Executive Summary - Revised 12/29/2014

An Evaluation of the Eau Claire County Pre-Charge Diversion Program as Measured by Recidivism Rates for Individuals Receiving Adult Ordinance Citations for Possession of THC or Paraphernalia

Sean Callister, MS
Data Analyst, Eau Claire County

Angie Braaten
Diversion Program Coordinator, Eau Claire County

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 judicial system and potentially reduce recidivism. The aim of this quasi-experimental study is to investigate the impact of the program on recidivism by comparing 2012 Diversion participants to a comparable low-risk control group from 2011 that did not receive the program but would have qualified based on their past criminal record and low-risk classification. All individuals included for the study received an adult ordinance citation for Possession of THC or Paraphernalia. 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 with no criminal history.

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 18.3 percentage points, or 46.6%, lower than that of the Control group, as can be seen in Table 1. It is estimated that the risk of reoffending is 84% greater for offenders that do not complete the 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

<table>
<thead>
<tr>
<th>Group</th>
<th>Reoffended</th>
<th>No New Charges</th>
<th>Total Sample</th>
<th>Percent Recidivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>22</td>
<td>34</td>
<td>56</td>
<td>39.3%</td>
</tr>
<tr>
<td>Diversion</td>
<td>13</td>
<td>49</td>
<td>62</td>
<td>21.0%</td>
</tr>
</tbody>
</table>
An Evaluation of the Eau Claire County Pre-Charge Diversion Program as Measured by Recidivism Rates for Individuals Receiving Adult Ordinance Citations for Possession of THC or Paraphernalia

Sean Callister, MS
Data Analyst, Eau Claire County

Angie Braaten
Diversion Program Coordinator, Eau Claire County

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 judicial system and potentially reduce recidivism. The aim of this study is to investigate the impact of the program on recidivism by comparing 2012 Diversion participants to a comparable low-risk control group from 2011 that did not receive the program but would have qualified based on their past criminal record and low-risk classification. All individuals included for the study received an adult ordinance citation for Possession of THC or Paraphernalia. 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 with no prior criminal history.

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. Therefore,
the first step of this retrospective study was to identify equivalent low-risk treatment and control groups. For feasibility purposes and time constraints, this study was limited to offenders who received an ordinance citation for Possession of THC or Paraphernalia.

Methods
The treatment group includes all individuals that successfully completed the Diversion Program after receiving an ordinance violation for Possession of THC or Paraphernalia from the UW-Eau Claire Police Department. The study was limited to those that completed the program in 2012 in order to ensure a consistent follow-up period for all individuals. In order to eliminate confounding variables, a control group was selected by identifying all individuals that received an equivalent citation from the Eau Claire Police Department in 2011. This group was further narrowed down to include only those that would have qualified for the Diversion Program, had it been in place. We now had two groups of first-time offenders facing equivalent charges to use for the study. The next step was to measure recidivism, which for purposes of this study 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. All charges were tracked through the Wisconsin Circuit Court System (CCAP*) for each individual in the study. Criminal Traffic charges 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 18.3 percentage points, or 46.6%, lower than that of the Control group, as can be seen in Table 1. After performing Fisher’s Exact Test for Count Data, we have strong evidence (p-value = 0.024) of a significant difference in the recidivism rates of the two groups. A sample odds ratio (OR) of 2.42 suggests the odds of reoffending within one year of disposition are approximately 142% 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 (Liberman, 2005; Zhang, 1998). The relative risk (RR) of reoffending for offenders that do not complete the program compared to those that do is approximately 1.84. Therefore, we estimate the risk of reoffending within two years of case disposition is 84% 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>
<thead>
<tr>
<th>Group</th>
<th>Reoffended</th>
<th>No New Charges</th>
<th>Percent Recidivism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>22</td>
<td>34</td>
<td>39.3%</td>
</tr>
<tr>
<td>Diversion</td>
<td>13</td>
<td>49</td>
<td>21.0%</td>
</tr>
</tbody>
</table>

Table 1. Two year recidivism outcomes for both groups
Appendix

Figure 1. Output from Fisher’s Exact Test for Count Data

```R
> Diversion
    Reoffended
  Group   Yes No
  Control 22 34
  Diversion 13 49
> fisher.test(Diversion, alternative="greater", conf.level=0.90)

Fisher's Exact Test for Count Data

data:  Diversion
p-value = 0.02404
alternative hypothesis: true odds ratio is greater than 1
90 percent confidence interval:
  1.320643    Inf
sample estimates:
  odds ratio
          2.420091
```

Figure 2. Relative Risk Calculation

```R
> Pc<-0.393 #Probability of Reoffending in Control Group = 22/(22+34)
> Pd<-0.210 #Probability of Reoffending in Diversion Group = 13/(13+49)
> OR<-2.42
> RR<-OR/((1-Pd)+(Pd*OR))
> RR
[1] 1.86412
```

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 CCAP.

References

