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The Feasibility of Voluntary Ignition Interlocks As a Prevention Strategy for Young Drivers

Background

Motor vehicle crashes are the leading cause of death for all 15- to 20-year-olds. In 2014, there were 1,717 young drivers (15 to 20 years old) who died in motor vehicle crashes.

In 2014, even though it was illegal for drivers under age 21 to operate a vehicle with any detectable amount of alcohol in their system in every State in the United States, 26 percent of the young drivers who were killed in crashes had a blood alcohol concentration (BAC) of .01 grams per deciliter (g/dL) or higher; 81 percent of those young drivers had a BAC of .08 or higher – the illegal *per se* limit for adults age 21 and older in every State in the United States.

Ignition interlock devices have been used for more than 25 years as a sanction, typically for DWI offenders. The devices are effective in decreasing a driver's drinking and driving trips while in use on a vehicle. As of March 2017, 28 States and the District of Columbia require interlocks on the vehicles of all offenders, including first-time offenders.

Ignition interlocks, in effect, provide protection for drivers who might otherwise show poor judgment about driving after drinking. They prevent the operation of a vehicle if drivers exceed a set breath alcohol concentration (BrAC) level of alcohol in their system. Parents may be interested in ignition interlocks for their young drivers to prevent driving after drinking any amount of alcohol.

Project Objective

This project examined the feasibility of using ignition interlocks as a preventive measure for young drivers. This is a unique approach to using the ignition interlock, which is typically viewed as a measure for punishing drivers convicted of impaired driving. The National Highway Traffic Safety Administration (NHTSA) contracted with the Pacific Institute for Research and Evaluation (PIRE) to conduct the study. This project examined the *possible use* of ignition interlocks in this manner — ignition interlocks were not actually installed on young drivers' vehicles for this study.

Using Ignition Interlocks as a Preventive Strategy

One challenge to using ignition interlocks as a prevention measure is the perception that the young driver was arrested for

DWI, and that the device is being used as a penalty. Therefore, social acceptability around such an approach may need to be met. To address this concern, it may be necessary to demonstrate the benefits of use. For example, parents who are reluctant to allow their teenagers or young adult children to drive, may do so with the added "peace of mind" provided by an ignition interlock. Similarly, financial incentives for an ignition interlock (such as through a grant provided by a safety advocacy group) might encourage families to participate.

If ignition interlock use increases within the prevention arena, it is possible that the negative connotation of ignition interlock installation would diminish.

Methods

Researchers spoke with a select number of ignition interlock providers, insurance companies, and members of community groups. In addition, they held informal meetings with a select number of parents and young drivers (separately) to obtain input about a prevention-based ignition interlock program for young drivers. The researchers also examined interlock recorder performance data from a sample of voluntary and involuntary interlock users. Further, they described the results of an independently conducted internet survey with parents of voluntary interlock users and voluntary users themselves.

Results

Discussions With Ignition Interlock Companies

The discussions with ignition interlock company representatives revealed that four companies had already marketed voluntary teen ignition interlock programs to high schools. However, the programs were not successful because the potential users (parents and young drivers) were reluctant. Some parents did not see their young drivers as being at risk of driving while impaired, and others viewed the device as an inconvenience. Young drivers indicated that using the ignition interlock would be embarrassing. The successful marketing of interlocks as a preventive technology requires de-stigmatizing its use by emphasizing its safety aspects, and de-emphasizing its use as a punishment for DUI. Some companies suggested a pilot or demonstration project to show the feasibility and benefits. All of the ignition interlock companies were open to offering some level of discount to pilot test a young driver program.

Discussions With Insurance Companies

A dominant theme in the discussions with insurance company representatives was the need to have actuarial justification for providing discounts in insurance premiums for young drivers using ignition interlocks. This means that information on the extent to which ignition interlocks lower crash risk, deter impaired driving, and increase safe driving behavior among young drivers would need to be shared. Further, before offering discount programs, insurance companies would have to file and gain approval from State agencies that regulate insurance.

Discussions With Community Groups

Representatives from community groups unanimously indicated that community support for a voluntary young driver ignition interlock program would be necessary for success and felt that they could play a role. One theme echoed by this group was the need to “rebrand” the interlock as a safety device for young drivers to keep them alive, versus the current view that it is only for criminal DUI offenders.

Discussions With Parents of Young Drivers

Discussions with parents primarily related to young driver safety and the practicalities of using ignition interlocks. Parents did not consider a breath test to start the ignition interlock device as a problem. However, both parents and youth thought some young drivers would be able to circumvent the device.

The use of BrAC retests (to ensure that the same person who initially provided a sample into the device is the same as the person driving, or to ensure that drivers do not consume alcohol after they begin to operate the vehicle) received mixed reactions. Some parents did not express a concern, whereas others believed that the device would be a distraction for novice drivers.

Parents were not overly concerned about embarrassment or trust issues with their children, but worried about young drivers circumventing the device and its cost. They were also concerned that young drivers might use other drugs to avoid detection of impairment by the device. Some parents suggested that young drivers might question the installation of an interlock, but indicated that their child’s safety was of primary importance. Many felt there was a need to change the social norm regarding attitudes about ignition interlocks.

Discussions With Young Drivers

Some young drivers had strong feelings that having an ignition interlock, even though they had not been caught drinking and driving, was unfair. They, too, noted that young drivers might attempt to circumvent the device, and substitute drug use for alcohol use. Most of the young drivers resisted the idea of using ignition interlocks, and indicated they would need a significant incentive to adopt one without parental coercion.

Analysis of Survey Data of Ignition Interlock Users

PIRE independently conducted and analyzed a web survey with data from ignition interlock customers who were voluntarily using the device (i.e., not ordered to do so). Some survey respondents were parents who had the device installed for their children. One surprising response was that most parents did not access the monthly ignition interlock data reports that include the number of times the device registered a positive BrAC. Nonetheless, most of those surveyed believed that the device is an effective strategy in reducing drinking, and drinking and driving in particular.

Ignition Interlock Recorder Data Analysis

Archival ignition interlock data recorder results were analyzed comparing voluntary and involuntary users (court or DMV ordered). Voluntary users were more likely to have higher startup BrAC tests than involuntary users. This is likely related to the differential risk of further sanctioning.

Summary

It is not unexpected for drivers unfamiliar with ignition interlocks as a means of prevention to have questions. In fact, the parents and young drivers participating in this study had not previously heard of the concept. However, some people are already using ignition interlocks on their vehicles as a preventive strategy – without a court or administrative sanction.

Although the study was unable to fully explore specific incentives, thresholds of acceptance for young driver use, or ways to de-stigmatize a prevention-based ignition interlock program for teens, it did begin the discussion.

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