispositions, recidivism, and resource usage.

Outcome	Entire AMP period (1)	AMP Pilot (2)	Full Expansion (3)
Panel A: Dispositions			
Diversion	0.21 (0.02)***	0.19 (0.03)***	0.22 (0.03)***
AMP	0.40 (0.02)***	0.25 (0.02)***	0.51 (0.02)***
Jail/Probation	-0.08 (0.03)**	-0.10 (0.04)**	-0.08 (0.03)*
Dismissed	-0.12 (0.03)***	-0.11 (0.04)**	-0.13 (0.03)***
Expungement	0.16 (0.03)***	0.13 (0.03)***	0.18 (0.03)***
Panel B: 5-year recidivism windows			
Arrests	-0.04 (0.03)	-0.03 (0.04)	-0.05 (0.03)

Reconviction	-0.06 (0.03)*	-0.01 (0.04)	-0.08 (0.03)**
Reconviction + Diversion	-0.04 (0.03)	0.00 (0.04)	-0.07 (0.03)*
Panel C: Future Sentenced Time & Fees (5-year window)			
Confinement Minimum Time (Log)	-0.14 (0.14)	0.03 (0.18)	-0.24 (0.16)
Probation Time (Log)	-0.50 (0.19)*	-0.33 (0.25)	-0.60 (0.22)**
Total Dollars Imposes (Log)	-0.33 (0.21)	-0.10 (0.28)	-0.48 (0.24)*
N	4179	4179	4179

Notes: Column 1 shows the estimates for the entire period based on equation (1). The estimates in Column 2 and 3 come from equation (2). Column 2 shows the estimates for the pilot period. Column 3 shows the estimates for the full expansion period. Standard errors are enclosed in parentheses. For confinement time, probation time, and total dollars, the outcomes are logged after adding 1. $p < 0.05^*$, $p < 0.01^{**}$, $p < 0.001^*$

RECIDIVISM AND RESOURCE USAGE OUTCOMES

Panel B of Table 2 shows the estimates for the recidivism outcomes. Following the dispositional changes, Column 1 shows that re-arrest rates did not significantly decrease in the post-period for the AMP group. Reconviction rates decreased by 6 percentage points ($p < 0.05$), driven primarily by a lower misdemeanor reconviction rate. However, when the reconviction measure incorporates any new diversion case, the treatment group showed a non-significant decrease. This broader measure accounts for the issue that recidivating individuals in the post-period were potentially more likely to receive diversion rather than a new conviction due to the expansion in diversion capacity. Also, recall that the pilot and full expansion period experienced different levels of AMP uptake. The estimates in Column 2 for the pilot period show non-significant and smaller in magnitude decreases across the board. In contrast, the estimates in Column 3 for the full expansion period are larger in magnitude for all recidivism outcomes. Reconviction rates for the treatment group in the full expansion period fell by 8 percentage points ($p < 0.01$). Reconviction adjusted for new diversion cases still decreased by 7 percentage points ($p < 0.05$). These are sizeable reductions considering that the reconviction rate adjusted for new

diversion cases in the pre-period was 27 percentage points. In addition, Table A1 shows that the reduction in recidivism is driven by misdemeanor offenses. The decrease in reconviction rates could reflect a reduced labeling effect where defendants are less likely to internalize a criminal identity. It is also possible that defendants take advantage of an expunged case record to maintain access to opportunities or structural supports, like jobs, schools, and family or romantic relationships, that facilitate desistance.

Panel C of Table 2 shows that the AMP-eligible group experienced less sentenced probation time and fewer court-imposed fees over the five-year window. The AMP-eligible group in the full expansion period experienced a 45 percent reduction in future probation time ($p < 0.01$). In addition, the total number of dollars imposed decreased by 38 percent, much of which comes from probation fees ($p < 0.01$). When defendants' lives do not revolve around making regular contact with the probation or using their income to pay court fees, the additional degree of separation may make it easier for defendants to sustain a pro-social or conventional identity.

At the same time, the reductions in recidivism may stem from a combination of changes in defendant behavior and changes in system responses. A re-arrested defendant who successfully completes diversion is less likely to be perceived as a repeat offender when his criminal history is reviewed. Furthermore, re-arrested defendants may be able to show stronger evidence of mitigating factors that lead to a prosecutor's decision to dismiss a case if their prior expungement helped them connect with pro-social institutions such as employment. It is unclear what the underlying change is, but the larger reductions in reconviction rates compared to the rearrest rates suggest that changes in legal actor responses play a role.

HETEROGENEOUS EFFECTS BY AGE

Younger defendants may benefit from early expungement when they have limited job experience or ties to professional networks. Subsequently, young defendants who are rearrested but have benefited from their expungement can present mitigating factors which garner more sympathy from judges and prosecutors, ultimately increasing their likelihood of more favorable outcomes. In addition, younger defendants may face more difficulty complying with standard probation conditions. Transitioning to AMP would facilitate quicker case closure. To assess heterogeneous effects, I divide the sample around the median by younger defendants aged 18-22 and older defendants aged 23-27.

Columns 1 and 2 of Table 3 provide the estimates for each age group in the post-period. Defendants between the age of 23-27 in the AMP group experienced a larger increase in overall diversion. Cases were more likely to be drawn from cases that would have previously been sentenced to jail or probation. Defendants between the age of 18-22 experienced higher AMP uptake. But AMP also imposed a larger net-widening effect on the younger defendants. Both groups experienced a sizeable 17 percentage point increase in expungements ($p < 0.001$). Panel B of Table 3 shows that reductions in recidivism are driven primarily by the younger defendants. The older defendants show non-significant, negative reductions across the board. The younger defendants show a 10-percentage point reduction in reconvictions driven by both misdemeanors and felonies ($p < 0.05$). When the estimates are demarcated by the pilot and full period in Columns 3 and 4, the younger defendants show a 14-percentage point reduction in reconviction rates ($p < 0.01$). The reduction falls to 9 percentage points and remains significant after adjusting for new diversion cases ($p < 0.05$). The AMP-eligible group in the full expansion period also experiences a 50 to 60 percent reduction in each of the resource usage measures.

TABLE 3 Heterogenous effects by age.

Outcome	Post (23-27) (1)	Post (18-22) (2)	Pilot (18-22) (3)	Full (Age 18-22) (4)
Panel A: Dispositions				
Diversion	0.26 (0.03)***	0.16 (0.04)***	0.15 (0.05)***	0.17 (0.04)***
AMP	0.37 (0.02)***	0.43 (0.03)***	0.27 (0.03)***	0.54 (0.03)***
Jail/Probation	-0.13 (0.04)**	-0.05 (0.04)	-0.05 (0.05)	-0.04 (0.04)
Dismissed	-0.13 (0.04)**	-0.12 (0.04)**	-0.13 (0.05)*	-0.12 (0.05)**
Expungement	0.17 (0.03)***	0.17 (0.04)***	0.16 (0.05)***	0.17 (0.04)***
Panel B: 5-year recidivism windows				
Arrests	-0.06 (0.04)	-0.05 (0.04)	-0.02 (0.05)	-0.06 (0.05)
Reconviction	-0.03 (0.04)	-0.10 (0.04)*	-0.05 (0.05)	-0.14 (0.05)**
Reconviction + Diversion	-0.04 (0.04)	-0.06 (0.04)	-0.02 (0.05)	-0.09 (0.05)*
Panel C: Future Sentenced Time & Fees (5-year window)				
Confinement Minimum Time (Log)	0.05 (0.19)	-0.43 (0.21)*	-0.05 (0.26)	-0.70 (0.24)**
Probation Time (Log)	-0.46 (0.27)	-0.70 (0.28)*	-0.40 (0.35)	-0.91 (0.32)**
Total Dollars Imposes (Log)	-0.23 (0.3)	-0.65 (0.31)*	-0.33 (0.39)	-0.88 (0.35)*
N	2124	2055	2055	2055

Notes: Column 1 and 2 shows the estimates for the entire period based on equation (1). Columns 3 and 4 show the estimate for equation (2). Column 1 is restricted to individuals between the age of 23-27. Column 2-4 are restricted to individuals between the age of 18 and 22. Standard errors are enclosed in parentheses. For confinement time, probation time, and total dollars, the outcomes are logged after adding 1. p<0.05*, p<0.01**, p<0.001*

DISCUSSION

The creation of AMP shifted defendants from traditional sanctions, sometimes with the possibility of expungement through ARD, to a shorter sanction that required the completion of community service. It also reduced dismissals. Despite the net-widening effect of putting more defendants into diversion, AMP increased expungement rates. There are a couple of reasons for

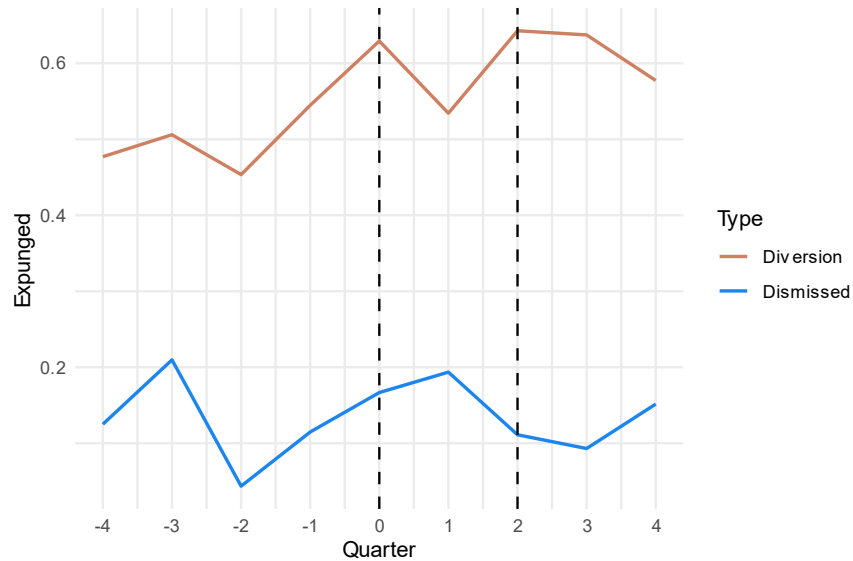
this phenomenon. The AMP program submits cases for expungement upon completion. Conversely, if a case is dismissed, the record is still public and the onus is on the defendant to expunge the records. If the defendants used a private attorney or bar advocate, they would need to circle back and pay for any additional lawyer fees. If the defendants used a public defender, they would need to return to the public defender's office, contact their attorney, and fill out extensive paperwork. Figure 3 shows that conditional on being dismissed the expungement rate fluctuates between 10 to 20 percentage points¹⁰. For cases that were diverted, the expungement rate grew likely since AMP was easier to complete compared to ARD.

These findings highlight the importance of considering both short-term and long-term repercussions when considering the net-widening impacts of diversion. AMP translated into a short-term increase in criminal justice involvement, suggesting a net-widening effect. But I also show that AMP increased expungements—leading to net-narrowing. Traditionally, net-widening is solely concerned with the additional number of people drawn into formal social control due to the development of new sanction options (McMahon, 1990). But case records can follow an individual for a long period and influence how criminal justice actors and non-legal actors respond to future interactions. The “shadow” of case records can make it easier for legal actors to extend social control. Diversion can produce a net-narrowing effect if they increase the number of people exiting the criminal justice system with a clean slate. Thus, examining just the change in dispositions when thinking about how diversion can change the scope of criminal justice involvement paints only a partial picture and can be misleading. My results also suggest that adult diversion programs' efficacy may result from their capacity to expunge records at a much earlier

¹⁰ The process for expunging cases during the study's time period is different from the current process. When cases are now dismissed, Pennsylvania's Clean Slate law, which started in June 2019, automatically seals the record for low-level misdemeanor cases that are dismissed.

stage. As a whole, AMP is a “second-chance” program where the goal is to hold individuals accountable but to also move them through the system quickly while exiting with a clean slate.

FIGURE 3 AMP facilitated higher expungement rates while the expungement rate for dismissals stayed relatively flat.



Notes: The figure shows the expungement rate conditional on being diverted or dismissed for the AMP-eligible group. The first vertical line indicates the pilot period. The second vertical line indicates the full expansion period.

Data source: 1,655 AMP-eligible cases that were diverted or dismissed.

Other policy interventions that attempt to address the negative impacts of a criminal record at a later stage deal with various challenges. For example, Ban the Box policies seek to limit the impact of collateral consequences by removing questions that ask about criminal history. While the policy increased callback rates, it also appeared to encourage racial discrimination against black applicants (Agan & Starr, 2017). Jackson and Zhao examined Ban the Box in Massachusetts and found that Ban the Box actually lowered the employment rate and average quarterly earnings for ex-offenders (Jackson & Zhao, 2017). These results suggest that policies aiming to change employer practices can exacerbate the negative impact of collateral consequences.

In contrast to Ban the Box, expungement policies provide a more direct mechanism for eliminating collateral consequences albeit at a much later date. Using data from individuals seeking expungement in Alameda County, California, Selbin et al. (2018) found that record cleaning boosted participants' employment rates by 5 to 10 percentage points and average annual earnings grew by \$6,000. People sought record cleaning after a period of suppressed earnings which suggests that ex-offenders can reintegrate quicker if record clearing occurs sooner rather than later (Selbin, McCrary, & Epstein, 2018). Similarly, Prescott and Starr (2019) studied the effect of expungement policies in Michigan and found that wages increased. However, only 6.5% percent of eligible individuals expunged their criminal records. The lack of information, administrative hassle, fees, distrust of the criminal justice system, lack of access to counsel, or insufficient motivation could all contribute to lower expungement rates (Prescott & Starr, 2019). Thus, prosecutor-led diversion programs are uniquely situated to ameliorate the shortcoming of Ban the Box policies and expungement policies by eliminating criminal records at an early stage. Moreover, when the expungement immediately follows diversion completion like in AMP, employers will be less likely to detect gaps in employment that could signal prior criminal justice system involvement.

There are several important limitations to this study. Foremost, I cannot disentangle whether the reductions in reconvictions are a function of changes in system response or changes in defendant behavior. AMP defendants with no prior convictions and evidence of mitigating factors, such as employment, may be able to negotiate better outcomes if they are charged with a new case. To put it another way, the AMP-eligible group may experience a reduction in "secondary sanctioning" rather than a change in "secondary deviance" (Lieberman, Kirk, & Kim, 2014). It is also difficult to gauge whether the changes in recidivism are heavily influenced by the lower

sanction or the easier expungement process. Another limitation is that the study cannot directly measure whether diversion and expungement lead to better employment and other pro-social opportunities. Finally, the sample restriction does not allow me to assess whether misdemeanor diversion is beneficial for defendants older than 27. Future studies could examine which diversion mechanisms lead to better outcomes and assess whether misdemeanor diversion is effective with other groups. Along a continuum of net-narrowing mechanisms, expungements likely produce the strongest net-narrowing effect compared to diversion programs that conceal case records or just dismiss cases. Future research could compare the effect of different net-narrowing mechanisms when they are coupled with diversion programs. Future work could also explore why younger defendants are more receptive to diversion as opposed to probation.

CONCLUSION

Individuals who are marked with a criminal record are less likely to be given the benefit of the doubt in many societal endeavors, which can cripple their ability to participate in pro-social opportunities. Repeated interactions with the criminal justice system or repeated rejection in one's community may reduce an individual's ability to desist from crime. Consequently, interventions that foster people's commitment to positive change or facilitate attachment to pro-social institutions are critical. "Second-chance" misdemeanor diversion programs offer a low-cost sanction alternative that can save court resources and allow individuals to pursue opportunities that otherwise would have been blocked by a criminal record. AMP increased the expungement rate by 16 percentage points. When AMP uptake was at its highest, AMP-eligible defendants experienced a 7 to 8 percentage point reduction in reconvictions, even after adjusting for new diversion cases. These reductions were concentrated among younger defendants who may benefit

from expungement at an early age. It is also possible that the imposition of community service rather than a case dismissal produced a degree of accountability among younger defendants.

This study contributes to the broader literature by analyzing the efficacy of prosecutor-led diversion programs for misdemeanor cases. The difference-in-differences design addresses the selection bias issue that is a common challenge among diversion studies. The findings highlight the importance of incorporating a mechanism for expungement in diversion programs, as this may be the key channel that diversion programs use to produce better outcomes. This study also offers a theoretical contribution, by highlighting that short-term net-widening analyses of diversion might be missing longer-term net-narrowing. Evaluating the efficacy of diversion programs should consider the balance between the net-widening effect and the net-narrowing effect. In addition, the study builds upon the literature by assessing the impact of prosecutor-led diversion on long-term recidivism outcomes (Wright & Levine, 2021). With the current increase in prosecutorial diversion programs, it is important that we continue to examine how adult diversion operates and whether diversion can be a viable sanctioning alternative.

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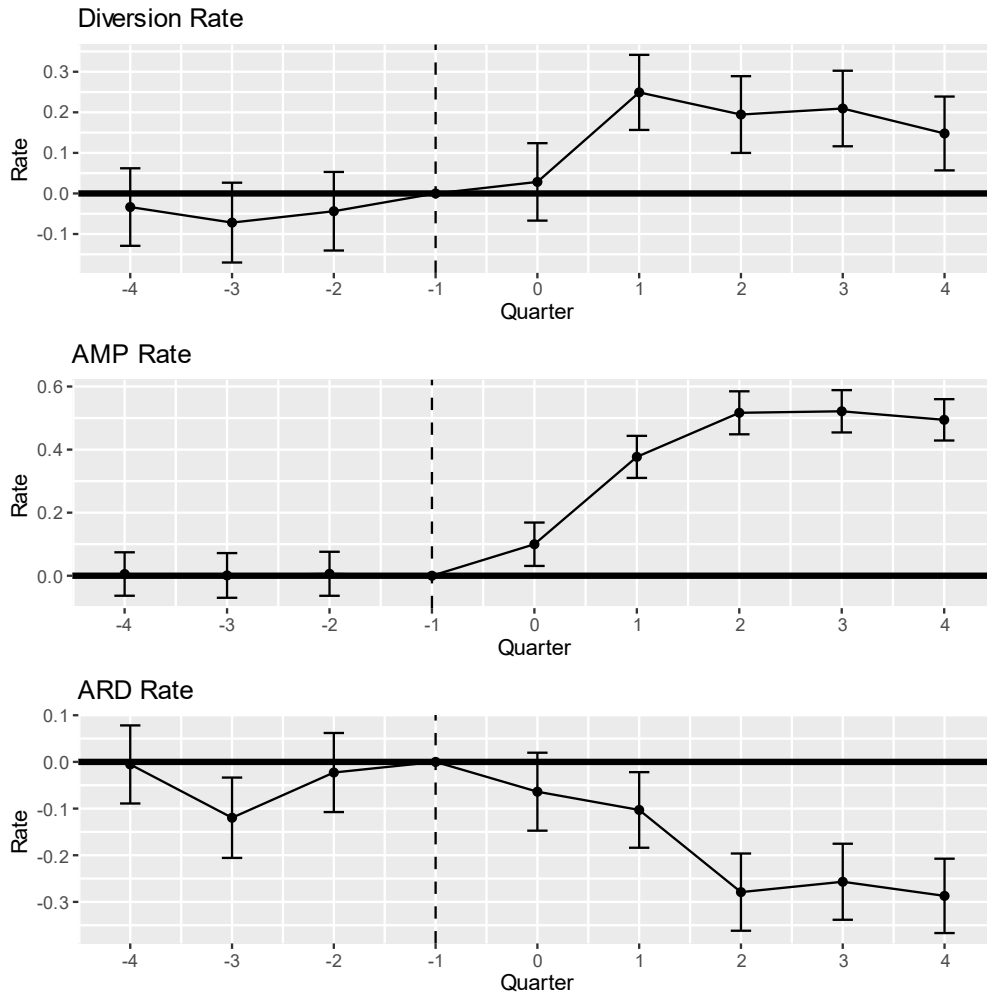
Appendix

Table A1. Outcomes broken down by offense grade

Outcome	Entire AMP period (1)	AMP Pilot (2)	Full Expansion (3)
5-year recidivism windows			
Misdemeanor Rearrests	-0.03 (0.03)	-0.02 (0.04)	-0.04 (0.03)
Felony Rearrests	-0.03 (0.03)	0.00 (0.04)	-0.05 (0.03)
Misdemeanor Reconviction	-0.05 (0.03)*	-0.02 (0.03)	-0.08 (0.03)**
Felony Reconviction	-0.03 (0.02)	-0.01 (0.03)	-0.05 (0.02)
Misdemeanor Reconviction + Diversion	-0.04 (0.03)	0.00 (0.04)	-0.06 (0.03)
Felony Reconviction + Diversion	-0.02 (0.02)	0.01 (0.03)	-0.04 (0.03)
N	4179	4179	4179

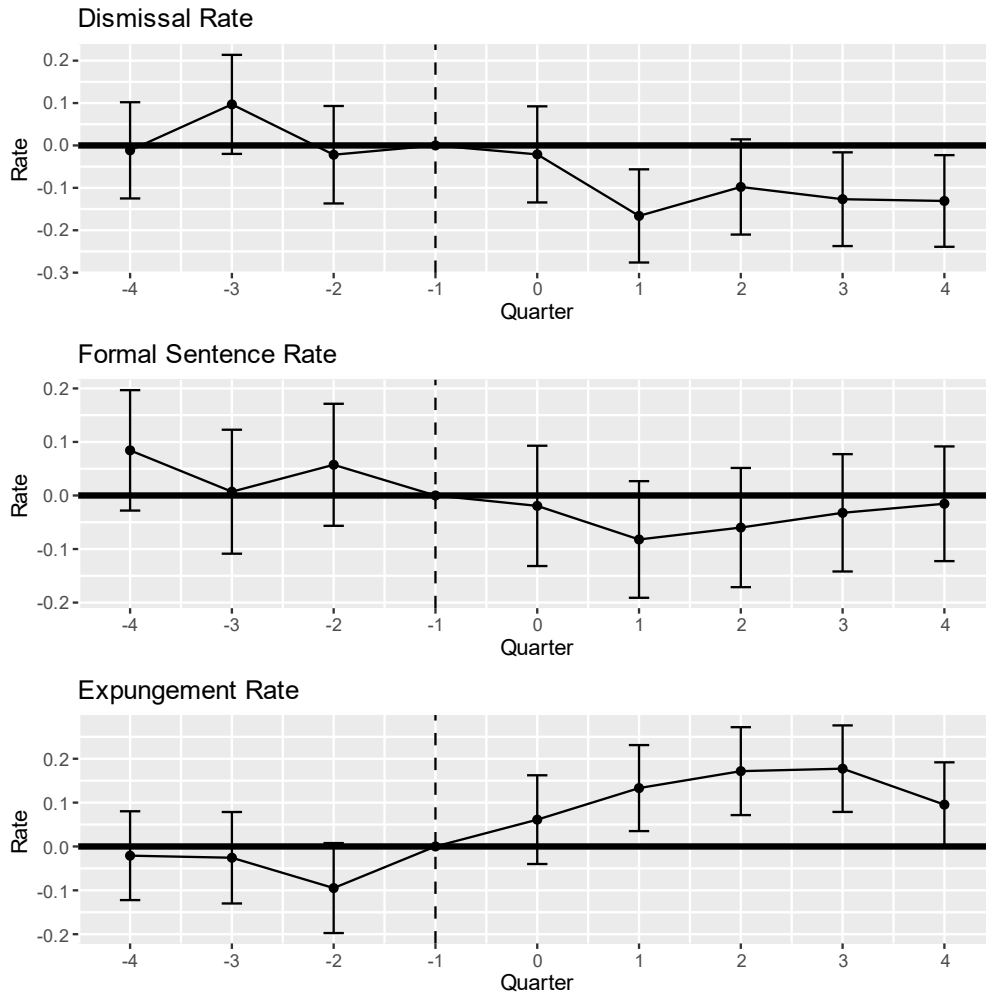
Notes: Column 1 shows the estimates for the entire period. The estimates in Column 2 and 3 come from equation (2). Column 2 shows the estimates for the pilot period. Column 3 shows the estimates for the full expansion period. Standard errors are enclosed in parentheses. $p < 0.05^*$, $p < 0.01^{**}$, $p < 0.001^*$

Figure A1 Parallel Trends for Diversion



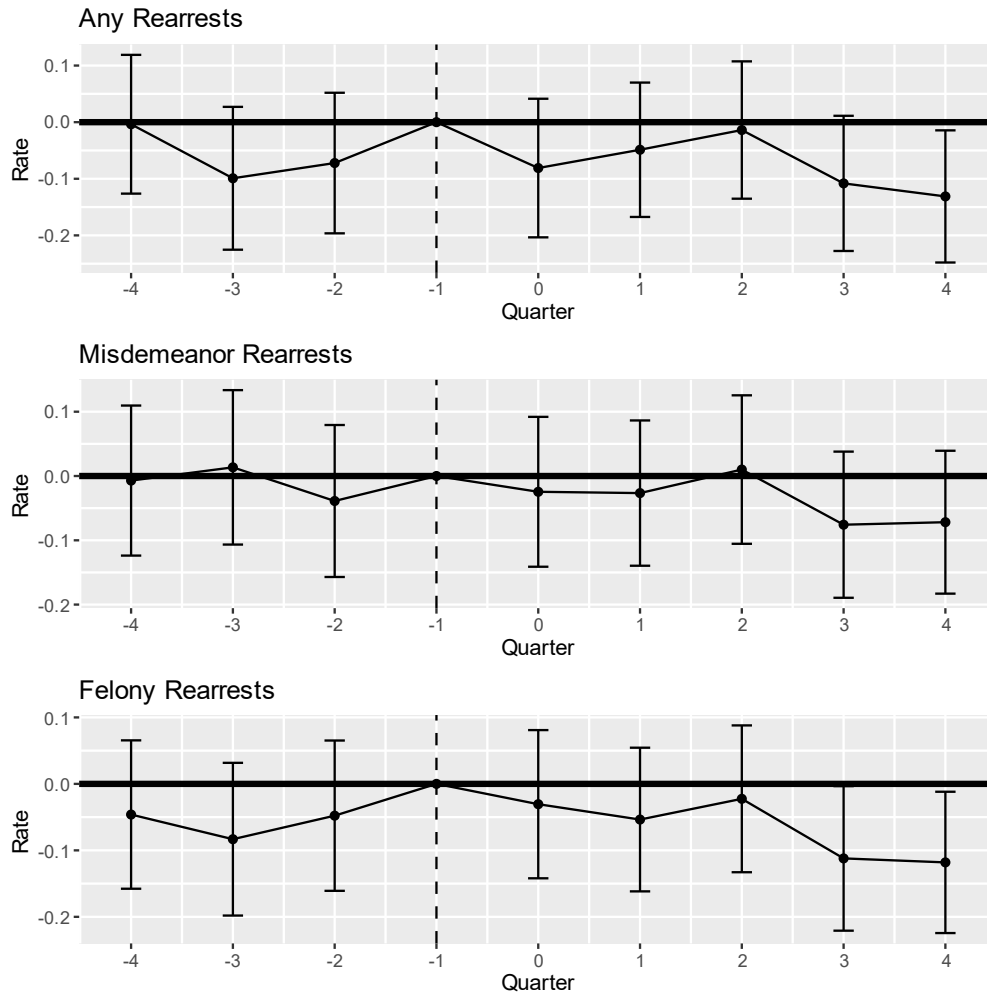
Notes: This figure plots the difference-in-differences estimates by quarter. The error bars show the 95% confidence interval around the estimate. The vertical line represents the omitted, reference quarter prior to the intervention. The parallel trends assumption is violated when the estimates are non-significant and by quarter estimates show a trend prior to the intervention.

Figure A2 Parallel Trends for Dispositions and Expungements



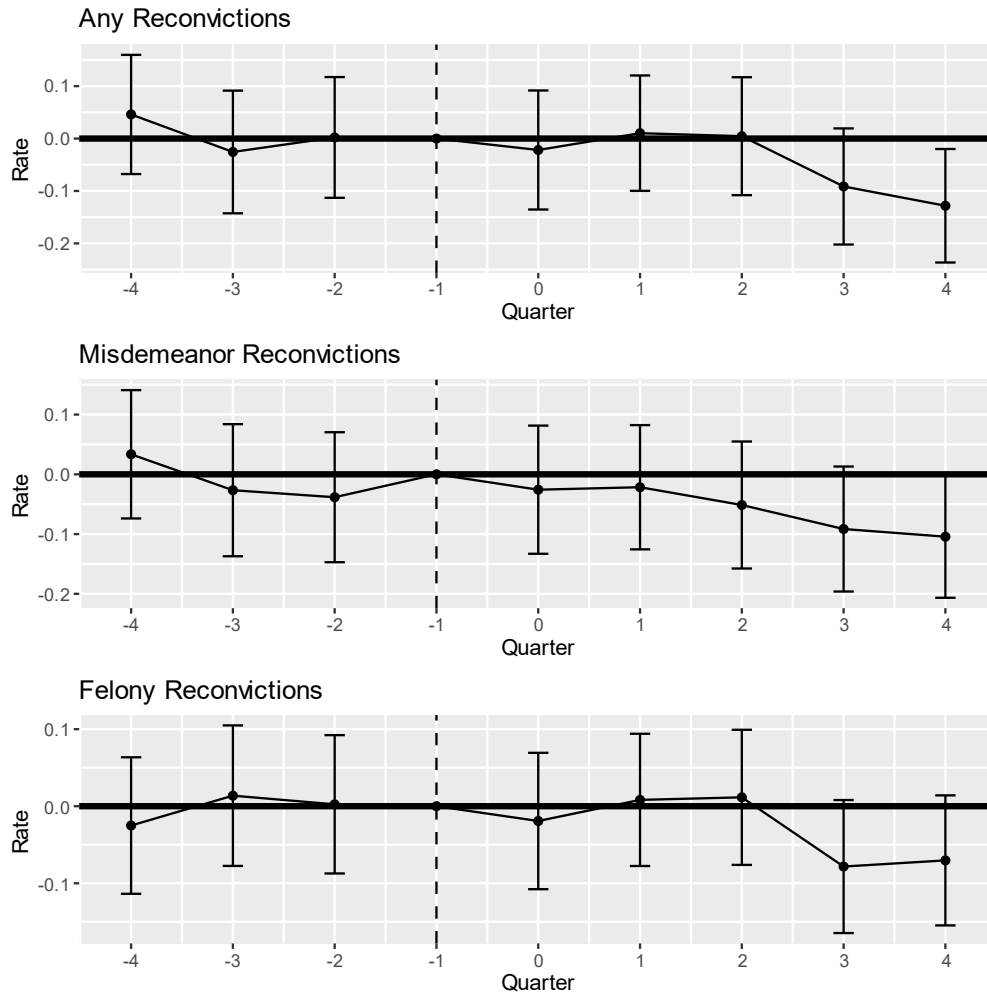
Notes: This figure plots the difference-in-differences estimates by quarter. The error bars show the 95% confidence interval around the estimate. The vertical line represents the omitted, reference quarter prior to the intervention. The parallel trends assumption is violated when the estimates are non-significant and by quarter estimates show a trend prior to the intervention.

Figure A3 Parallel Trends for Re-arrest Outcomes



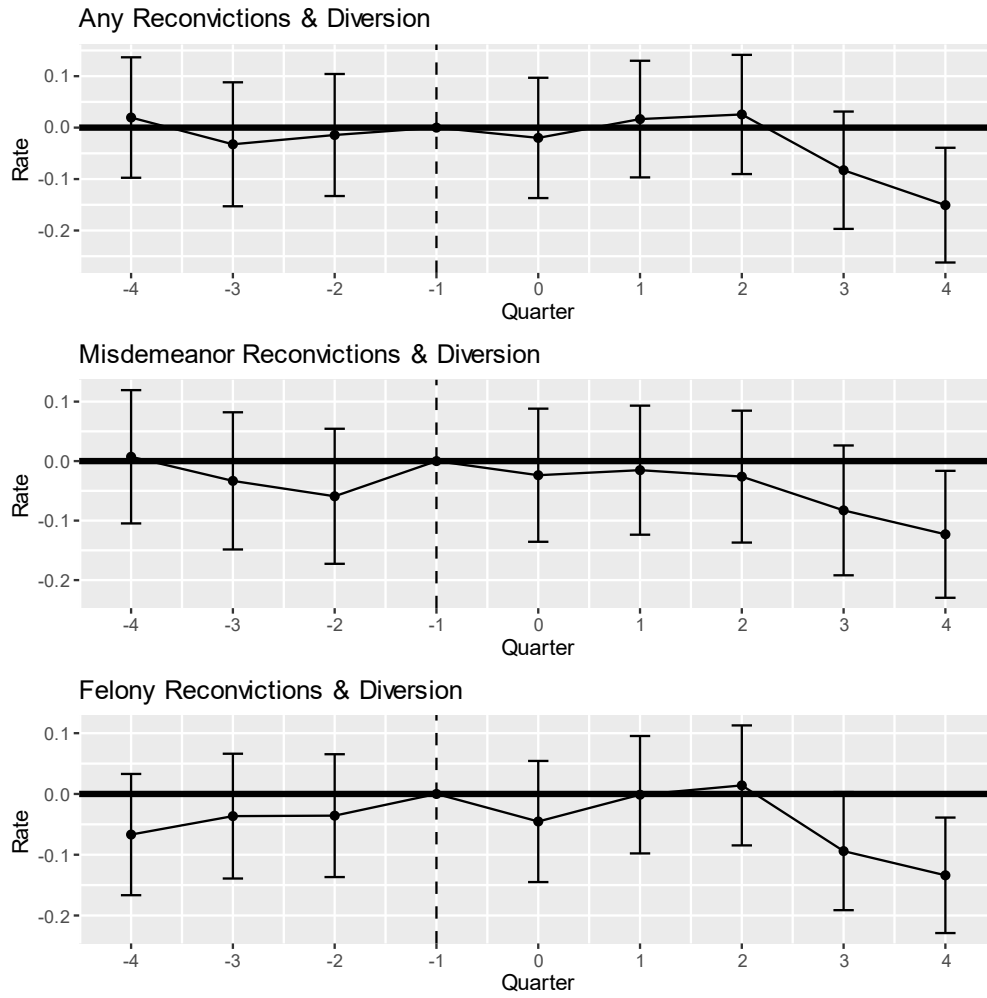
Notes: This figure plots the difference-in-differences estimates by quarter. The error bars show the 95% confidence interval around the estimate. The vertical line represents the omitted, reference quarter prior to the intervention. The parallel trends assumption is violated when the estimates are non-significant and by quarter estimates show a trend prior to the intervention.

Figure A4 Parallel Trends for Reconviction Outcomes



Notes: This figure plots the difference-in-differences estimates by quarter. The error bars show the 95% confidence interval around the estimate. The vertical line represents the omitted, reference quarter prior to the intervention. The parallel trends assumption is violated when the estimates are non-significant and by quarter estimates show a trend prior to the intervention.

Figure A5 Parallel Trends for Reconviction Outcomes Adjusted for New Diversion Cases



Notes: This figure plots the difference-in-differences estimates by quarter. The error bars show the 95% confidence interval around the estimate. The vertical line represents the omitted, reference quarter prior to the intervention. The parallel trends assumption is violated when the estimates are non-significant and by quarter estimates show a trend prior to the intervention.