Veteran Treatment Courts: Impact on Long-Term Recidivism

(VERY PRELIMINARY: DO NOT CITE OR DISTRIBUTE)

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Abstract

Veteran treatments courts (VTCs) emerged in response to the perceived success of drug treatment courts and the increased recognition of the unique mental health and substance abuse treatment requirements of combat veterans. These diversion programs seek to reduce jail time among veterans by leveraging veteran programs, and veteran-specific mentorship. Recently, however, drug courts have been criticized by groups favoring a public health approach to drug-use and by those concerned over the courts' restrictions on due process. We estimate the impact of VTCs on recidivism using detailed criminal court records from Oklahoma linked to service records from the U.S. Army in a triple difference strategy that leverages county-level variation in the rollout of drug treatment courts in Oklahoma. This approach compares the outcomes of veteran drug felony defendants with non-veteran drug felony defendants, accounting for time-invariant recidivism differences between counties and state-wide differences from year to year. Our estimates are of particular interest to policymakers because of the population affected, but also because we are able to capture the effectiveness of wrapping additional services around traditional drug treatment courts.

1. Introduction

For the past decade and a half, more than 2 million US troops have deployed to support combat operations in Iraq, Afghanistan, and other areas of conflict around the world. An ever increasing body of literature outlines the unique challenges, characterized by post-traumatic stress disorder (PTSD), and traumatic brain injury (TBI), frequently experienced by our contemporary veterans. Since the start of Operation Enduring Freedom (OEF) in Afghanistan, a series of studies have outlined the staggering numbers of Soldiers returning from war with previously underappreciated 'invisible wounds.' A 2009 meta-study estimated that approximately 10-18% of US troops returned from OEF or OIF (Operation Iraqi Freedom) with PTSD. Given the continuation of OEF and the increased likelihood of PTSD from multiple deployments, this estimate has the potential to increase in the future (Litz and Schlenger 2009). Furthermore, the focus on PTSD and TBI from current conflicts have shed new light on challenges still faced by the millions of veterans from previous wars.

The burden of care for veterans returning from deployments initially fell on military units, veteran's charitable organizations, and the Department of Veterans Affairs. Between 2002 and 2011, more than 700,000 veterans of Iraq and Afghanistan have used Veterans Affairs health services. The President's 2017 Budget includes $182.3 billion in funding for the Department of Veterans Affairs, and much has been written about the long term federal costs associated with providing appropriate treatment for combat veterans. Increasingly, however, there is a recognition of the role of local communities in reintegrating veterans through housing, employment and criminal justice programs.

Starting in 2004, counties across the country began to implement veteran treatment courts (VTC) as a policy response to the distinct requirements and challenges faced by veterans in the

criminal justice system. Recognizing that untreated TBI and PTSD might lead to substance abuse, these courts sought to treat non-violent criminals not with jail time, but with a program of substance abuse treatment. VTCs vary by county, but have a basic structure that is similar to drug treatment courts with additional components tailored specifically to veterans, such as veteran mentorship. In most counties with a VTC, when a veteran is arrested for a nonviolent drug related charge, they will have the opportunity to apply to the VTC. The VTC will either defer or dismiss any sentence under the condition that the veteran completes a substance abuse treatment program. These programs typically last from 15-18 months (varying with the level of crime) and include frequent drug testing, improved and clarified access to veteran services, and in many cases mentorship with veteran volunteers (McGuire, et al. 2013).

As counties offering a veteran treatment court began to show anecdotal success, and demonstrated cost savings relative to prison sentences, programs spread across the country. The Department of Veteran's Affairs published a study in February 2013 outlining the prominence of veteran courts and separate dockets; by December 2012, these entities numbered more than 150 (McGuire, et al. 2013). As the popularity of this program grows, so too does the spending. The Department of Justice recently awarded $4 million in grants to veteran courts around the country. Clearly, demonstrating the effectiveness of these courts is an important policy question from both a cost and effectiveness perspective.

To estimate the impact of veteran courts, we use individual level crime data from Oklahoma and leverage within-county variation in the rollout of veteran treatment courts in the state. We choose recidivism as our measure of the VTC's effectiveness, and measure the VTC's impact on recidivism using a difference-in-difference strategy. Our initial results demonstrate a

reduction in recidivism over the year following the charge, a "bounce back" effect in the second year, and an imprecise reduction in recidivism after three years.

The rest of the paper is organized as follows. In section 2, we review relevant literature including recidivism research on both drug court and veteran treatment courts. In section 3, we outline the specific details of the data, the data collection method, and descriptive statistics. Section 4 describes the empirical model and Section 5 summarizes the preliminary results. Finally, in Section 6 we discuss potential policy implications and future improvements to finalize the findings.

2. Literature Review

Veteran treatment courts evolved as a targeted extension of drug treatment courts. The history of drug treatment courts starts in the late 1980s as a response to a dramatic increase in criminal caseloads driven substantially by drug charges (Goldkamp 1994). Similar to VTCs, as an attempt to use suspended sentencing in combination with substance abuse treatment to reduce jail time among nonviolent offenders. Since their inception, specialty courts have taken on a number of different variations (juvenile, community, DWI, etc.), but the court with the most relevant series of literature are adult drug courts. While a number of studies focus on cost reduction and jail time, our primary concern for this paper is reduction of recidivism. In perhaps the most comprehensive review of the literature, Sevigny, Fuleihan and Ferdik (2013) find that drug courts significantly reduce the incidence of incarceration. They add, however, that the average length of incarceration may remain the same due to increased sentences for those who fail to complete the treatment prescribed by the court.

Two specific studies are sighted by Sevigny et al. as among the most rigorous randomized control trails attempting to show the impact of drug treatment courts (DTCs) on recidivism. First, a University of Maryland study used an experimental design comparing 235 offenders randomly assigned to DTCs or to the traditional court system. The authors conclude that DTCs "show a sustained treatment effect on recidivism," that lasts even after completion of the treatment period (Gottfredson, et al. 2006). A second widely cited study randomly assigned of 630 offenders in Maricopa County, Arizona to either a DTC or probation. This study found that, "Although there was no statistically significant difference between participants in the drug court program and those on routine probation in terms of new arrests, drug court participants had a lower overall rate of technical violations with fewer drug violations in particular" (Deschenes, Turner and Greenwood 1995). On balance, the existing meta-analyses of DTC literature demonstrates some ability to reduce recidivism. VTCs, however, do not have as robust a background in the literature.

Due to the recent introduction of VTCs, the literature reviewing the effectiveness of these specialty courts is more limited than traditional drug courts. Holbrook and Anderson (2011) provide one of the earliest assessments of VTCs using online and paper surveys of 53 of the VTCs existing at the time. Holbrook and Anderson determine that, "on the basis of present data…[the] outcome of veterans courts appears to be at least as favorable as those of other specialized treatment courts" (Holbrook and Anderson 2011). This study, however, was conducted at a very early stage in the development of VTCs, and suffers from a low response rate (14 of 53 counties polled).

Overall, there is evidence that drug treatment courts can reduce recidivism. However, the question of whether VTCs have the same impact, and more importantly, have a larger effect than

their comparable drug courts in the same counties is still unanswered. This paper aims to add to the literature a more definitive causal link between VTCs and a reduction in recidivism even when compared to already established drug courts.

3. Data

4.1 Criminal Court Data

The data for this paper came from two sources. First, Oklahoma State Courts Network (OSCN) provides public access to criminal court data in the state. The OSCN maintains a website that provides public access to detailed charge and defendant information, presented separately on individual webpages by court case. We systematically scraped relevant information from the html code on these webpages and compile it into a dataset with observations at the defendant by case level, which contains the names, birthdates, demographics, and charges of defendants. As of the writing of this paper, the latest iteration of results includes observations of any felonies reported on the OSCN site from 1 January 2002 to 18 October 2016 for individuals born after 1960. This time period spans the most significant variable in VTC implementation, as the first court was introduced in Tulsa County in 2008. Our preliminary dataset includes 46 counties[1] that have uniquely structured data for the charges filed. This subset of 46 counties includes the largest counties, Oklahoma and Tulsa, as well as a majority of the counties where the timing of VTC implementation variation occurs. The data also includes a substantial number observations for veterans in counties with VTCs and in counties without (table 1). For non-veterans, the race data is missing for a significant portion of the population,

[1] This counties are: Adair, Alfalfa, Atoka, Beckham, Blaine, Bryan, Caddo, Canadian, Carter, Cherokee, Choctaw, Cimarron, Cleveland, Coal, Comanche, Cotton, Craig, Creek, Custer, Delaware, Dewey, Ellis, Garvin, Grady, Grant, Greer, Harmon, Harper, Haskell, Hughes, Jackson, Jefferson, Johnston, Kay, Kingfisher, Kiowa, Latimer, Leflore, Logan, Oklahoma, Pottawatomie, Pushmataha, Rogermills, Rogers, Seminole, and Tulsa.

though race data for veterans is available, and we will impute race using a race prediction index based on the likelihood that a person is of a particular race given their first and last name. Currently, the data shows a ratio between races that matches that expected in Oklahoma and the balance between veteran and non-veteran population is reasonably good (table 2).

4.2 Veteran Data

We identify veteran defendants by linking defendants from the OSCN data to a dataset maintained by the Army Personnel Office (G1) by first name, last name, and birthdate. This data includes any officer or enlisted Army soldier who spent at least one month in the US Army from September 1990 to September 2016. This will identify army veterans of any conflict from the Gulf War forward, some veterans of earlier wars who are enrolled in the VTC will not be identified. Given the average age of defendants in our data set, this seems to be a relatively limited problem (table 2).

There will be measurement error in our identification of veterans, but unless these errors are correlated with the timing of VTC implementation, they should not bias our estimates. In the future, we plan to improve our veteran identification in three ways. First, we will limit false positives by specifically checking those who did not enlist from or depart the army to the state of Oklahoma for mismatched middle names or other unique identifiers. Second, we plan to obtain veteran records for service branches other than the army. Third, we hope to obtain treatment court administrative data from Oklahoma.

4. Empirical Strategy

We identify the effect of veteran treatment courts (VTCs) on the recidivism of veteran drug felons using a triple difference strategy that leverages variation within counties in the

availability of VTCs as a result of the initial rollout of these courts. We account for time-invariant differences in drug felon recidivism between counties with county fixed effects and state-wide changes in recidivism by year with year fixed effects. To account for the possibility that there are changes in recidivism within a county-year that coincide with, but are not caused by the implementation of veteran treatment courts, we use non-veterans with drug felony charges as a comparison group for veterans with drug felony charges. This enables us to isolate the VTC effect from other factors that influence the recidivism of drug offenders, since non-veterans do not have access to the VTC in counties where it has been implemented.

Our preferred specification is as follows,

$$y_{ict} = \beta_1(VTC_{ct} \times Vet_i) + \beta_2 Vet_i + \beta_3 VTC_{ct} + \gamma X_{ict} + \theta_c + \nu_t + \epsilon_{ict}, \quad (1)$$

where y_{ict} is the recidivism outcome for defendant i charged in county c in year t. VTC_{ct} is an indicator equal to one if county *c* had a VTC in year *t*. Vet_i is an indicator equal to one if defendant i was matched records of military veterans using first name, last name, and date of birth. X_{ict} are covariates including calendar month fixed effects, a cubic of defendant age when charged and indicators for defendant race, sex, and prior charge in the last 4 years. θ_c is a vector of county fixed effects and ν_t is a vector of year fixed effects. The coefficient of interest is β_1.

5. Preliminary Results

Table 3 shows estimates from the sample of drug felony defendants for $\beta_1, \beta_2,$ and β_3 from Equation 1 for 1, 2, and 3 year recidivism. The estimation sample is 2006-2013 and standard errors are clustered at the county level. The coefficient estimates imply a statistically

significant 5 pp (30%) reduction in 1 year recidivism (Column 1) and an imprecisely estimated 1 pp (3%) reduction in 2 year recidivism (Column 4) and 2 pp (6%) reduction 3 year recidivism (Column 6). Table 4 shows a statistically significant increase of 4 pp in repeat offending after 1 year but before 2 years, but a statistically significant decrease of 1 pp after 2 years but before 1 year.

These results suggest that VTCs reduce recidivism among veteran drug felons in the first year after the initial charge filing, consistent with an incapacitation effect while veterans were enrolled in the program. The increase in reoffending between 1 and 2 years could reflect a "bounce back" in offending after VTC completion. The imprecise reduction in 3 year recidivism suggests that the bounce back is not severe enough to outweigh the beneficial effects of the VTC.

References

Carson, Ann E. 2015. *Prisoners in 2014.* US Deparment of Jusice, Bureeau of Justice Statistics.

Deschenes, Elizabeth, Susan Turner, and Peter W Greenwood. 1995. "Drug court or probation?: an experimental evaluation of Maricopa County's drug court." *Justice System Journal* 55-73.

Goldkamp, John S. 1994. "Justice and Treatment Innovation: The Drug Court Movement." *National Institute of Justice.*

Gottfredson, Denise C, Stacy S Najaka, Brook W Kearley, and Carlos M Rocha. 2006. "Long-term effects of particpation in the Baltimore City drug treatment court: Results from an experimental study." *Journal of Experimental Criminology* 67-98.

Holbrook, Justin G, and Sara Anderson. 2011. "Veterans Courts: Early Outcomes and Key Indicators for Success." *Widener Law School Legal Studies Research Paper No 11-25.*

Litz, Brett T, and William E Schlenger. 2009. "PTSD in Service Members and New Veterans of the Iraq and Afghanistan Wars: A Bibliography and Critique." *PTSD Research Quarterly* 2-8.

McGuire, Jim, Sean Clark, Jessica Blue-Howells, and Cedric Coe . 2013. *An Inventory of VA involvement in Veterans courts, dockets and tracks.* VA Veterans Justice Programs.

Sevigny, Eric L, Brian K. Fuleihan, and Frank V Ferdik. 2013. "Do drug courts reduce the use of incarceration?: A meta-analysis." *Journal of Criminal Justice* 416-425.

Tanielian, Terri, Lisa H Jaycox, Terry L Schell, Grant N Marshall, M Audrey Burnam, Christine Eibner, Benjamin R Karney, Lisa S Meredith, Jeanne S Ringel, and Mary E Vaina. 2008. "Invisible Wounds: Mental Health and Cognitive Care Needs of America's Returning Veterans." *Rand Corporation Publications.* Accessed October 29, 2016. http://www.rang.org/pubs/research_briefs/RB9336.html.

Table 1: Oklahoma Crime Data Descriptive Statistics

Variables	N by Data Component		
	All	Counties with Veteran Court	Counties without Veteran Court
	(1)	(2)	(3)
Observations	376,089	209,487	166,602
Drug Cases	127,608	81,153	46,455
Veterans	4,712	2,174	2,538
Veteran Drug Cases	1,200	668	532

Note: Table 1 includes all observations, not unique observations by defendant. Recidivism numbers are specified on table 2. Observations occur in previously specified counties and where felonies filed from 1 Jan 2002 to 18 October 2016.

Table 2: Descriptive Statistics for Drug Court Eligible Crimes

Variables	N by Data Component	
	Number of NonVeterans (Mean)	Number of Veterans (Mean)
	(1)	(2)
Observations	126,408	1,200
Recidivism by Year:		
1 year	20,543	178
	(16.3%)	(14.8%)
2 year	28,930	263
	(22.9%)	(21.9%)
3 year	34,230	294
	(27.1%)	(24.5%)
4 year	38,067	333
	(30.1%)	(27.8%)
Demographics		
Age	30.9	31.8
Female	8,244	19
	(6.52%)	(1.58%)
Black	2,882	31
	(2.28%)	(2.58%)
Hispanic	623	7
	(0.49%)	(.58%)
White	20,320	227
	(16.1%)	(18.9%)

Note: Numbers may not sum to 100% to unrecorded demographics. Recidivism includes all offenders for whom any felony charge is filed in the N years subsequent to their initial drug court eligible offense.

Table 3: Effect of VTC Availability on Recidivism of Drug Felons

	1 YR		2 YR		3 YR	
	(1)	(2)	(3)	(4)	(5)	(6)
VTC Available x Veteran Defendant	-0.052	-0.050	-0.010	-0.007	-0.023	-0.019
	(0.020)	(0.017)	(0.034)	(0.030)	(0.038)	(0.033)
Veteran Defendant	0.007	0.008	0.007	0.011	-0.012	-0.007
	(0.017)	(0.015)	(0.019)	(0.017)	(0.018)	(0.016)
VTC Available	-0.005	-0.005	-0.012	-0.010	-0.004	-0.002
	(0.007)	(0.008)	(0.009)	(0.010)	(0.008)	(0.008)
Mean Rate	*0.177*	*0.177*	*0.248*	*0.248*	*0.300*	*0.300*
Obs	*64,327*	*64,319*	*64,327*	*64,319*	*64,327*	*64,319*
Covariates		X		X		X

Table 4: Effect of VTC Availability on Recidivism of Drug Felons by Timeframe

	1 YR		Between 1 and 2 YRS		Between 2 and 3 YRS	
	(1)	(2)	(3)	(4)	(5)	(6)
VTC Available x Veteran Defendant	-0.052	-0.050	0.041	0.043	-0.013	-0.012
	(0.020)	(0.017)	(0.019)	(0.018)	(0.006)	(0.006)
Veteran Defendant	0.007	0.008	0.000	0.003	-0.019	-0.018
	(0.017)	(0.015)	(0.011)	(0.011)	(0.006)	(0.006)
VTC Available	-0.005	-0.005	-0.006	-0.005	0.008	0.008
	(0.007)	(0.008)	(0.003)	(0.004)	(0.003)	(0.003)
Mean Rate	*0.177*	*0.177*	*0.071*	*0.071*	*0.052*	*0.052*
Obs	*64,327*	*64,319*	*64,327*	*64,319*	*64,327*	*64,319*
Covariates		X		X		X