



**Executive Summary – Revised 1/29/2016**

**An Evaluation of the Eau Claire County Pre-Charge Diversion Program as Measured by Two Year Recidivism Rates**

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**Overview**

The Eau Claire County Pre-Charge Diversion Program is founded on the principle that low-risk individuals are generally self-correcting. By limiting formal intervention, the hope is to limit further involvement in the criminal justice system and potentially reduce recidivism. The aim of this quasi-experimental study is to investigate the impact of the program on recidivism by comparing offenders who successfully completed the Diversion Program in 2012-2013 to a comparable low-risk Control Group that did not receive the program but would have qualified based on their charges and past criminal history. All individuals included had cases that were processed through the Eau Claire County District Attorney’s Office for charges that were appropriate for the Diversion Program. For purposes of this study, recidivism was defined as receiving a subsequent misdemeanor or felony charge or any citation that could otherwise be criminal within a two year follow-up period. It was determined that the Diversion Program significantly lowered recidivism rates for low-risk offenders.

**Results**

It was found that the risk of re-offense nearly doubles when offenders do not complete the Diversion Program and are instead formally charged. The recidivism rate for the Diversion Group was 15.0 percentage points, or 44.6%, lower than that of the Control Group, as can be seen in Table 1 below. It is estimated that the risk of reoffending within two years of case disposition is 80% greater for offenders that do not participate in the Diversion Program. By educating first time offenders and diverting these low-risk individuals out of the criminal justice system, the Diversion Program significantly lowers recidivism rates while also preserving limited resources that can be redirected to higher risk individuals.

Table 1. Two year recidivism outcomes for both groups

Group	Reoffended	No New Charges	Total Sample	Percent Recidivism
Control	75	148	223	33.6%
Diversion	46	201	247	18.6%



**Full Report** – Revised 1/29/2016

# An Evaluation of the Eau Claire County Pre-Charge Diversion Program as Measured by Two Year Recidivism Rates

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## Abstract

The Eau Claire County Pre-Charge Diversion Program is founded on the principle that low-risk individuals are generally self-correcting. By limiting formal intervention, the hope is to limit further involvement in the criminal justice system and potentially reduce recidivism. The aim of this quasi-experimental study is to investigate the impact of the program on recidivism by comparing offenders who successfully completed the Diversion Program in 2012-2013 to a comparable low-risk Control Group that did not receive the program but would have qualified based on their charges and past criminal history. All individuals included had cases that were processed through the Eau Claire County District Attorney's Office for charges that were appropriate for the Diversion Program. For purposes of this study, recidivism was defined as receiving a subsequent misdemeanor or felony charge or any citation that could otherwise be criminal within a two year follow-up period. It was determined that the Diversion Program significantly lowered the risk of reoffending for low-risk offenders.

## Background

The Diversion Program was created in 2012 with the purpose of reducing recidivism and preserving limited resources that research suggests are more effective and appropriate for medium and high-risk offenders. Low-risk individuals tend to be self-correcting and research has shown formal intervention can interfere with such correction and lead to increased recidivism. All individuals receiving UW-Eau Claire, Eau Claire County, or City citations for matters which could otherwise be considered criminal are eligible for the program, as long as they are first time offenders or considered low-risk based on their criminal history. The program averaged more than 250 successful participants per year from 2012-2015. When an offender is offered the program, they are first instructed to meet with the program coordinator to discuss the program and sign up for a class. If the defendant pays the program fee and all restitution upfront, and remains offense-free pending completion of the class, their charges will not be formally prosecuted. If the defendant fails to fulfill these requirements, they will be formally charged according to statutory guidelines. Another benefit to completing the program is the avoidance of the potential ramifications caused by having publicly available criminal records (see Notes section in Appendix). The program diverts limited resources to higher risk offenders and has had a significant impact since inception. Over the past four years, the program has collected more than \$25,000 in restitution for victims. In addition, the Eau Claire County District Attorney's Office has seen a significant increase in clearance rate and criminal case dispositions. In 2014, a limited study was performed on the recidivism rates for Diversion participants who received ordinance citations for possession of THC or paraphernalia. The positive results of that study led to an increased demand for this comprehensive analysis.

## Methods

The Diversion (Treatment) Group includes individuals that successfully completed the Diversion Program after being referred from the Eau Claire County District Attorney's Office. The study was limited to those that completed the program in 2012-2013 in order to ensure an equivalent follow-up period for all individuals. To ensure consistency and accurate extrapolation, the study was further limited to offenders that received charges falling into the following categories: Disorderly Conduct (including Resisting/Obstructing, Trespassing, Criminal Damage, etc.), Drug/Paraphernalia Possession and Theft. These are the main charges that comprise the program, although some offenders facing other charges are offered the program on a case-by-case basis. In order to eliminate confounding variables, a Control Group was selected by identifying all individuals that had equivalent charges processed through the ECC District Attorney's Office (PROTECT database) from 2011-2013. This group was then assigned a number via a random number generator, sorted, and individually evaluated to include only low-risk, first time offenders that would have qualified for the Diversion Program until a sufficient sample size was reached. Over half of the offenders in the Control Group were charged before the program was in place, while the others could have been accepted into the program under its current guidelines. All cases in the Control Group were prosecuted through the District

Attorney’s Office under standard protocol according to statutory guidelines, with the majority of cases resulting in only monetary penalties. All offenders in both groups had appropriate charges and little or no criminal history at the time of the incident, making them low-risk and appropriate for Diversion.

This resulted in two groups with similar charges and risk levels to use for the study and, as can be seen in the Appendix, the age, gender, and race compositions for each group is nearly identical. For purposes of this study, recidivism was defined as receiving a subsequent misdemeanor or felony charge or any citation that could otherwise be criminal within a two year follow-up period in the state of Wisconsin. The follow-up period was measured from the date of case disposition (Control Group) or Diversion class, and all cases included had a sufficient window to measure two year recidivism rates. All charges were tracked through the Eau Claire County District Attorney’s Office and the Wisconsin Court System’s Consolidated Court Automation Programs (CCAP) for each individual in the study. Non-criminal traffic convictions and charges dismissed without prejudice were not included.

## Results

It was found that the risk of re-offense nearly doubles when offenders do not complete the Diversion Program and are instead formally charged. The recidivism rate for the Diversion Group was 15.0 percentage points, or 44.6%, lower than that of the Control Group, as can be seen in Table 1 (see Appendix for further breakdown of re-offense rates by charge). After performing the Chi-Square Test for Independence and Fisher’s Exact Test for Count Data, we have strong evidence ( $p$ -value  $< 0.001$  for both tests) of a significant difference in the recidivism rates of the two groups. A sample odds ratio (OR) of 2.21 suggests the odds of reoffending within two years of disposition are approximately 121% greater for offenders if they do not complete the program. However, the accuracy and interpretability of this estimate can be improved upon by approximating the relative risk from the sample odds ratio (Lieberman, 2005; Zhang, 1998). The relative risk (RR) of reoffending for offenders that do not complete the program compared to those that do is approximately 1.80. Therefore, we estimate the risk of reoffending within two years of case disposition is 80% greater for offenders that do not complete the program. By educating first time offenders and keeping these low-risk individuals out of the criminal justice system, the Diversion Program significantly lowers recidivism rates while also preserving limited resources that can be redirected to higher risk individuals.

Table 1. Two year recidivism outcomes for both groups

Group	Reoffended	No New Charges	Total Sample	Percent Recidivism
<b>Control</b>	75	148	223	33.6%
<b>Diversion</b>	46	201	247	18.6%

## Appendix

Figure 1. Output from Chi-Square Test for Independence

```
> Diversion
      Reoffended
Group   Yes  No
Control  75 148
Diversion 46 201
> chisq.test(Diversion)

Pearson's Chi-squared test with Yates' continuity correction

data:  Diversion
X-squared = 13.0356, df = 1, p-value = 0.0003056
```

Figure 2. Output from Fisher's Exact Test for Count Data

```
> Diversion
      Reoffended
Group   Yes  No
Control  75 148
Diversion 46 201
> fisher.test(Diversion, alternative="greater", conf.level=0.95)

Fisher's Exact Test for Count Data

data:  Diversion
p-value = 0.0001488
alternative hypothesis: true odds ratio is greater than 1
95 percent confidence interval:
 1.517814      Inf
sample estimates:
odds ratio
 2.210513
```

Figure 3. Relative Risk Calculation

```
> Pc<-0.336 #Probability of Reoffending in Control Group = 75/(75+148)
> Pd<-0.186#Probability of Reoffending in Diversion Group = 46/(46+201)
> OR<-2.21
> RR<-OR/((1-Pd)+(Pd*OR))
> RR
[1] 1.803993
```

Figure 4. Re-offense Rates by Charge Category\*

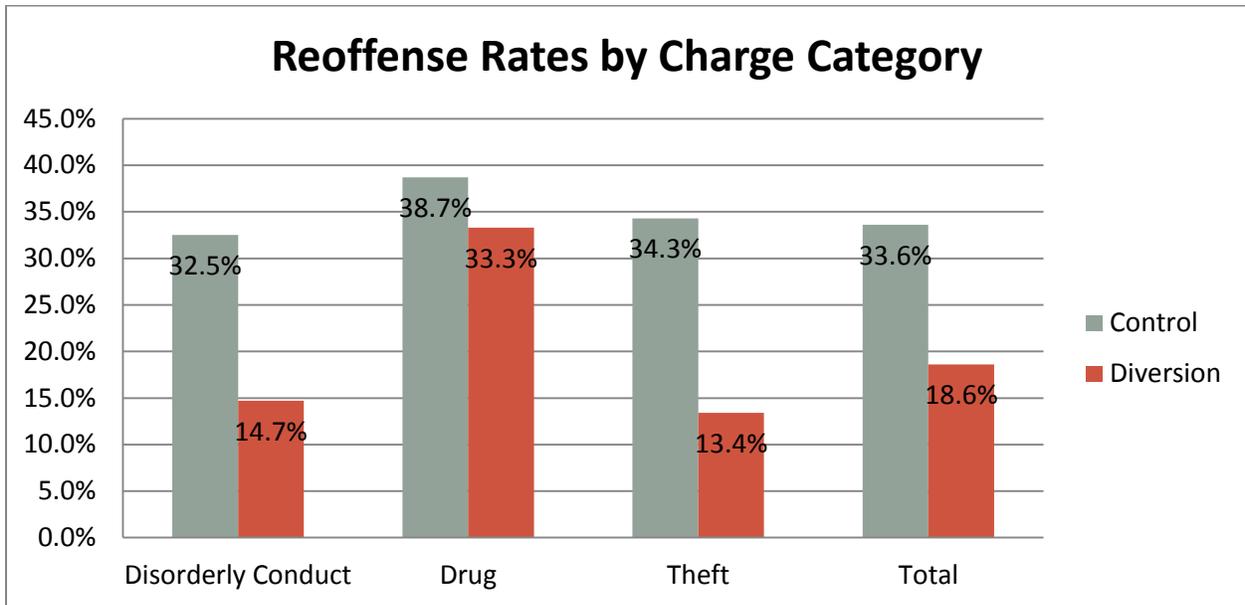


Figure 5. Gender Comparison

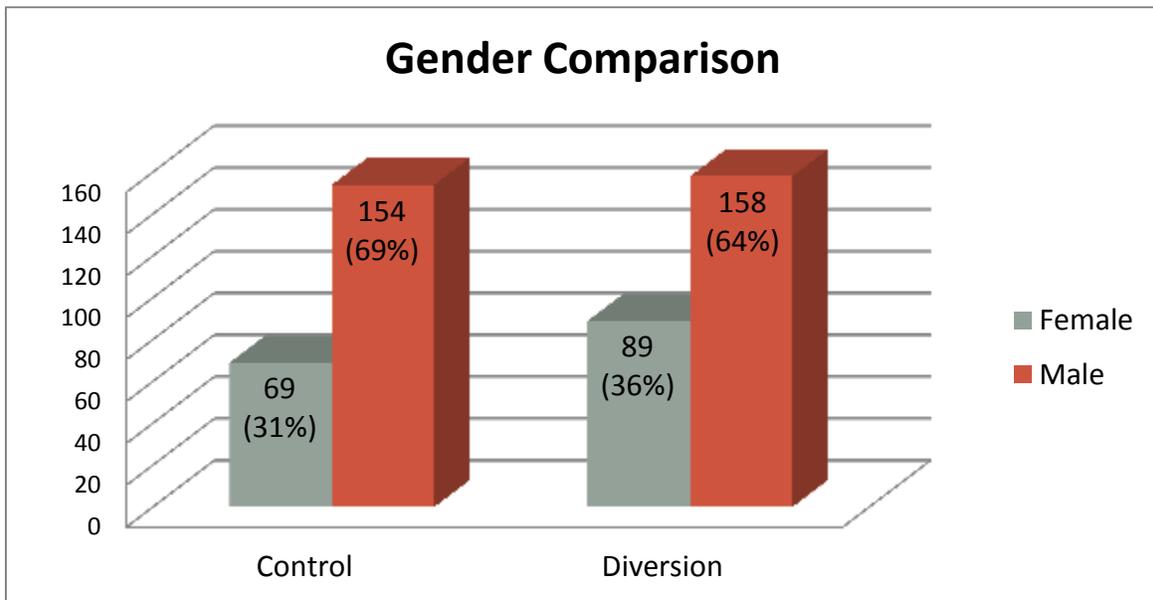


Figure 6. Output from Chi-Square Test for Independence – Gender Comparison

```
> Gender
      Reoffended
Group  Control  Diversion
Male   154      158
Female 69       89
> chisq.test(Gender)

Pearson's Chi-squared test with Yates' continuity correction

data:  Gender
X-squared = 1.1424, df = 1, p-value = 0.2851
```

Table 2. Age Comparison

Group	Count	Age at Incident			
		Minimum	Mean	Median	Maximum
Control	223	17.0	26.0	22.0	73.0
Diversion	247	17.0	24.7	21.0	65.0

Figure 7. Output from Welch Two Sample t-test – Age Comparison

```
> t.test(ControlAge, DiversionAge, paired=FALSE)

Welch Two Sample t-test

data:  ControlAge and DiversionAge
t = 1.3477, df = 441.732, p-value = 0.1784
alternative hypothesis: true difference in means is not equal to 0
95 percent confidence interval:
 -0.589804  3.163831
sample estimates:
mean of x mean of y
 25.99552  24.70850
```

Figure 8. Output from Chi-Square Test for Independence – Race Comparison\*

```
> Race
      Race
Group  White Non-White
Control 191      30
Diversion 221      25
> chisq.test(Race)

Pearson's Chi-squared test with Yates' continuity correction

data:  Race
X-squared = 0.9967, df = 1, p-value = 0.3181
```

\*Race information was missing for 3 participants in study

## Notes

In Wisconsin, public records of the Wisconsin Circuit Court are available online through the Wisconsin Court System's Consolidated Court Automation Programs (CCAP). Once a case is made available online, it has the potential to follow an individual their whole life. The social stigmas that come with having a case available on CCAP often prevent individuals from obtaining jobs, scholarships, housing, etc. When a defendant successfully completes the Diversion Program, their case is not prosecuted and they remain off of CCAP.

\*Although the program produced substantial results for all charge categories (Figure 4), the largest reduction in re-offense rate was among offenders facing charges falling under the categories of Disorderly Conduct and Theft. Two of the charge categories had small sample sizes, so further analysis should be conducted to determine statistical significance for specific charges. Offenders in the Diversion group were categorized by their most serious charge while offenders in the Control group were limited to only those in which the offender was found guilty. Therefore, it is possible that offenders could have fallen into multiple categories at time of arrest.

## References

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