

July 30, 2003

Minutes of the Seventh Meeting of the Blue Ribbon Panel for Evaluation of Inflatable Restraint Performance-Field Data Collection and Analysis

Chairperson, Dr. Susan Ferguson called the meeting to order at 8:30 A.M. at the Offices of Veridian Engineering in Buffalo, New York (Note: Veridian is under contract with NHTSA to be the NASS Zone Center 1 for the Eastern half of the U.S.) All panel members and observers were present with the exception of members Dr. Maria Segui-Gomez and Dr. Jeffrey Augenstein and observer Mr. Robert Strassburger. Dr. Ferguson introduced Dennis Durbin, M.D., with Partners for Child Passenger Safety at The Children's Hospital of Philadelphia, the University of Pennsylvania as a new member of the Panel. Dr. Ferguson believes that Dr. Durbin will supplement the experience that has been diminished, as Dr. Segui-Gomez has curtailed her involvement with the Panel. Dr. Durbin also brings vast experience with children's issues, heretofore not available on the Panel.

Dr. Ferguson turned the meeting over to Bob Woodill, the manager of the Zone Center contract. Bob described the agenda for the morning's activities. The Panel will receive a review of the case management system utilized by Veridian, as conducted by Veridian staff responsible for the various aspects. This will be followed by a tour of the Veridian facilities and the opportunity to witness a sled test.

Mr. Woodill briefly described some of the changes that he has been making to enhance the quality and timeliness of the NASS cases. A weekly report lists every crash scene that has not been investigated within the allotted time of a week. The report also contains a list of every vehicle inspected within the last week. The crash investigator must get in a request for medical information within four days of the case initiation; this has resulted in a 50% drop in turnaround time. Bob uses a rolling acquisition rate report of vehicle acquisition and occupant interviews as a management tool to monitor performance of the researchers and weed out the poor performers. There was some turnover in researchers in the past year, but the 3 new Alliance funded PSU's are now fully staffed and operating effectively.

Bob introduced Evelyn Benton, who is the supervisor of day-to-day activities at the Zone Center. Evelyn conducted the review of Veridian's Case Management System.

Evelyn introduced Diane Serafini. Diane described the sampling scheme used for both GES and NASS cases. The researchers visit the police jurisdictions within the study area weekly and gather all Police Accident Reports (PARS). A computer program is then run to randomly sample the cases that will be selected for acquisition that week. The sampling program over-samples the more serious crashes involving a vehicle of the last four model years.

Evelyn next introduced Kendra Perillo, who is responsible for case registry. Kendra initiates the flow of the case through the Zone Center and determines the status of medical data within the case.

Injury Coding was the next activity described. Connie Volkots and Laurie Efthemis are responsible for injury data coding from records and occupant interviews. Injuries are then sourced to vehicle components from vehicle inspection data and occupant interviews.

The Panel was next introduced to Bill Pacer, Michael Burke, Jack Thiesen and Bob Hochreiter, who are responsible for technical overview of the NASS cases. Changes can be made to the electronic version of the cases, which are resident on the Zone Center server. When changes are made the reviewer contacts the researcher who investigated the case to discuss these changes and the reasons for the changes. In this manner it is hoped to continuously upgrade the expertise of the researchers.

Following the initial review process, cases receive a final audit by Bill Pacer and Julie Miller before receiving Preliminary Approval. Veridian uses a Team Management approach during the approval process. Any of the team members can consult with any of the other team members who may have particular expertise in a given area.

Bob Woodill reviewed the overall Veridian Case Management System and attempted to answer questions put forth by the Panel members. Bob then hosted a tour of the Veridian facilities, which included the conduct of a hygiene sled test of a child restraint system.

Dr. Ferguson resumed the meeting of BRP. She asked whether it was necessary to post the minutes of the 6th meeting of the BRP because it was simply a meeting to plan for the first Public Meeting in Washington, D.C. Don Bischoff suggested that observers may be interested to learn how the BRP selected the presentations and invitation list for the public meeting. The minutes subsequently were posted.

Dr. Ferguson said that she received many favorable comments on the first public meeting. She said that a summary of the public meeting has been posted to the BRP web site. A condensed summary of the public meeting was sent to AAAM for publication in the proceedings of their upcoming meeting in Lisbon, Spain, September 22-24, 2003. The Traffic Injury Prevention journal has asked whether we would submit a summary of the public meeting to the journal for consideration.

Alliance staff has developed briefing materials for members of Congress and staff on the findings and activities to date of the BRP. Tom will circulate the draft materials to the Panel for comment.

There was discussion as to the desirability of holding a second public meeting to discuss results and progress of the Panel. There was unanimous agreement to hold a second meeting. It was also agreed that April, 2004 would be a good date and the Reagan Center was an excellent venue. Dr. Ferguson asked Tom Carr to check on the availability of the

Reagan Center in April, 2004 for the second public meeting of the BRP. Tom said he would check and get back to the Panel.

There was a short discussion of what might be presented at the next public meeting. Chip Chidester suggested that the auto manufacturers may want to discuss the advanced airbag systems that they are using in their new vehicles. Tom Carr volunteered to check with the manufacturers to see if they would be willing to make such a presentation. Everyone agreed that it would be desirable to have Dr. Sequi-Gomez update her statistical analysis of NASS, which analyzes the injury reduction effectiveness of depowered and advanced airbag systems compared to pre-depowered systems. Updated summaries and analyses of the UMTRI and Miami SCI case files were also discussed. Dr. Ferguson asked NHTSA to think about what it might contribute with regard to any updated analyses of NASS, FARS and SCI data. No firm decisions were made as to the appropriate material for presentation.

Chip Chidester briefly described a new data collection program initiated with the help of Nationwide Insurance. Nationwide is using the company that does their collision damage cost estimating to notify NHTSA of crashes involving vehicles with advanced airbag systems. Chip has given Nationwide a list of all vehicles equipped with what NHTSA considers to be advanced systems. The program hopes to avoid the long delays due to the need to obtain releases from vehicle owners that plagued an earlier study with State Farm. Chip volunteered to report on the status of the NHTSA/Nationwide study at the next meeting of the BRP.

Dr. Ferguson asked Chip Chidester to discuss the status of data collection at the 3 Alliance funded PSU's and other ongoing related efforts at NHTSA. Chip led off by briefly reviewing the case selection criteria and the overall goal of the data collection effort. The 3 PSU's funded by the Alliance began data collection in December, 2001. Initially, it was planned that only cases selected after 4/1/02 would be weighted and added to the master NASS file. However, since the "start-up" cases investigated between 1/1/02 and 4/1/02 followed the full NASS protocol, it has been decided that they will be weighted and included in the 2002 NASS file.

Chip reminded everyone that NHTSA has created a preliminary case viewing system via the Internet. This enables interested parties to view cases much earlier compared to the old system, which required waiting for the complete yearly NASS file to be published in the summer of the year following data collection. These cases are preliminary and as such have not received a complete quality control. Chip asked the Panel members to contact him directly with any criticisms of the preliminary cases. The final 2002 NASS CDS SAS file, which was due to be released by the end of July, will be delayed. The 2002 NASS CDS ORACLE to SAS weighted file will also be delayed due to the introduction of some major innovations. Chip may put out a preliminary version of the ORACLE file and ask the Panel members to review and comment.

The total number of cases investigated by the Alliance funded PSU's through the end of June, 2003 is as follows: Miami, Florida, 217; Birmingham, Alabama, 175; and, Dallas,

Texas, 152 for a grand total of 544 cases. All three PSU's are currently fully staffed, although there was some turnover during the past year. The 2002 NASS CDS file will contain 380 Alliance funded cases and 4234 NHTSA funded cases for a total file of 4614 cases. Chip noted that sufficient funding is now available and that he expects that the number of NASS cases will increase in the coming years.

Chip detailed the data acquisition rates for vehicle inspections and occupant interviews at each of the Alliance funded PSU's. The data showed that the data acquisition rates at Miami were substantially lower than at the other two sites and substantially lower than overall NASS averages. The Panel expressed concern over the low rates at Miami. Bob Woodill said that Veridian is making every effort to improve the rates. The problem is that notification time is excessive, 16 days on average. Bob said that he will attempt to personally meet with the responsible law enforcement agencies and see if he can improve the situation. The good news is that the Miami team is able to investigate a disproportionate share of new vehicles, probably due to the large number of rental vehicles in the Miami area. Dr. Ferguson asked if the study area could be shrunk down to lessen the number of law enforcement jurisdictions that needed to be visited. Bob said that could be done but that it might compromise the sampling process. He believed that the real problem was a lack of expedient cooperation from some of the jurisdictions and that he thought this could be improved over time. Chip noted that the acquisition rates are actually slightly better than the prior Miami team's (Miami was previously a NASS PSU when NASS had a larger number of PSU's).

Dr. Ferguson asked if NHTSA could provide the selection rates for fatal and serious injury crashes for the 3 Alliance funded PSU's. Dr. Carra said that he would investigate and report back to the BRP.

There was a discussion of the appropriate time and venue for the next meeting of the BRP. It was agreed that the Panel will need two meetings to prepare for the public meeting in April, 2004 as per the experience prior to the 2003 public meeting. Chip noted that the annual NASS training meeting was taking place in Las Vegas, Nevada the week of November 17th. If the BRP meeting was coincident with the NASS meeting it would provide the opportunity for the BRP to address the NASS investigators and relay the importance of good data to the analysis efforts of the BRP. It was agreed by all that this was a desirable undertaking. Chip Chidester suggested that the Panel members may want to submit suggestions for papers before the November meeting. After further discussion, the second meeting was set for January 20, 2004 in Miami, Florida.

Dr. Ferguson asked Dr. Larry Schneider to make a presentation of a preliminary analysis that he had done on the preliminary case file. The detailed charts of Dr. Schneider's briefing will be posted to the BRP web site since they are too detailed for summary here. There was substantial discussion/concern about the vehicle inspection rate at the Miami and Alabama PSU's. Dr. Schneider was also concerned about the overall low severity level of the crashes being investigated. A discussion ensued which noted on the one hand that researchers often like to have higher severity cases to judge the performance of airbag systems in those crashes, but others noted that the only way that the Panel can

judge the overall efficacy of advanced airbag systems is to have a statistically representative sample of cases that represent the whole severity spectrum. Chip Chidester was asked to compare the 3 Alliance funded PSU's to the rest of the NASS PSU's in terms of data acquisition rates and crash severity. Chip accepted the assignment. There was discussion of what constitutes a complete versus partial vehicle inspection. Bob Woodill said that he believes that it is broad ranging. Chip said that he would investigate this issue as well, particularly since he was concerned what the data that he presented represented in terms of complete versus partial vehicle inspections.

Dr. Ferguson asked the Panel if it should be spending some of the money set aside for analysis. The consensus seemed to be that it was still too early in the data collection process to consider the formal contracting of someone to analyze the data. Dr. Digges proposed that his graduate students could put together 2-page summaries of the more serious crashes for review at the next meeting. All agreed that this would facilitate expedient anecdotal review of the cases for emerging trends or concerns.

Dr. Durbin asked if NHTSA had ever analyzed the effect of sampling bias attendant to the NASS file. Dr. Carra said that he would check into it and report at the next meeting.

Tom Carr thanked Veridian Engineering for hosting the BRP meeting. Dr. Ferguson entertained a motion to adjourn and it was so moved and unanimously approved by voice vote.