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## **WHITE PAPER**

# **Meeting the Challenges of Reaching Long-Haul Truck Drivers with Health and Wellness Information and Coaching**

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## Introduction

In January 2014, the National Institute for Occupational Health and Safety (NIOSH) published a study entitled *The National Survey of U.S. Long-Haul Truck Driver Health and Injury*, which was conducted in truck stops across the country. The survey, which focused exclusively on the over-the-road truck drivers, discovered that 26 percent of drivers are overweight (BMI 25.0-29.9) and 64 percent are obese (BMI >30.0) according to the body mass index (BMI), while 32 percent were found to have hypertension.<sup>1</sup> Furthermore, not only did the study find that that 90 percent of long-haul truck drivers are either overweight or obese, but also that this was not exclusive to only older drivers. In fact, the obesity figure for the 20 to 24 year old age group was 90 percent, while the 25 to 64 year old and older age groups were 64 percent and 47 percent, respectively. In addition, the study found that 26 percent of the middle aged drivers (aged 20-64) and 51 percent of the oldest drivers have hypertension.

The Owner-Operator Independent Drivers Association Foundation (OOFI), which has access to over 25,000 Professional Employee Drivers (PED) and 130,000 Owner-Operators (OOs), has conducted a survey of its membership every year since 1998.<sup>2</sup> As part of the surveys, OOFI has routinely asked the members of the Owner-Operator Independent Drivers Association (OOIDA) for their height and weight measurements in order to calculate their BMI, a measurement that is frequently used to determine health.

In the two previous surveys, the median BMI for both PEDs and OOs was 31.9 and 32.2, respectively, which effectively placed the drivers into the obese category. This information, along with the prevalence of medical insurance, seems to be consistent with the NIOSH Survey. The 2012 Owner-Operator Member Profile Survey (2012 Member Survey) found that 29% of drivers do not have any health insurance. Comparatively, the NIOSH study found that 33% had no medical insurance. While the Affordable Care Act (ACA) might affect this situation, it will not provide the necessary information and coaching needed to institute a successful health and wellness program for drivers. Moreover, according to the 2014 Member Survey, only 18 percent of OOs indicated that they have purchased a health insurance plan under ACA.

## Background

In 1996, the Office of Motor Carriers, which was the predecessor to the Federal Motor Carrier Safety Administration, began an outreach campaign to educate the commercial trucking and motor coach industries about the risks and countermeasures to driver fatigue. Eventually, a train-the-trainer type program was initiated, entitled “Mastering Alertness and Managing Driver Fatigue.” According to the report conducted by the Transportation Research Board (TRB) entitled *Research on the Health and Wellness of Commercial Truck and Bus Drivers: Summary of an International Conference*, “After about 5 years of “teaching fatigue,” it became clear that if a driver’s lifestyle could be focused on health, wellness, and fitness, it would be a precursor to overall safety consciousness. With the tenet that

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<sup>1</sup> W. Karl Seiber et al., *The National Survey of Long-Haul Truck Driver Health and Injury*, National Institute for Occupational Safety and Health (2014).

<sup>2</sup> PEDs on odd numbered years, and OOs on even numbered years

healthy workers make safer workers, the theory was that a driver who adopts a personal health, wellness, and fitness philosophy is more likely to properly follow established safety rules and to manage his or her driving alertness and fatigue levels.<sup>3</sup>”

Although 4,500 commercial carrier representatives were instructed, the program never got off the ground. The commercial carrier representatives which received the training consisted primarily of safety managers, fleet managers, human resources personnel, corporate officials, commercial vehicle safety inspectors, etc. Nevertheless, the groups that most needed the information and education, the actual truck and bus drivers, were excluded. Interestingly, it would appear as if things have come full circle the previous couple of years, as recent regulatory actions have begun to emphasize teaching drivers about fatigue and its possible safety issues. However, the driver population predominately views these actions as a vendor driven solution in search for a problem.

Simultaneously, the Centers for Disease Control (CDC) and Prevention has also taken an active interest in the health and well-being of truck drivers, as fitting the CDC's public health model because motor vehicle safety is an important public health issue.

In 2003, NIOSH sponsored a conference on commercial driver occupational safety and health. Participants concluded that occupational illnesses not only jeopardized highway safety, but also diminished the quality of life for truck drivers and possibly even lead to premature death. As a result of the conference, NIOSH recommended further studies on:

- Poor health habits, which included smoking, obesity, lack of physical activity, chronic diseases such as diabetes;
- Driver injuries;
- Driver fatigue; and
- Driver illnesses that are work related such as exposure to fumes, body vibrations resulting in respiratory illness, reduction in pulmonary function, lung cancer, musculoskeletal injuries and other conditions having safety implications.

The NIOSH conference addressed concerns for the drivers and their health by recognizing that in order to affect health and wellness in the driver population, the programs offered must recognize the old adage, “People don’t care how much we know until they know how much we care.”

### **Design, Development, and Evaluation of Truck and Bus Driver Wellness Programs**

In June 2000, the FMCSA, in cooperation with the National Private Truck Council's Private Fleet Management Institute, Sue Robert's Health Concepts, and the American Trucking Association Foundation, issued a Final Report titled *Design, Development, and Evaluation of Truck and Bus Driver Wellness Programs*. The report consolidated three previous technical memorandums that were published on the project task to design, develop, and evaluate a model truck and bus driver wellness program which was to provide a resource for addressing truck and bus industry challenges in the areas

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<sup>3</sup> Gerald P. Krueger, *Research on the Health and Wellness of Commercial Truck and Bus Drivers: Summary of an International Conference*, Transportation Research Board (2010), pg. 3.

of driver health, safety, turnover, performance, job satisfaction, and industry competition.<sup>4</sup> The report completed on-site evaluations of six carriers and assessed the effectiveness of their wellness programs.

Motor Carrier Operation One, the largest truckload carrier in the study, equipped 75 percent of their operation centers with fitness rooms and employee cafeterias. However, during the on-site evaluation, there was no evidence that the fitness rooms were being utilized, despite the fact that 800 drivers had passed through the facility. The majority of the cafeteria food provided was high in fat, such as bacon, eggs, hamburgers, and cheeseburgers. The interviewed wellness coordinator noted that the program's weakness was the inability to reach drivers, as well as not having a wellness program representative at local operation centers.

The report found that Motor Carrier Operation Two, which was a regional flatbed operation with 800 trucks located in the Midwest, had a program that was primarily utilized by the office staff, and not by the actual drivers. The interviewee stated that the program strengths was the employees interest (i.e., corporate office staff), modern facilities, and top management commitment. The weaknesses of the wellness program were the inability to reach drivers, the newness of the program, and the lack of personnel to administer the program.

Motor Carrier Operation Three, a large national refrigerated carrier with a driver turnover rate in excess of 200%, claimed to have an interest in wellness programs but said that they too were unable to learn how to reach their drivers.

Motor Carrier Operation Four, a Midwest refrigerated carrier with 2,000 independent owner-operators and 400 in-house support staff, was in the beginning of establishing a wellness program but listed their chief concern as reaching the drivers. The concern was reflected in the participation of their program, which saw 20 percent of corporate staff involved but only 1% of the drivers.

Motor Carrier Operation Five was a private fleet operation of 500 over-the-road refrigerated trucks, and implemented a fatigue and health education program designed for its drivers. The carrier experienced a large acceptance of their program by the drivers, which resulted in a 40 percent reduction in accidents. Unfortunately, the coordinator for the program left, and the program was placed under the responsibility of the corporate risk management group. Eventually, the company stopped supporting the program and all activities were put on hold.

Motor Carrier Operation Six was a western-based trucking company with over 3,000 truck drivers. The program's participation rate was based on a six-month period, and averaged 20-25 percent for office employees and only 10 percent for drivers. Once again the interviewee perceived that the resources were not available to reach the targeted population.<sup>5</sup>

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<sup>4</sup> Sue Roberts and Jim York, Design, *Development and Evaluation of Driver Wellness Programs: Final Report*, Federal Motor Carrier Safety Administration (2000).

<sup>5</sup> Ibid.

In the occasion where a large portion of drivers participated in the wellness program, the results were very successful. However, when the carriers struggled to attain large driver participation, the program's effectiveness was poor, even with a high participation from staff members. Ultimately, the study highlighted the major concern associated with health and wellness programs, which was reaching the truck driver.

### **Federal Motor Carrier Safety Administration and Health and Wellness**

FMCSA has been involved with driver health issues almost since its inception in 2000. In 2007, FMCSA requested that the TRB Commercial Truck and Safety Synthesis Program address the relationship between corporate-sponsored employee health and wellness programs in order to highlight their potential for enhancing safety in the commercial truck and bus-motor coach industries. However, these programs invariably seek out larger carriers whose net corporate income are in the millions, or even billions, of dollars and represent less than 1% of the registered carriers in the United States. It is important to understand that small to medium-sized carriers, which represent over 96% of the trucking industry, do not have the resources to offer any corporate-sponsored health and wellness programs.

Nevertheless, there are other issues concerning the implementation of an FMCSA administered wellness programs, including the adversarial relationship that exists between the agency and the average truck driver. A majority of drivers do not view FMCSA as a benevolent administration interested in their well being, but as an enforcement agency looking for more evidence to regulate and or price them out of business. FMCSA has stressed the need to remove drivers with health problems off the road in order to make the roadways safer for the public.

Periodically, the Medical Review Board for FMCSA issues recommendations concerning the health standards that they feel should be instituted in the driver physical exam, which all commercial drivers must undergo before being allowed to obtain a commercial driver's license CDL. In recent years, several of the medical qualification standards have been revised making it more difficult to pass the exam without some restriction or further testing on a regular basis, such as lowering the acceptable blood pressure readings to < 140/90. Another example is the current push for more testing for sleep apnea with a cost that easily could run into the thousands of dollars. Regrettably, FMCSA has alienated many truck drivers as their focus has not been so much on the concern for the health and wellness of the drivers, but rather targeting those supposed high-risk drivers and removing them from the road.

FMCSA often points to statistics on poor health findings for drivers and has determined that new regulations or stricter regulations are needed to keep the roads safe from these ill, fatigued, and unhealthy drivers. In response, the drivers are just as quick to point out that the statistics for fatalities and accidents involving commercial motor vehicles and drivers have steadily decreased over the years. According to FMCSA's Large Truck and Bus Crash Facts:<sup>6</sup>

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<sup>6</sup> FMCSA Analysis Division, *Large Truck and Bus Crash Facts 2013*, Federal Motor Carrier Safety Administration (2015).

- The number of large trucks involved in fatal crashes decreased from 4,721 to 3,906, a drop of 17 percent.
- The number of large trucks involved in injury crashes decreased from 89,000 to 73,000, a drop of 18 percent.
- The number of large trucks involved in property damage only crashes decreased from 363,000 to 265,000, a drop of 27 percent.

Moreover, according to OOFI's Member Surveys, the mean accident rate for drivers has been 0.7 percent for their entire driving career, which is 20 years or more, with a median of zero percent.

### **Research on the Health and Wellness of Commercial Truck and Bus Driver**

In November 2010, an International Conference was convened and was entitled, "Research on the Health and Wellness of Commercial Truck and Bus Drivers." The Conference was sponsored by FMCSA, TRB, and NIOSH. An impressive array of research and studies were presented that highlighted the need for health, wellness, and educational programs within the trucking industry. In the luncheon address, Christine M. Branche, the Principal Associate Director of NIOSH, reiterated that the mission of the institute was to generate new knowledge in occupational safety and health and to transfer that knowledge into practice for the betterment of workers. She went on to distinguish that motor vehicle crashes are the leading cause of U.S. occupational fatalities and that they account for 35 to 40 percent of all workplace fatalities, 40 percent of which involved truck drivers. In 2008, an estimated 57,700 injuries to U.S. truck drivers resulted in days away from work, which was the second highest number among all occupations.

The distinguished representatives from academia, research institutes, trade associations and vice-presidents of major trucking companies all provided input to the conference. Three carriers, Conway, J.B. Hunt, and Schneider National, were interviewed about their health and wellness programs. Each of these carriers has spent a considerable amount of money in developing and instituting health and wellness programs and facilities for their drivers and staff. The annual revenue for each of these carriers is into the billions of dollars, while the net profits are well into the millions. However, according to OOFI's Member Surveys, the average net income for is approximately \$40,000, while the net income in the Professional Employee Driver Survey is closer to \$36,000. These mega-carriers are certainly to be lauded for their efforts in meeting some of the health and wellness problems for drivers, but they are also a business and must show a profit. Therefore, health and wellness needs to be a part of reducing overall health cost.

In order to pay for the facilities, life coaches, health clinics, etc. within the terminal locations the carriers must receive a return on their investment. As stated previously, these mega-carriers represent less than 1 percent of the carriers registered and operating in the U.S. Nevertheless, they do represent an estimated 35 to 40 percent of the company drivers in the for-hire trucking sector, however, it is important to note that not all of the mega-carriers with 1,000 or more trucks, have health and wellness programs, and according to the Unified Carrier Registration Plan, only 292 carriers out of 433,535 carriers have 1,000 or more trucks.

## Problem Statement

A common theme among the presenters at the International Conference on Health and Wellness of Commercial Truck and Bus Drivers was that the driver population was an underserved and understudied sector of the workforce. “The diverse attributes and work environments of truck drivers make them a challenging and unique population requiring different information from other populations (e.g., truck drivers need information about how to eat healthy and be physically active in different locations throughout the week). Furthermore, drivers also require different modes of intervention and follow-up than do traditional employees of fixed-location employment sectors.”<sup>7</sup>

Several presentations have listed the challenges which face both truck drivers today and the possible implementation of a health and wellness program. These include:

- Hours-of-service regulations
- Pay by the mile
- Lack of parking facilities
- Poor food choices available at truck stops
- Scheduling problems
- Long hours
- Delays at loading docks
- Proper sleep
- Available health care
- Prolonged sitting
- Intermittent intense exercise during loading, tarping, tying down, etc.
- Vibration

Conversely, common themes of successful health and wellness programs were:

- That they must be customized to meet the individuals needs
- Steps within the program must be incremental
- There needs to be a feeling of anonymity where the driver feels free to discuss and openly express concerns
- An accessible avenue to obtain information from just about anywhere they might be
- Accessible professional information and advice
- On-going monitoring of program and participation
- Minimal cost

Perhaps the most essential element of a successful program is that the driver must feel that the administrator of the program is concerned with the health and well being of the individual, not for cost

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<sup>7</sup> Maureen A. Murtaugh et al., *Challenges and Opportunities in Addressing Diet, Obesity, and Chronic Disease in Commercial Drivers*, University of Utah (2010).

savings, or to improve their safety on the road, but because they are an important and valuable resource unto themselves.

Thus, how can a driver population that is not only diverse, but also is away from their home or terminal for 150 to 300 nights per year (60 percent according Member Surveys) and operating on a thin financial margin with little time to spare, be reached? In particular, OOFI has searched for such a program for a number of years and has interviewed and listened to many presentations that purport to reach drivers and help them to achieve a healthier life style. Unfortunately, none of them have met the criteria that OOFI feels is essential to achieving the goals mentioned above.

While truck drivers are often slow to embrace change, the OOFI Surveys indicate that the PEDs and the OOs are becoming more technologically perceptive. Many OOs and PEDs today have access to a computer both at home and on the road, while only 15 percent do not own a computer. Furthermore, the number of drivers that utilize tablets and smart phones with mobile apps has also continued to grow. These new and upcoming forms of communication offer the greatest opportunity to reach the drivers whose lifestyle demands that they be away from home 150 to 300 nights per year. These drivers are difficult to reach and have little or no access to health care or fitness opportunities. Therefore, it is imperative that these drivers receive information and direction aimed at helping them to attain a healthy lifestyle under such extreme conditions.

## Human Factor Health and Well For Life

In an attempt to create successful health and wellness program, OOFI began working with Human Factor Health (HFH) and their integrated wellness program called Well For Life in 2014. This program was first developed by the founders of HFH with a vision of building an easily understood, educational portal that would encourage individuals to take responsibility for their own health. The Well For Life program utilized material from the CDC, John Hopkins University, and Duke University, in order to build a series of questions and answers most commonly asked by patients concerning their health and wellness.

Since its launch in 2004, Well For Life has worked in partnership with eDocAmerica (eDoc), founded through the University of Arkansas for Medical Services, to provide real time information to their client base. As the client base expands, the portal content has increased its scope. The goal was that as a program participant interacted with a medical professional, he or she would gain valuable information and become more aware of how lifestyle changes affected their health. Thus, Well For Life was designed to become a living program that could take what an amorphous and confusing health and wellness issue and provide structure and a path to formulating an individualized health program.

## The Launch of Beta and Pilot Test for the Long-Haul drivers and their Families

Through this partnership, OOFI and the HFH group developed both a beta test and pilot test program called Well For Life. The program was offered free to OOIDA members for the first 300 to enroll. Nonetheless, before launching the pilot program for the full 300 members, OOFI first conducted a two-week beta test consisting of a few volunteered members, which served to help remove preliminary obstacles from the overall pilot test program. Once the initial beta test was completed, OOFI utilized

various media sources, such as OOIDA's *Land Line Magazine* and their Sirius XM radio program, Land Line Now, to inform members about Well For Life. In particular, OOFI promoted the pilot program by:

- Providing airtime on its daily radio program, Land Line Now, on Sirius XM Satellite Radio channel 146, the Trucker's Network;
- Promoting program participation on the OOFI and OOIDA's websites;
- Provided a free online promotional module, which was made available on YouTube for all drivers with access to information about the program; and
- Emailing an initial pilot letter encouraging participation in the program to over 60,000 members

Incidentally, through its affiliation with OOIDA, OOFI already had an established relationship with OOIDA members, which was based on a culture of trust and respect. Thus, through the above mentioned resources, OOFI was able to outreach to the Association's 150,000 members, and within the first four weeks, over 300 members and their families had enrolled in the pilot program.

After reaching the targeted participation level, OOFI soon launched the program which was designated to run in 2014 between the months of June and November. However, before the actual pilot test was launched, both OOFI and HFH worked together with the small group of beta testers in order to develop seven common themes of a successful health and wellness program. These seven themes were:

1. **Customized to the individuals needs:** The driver was asked to give a health history online with a 30 panel biometric screening, which was stored in that driver's Health Profile. Through their partnerships, Well For Life utilized the data to send personal messages customized to those drivers at risk for specific health issues.
2. **Accessible avenue to obtain information from just about anywhere they might be:** Drivers were able to receive answers about lifestyles from nutritionists, pharmacists, dentists, and fitness experts online, 24/7, anywhere there was internet connectivity or Wi-Fi.
3. **Accessible professional information and advice:** Drivers had access to medical professionals, who were able to answer their questions while they were away from home through the Well For Life portals, in partnership with eDocAmerica and the University of Arkansas for Medical Services pharmacy and physician programs.
4. **Steps within the program must be incremental:** The drivers had access to weekly communications of motivation and encouragement during lifestyle changes. There were 156 weekly emails and 12 monthly newsletters, which were related to health and medical issues that have attracted the national media. Every Tuesday and Thursday, an email communication was sent asking one simple question regarding lifestyle, and a two-sentence action step. The Weekly Wellness Wire seasonally addressed one health concern, while a monthly newsletter, *Wellness..a State of Mind*, followed the CDC in order to inform and reinforce the health issues of the month.
5. **On-going monitoring of program and participation:** The Well For Life portal was capable of monitoring usage of the site as well as identifying which topics the driver frequented the most. Future communications were directed to the interest of that driver.

6. **There needs to be a feeling of anonymity where the driver feels free to discuss and openly express concerns:** Well For Life adhered strictly to HIPPA guidelines, and with the trust that OOIDA had already built with its driver population, drivers were assured anonymity.
7. **Minimal Cost:** The initial pilot test was offered for free with the goal of eventually receiving additional grant funding in order to keep costs low for the second phase of the program, which was to be open to all OOIDA members.

In addition to the seven themes, OOFI decided that the program would be based on the medical examination that all drivers must take regularly in order to retain a valid CDL. Therefore, Well For Life utilized the six basic sections found in the medical exam, which are referred to in the program as the Six Pillars of Health, to focus on. In doing so, OOFI and HFH were not only focused on the individuals health, but also on the drivers' economic motivation for taking part in the program, as a failed medical exam would threaten their lively hood. As part of the initial registration process, the participants were able to select which pillars most pertained to them. The Six Pillars of Health were:

1. Health History
2. Vision
3. Hearing
4. Blood Pressure/ Pulse Rate
5. Laboratory Examination
6. Physical Examination

As it turned out, customizing the program to each participant's health concerns and tying it to the physical exam that the drivers must pass, proved to be a powerful motivational tool, thereby the Well For Life program was able to have a positive impact in the both the members' lives and their families. Moreover, the customization of the program also allowed each participant to select which information they desired to receive and how frequently they received it, such as weekly or bi-weekly, based upon which options they selected upon registering for the program. This proved to be very helpful as some of the initial beta testers expressed that they felt overwhelmed with the high volume of emails which they were receiving. Unfortunately, this practice tended to discourage some of the beta testers from taking a more active role in the program. Nevertheless, once this problem was addressed, participation grew during the pilot program.

It became evident even in the early stages of the pilot test that Well For Life was experiencing success in reaching the long-haul truck drivers, which was accomplished especially through the high level of participation from the family members. Astoundingly, around 80 percent of the members' family participated in some portion of the pilot test, whereas the national average for family participation in such a program is closer to 10 percent. It was evident that the family members' participation was monumental in reaching the members, as it provided a new avenue for the families to communicate with one another about health and other issues while the member was over the road.

Moreover, the eDoc segment of the program proved to be perhaps the most popular and important portion of the pilot. Through eDoc, both the driver and the family member were able to email a board

certified doctor with questions about their health and receive a response to their questions within 24 hours. However, the participants did not only have access to board certified doctors, but to pharmacists, dentists, nutritionists, and other health care providers as well.

Overall, eDoc was one of the most utilized portions of the program and upon asking the participants which parts of Well For Life they enjoyed the most, eDoc was rated number one. The reasoning behind this of course is natural. For example, when a driver is hauling a load, they are not allowed to leave the trailer just anywhere to go and visit a doctor when they have a health concern, but they can email a doctor in order to understand if the symptoms are serious enough to warrant immediate medical assistance. In addition, a driver can also feel as if they are a part of their family's life by utilizing eDoc when a family member is feeling ill, as they can receive results and information that allows them to share with the family even while on the road. Other areas of the program that saw the most use were:

- Healthcare
- Financial
- Medical Self Care Guide
- Behavioral Health
- Aging

## Results

In order to maintain anonymity, program participants utilized their OOIDA member number, thus third party vendor which collected the data from the drivers on health and usage did not have access to any identifying information. The pilot program received 293 participants, which included 212 family members. The following table illustrates the primary concerns of the participants of the pilot study.

**Table 1: Wellness Concerns**

Health Concerns	Well For Life	OOIDA	Trucking Industry	Driver Concerns
<b>Hypertension</b>	59% indicated that they needed to lower BP	48% of members use prescription medications	26% of the industry has hypertension <sup>8</sup>	Can only receive a 1-year medical certificate
<b>Sleep Apnea</b>	45% indicated that they are not receiving restful sleep after 6 hours	61% are not covered by for OSA under their medical policy  34% of additional tests were OSA	14.8% of the industry have severe or moderate sleep apnea <sup>9</sup>	Expensive tests and treatment options.  Average test is \$2,925 <sup>10</sup>

<sup>8</sup> *The National Survey of U.S. Long-Haul Truck Driver Health and Injury*, pg 5.

<sup>9</sup> Douglas M. Wiegand et al., *Commercial Motor Vehicle Health and Fatigue Study Final Report*, Virginia Tech Transportation Institute (2009), pg 5.

<sup>10</sup> "Sleep Study (Polysomnography) Cost and Procedure Information," New Choice Health, <http://www.newchoicehealth.com/procedures/sleep-study-polysomnography>

		tests		
<b>Diabetes</b>	55% worry about developing/controlling diabetes	Weight is associated with diabetes, the average BMI is 30.5 for members	14% of the industry has diabetes <sup>11</sup>	Will need a waiver through the FMCSA exemption program
<b>Weight Issues</b>	82% know that their weight will cause health problems	The average weight is 220 lbs. with a height of 70 in.	BMI for the industry: 40% are 25-29.9 26% are 30-34.9 23% are 35+ <sup>12</sup>	Back pain Sleep Apnea Diabetes Cardiovascular Disease

The primary purpose of Phase I pilot program was to answer the question of whether a population of drivers that were on the road and away from home for lengthy periods of time could be reached with information about health and wellness. Furthermore, the pilot test was designed in order to investigate the amount of participation that might accompany such a program. Throughout the six-month program, information was accrued as to how the participants utilized the various services and benefits available to them, including how frequently they were used. Overall, the pilot program experienced an 89 percent participation rate.

All participants were required to fill out a wellness panel assessment, which helped OOFI and HFH to customize the program to their particular health concerns. The program did experience some initial glitches during the beta test, as a small group of participants navigated through the different benefits available. However, these glitches were addressed and modified in order to make various functions of the program easier to access and utilize. For example, as mentioned previously, the beta testers were initially receiving a high volume of emails each week, but after the program was modified, the participants were able to select to receive just one newsletter per week, which helped to boost overall participation levels.

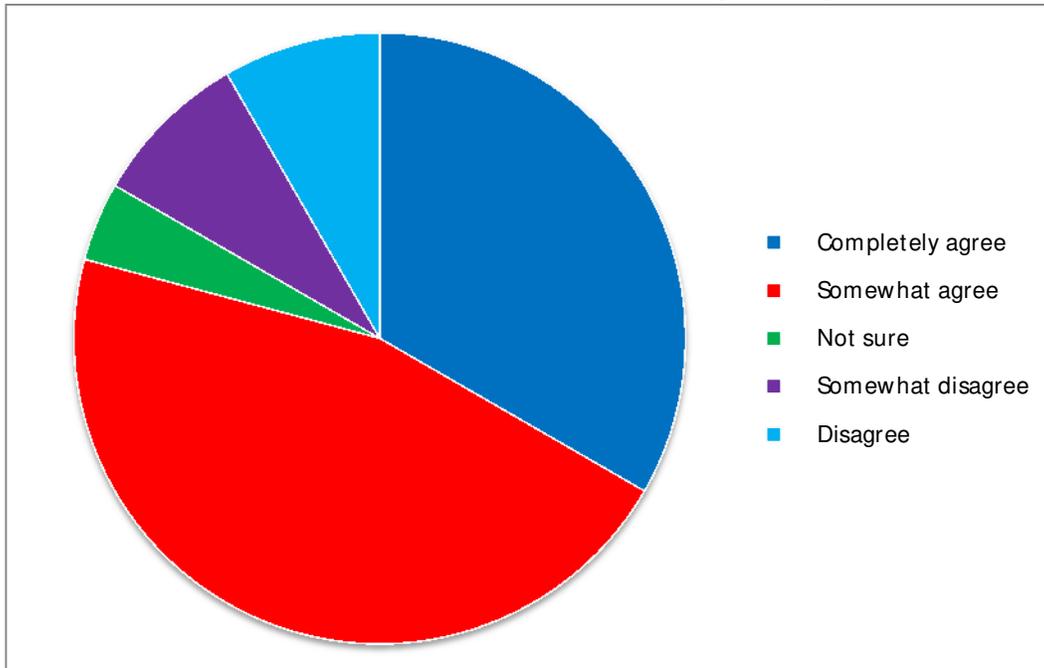
In addition to the high volume of emails, another early glitch included the difficulty for participants to sign up to utilize certain portions of Well For Life, particularly eDoc. After the additional benefits and sign up were made more user friendly, eDoc became the most popular portion of the program.

While there was no recognized baseline of problems or particular goals established, as the purpose of the pilot test was to overcome the shortfall of not being able to reach the driver, OOFI did learn the primary concerns of the participant drivers could be categorized into three main areas, which included hypertension, weight control, and diabetes. However, it became noticeable that the program had some measurable positive health benefits.

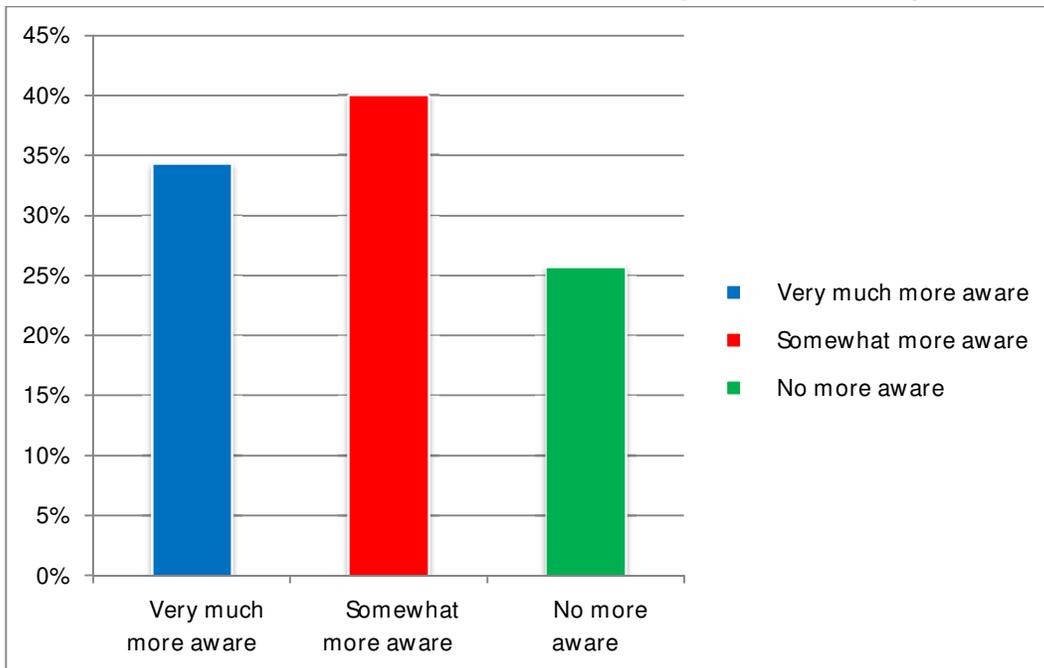
<sup>11</sup> *The National Survey of U.S. Long-Haul Truck Driver Health and Injury*, pg 5.

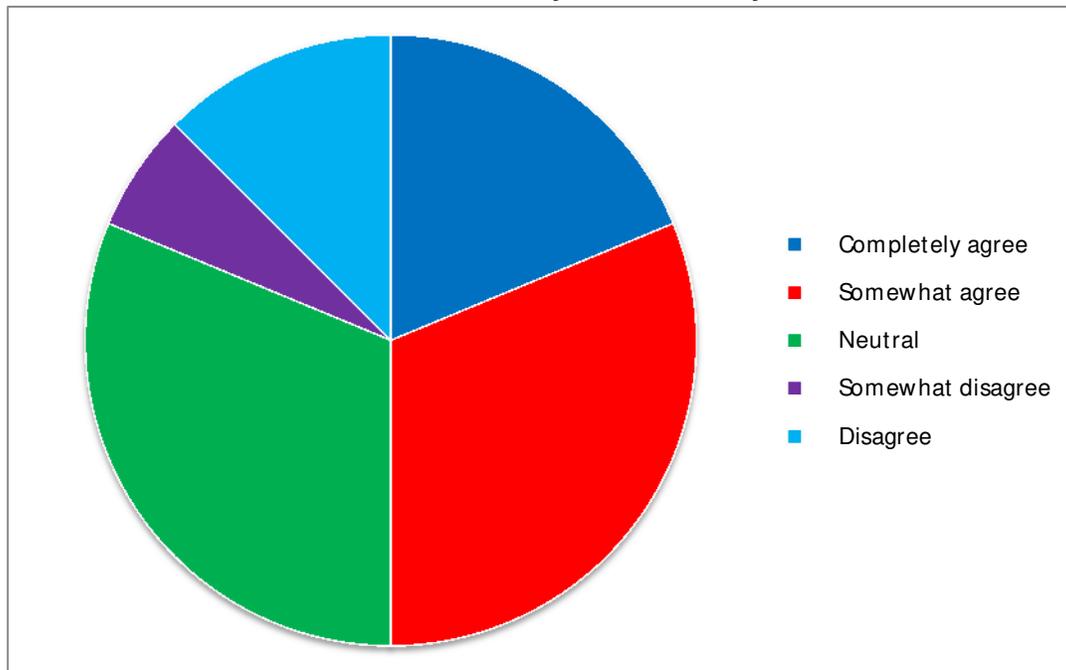
<sup>12</sup> "Hours of Service (HOS) Final Rule Regulatory Impact Analysis Appendix B," FMCSA, pg B-2.

**Chart 1: I have learned behaviors to lower my blood pressure**



**Chart 2: I am much more aware of the affects weight has on health problems**



**Chart 3: I have learned ways to control my diabetes**

OOFI also discovered during the pilot test that the best time to try and engage the participants was at night, as the most common usage time during the day was between 9 p.m. and 6 a.m. Moreover, participants were more likely to utilize the program during the week. The three days that witnessed the greatest usage were Mondays, Wednesdays, and Thursdays. More than likely this result was derived from the fact that many loading schedules tend to be slated toward the latter portion of the week when traffic is generally at its lowest.

The pilot test was designed to be Phase I of a two phase program. The second phase of the program was to focus on the three main areas of concern for drivers, namely hypertension, weight control, and diabetes. Not only are all of these concerns measurable, but each of them are also interrelated with one another. Moreover, all three are undoubtedly coupled with another major concern with drivers, which is obstructive sleep apnea. It is important to understand that these health concerns are the primary issues facing drivers today as they take their medical exams in order to receive or renew their CDL.

## Bibliography

- FMCSA. (2011). *Hours of Service (HOS) Final Rule Regulatory Impact Analysis Appendix B*. Washington DC: Federal Motor Carrier Safety Administration.
- FMCSA Analysis Division. (2015). *Large Truck and Bus Crash Facts 2013*. Washington DC: Federal Motor Carrier Safety Administration.
- Krueger, G. P. (2010). *Research on the Health and Wellness of Commercial Truck and Bus Drivers: Summary of an International Conference*. Baltimore: Transportation Research Board.
- Murtaugh, M. A., Kinney, A., Thiese, M. S., Wood, E., & Hegmann, K. T. (2010). *Challenges and Opportunities in Addressing Diet, Obesity, and Chronic Disease in Commercial Drivers*. Salt Lake City: University of Utah.
- New Choice Health. (2015). *Sleep Study (Polysomnography) Cost and Procedure Information*. Retrieved 2014, from New Choice Health, Inc.: <http://www.newchoicehealth.com/procedures/sleep-study-polysomnography>
- Roberts, S., & York, J. (2000). *Design, Development, and Evaluation of Truck and Bus Driver Wellness Programs: Final Report*. Washington DC: Federal Motor Carrier Safety Administration.
- Seber, W. K., Robinson, C. F., Birdsey, J., Chen, G. X., Hitchcock, E. M., Lincoln, J. E., et al. (2014). *The National Survey of U.S Long-Haul Truck Driver Health and Injury*. Cincinnati: National Institute for Occupational Safety and Health.
- Wiegand, D. M., Hanowski, R. J., & McDonald, S. E. (2009). *Commercial Motor Vehicle Health and Fatigue Study Final Report*. Blacksburg: Virginia Tech Transportation Institute.