Remote Alcohol Monitor Technology Deemed Reliable

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Daubert Admissibility of the SCRAM Remote Transdermal Alcohol-Monitoring Device Upheld by South Dakota Supreme Court

In *State v. Lemler*, 774 N.W.2d 272 (S.D. 2009), the Supreme Court of the State of South Dakota considered three matters: whether the South Dakota Sixth Judicial Circuit Court erred in allowing the testimony of the state's expert, the admissibility of the alcohol-monitoring device data under the standard established by *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and the sufficiency of the evidence to support a probation violation.

Facts of the Case

Neil J. Lemler was arrested for driving under the influence of alcohol in December 2005. In April 2006, he pleaded guilty and received a sentence of two years in the state penitentiary as a third-time offender. Execution of his sentence was suspended, and he was placed on probation for two years. One of the conditions of his probation was that he was not to consume alcoholic beverages. To ensure compliance with this condition, on January 16, 2007, he was fitted with a Secure Continuous Remote Alcohol Monitor (SCRAM) ankle bracelet produced by Alcohol Monitoring Systems, Inc. (AMS). He also signed a SCRAM participation agreement prohibiting the use of any alcohol-containing products, whether consumable or not. On July 10 to 12, 2007, the SCRAM device detected three drinking events.

The state filed a petition to revoke Mr. Lemler's probation as a result of the data. He filed an affidavit alleging that interferants (substances other than consumed alcohol that could cause the SCRAM to give a positive reading) used in his occupation as a farmer must have caused the results, and he denied that he had consumed any alcohol. He specifically stated that he had been using agricultural chemicals and that he had cleaned out grain bins containing fermented grain on the dates in question. He also reported that he had sores caused by the SCRAM ankle bracelet and that these may also have contributed to the readings.

Jeffrey Hawthorne was called as an expert witness by the state to explain the AMS analysis procedures and to refute Mr. Lemler's arguments. Mr. Hawthorne is the co-inventor of the SCRAM ankle bracelet and the Chief Technology Officer at AMS. He testified that SCRAM technology distinguishes interferants from alcohol consumption, that Mr. Lemler's agricultural chemicals had been specifically ruled out as a cause of SCRAM reporting, and that inhalation of fermented grain vapor could not produce blood alcohol levels detectable by the SCRAM's transdermal monitoring system. Mr. Hawthorne also stated that the sore on Mr. Lemler's leg would not have influenced SCRAM readings.

Mr. Lemler's expert witness was Dr. Michael Hlastala, an expert in alcohol physiology and pharmacology and SCRAM technology, who testified that interferants could create a SCRAM reading similar to that of ingested alcohol. However, he agreed that, in principle, the SCRAM can be useful for its intended purpose of monitoring alcohol consumption. Since probation violations require only that the court be reasonably satisfied that a violation occurred, Dr. Hlastala confirmed that the SCRAM reached the level of reliability required in this case.

Over Mr. Lemler's objections, the circuit court recognized Mr. Hawthorne as an expert in transdermal alcohol detection and stated that his opinions met the *Daubert* standard for reliability of scientific evidence. In addition, the circuit court determined that the SCRAM ankle bracelet met the *Daubert* standards and concluded that Mr. Lemler violated a condition of his probation. On appeal, he challenged the qualifications of Mr. Hawthorne, the admissibility of the SCRAM data under *Daubert*, and the sufficiency of the evidence to support a probation violation. The Supreme Court of South Dakota affirmed the circuit court's decision.

Ruling and Reasoning

Mr. Lemler made several arguments in his appeal to the state supreme court. He first argued that Mr.

Hawthorne lacked the qualifications necessary to testify as an expert witness on transdermal alcohol detection. In addition, Mr. Lemler contended that because of Mr. Hawthorne's financial interest in AMS he cannot claim expert status and also that having previously testified in numerous cases does not automatically qualify him to be an expert witness. The court believed that, although prior acceptance as an expert and financial interest in the company performing the tests are factors to consider, neither is dispositive. Instead, the circuit court relied on several factors: Mr. Hawthorne's bachelor's degree in electrical engineering, his development and design work with handheld breathalyzers with fuel cell technology beginning in 1986, his transdermal alcohol monitoring research since 1989, and his co-invention of the SCRAM in 1990. Mr. Hawthorne also had co-published an article that was published in a peer-reviewed journal in 2006, and he had qualified as an expert and testified on 48 prior occasions regarding transdermal alcohol testing. In this case, the court reasoned that, since there was evidence that Mr. Hawthorne had expert qualifications and Mr. Lemler had not established that the circuit court proceeded on erroneous standards, the circuit court did not abuse its discretion in qualifying Hawthorne as an expert witness.

Mr. Lemler's second argument concerned whether the SCRAM data met the *Daubert* standard. South Dakota courts determine the admissibility of scientific evidence in accordance with *Daubert v. Merrill Dow Pharmaceuticals*, *Inc*. He did not dispute the relevancy inquiry, only the evidentiary reliability, arguing that variables may affect the fuel cell methodology employed in the SCRAM system. Under the *Daubert* rules of evidence, four factors guide the court's consideration: testing of the hypothesis or technique, peer review of the hypothesis or technique, the known or potential error rate and standards of maintenance for the technique, and the degree of acceptance within a relevant scientific community.

Ultimately, Mr. Lemler argued that, although Mr. Hawthorne's conclusions may have been drawn from the accepted scientific process, they could still be erroneous. The court acknowledged that although variables could affect the outcome or conclusion, the *Daubert* standard does not require scientific certainty. Furthermore the *Daubert* requirements of admissibility were met, because the underlying scientific process was widely accepted, the theories and techniques in question either have been or could be tested, the process has been subjected to some review and publication, and the potential error rates (under the evidence presented) are lower than those of some other accepted forms of measuring alcohol consumption. The court further delineated that a scientific opinion may be admitted under *Daubert* despite the existence of potential variables affecting the scientific conclusion. The court concluded that, as the trial court's admissibility of SCRAM expert witness opinion testimony was not an abuse of discretion, the trial court's conclusion that Mr. Lemler had violated his probation did not constitute reversible error.

Discussion

Court-ordered sobriety monitoring of convicted substance abusers is not a novel practice in the U.S. criminal justice system. However, the *Lemler* decision marks the nation's first appellate decision on the use of SCRAMs as a reliable way to monitor criminal offenders for alcohol consumption. Since these devices have been used in 48 states to monitor compliance with sobriety in over 120,000 offenders, this ruling could have far-reaching implications. Establishing judicial precedent and meeting the standards established by the courts under the most rigorous evidentiary standard is necessary for this type of remote alcohol monitoring to be viewed as a valid, reliable, and therefore practical, technology for the criminal justice system. The *Lemler* decision may result in more widespread use of SCRAMs in the justice system, as it has now gained acceptance at the appellate level.

Mr. Lemler asserted that the device and interpretation of its data could not be viewed as discriminating reliably between alcohol consumed by the wearer of the ankle bracelet and environmental exposure to interferants (products containing alcohol). The ruling mentioned that while there are potentials for error with the SCRAM system, the technology did not have to be perfect to be acknowledged as reliable. The *Lemler* conclusion draws on the precedent of *State v. Loftus*, 573 N.W.2d 167 (S.D. 1997) (citing *Daubert*, p 173), finding that the subject of scientific testimony need not be known to a certainty. While acknowledging the possibility of error by the SCRAM system, this jurisdiction opined that the chance of error in differentiating actual consumption

of alcohol versus contaminations by interferants was at a tolerable rate for such technology.

This case also shows that potential experts may have a vested interest in the technology in question and still testify as expert witnesses in SCRAM-related cases. The finding by the South Dakota Supreme Court that Jeffrey Hawthorne qualified as an expert witness, despite his financial interest in the technology in question, could be an ethics-related concern. Mr. Hawthorne holds the patent for the SCRAM and also is employed by AMS, Inc., the manufacturer. At the time of this writing, the SCRAM has only one competitor on the market. Also, AMS has since introduced SCRAMx, a device that combines the SCRAM technology with house-arrest monitoring. Financial interests may be taken into account by the court in determining expert status, but are not grounds for automatic disqualification if the subject meets the required criteria. The court cited *Maroney v. Aman*, 565 N.W.2d 70 (S.D. 1997), stating that an expert can be qualified only by comparing "the area in which the witness has superior knowledge, skill, experience, or education with the subject matter of the witness's testimony" (*Maroney*, p 79).

With the increasingly overstretched correctional system searching for viable options to incarceration, technology such as the SCRAM will continue to be an attractive option, since such programs save the cost of incarceration, and many of these programs require the offender to pay any related fees for the program. These factors make it likely that more jurisdictions will adopt this technology, and therefore the precedent set in the ruling of the Supreme Court of South Dakota will affect future challenges nationwide.

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Holding Prosecutors to a Higher Standard Than Constitutionally Required?

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The United States Supreme Court, in a Footnote, Cited the American Bar Association (ABA) Model Rule of Professional Conduct 3.8(d) (2008), Which Compels a Prosecutor to Disclose Exculpatory and Mitigating Evidence to the Defense Beyond What Is Constitutionally Mandated

In Cone v. Bell, 129 S. Ct. 1769 (2009), in a seven-to-two decision, the Supreme Court vacated the decision of the U.S. Court of Appeals for the Sixth Circuit and remanded the case to the U.S. District Court for the Western District of Tennessee, Western Division, with instructions to give full consideration to the merits of the defendant's *Brady* claim—specifically, to consider whether the prosecutor's failure to disclose exculpatory evidence could have mitigated the defendant's capital sentence. The Court held that Mr. Cone's *Brady* claim was not procedurally defaulted and state court decisions did not provide independent and adequate grounds for denying a federal *habeas corpus* review.

The Due Process Clause of the Fourteenth Amendment mandates the disclosure of material exculpatory evidence by the prosecution to the defense (*Brady v. Maryland*, 373 U.S. 83 (1963)). Material exculpatory evidence is defined as evidence favorable to the defense, where there is reasonable probability that, if disclosed, the result of the proceeding would have been different. To establish a *Brady* violation, a petitioner must show that the prosecution withheld evidence that is both favorable to the defendant and material to either guilt or punishment.

Aside from the procedural and constitutional aspects of this case, the Court cites the American Bar Association (ABA) Model Rule of Professional Conduct 3.8(d) (2008), which addresses a prosecutor's ethics-based responsibility to disclose evidence to defense counsel that tends to negate the guilt of the accused or mitigates the punishment. The ABA model rule sets a higher standard of ethics than the constitutionally required standard. In the Discussion section, we address the relevance and potential impact of the Court's citation of this ABA model rule.

Facts of the Case

On August 10, 1980, Gary Cone robbed a jewelry store in Memphis, Tennessee. After a high-speed car chase, Mr. Cone shot and killed a police officer and a bystander. He escaped, and the following day, he gained entry into the home of an elderly couple and beat them to death. While in their home, he bathed