EXECUTIVE SUMMARY

Intoxicated Driver Program-2:

Analysis of Arrests, IDP Compliance and 3 Year Recidivism

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Introduction

This report summarizes our analyses of Wisconsin arrests and convictions for operating while intoxicated (OWI), conducted in support of Wisconsin's Intoxicated Driver Program (IDP). The work builds on a prior assessment of five-year recidivism of arrested drivers (Moberg and Kuo, 2017). The current report provides further analyses of the existing data set, focusing on arrests from 2009-2011 and three-year recidivism. Specific analytic topics were posed in advance and a section of the report addresses each of those topics.

Method: The de-identified data set includes all arrests for operating while intoxicated (OWI) offenses from 2004 through 2014, with linkage to data on convictions; symptoms, findings, and recommendations from the Wisconsin Assessment of Impaired Driver (WAID); and to data on subsequent compliance with the Driver Safety Plan. Statistical analysis ranged from simple descriptive summarization (cross-tabulations, means, percentages) to complex multi-variate statistical modeling.

Limitations: As an analysis of an existing set of administrative data, no randomization to the IDP program was possible and only limited statistical controls could be used. Thus, limitations of self-selection bias in IDP participation, limited or missing data, reliance on a pre-extracted data file, and data linkage difficulties are present.

Findings

Topic 1: Recidivism Patterns, Conviction and Intoxicated Driver Program Participation Among Wisconsin OWI Arrestees

A. What is the rate of arrest, conviction and recidivism for drivers in Wisconsin for OWI offenses?

- OWI arrests decreased steadily from 47,972 in 2004 to 31,515 in 2014, with corresponding decrease in unique individuals arrested and in convictions. Simultaneously, all cause injury crashes and fatal crashes decreased, as did the rate and number of alcohol-related crash injuries and fatalities.
- Overall *Recidivism* (defined as re-arrested for OWI subsequent to "index[1]" arrest) increases over time subsequent to an index arrest:
    - 2004-2008 Cohort: N= 175,446; **5 year re-arrest rate= 24.0%**
    - 2009-2011 Cohort: N= 103,074; **3 year re-arrest rate= 14.6%**
    - 2009-2012 Cohort: N= 130,338, **1 year re-arrest rate= 6.8%**

B. Does participation in the Intoxicated Driver Program by completing an assessment and complying with treatment or education recommendations make a difference in recidivism rates?

- Re-arrest rates were consistently much lower among the convicted OWI arrestees who participated in the IDP and complied with their driver safety plan (DSP) compared to non-participants.
- The association of IDP participation with reduced re-arrest rates was consistent across sub-groups of OWI offenders, including age group, gender, race/ethnicity, number of prior offenses, BAC-level at arrest, conviction and severity of substance use disorder.

[1] An index arrest is an individual's first OWI arrest during the specified time period.

Re-Arrest by Time Following Index Arrest, IDP Participants and Non-Participants			
	Participated in IDP (WAID) and Compliant with Driver Safety Plan (DSP)*	Did not participate in IDP (no WAID Assessment)*	Total All Arrestees
Re-Arrest for OWI within One Year	**2%**	**16%**	**7%**
Re-Arrest for OWI within Three Years	**9%**	**25%**	**15%**
Re-Arrest for OWI within Five Years	**19%**	**34%**	**24%**

*The 8% who participated in WAID but were non-complaint with their DSP had similar outcomes to non-participants.

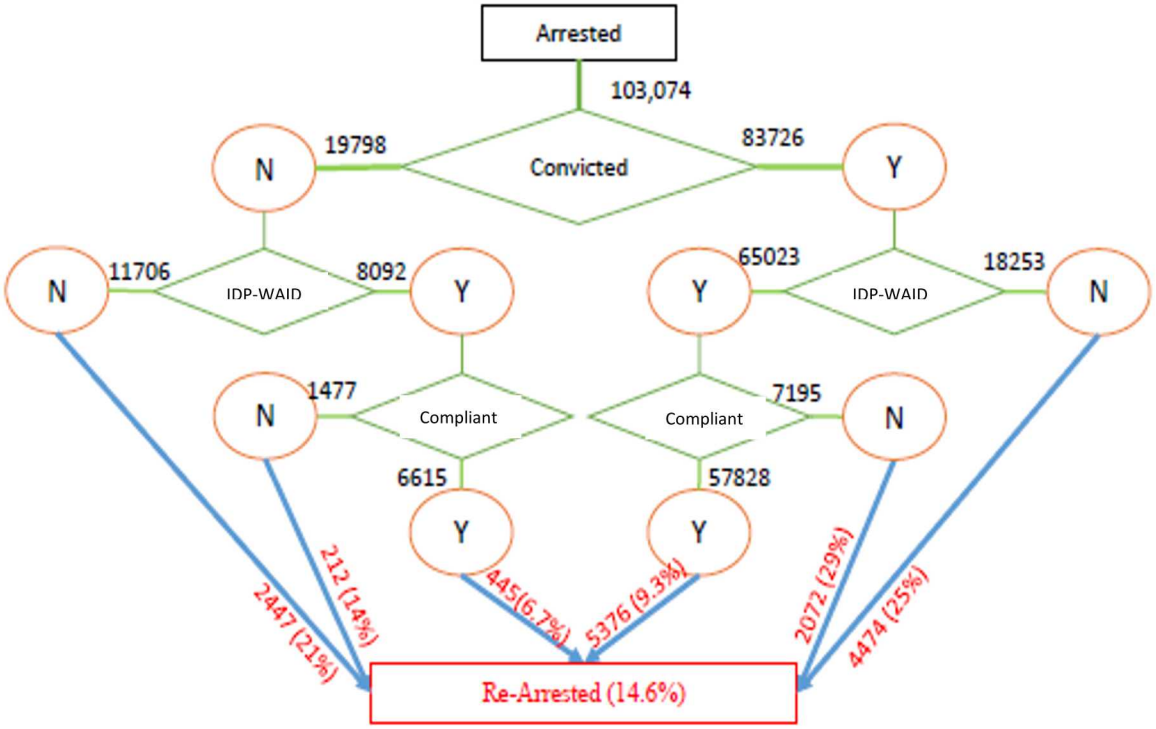
- Despite required participation, over one in five (22%) convicted drivers in the 2009-2011 cohort of arrestees did not present for an assessment; an additional 8% did not comply with their DSP.
- Among those *not convicted (19% of the 2009-2011 cohort)*, about one-third participated and complied with the IDP program. For each recidivism interval (12, 36 and 60 months), the re-arrest rate for IDP participants was lower than the re-arrest rate for non-convicted drivers who did not participate.

Topic 2: Predictors of Conviction, Compliance and Re-Arrest 3 Years after Index Arrest

A. What variables are associated with conviction, with participation and compliance in the Intoxicated Driver Program (IDP), and with re-arrest for OWI?

- Half of all arrested drivers were 29 or younger. This group had the highest conviction rate and highest re-arrest rate.
- Males represented 75% of all index arrests, were less likely than females to comply with IDP requirements and were slightly more likely to be re-arrested within 3 years.
- White drivers represented 80% of all arrests and had similar rates of conviction to other races/ethnicities.
- White drivers were much more likely to participate in IDP and comply with requirements (75%) than Black, American Indian or Hispanic drivers (46%). White drivers also had a lower re-arrest rate.
- 37% of the index arrestees had prior arrests for OWI. The more priors, the less likely a driver was to be convicted of an OWI offense and the less likely to participate/comply with the IDP.
- The three year re-arrest rate was similar (14-15%) for drivers with 0-3 priors. Drivers with 4 or more priors had the lowest re-arrest rate (9%).
- Those with priors were less likely to comply with the IDP, but if they do, their three year re-arrest rate was low (8%).
- The median BAC was nearly twice the legal limit (median= 0.15).
- African American's BACs were lower on average than other racial/ethnic groups, both in the convicted and not convicted groups.
- Participation and compliance with IDP was highest among those assessed as "irresponsible use." They also had the lowest 3 year re-arrest rate (8%).

Transition to Recidivism Within 3 years of Index Arrest (2009-2011 Cohort)



Topic 3: Repeat Offenders

What can we conclude about repeat offenders and extreme cases of multiple OWI recidivism (e.g., those with 4 or more arrests)?

- Among all arrests of Wisconsin drivers for OWI from 2004 to 2014, 42% had at least one prior OWI offense on their record.
- Among our 2009-2012 cohort, 37% of the index arrestees had at least one prior OWI.
- In 2015, 15.9% of Wisconsin drivers, or almost 1 in every 6 drivers, have at least one OWI on their driver record.
- In the most recent year (2014) of our data set, 1,246 arrestees (5% of 26,468 OWI arrestees) had 4 or more priors.
- Conviction rates are lower with more priors.

Re-Arrest at Three Years by Prior OWI Offenses, IDP Participants and Non-Participants			
	Participated in IDP (WAID) and Compliant with Driver Safety Plan (DSP)*	Did not participate in IDP (no WAID Assessment)	Total All Convicted Arrestees
No Priors	**10%**	**24%**	**14%**
1 Prior	**9%**	**30%**	**15%**
2-3 Priors	**6%**	**24%**	**14%**
4 or more Priors	**3%**	**14%**	**9%**

*The 8% who participated in WAID but were non-complaint with their DSP had similar outcomes to non-participants.

- With IDP participation and compliance, recidivism rate is lower regardless of number of priors.
- Older, male, American Indian and White arrestees are more likely to have priors than others.
- Arrests with an associated Injury/death charge do *not* increase proportionately with number of priors. Most (58%) OWI arrests involving an injury or death charge occur among first offenders.

Topic 4: County-level Variation in OWI Processes

How do counties vary on key variables in the analysis? (Results based on 2009-2011 cohort of arrests; see details in full report, Table 4.1)

- Annual OWI arrest rates, expressed as OWI arrests per 1000 adults over age 17, ranged from 5.1 to 23 by county. The statewide rate was 7.9 OWI arrests per 1,000 adult population.
- Conviction rates (81% overall) varied by county from 56% to 89% of OWI arrests.
- Participation in IDP among convicted arrestees (71% IDP participation overall) ranged from 44% to 91% by county.
- Index arrestees with any prior offense (37% overall in the 2009-2012 cohort) varied from 29% to 50% by county.
- Three-year re-arrest rates (15% overall) varied from 10% to 22% of index arrests by county.

Topic 5: Clustering of OWI Offenders

Are there distinct subgroups of OWI offenders with different estimated/predicted likelihood of conviction, IDP participation, and re-offending within three years of an index offense?

- *Conviction* was more likely with:
  - Higher BAC level,
  - Lower number of priors
  - Younger age
  - Minority race/ethnicity.

- *IDP participation* is the best predictor of reduced re-arrest, dominating all other variables.
    - IDP participation decreases with the number of priors
    - IDP participation is lower among minority group members.
- Variation in *re-arrest* among subgroups of convicted offenders ranged from 9% to 30%.
    - The group with the lowest re-arrest rate (9%) was White/Asian, age 30+, who participated in the IDP.
    - The group with the highest re-arrest rate (30%) was White/Asian, under age 30, who did not participate in the IDP.
    - IDP participation was the best predictor of re-arrest.
    - Regardless of IDP participation, those under 30 had higher re-arrest rates than those 30 or older
    - Persons of non-White race/ethnicity had significantly higher re-arrest rates among IDP participants, but lower re-arrest rates among non-participants. This may be due to a high rate of non-compliance (18%) with the DSP among those minorities who did receive assessments, relative to 9% among White/Asian offenders.
    - Those with WAID finding level higher than irresponsible use (also evidenced by a treatment recommendation), **and** who were under 30, had higher re-arrest rates.
    - Among those 30 or over, severity of finding was not an important predictor of re-arrest.

Topic 6: Program and Policy Implications

The evidence continues to be strong that participation in the IDP is a critical factor in reducing recidivism, and that prevention of first offense OWI should be a major goal. The data also show that even drivers with multiple prior OWIs benefit from IDP participation.

- **Recidivism is considerably lower among those arrestees who participate in the IDP** assessment and subsequently comply with their driver safety plan (DSP). Strategies to improve participation and compliance with the IDP would likely be productive, even though this finding undoubtedly also reflects some degree of self-selection bias. Tested strategies include follow-up with OWI offenders who fail to schedule their IDP assessments, and increased use of motivational interviewing (see DHS-DCTS, 2016). Other possible (but untested) strategies to enhance compliance could include:
    - further court intervention with those who fail to participate and comply,
    - higher penalties, including perhaps a misdemeanor conviction for first offense, upon failure to participate, and
    - reduced initial penalties and fees to remove financial barriers to IDP participation (while reserving higher penalties for those who fail to follow through).
- Any policy changes should consider that to improve overall population safety in a significant manner, **a focus on preventing or deterring first offenses** is likely to have more impact than a focus on those with four, five or more offenses (as much recent legislation has done).
    - An individual with a history of even one OWI arrest is 7 times more likely to be arrested in a given year than an individual who has never been arrested for OWI; first OWI offenders are much more similar to those with prior offenses than to those

with no priors in their risk level (Rauch et al., 2010).
    - Among those arrested for OWI in Wisconsin, the majority of injury and death crash charges are of those with first offense OWIs.
    - Fourth or higher offenders, on whom much legislative effort has focused, account for less than 6% of the 670,200 drivers with a record of an OWI offense in the state. They have lower conviction rates, a similar rate of involvement in injury or death crashes, and with participation in IDP lower re-arrest rate than first offenders.

  Along with prevention of first offenses, a **goal should be to assure IDP participation** for multiple offenders, most of whom are likely substance dependent and require treatment.

- **Preventive interventions** should target young white males. Native Americans should also be targeted for recidivism prevention. Additional strategies to reduce overall alcohol consumption (such as increased taxation of alcohol, reduced outlet density, electronic screening and brief intervention, public education and awareness campaigns), server liability and host training, and policies which reduce the risk of driving after drinking via location of establishments and transportation options all have evidence of success (Guide to Community Preventive Services; Scott, 2013; UWPHI, 2017; Voas and Lacey, 2011). Many of these interventions would need to involve alcohol servers and licensees in strategies to reduce overserving and impaired driving. Increased penalties for individual arrestees are not effective beyond some minimal threshold (Scott, 2013).

- There are racial/ethnic **disparities in arrests, convictions and participation in the IDP program.** OWI arrests with low BAC levels are overly concentrated among African Americans, and the average BAC at which African Americans are convicted is lower (0.130 vs 0.154) than that of White arrestees. Non-White arrestees are much less likely to participate in the IDP, and if they did participate, less likely to comply with recommendations. Strategies are needed to improve the participation of non-White populations at all stages of the IDP. The cost of IDP participation, and lack of cultural specificity, may be barriers to participation and compliance.

- **County differences were pronounced** in rates of conviction, IDP participation and recidivism. County level enforcement activity, court procedures, and treatment systems (not assessed in this analysis) vary considerably and may contribute to these observed differences. Variation on some of these factors should be addressed, particularly in low IDP participation counties with higher recidivism rates. Concurrently, a best practices review in high performing counties could provide ideas for system improvement in other sites.

- Better data on the **role of drugs other than alcohol** in impaired driving is needed. Law enforcement officers systematically document whether alcohol was involved in crashes, but not other drugs. Drug toxicology is rarely available for OWI arrests, and once a BAC level is determined further testing for other drugs is rare. Based on the available data, we are uncertain whether arrests with missing or zero BAC levels reflected impairment by drugs other than alcohol. Given the sparse but alarming data on drug-impaired driving (NIDA, 2016), and the inclusion of other drugs under the same statutes and processes as alcohol impairment, more thorough assessment of blood tests, additional data collection, and complete documentation would be useful.

Regardless of its limitations, the analysis presented in this series of reports provides an in-depth source of data which we hope will inform future policy deliberations to address the declining but still very prevalent incidence of operating while impaired in Wisconsin. For offenders who comply with the IDP system, recidivism rates are lower—even among those not convicted for the index offense, and those who have multiple prior offenses. Perhaps the critical issue is how to increase rates of compliance and reduce disparities in benefit from the IDP services. This is likely best accomplished both by improving and standardizing the community systems in place and by working to further motivate and incentivize offenders to participate in beneficial services.

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The full report is available at:

https://uwmadison.box.com/v/IntoxDriverProgramMarch2019

Or by email request to: dpmoberg@wisc.edu