

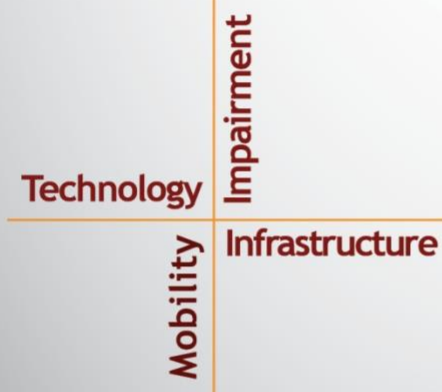
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A Catalog of Health and Wellness Programs for Commercial Drivers

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EXECUTIVE SUMMARY

Given the distributed operations in long-haul trucking, truck drivers' limited access to healthy food options while on the road, and the sedentary nature of the driving profession, it is not surprising that the prevalence of obesity and comorbid conditions among commercial motor vehicle (CMV) drivers far outpaces that of the U.S. adult population in general. Studies in the U.S. have reported overweight and obesity rates among CMV drivers to be as high as 90% (Mabry et al., 2016). CMV drivers also have high rates of hypertension, dyslipidemia, diabetes, and sleep apnea. They tend to engage in unhealthy behaviors such as smoking, make poor nutrition choices, and remain sedentary off the job, further exacerbating their health problems. Obesity has been shown to impact work performance, productivity, absenteeism, and healthcare costs, and is associated with a greater risk of crashes in CMV drivers. While there are multiple ways to address these issues, worksite health and wellness (H&W) interventions—which support improved health outcomes and can be effective for employee engagement and retention—can be of great benefit to CMV drivers due to the nature of the industry (Mabry et al., 2013).

Acknowledging these concerns, the Federal Motor Carrier Safety Administration (FMCSA) has committed to improving CMV driver H&W. To develop a plan of action, FMCSA tasked the agency's Medical Review Board (MRB) and the Motor Carrier Safety Advisory Committee (MCSAC) with providing recommendations on how to structure and effectively deliver a H&W program for CMV drivers. FMCSA also tasked these groups with identifying ways to evaluate the effectiveness of such a program, in terms of getting drivers to take advantage of the resources and assessing the extent to which drivers believe the resources have helped improve their overall health. In 2016, the MRB and MCSAC delivered to FMCSA a comprehensive discussion on improving the health outcomes of CMV drivers; however, no formal recommendations were developed.

The purpose of this study was to identify, review, and document existing CMV driver H&W programs and to identify industry best practices. The study began with a thorough literature review to understand the common medical conditions found among CMV drivers and the health risks—both behavioral and environment—associated with driving a commercial vehicle, along with a review of existing risk factor intervention programs and H&W programs designed for commercial drivers. Next, the study team conducted phone interviews with fleet and industry representatives to document and detail their H&W programs and initiatives and to identify program metrics and reported outcomes. This report includes a discussion of key aspects of existing programs, program recruitment methods, health assessments and testing, health education and coaching, and follow-up and maintenance activities. Findings from this study will inform recommendations for a larger study to evaluate the effectiveness of an H&W program for motor carrier operations.

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LIST OF ABBREVIATIONS AND SYMBOLS

BMI	body mass index
CDWP	Company Driver Wellness Program
CMV	commercial motor vehicle
DHFP	driver health and fitness program
DOT	department of transportation
EAP	employee assistance program
FMCSA	Federal Motor Carrier Safety Administration
H&W	health and wellness
HSA	health savings account
HR	human resources
HRA	health reimbursement account
KTA	knowledge-to-action
LMS	learning management system
MRB	Medical Review Board
NHTSA	National Highway Traffic Safety Administration
OSA	obstructive sleep apnea
PFG	Performance Food Group
SHIFT	Safety and Health Involvement For Truckers
TA	Transport America
TRIHPP	Truckers Research for Innovative Health Promotion Program
VTTI	Virginia Tech Transportation Institute
WWP	worker wellness program

CHAPTER 1. LITERATURE REVIEW

BACKGROUND

Given the distributed operations in long-haul trucking, drivers' limited access to healthy food options, and sedentary lifestyle, it is not surprising that the prevalence of obesity and comorbid conditions among commercial motor vehicle (CMV) drivers far outpaces that of the U.S. adult population. Studies in the U.S. have reported overweight and obesity rates in CMV drivers to be as high as 90% (Mabry et al., 2016). CMV drivers have high rates of hypertension, dyslipidemia, diabetes, and sleep apnea. They also engage in unhealthy behaviors such as smoking, poor nutrition and eating habits, and sedentary behavior when not working, further exacerbating the problem of obesity and related diseases and disorders. Obesity has been shown to impact work performance, productivity, and absenteeism as well as healthcare costs (Martin et al., 2009; Schulte et al., 2007). Obesity is also associated with a greater risk of crashes in CMV drivers. Worksite interventions are ideal for CMV drivers due to the nature of the industry and can be effective for engaging and retaining drivers (Mabry et al., 2013).

MEDICAL CONDITIONS AMONG CMV DRIVERS

A number of medical conditions—including hypertension, diabetes, and obesity, as well as behaviors such as cigarette smoking—are found to have at least double the prevalence rate among CMV drivers compared to the national working population in the U.S. (Federal Motor Carrier Safety Administration [FMCSA], 2014). In a repeated cross-sectional analysis of health data from over 88,000 CMV drivers, Thiese et al. (2016) discovered a disproportionate increase in poor health and risk factors among CMV drivers compared to data from the general U.S. population (using data from the National Health and Nutrition Examination Survey [NHANES]). CMV drivers were more likely to be obese and morbidly obese, and had significantly increased measures of blood pressure, and higher prevalence of hypertension, diabetes, heart disease, and sleep disorders compared to the general population (Thiese et al. 2018). In a review of the literature to examine the prevalence of cardiometabolic risk factors among CMV drivers, Mabry et al. (2016) found a high prevalence of health disparities, including obesity and cardiovascular and metabolic disorders in this population. Sangaletti and colleagues (2014) demonstrated a high prevalence of cardiovascular risk factors, including lack of physical inactivity, alcohol use, smoking, overweight and obesity, abdominal obesity, hypertension, and elevated glucose in a cross-sectional study of 250 long-distance truck drivers. In another study (Ronna et al., 2016) found that almost a quarter of drivers (23.8%) were categorized as having a high-risk for having cardiovascular disease. Berger et al. (2012) calculated a conservative estimate of 21% prevalence of obstructive sleep apnea (OSA) among the CMV driver population. Beyond the high prevalence of certain medical conditions, drivers themselves self-report their health as being only good or fair, with both male and female long-haul truck drivers reporting numerous health problems, including chronic conditions such as arthritis and hypertension (Layne et al., 2009)

Out of concern for the health and wellness (H&W) of the CMV driver population, FMCSA partnered with the Transportation Research Board (part of the National Academies of Sciences, Engineering, and Medicine) in 2010 to sponsor a H&W conference in Baltimore, Maryland. More than 200 industry experts gathered to discuss commercial truck and bus driver H&W issues. In the published summary of that conference, Wood et al. (2012) presented a commercial driver health profile based on a study of 650 drivers. Researchers concluded that the prevalence

of diseases in the commercial driver population is markedly different from the U.S. working population. Among other findings, Wood et al. recorded point prevalence of physician-diagnosed hypercholesterolemia at 25.6%, hypertension at 28.4%, diabetes mellitus at 10.3%, and sleep apnea at 14.5%.

Similarly, Sieber et al. (2014) reported what they describe as a “constellation of chronic disease risk factors” present among the 1,670 long haul truck drivers they surveyed via personal interview and/or height and weight measurements at truck stops located throughout the U.S. in 2010. They found that 26.3% of those they surveyed had hypertension, 22% were either taking medicine for, or had been told they had, high cholesterol, and over two-thirds were obese, with 17% being morbidly obese. The researchers also found that 51% of the group surveyed were cigarette smokers, 27% reported no moderate or vigorous physical activity of at least 30 minutes duration during the previous 7 days, and 27% averaged 6 hours of sleep or less per night.

Higher than average body mass index (BMI) is reported in the literature as a common medical condition among both male and female CMV drivers. In a 2015 comparison of truck driver BMI data and BMI data for the U.S. workforce in general, Birdsey et al. found that the mean BMI was significantly higher for both male and female long-haul drivers compared to U.S. workers. They also found that the prevalence of class II obesity and excessive obesity (BMI of 35 or greater) among male long-haul drivers was triple that of other male U.S. workers (31.3% versus 9.1%). A literature review on the identification of metabolic syndrome in commercial truck drivers found an even higher rate of obesity. This review found a combined reported prevalence rate of overweight and obesity ranging from 55.2% up to 90% in CMV drivers (Mabry et al., 2016). Hickman et al. (2020) recently supported these findings in a national sample of 21,000 CMV drivers, reporting overweight and obesity rates of 28.8% and 58.5%, respectively. Furthermore, Martin et al. (2009), in a study primarily focused on the impact of overweight and obesity conditions on the direct medical costs of truck drivers, found a strong relationship between high BMI groups and the prevalence of hypertension, diabetes, and hyperlipidemia. Overweight subjects in this study had a 48% higher prevalence of hypertension, a 54% higher prevalence of hyperlipidemia, and a 100% higher prevalence of diabetes.

BEHAVIORAL AND WORK ENVIRONMENT HEALTH RISK FACTORS AMONG CMV DRIVERS

A number of behavioral, lifestyle, and work-environment factors of CMV drivers exacerbate their health risks. Some of the most commonly noted health risk factors for CMV drivers include smoking, lack of exercise, poor quality of sleep, work organization stress, and work environment.

Smoking

The rate of smoking among CMV drivers is consistently high (Birdsey et al., 2015; Sieber et al., 2014; Layne et al., 2009). Cornelius et al. (2020) reported that in 2019, 14% of adults in the U.S. smoked cigarettes and 20.8% used some form of tobacco product. Comparatively, research has shown cigarette smoking to be as high as 51% among the CMV driver population and that 63.3% of CMV drivers use any tobacco product (Sieber et al., 2014, Hickman et al., 2020).

Lack of Exercise

Physical inactivity has been reported to be the fourth leading cause of death worldwide in the general population (James et al., 2017). In a study involving a convenience sample of 300 participants recruited from six truck shows in the U.S. between 2008 and 2009, Turner and Reed (2011) found that exercise was minimal, with nearly 20% of participants not engaging in any type of exercise during the preceding 7 days and more than one fourth engaging in no aerobic exercise at all during the preceding week. Similarly, in the 2010 Survey of U.S. Long-Haul Truck Drivers and the Commercial Driver Risk Factors study, 27.1% and 28.63% of CMV drivers reported no moderate or vigorous physical activity for 30 minutes in the preceding 7 days respectively (Sieber et al., 2014, Hickman et al., 2020). Overall, drivers cited lack of time (66.7%) and lack of exercise facilities (45.3%) as the primary barriers to exercising while traveling for work (Turner and Reed, 2011).

Poor Diet

A poor diet is a key determinant of high blood pressure and excess body mass (Joy et al., 2018). Studies have noted that truck drivers commonly consume fast food, which is high in fat ,and low levels of fruits and vegetables, with obese drivers consuming over the recommended daily amount of fat and calories (Olson et al., 2016). Truck drivers have fewer healthy food options while on the road and have logistical barriers to bringing home-cooked meals with them or preparing them while on the road (Birdsey et al., 2015). Poor diet is consistently reported throughout the literature as an aggravating factor in poor health, especially when combined with lack of exercise (FMCSA, 2009; Krueger et al., 2007).

Poor Sleep Quality

Both shift work and sleep duration (which appear to be a function of sleep quality) are likely to impact a driver's weight status in addition to affecting comorbidities associated with weight status (Hege et al., 2018).

The Trucker Sleep Disorders Survey (Lemke et al., 2016) found that sleep quality versus sleep duration was a significant sleep-related predictor for drivers who said they drove a truck while being sleepy. Regarding sleep quality, 38.1% of the drivers surveyed by Lemke et al. reported that they never or rarely got good quality sleep during their workdays, whereas only 16.7% reported this on their non-workdays. Beyond this, 38.4% of surveyed drivers reported that sleepiness impacted their job performance at least once a week, and 43.8% stated that sleepiness impacted their concentration at least once per week. The researchers concluded that while sleep duration is a well-established factor in driving performance, sleep quality is a better predictor of driving while sleepy.

One common disorder among CMV drivers which leads to poor sleep quality is OSA (Bergoffen G. et al., in press). OSA is a sleep disordered breathing condition that is characterized by repetitive spells of upper airway occlusion or collapse which results in arousals during sleep. This fragmented sleep leads to poor quality of sleep, which in turn can lead to excessive daytime sleepiness and poor driving performance.

It has also been found that fatigue-inducing factors such as long work hours, irregular work shifts, a high number of miles driven, and violations of hours-of-service regulations can have a critical bearing on truckers' sleep patterns. Despite changes in hours-of-service legislation to promote sleep and rest periods, the implications of these findings suggest that a review of the regulations and operational conditions for CMV drivers should be continuously monitored (Hege et al., 2015).

Work Organization Stress

The work-life framework in which a CMV driver must operate is a unique blend of isolation—away from their family for possibly long periods of time, separated from resources directly available in work offices, and environmental challenges limiting where drivers can go while en route. As described by McDonough et al. (2014), “[t]ruck drivers are ‘lone workers’—their workplace is their cab, the road and the stops along the journey.” The relation between work organization stress and health risks has been often documented by researchers (Apostolopoulos et al., 2010). Beyond isolation, there are a number of other stressors that are inherent with CMV driving. Driving a CMV requires a driver to be constantly alert at a monotonous task for up to 14 hours a day with drivers reporting over 60 hours of work a week, almost 20 hours more than other U.S. full time employees (Apostolopoulos et al., 2013; Bureau of Labor Statistics, 2020). CMV drivers also need to mentally juggle their work within tight schedules to make deliveries on time while environmental factors such as weather or traffic and problems during loading and unloading can cause delays. Also due to work scheduling, drivers may need to frequently change their sleep schedules, which can cause stress on the body (Apostolopoulos et al., 2011)

Additionally, Apostolopoulos et al. (2013) state that their findings from a cross-sectional study of 316 randomly selected truckers support their hypothesis that CMV driving within current governmental and corporate policies “creates a work environment that is not conducive to healthful living for U.S. truck drivers.” CMV drivers are often under time stress for work, work long hours, have no health insurance or an easy way to seek medical attention if ill, and are not offered sick leave by employers. These work environment factors add to the stress of their daily lives.

Work Environment Risks

Workplace risks for CMV drivers include noise, whole-body vibration, postural fatigue, and exposure to diesel fumes (Crizzle et al., 2017; Apostolopoulos et al., 2010; Thiese et al., 2015; Saltzman and Belzer, 2007). Drivers have long exposures to highway noise, potentially even when sleeping if they sleep in the sleeper berth while team driving. This constant exposure can lead to hearing loss (Saltzman and Belzer, 2007). Long work hours, postural fatigue and truck-induced whole-body vibrations can lead to musculoskeletal disorders in truck drivers (Apostolopoulos et al., 2010). **Truck drivers also have a high exposure to diesel fumes from not only driving but also from idling during traffic congestion, while running heat or air conditioning while sleeping in the sleeper berth, waiting at docks for loading or unloading, and while around truck stops. Diesel fume exposure has been documented to cause headaches, dizziness, nausea, respiratory strains, stroke, cardiovascular disorders, and even lung cancer in truck drivers (Apostolopoulos et al., 2010).**

Seat Belts

Seat belt use is directly linked to driver survival in the event of a crash. Statistics show that drivers who do not wear seat belts are more likely to die in a crash. Chen et al. (2015) found that about 14% of long-haul truck drivers do not use a seat belt on every trip and are therefore at increased risk for injury and death. In a more recent study, Hickman et al. (2020) surveyed 11,256 CMV drivers and only 3.2% reported that they did not use a seat belt on every trip in their CMV. Those drivers who did not always use their seatbelt were associated with an increased crash and moving violation conviction risk. Chen et al. (2015) also found a direct correlation between U.S. CMV driver seat belt use and (1) motor carrier adoption of a comprehensive employee safety program and policies with an explicit emphasis on seat belt use, and (2) the installation of new anthropometrically designed truck cabs and better-fitting seat belt systems (Chen et al., 2015).

Links Between Medical Conditions and Safety

Findings from a 2007 study by Krueger et al. suggest that employing healthier drivers may increase highway safety by decreasing accident risk. Furthermore, motor carriers who implement H&W programs for their drivers may ultimately see improved employee morale, lower driver turnover, reduced medical and workers' compensation costs, and improved profits (Krueger et al., 2007; Mabry et al., 2013).

Other studies corroborate the conclusion that unhealthy drivers face increased crash risk. In a 2015 study conducted by Thiese et al., researchers concluded that the trucking population studied had many biometrics that were unhealthy, including high prevalence rates of obesity, uncontrolled hypertension, and hyperlipidemia, as well as many personal and occupational factors associated with lifetime prevalence of crashes. Medical conditions, including obesity, cardiovascular disease, and diabetes have also been demonstrated to increase crash risk (Weigand et al., 2009). Obese CMV drivers were found to be 1.37 times more likely than non-obese drivers to be involved in a safety critical event and were nearly twice as likely to be fatigued while involved in an at-fault safety critical event. Analysis of questionnaire data from 4,448 crash-involved drivers found that drivers with a history of myocardial infarction were 1.77x more likely to be involved in a crash and those with non-medicated diabetes were 3.08x more likely. (Sagberg, 2006). The cross-sectional study with nearly 800 CMV drivers by Thiese et al. (2015) found that low back pain was also associated with crashes.

It has also been found that drivers who were diagnosed with OSA and who subsequently drove without positive airway pressure treatment (due to nonadherence) had a fivefold increase in the risk of preventable, Department of Transportation (DOT)–reportable heavy truck crashes compared to matched controls (Burks et al., 2016). In this study, the participating firm's program to screen and diagnose their drivers—and to mandate treatment adherence for drivers found to have OSA—lowered crash risk in its workforce (Burks et al., 2016).

Ronna et al. (2016) found that drivers with high for cardiovascular disease were more likely to have a reportable crash than drivers with low risk. Researchers in this study identified a statistically significant trend of increasing prevalence of crashes with an increasing cardiovascular disease risk score.

AFFECTING BEHAVIORAL CHANGE

Health and Wellness Outreach Programs

It is widely acknowledged in the literature that the trucking industry is falling short when it comes to providing outreach and intervention aimed at positively affecting driver behaviors to improve long-term health outcomes (Lemke & Apostolopoulos, 2016). This is true not only in the U.S. but also internationally (Lalla-Edward et al., 2016).

Researchers have offered many recommendations on what a CMV driver occupational health program should entail. Characteristics that are generally deemed important include high levels of instrumental support, engendering trust, motivating language, and competent communication (Nayani et al., 2018). There is also an important relationship between the design of employee welfare programs and the geographical and cultural settings in which the programs operate; for example, offering more outdoor activities in locations where the weather permits, or encouraging healthy eating programs (Otenyo et al., 2107). Additionally, program designs need to take into account the personal choices of the individual participants as the best judges of the optimal life balance for their health and welfare when they are given the opportunity and resources to make well-informed decisions (Thompson, 2019).

A case study of Schneider National Inc.'s Health and Wellness program for CMV drivers explored what drivers liked in their H&W program (Mabry et al., 2013). Drivers surveyed in this study often joined the Health and Wellness program based on an insurance incentive to join and participate. They appreciated the fact that their employer showed an interest in their well-being and health and that they were able to complete biometric screenings and have health checks at various on-site operating centers without an appointment versus having to go to a doctor's office. The drivers felt like participation in their fleet's H&W program allowed them to be more aware of and be proactive in taking charge of their health with help from the health coaches.

Recommended program models suggest using the Integrative and Dynamic Healthy Commercial Driving paradigm for guiding efforts to improve industry H&W program shortcomings (Lemke & Apostolopoulos, 2015). Angeles et al. (2014) report that their findings have led to the establishment of the Truckers Research for Innovative Health Promotion Program (TRIHPP). TRIHPP is designed to develop and evaluate health promotion (smoking cessation, diet, exercise, stress debriefing) interventions using unique modes of delivery (internet-based, podcasts, in-truck, or truck stop settings) suited to the population. Researchers note that health promotional materials primarily focused on motivating drivers categorized as "non-intenders" (in terms of change intentionality) can fail to provide "action planning" for the "intenders" category among drivers. Furthermore, even material focused on non-intenders needs to sufficiently communicate an explicit link between the promoted healthy behavior and the necessitated behavior change in order to be effective (Boeijinga et al., 2017). Researchers have also taken note of the new outreach and intervention opportunities offered by wearable and mobile technologies. However, caution is suggested regarding the data privacy concerns of wellness program monitoring (Thompson, 2019).

Future Research

Most studies focus more on behavior intervention rather than the overall “setting” in which the behavior is found to occur. It is therefore suggested that more research should be directed toward changes in the work framework itself (Torp & Vinje, 2014). It should be noted that there is an ongoing need for further research around CMV driver health and safety in general, as evidenced by this literature review and as noted by specific researchers (Saltzman & Belzer, 2007).

Specific Risk Factor Intervention Programs

Physical Activity Counseling

In Australia, referrals to Accredited Exercise Physiologists for exercise counseling have been found to be an effective outreach strategy for a sustained improvement in activity levels (James et al., 2017). During a pilot study of a health promotion model for lone workers, Olson and colleagues (2009) found that truck drivers who engaged in physical activity recall interviews increased their physical activity the week before the interviews and doubled the number of individuals who reported engaging in moderate exercise on most days each week for the preceding 30 days (2009).

Obesity Intervention

Since CMV drivers are distributed workers, obesity prevention outreach programs may have to provide incentives and larger work-life framework strategies—such as work schedule structuring—that specifically address breaks for healthy food selection and physical activity (French et al., 2010). For example, Olsen et al. (2016) conclude from their analysis of baseline data on 452 truck drivers enrolled in the Safety and Health Involvement For Truckers (SHIFT) program study that weight loss interventions for drivers should overtly address sleep in addition to (1) traditional diet- and exercise-focused approaches and (2) interventions that combine driver-level programs with simultaneous work-environment-level changes designed to increase social support and remove or reduce workplace stress. (Note that the SHIFT program is aligned with the Total Worker Health® promotion of an integrated view of the impact of work environments on employee well-being, health, and safety.)

Dietary Intervention

As a follow-on to a prior “Roadside Restaurant Project” initiated by the Swedish National Food Administration that targeted truck stops in 11 counties in Sweden over a 3-year period, Gill and Wijk (2004) focused on one specific truck stop with interventions that were both direct via an information campaign and indirect through menu food changes (both in content and in presentation by the truck stop restaurant staff). Additionally, the project offered incentives for participation, such as offers of a healthier alternative on each “Today’s Special” menu, wherein drivers who chose the healthier alternative were given tokens that could be collected to claim various prizes like t-shirts, etc., or could be used to be entered in a lottery for other prizes. Gill and Wijk concluded that the multi-level, multi-method programs offer a model for reaching specific, hard-to-reach risk groups like CMV drivers and suggest that two steps are crucial: (1) the general education of restaurant staff in healthier food preparation and (2) the use of truck stop staff as proxy health promoters for their key customers (i.e., professional drivers). Telephone

counseling coupled with printed materials can also be an effective dietary intervention (Kim et al., 2010)

Health and Wellness Programs: Case Studies

There are few existing H&W programs specifically designed for CMV drivers. However, there are other H&W programs implemented in other industries that could potentially serve as models for the trucking industry. This section provides short case studies of four different H&W programs reviewed as part of this study.

“Gettin’ in Gear”

“Gettin’ in Gear” was a program developed to help create awareness and interest in H&W within the trucking industry by providing basic health and fitness information to CMV drivers. In a study of 54 participants, this program was found to have had a positive health impact measured in terms of statistically significant improvement in 6 out of 10 areas measured: BMI, pulse, diastolic blood pressure, aerobic fitness level (the measure with the greatest improvement), strength fitness level, and flexibility fitness level. An FMCSA Tech Brief (2009) reported that program participants rated the overall program a 4.65 on a scale of 1 (low) to 5 (high), and 96% of participants reported that the program had helped them. Drivers specifically noted that they liked the health assessments and found that having their personal health information was valuable. Interestingly, the study also found that the drivers did more exercising on their own than by using fitness club memberships and that they used the audio tape informational material more than written material.

“Wellness for All”

Joy et al. (2018) report best practices abstracted from the “Wellness for All” project, which developed, implemented, and evaluated healthy eating and active lifestyle supports for a small university worker wellness program (WWP) in Nova Scotia. The program used a knowledge-to-action (KTA) process. Joy et al. describe the application of the full KTA process by the university from 2013 to 2016. They concluded that the KTA process provides an effective, systematic approach grounded in both adoption and participatory action theories and practices, including ongoing consultations, knowledge sharing, implementations, and evaluations. In particular, they note that WWPs in small universities and organizations (< 500 employees) can accomplish a great deal. Despite perhaps lacking expensive supports, WWPs have the advantages of less bureaucracy in decision-making and a potential for a greater sense of engagement. Joy et al. also noted low participation among lower-wage university employees, which they attributed to the more physically demanding nature of their jobs, which makes participation either inconvenient or unappealing.

“Be Fit”

“Be Fit” is a 10-week employee nutrition and exercise program that Massachusetts General Hospital has offered to its employees since 2006. Levy and Thorndike (2019) have studied changes in health care expenditures, comparing “Be Fit” participants with a matched control group. The researchers used health care claims data obtained from Truven Analytics for 289 selected program participants from January 2010 through September 2014 as compared to 194

employees of the parent institution who did not participate in “Be Fit” (identified as control subjects). “Be Fit” participants and control subjects were perfectly matched on sex (by design) and 82% were women. The study found that although the “Be Fit” worksite exercise and nutrition program demonstrated improvements in cardiovascular risk factors, no evidence was found for a reduction in the healthcare costs of participants 1 year after the program. Levy and Thorndike concluded that the findings were likely due to the fact that prevention-based programs could take several years of practice before any notable financial benefit for employers.

Schneider National Inc. Health & Wellness Program

In a 2013 study, Mabry et al. described and evaluated the opinions, perceptions, and program satisfaction of drivers and program staff who participated in a voluntary H&W program launched in 2008 by Schneider National Inc., together with United Healthcare and Atlas Ergonomics, an ergonomic service and technology provider for healthcare, office, and transportation environments. Using data collected from 94 drivers and 27 staff via phone interviews and online questionnaires, Mabry et al. found that the majority of drivers and staff were satisfied with the H&W program, with the drivers reporting that their health had improved and that the insurance incentive and health concerns were their primary reasons for choosing to participate in the program. Final report recommendations include enhanced marketing of the program to employees, making available a sizable network of on-site occupational health clinics, addressing drivers’ concerns about the privacy of their health information (especially in terms of disclosure to their employers), providing multiple options (such as on-site, home-test, etc.) for the biometric screen as an effective health assessment, and ensuring the availability of individualized health coaching.

Since publication of this report in 2013, many more fleets have implemented health programs and initiatives for drivers. The purpose of this study was to identify, review, and document existing CMV driver H&W programs and to identify additional, and current, industry best practices.

CHAPTER 2. METHODS

To create the H&W program catalog, including detailed outlines of program features and characteristics, best practices, and health and operational outcomes, the Virginia Tech Transportation Institute (VTTI) team worked with staff at carrier operations to accurately detail and describe their company's respective H&W program. All study tasks, including interview procedures and questions, were reviewed and approved by the Virginia Tech Institutional Review Board (IRB) for the protection of human subjects research.

FLEET IDENTIFICATION

Every 2 years, motor carriers are required to complete an MCS-150 form to obtain or maintain their DOT number. VTTI staff used the file created from this census by the Federal Motor Carrier Safety Administration (FMCSA) to randomly select a total of 900 motor carriers based on the size of the organization in terms of the number of trucks they operate: 300 small (1–50 trucks), 300 medium (51–500 trucks), or 300 large (501+ trucks). The MCS-150 also collects contact information for the motor carrier contacts within the organization, which the research team used to recruit carriers for participation. Fleets with fewer than 15 drivers were excluded from recruitment (n = 305).

FLEET RECRUITMENT

The research team sent recruitment emails containing the online survey link to the list of randomly identified carrier personnel (n = 595), inquiring about (1) the presence of an H&W program for drivers, and (2) the interest of personnel at the company familiar with the H&W program (typically management or human resources [HR] staff) to participate in an online interview to discuss their company's H&W program. The fleet recruitment survey questions are included in Appendix A. VTTI staff also contacted 88 additional motor carriers not randomly selected from the list created from the MCS-150 data for potential recruitment. These carriers were identified from research team contacts who may have expressed interest in participating in VTTI research during prior communications.

Carriers expressing interest in participating in the research, via the survey, were sent an email with additional information about the research and how they could participate (Appendix B). The 88 additional carriers also received this email. Researchers followed up with these 88 carriers with up to one additional email and one phone call if a valid phone number was obtained. The scripts for these emails and phone calls are included in Appendix C.

Voluntary participants were sent an email (Appendix D) that included the Informed Consent information, an interview appointment reminder, and Zoom meeting details. There were no exclusion criteria to participate in this research based on sex, health, status, or ethnicity; however, all participants were required to be eligible for employment in the U.S., indicate their primary business was transporting people or freight, and have direct knowledge of and experience with their company's H&W program.

ONLINE INTERVIEWS

One-on-one or small group interviews were conducted online with carrier personnel, with one fleet represented at each interview. Each interview began with attendee introductions followed by a review of the consent information, which participants received and were encouraged to review prior to the interviews. All participants gave verbal consent before participating in the interview. Interview questions centered around the following themes:

- program recruitment methods;
- tests and assessments administered to drivers;
- H&W education, coaching, and motivational strategies;
- health outcomes and achievements; and
- long-term follow-up.

Interview participants were also asked about their opinions, perceptions, and satisfaction with their respective H&W programs, including strengths and supports, challenges and barriers, and suggestions for improvements. Detailed phone interview procedures as well as a complete list of topics and questions for carrier personnel are included in Appendix E.

Interviews took approximately 60 minutes to complete and were audio-recorded for later transcription and content analysis to identify themes and concepts in order to classify and describe the different H&W programs.

CHAPTER 3. RESULTS

FLEET SURVEY RESPONSE

Of the 595 fleets who were contacted via email to complete the fleet recruitment survey, 33 carriers responded (5.5% response rate) and 25 indicated their primary business was to transport people or freight. Among 12 carriers who responded that they had a H&W program, only one indicated willingness to participate in an interview but was subsequently unresponsive to requests to schedule an interview and thus did not participate. Of the 88 additional fleets that were contacted (identified from research team contacts), 16 responded with initial interest (18.2% response rate) and 8 agreed to participate in an interview.

FLEET INTERVIEWS

Of the 683 carriers contacted, 8 (1.2%) agreed to participate in an interview to discuss their respective H&W program. Main themes and findings from each interview are detailed below. Fleet interviews were conducted in summer and fall 2020, with a focus on current program policies and activities. As such, fleet procedures related to COVID-19 may now be different or no longer be in place, in accordance with updated Centers for Disease Control guidance and/or fleet policies.

EPES Transport System, LLC

Program Overview

The EPES H&W program is managed and led internally by fleet personnel who comprise the Health and Wellness Committee; however, the program also includes several internal initiatives and programs that are managed by third party providers, such as the company health insurance provider, United Healthcare. Employee H&W is high priority for EPES and the program evolves according to the needs of the company. One way the fleet determines which health initiatives to target is by monitoring data trends in health and safety claims. The program is available to any full- or part-time employee, including drivers and non-drivers. Some features of the program are available to employee families and independent contractors; however, the majority are geared toward EPES employees. Driver participation in program activities is dependent on the type of program, initiative, or challenge.

All H&W initiatives respect the confidentiality and privacy of health and medical data. Upon hire, all employees receive HIPAA training and review and sign a document indicating they understand HIPAA privacy laws and the protocols put in place by EPES to comply with privacy guidelines. A document management process in place at EPES protects any data related to medical history or privacy issues, and there are clear and defined processes in place for who can see and access this data. The importance of HIPAA protection is stressed to staff and drivers and is reflected in the recurring HIPAA refresher training they receive. Confidentiality and privacy of health data is also stressed in messaging and communications drivers receive regarding H&W program initiatives and events.

Participant Recruitment

Participation in the EPES H&W program is voluntary and free of cost, beyond premiums associated with employee insurance benefits as they relate to some features of the program. For example, during benefit enrollment, employees indicate their tobacco status (user vs. non-user) and non-users receive a reduced insurance premium rate. This tobacco disclosure is the only feature of the program that requires a mandatory response and is linked with health insurance benefits and premiums.

Employees are informed about the program at several points during the recruitment and hiring process, as well as throughout their tenure with the fleet. Participant recruitment in H&W initiatives is a constant and ongoing effort. Drivers learn about the benefits program and H&W program initiatives during recruitment and again during new-hire orientation. Throughout the year the fleet holds challenges and outreach events, which afford more opportunities for marketing H&W program features. For example, each holiday there is a wellness challenge; the fleet also hosts a yearly fall festival for employees and families that includes a focused H&W component. The EPES employee portal and Qualcomm onboarding communication platforms also afford effective opportunities to disseminate program information to drivers. Social media platforms, a monthly newsletter for employees, and word of mouth from safety managers and other employees are additional ways employees can learn about the H&W program, initiatives, and events.

Health Assessments and Biometric Screenings

There are no required health assessments to complete in order to participate in the EPES H&W programs. Voluntary blood pressure checks are offered at the yearly health fairs; this information is for the employees' knowledge and is not recorded as part of the program. Blood pressure machines are available at EPES terminals for employees to self-check, monitor, and reassess their blood pressure. Complimentary flu shots are also offered to employees.

As noted, employees are required to indicate their tobacco status, which impacts the health insurance benefit rate they receive. Again, this is the only required health indication drivers must complete beyond the required DOT physical and drug testing.

Review and Coaching

Health coaching is available to all employees at the wellness center clinic upon request. The on-site physician and nurse practitioner are available to assist drivers with goal setting, monitoring, and self-assessments. The physicians are eager to engage with employees who seek assistance and will follow-up with those participants who request it. Employees are encouraged to self-monitor their behaviors and progress. The fleet notes that fitness trackers and wearable technologies seem to be popular among drivers and employees, and these may be valuable tools for drivers to self-monitor their health behaviors.

A third-party provider offers a specialty care management program that is associated with the medical benefits program to target dialysis prevention. Through this voluntary program, employee health is assessed to proactively identify risk factors for kidney failure and mitigate development of disease. Certain risk factors and diagnoses flag employees who may be at risk.

Nurses from the third-party provider then contact the employee individually and provide them the counsel, care, information, and resources they need to mitigate disease progression.

Program Components and Activities

The EPES H&W program offers a variety of initiatives, events, and challenges to encourage employee participation and engagement. Participation is always voluntary and outcome and goal tracking are done on an honor system rather than via strict data monitoring and tracking requirements. A main goal of these program initiatives are widespread participation and to have fun while making healthy choices and positive behavior changes.

Each holiday there is a wellness challenge that employees can elect to participate in. Popular challenges include weight loss challenges, step count competitions, and challenges to reduce blood pressure. Some challenges provide participants with equipment such as pedometers for monitoring step counts and resistance bands for exercise challenges. Many challenges offer prize or gift card incentives to participants and/or winners. Examples include televisions, Visa gift cards, and company apparel and “swag.” The yearly fall festival is an opportunity to gather and socialize with family and coworkers, while also learning about the fleet’s many health and safety initiatives with resources, information, and giveaways from vendors, providers, and HR personnel. Each month there is a hotline giveaway where employees can complete a questionnaire and be entered into a lottery to earn prizes such as gift cards or promotional company items. The questionnaires are often geared toward H&W information. Fitness centers located at two major EPES terminals are available and employees are encouraged to use them. Employee assistance programs that offer mental health resources and assistance are also available as are elf-defense classes.

Another element of the H&W program is the free clinic that is available to employees and their families. The clinic, located next to the EPES corporate office, is convenient and easily accessible to drivers, but still separate from the fleet terminal. This may be an important detail that makes drivers feel comfortable utilizing the clinic resources, giving them confidence that their health and medical information is confidential and protected from fleet access. Employees can be seen by the clinic physician with or without an appointment and these visits are not processed through insurance. The clinic is funded by EPES and is free to employees and their dependents on the company insurance. A clinic nurse is also available by phone for needs that do not require an in-person appointment. Another important resource for over-the-road drivers is the telephone hotline that helps drivers locate and access health resources wherever they are across the country.

The EPES employee portal and independent contractor portal offer a variety of information, resources, and links related to general health, nutrition, exercise, fleet health programs and initiatives, and COVID-19 information. Current articles and publications are shared on these sites, and can be accessed by computer, smartphone, or tablet. The two portals include similar information; however, only the employee portal offers information related to health insurance benefits.

A unique component of the EPES H&W program is the spousal support program and quarterly newsletter that is targeted toward spouses; these resources focus on communicating with drivers’

spouses and keeping them informed about current and upcoming H&W initiatives and events, including open enrollment for health benefits. Information is communicated to spouses via email and the spousal support Facebook page. Information shared through these platforms includes healthy recipes, tips for meal prepping, preparing healthy foods, and healthy eating over the road. EPES recognizes the important role spouses play in influencing, facilitating, and supporting healthy driver behaviors. Sharing this information with spouses is a way to indirectly reach drivers.

EPES also has a worker injury program that includes virtual online training related to job safety, including information on slips, trips, falls, musculoskeletal injuries, and has recently been updated to include COVID-19 safety. Two thought-provoking questions are sent weekly to get employees to think critically about job safety and reducing injury.

Education

Education is an important component of the EPES H&W program. Employees receive education via flyers, brochures, and fleet newsletters, which include health-focused content, such as nutrition and exercise tips, stretching guidance, and risk mitigation. These materials are available from the fleet benefit department, at the free clinic, at safety meetings, and at H&W program activities and events, such as the yearly health fair. “Eat this not that” is a popular topic that encourages drivers to select healthier food choices when eating out or cooking at home. Educational materials are provided that communicate to drivers how to exercise over the road with no or minimal and portable equipment. One year, resistance bands were given to employees along with exercise tips and instructions.

Education and resources, including health- and wellness-focused content, are also shared electronically on the employee portal, to which all employees have access, as well as the independent contractor portal. Shared content includes information related to general health, nutrition and exercise, sleep, COVID-19 awareness and precautions, and information related to H&W program activities or initiatives. Educational posters featured at fleet terminals are updated monthly to present relevant and timely information. Similar content is posted to social media accounts and pushed to drivers via the Qualcomm system.

Medical Referrals

The clinic physician and nurse practitioner can make medical referrals for employees to see general practitioners or specialists for suspected ailments or disorders. The H&W program also has a telehealth component where an employee calls the clinic to speak to a medical professional about a health concern or ailment and may receive a medical referral to follow up. United Healthcare, the health insurance provider for EPES, also has a website where employees can access medical and health-related issues and ask questions.

Follow-ups

The on-site clinic physician and nurse practitioner will follow-up with those participants who request it; however, H&W program participants often self-monitor and hold themselves accountable. The only fleet health initiative that does require follow-up is the sleep apnea program, which requires OSA treatment compliance monitoring. DOT regulations require drivers

with diagnosed OSA to meet a threshold for treatment compliance, which is currently monitored internally through EPES.

COVID-19 Impacts

The fleet notes significant impacts of COVID-19 on H&W program initiatives and participation. In March, 2020, employee relations and the EPES Health and Wellness Committee were put on hold. Most events and challenges were cancelled for 2020, and those that were held (mostly virtually) had very low rates of participation. The fleet was challenged with developing ideas for holding future events while adhering to Centers for Disease Control COVID-19 safety and health guidelines.

To address COVID-19, training curriculums have added content on personal hygiene and social practices to mitigate disease spread. Drivers receive training and tips on how to disinfect their cabs and keep them clean. There is a COVID-19 hotline available for employees to contact if they feel sick or may have been exposed and wish to get tested. The on-site clinic is currently doing COVID-19 testing for employees and those who test positive or suspect exposure may be placed out of service to quarantine.

Kiosks were set up at larger EPES terminals to administer temperature checks. Masks were issued to all employees and drivers were required to wear masks when delivering to and interacting with customers. The fleet also reimburses employees for purchasing thermometers for self-monitoring temperatures.

Lessons Learned

EPES notes that key aspects of their H&W program that work well and are important for a successful program include transparent communication, constantly engaging employees, and repeated opportunities of making them aware of all the H&W programs and initiatives offered. A challenge of the program is the over-the-road nature of the industry. It can be difficult to get drivers to participate, face-to-face interactions are limited, and staff don't see drivers regularly so check-ins and accountability can be more challenging. Fleet staff note that driver turnover rates are less than half of the industry average. They are unable to identify the reason for this; however, they believe the H&W program may play a role in driver retention.

Groendyke Transport

Program Overview

The Groendyke Transport H&W program strives to engage employees on day one with the company by providing resources and incentives to encourage healthy behaviors. The program is designed to help employees identify health risks and implement strategies to mitigate them. Groendyke Transport's H&W program is run by HealthCheck360, a third-party population health management and well-being solutions company, which offers companies a variety of wellness services to create a comprehensive program that is tailored to unique needs and work cultures. The HealthCheck360 data-driven approach includes developing innovative well-being strategies to address individual and population health. Groendyke began offering all employees access to this free program in 2011 and almost all of their 1,000 employees participate in the

program through challenges and/or by receiving an insurance incentive after completing a biometric screen and Health Risk Assessment Survey. Spouses are also eligible and encouraged to participate in the H&W program challenges and complete biometric screenings.

Participant Recruitment

Participation in Groendyke's H&W program is voluntary and is introduced to the employees upon hire during discussions of their benefits and insurance. In addition, program information is sent through the Groendyke mobile application, which includes an individual participant portal called My HealthCheck360 for users.

Health Assessments and Biometric Screenings

In order to participate in the program and earn a reduction in their insurance payment, employees must complete a 15-minute biometric screening, which involves a full venipuncture blood draw, and a Health Risk Assessment Survey. This can be done over the course of a few months each year at various terminals or drivers can complete the screening at a participating lab free of charge.

Review and Coaching

Following the biometric screening, drivers may consult with a health coach to develop an individualized plan of action to address their health needs and goals. To comply with Condition Management program requirements, drivers, support staff, and spouses can have voluntary quarterly phone conversations with a representative from HealthCheck360. During these 5–10 minute conversations, drivers can discuss any or all of the following: medications the participant should be taking; compliance with physician-prescribed treatments or therapies (dependent on disclosure by the participant); updates on goals they might have set for themselves, including progress, setbacks, encouraging new goals, finding motivation, etc.; and advice on alleviating or improving health issues or concerns.

Program Components and Activities

The HealthCheck360 Condition Management Program helps employees improve adverse health risk factors through resources and medical support from nursing staff. Specific priority conditions the program targets include diabetes, coronary artery disease, obesity, asthma, chronic obstructive pulmonary disease, and high cholesterol. Health coaching newsletters, webinars, recipes, blogs, fitness devices, and other tracking tools are available to employees through the HealthCheck360 Lifestyle Rewards program. Health notifications are sent through the HealthCheck360 application, which covers topics including nutrition, exercise, common health disorders, weight loss, and healthy living on the road,. A unique feature of the app is a barcode scan which allows users to scan the barcodes of foods they eat to track nutritional and energy intake. Participants can also search for topics that are of personal interest at any time within the HealthCheck360 application. The app can be paired directly to personal fitness trackers to further motivate, engage, and support drivers through feedback and positive reinforcement. In addition, mailings and materials relevant to the program, health education, and resources are sent to employee homes through the U.S. Postal Service (USPS). To keep participants engaged and motivated, Groendyke's H&W program includes challenges and competitions to encourage healthy habits such as weight loss or physical activity. BlueCross BlueShield of Oklahoma also subsidizes fees for gym memberships to support physical activity among employees and offers free tobacco cessation support. The H&W program offers a reward system for adhering to health

behaviors and goals, including preventative care, vaccines, nutrition, sleep, exercise, meditation, and stress management.

The Groendyke health insurance and medical plan also offers many resources to help employees receive high quality and cost-effective care. The medical plan, provided by BlueCross BlueShield of Oklahoma, offers Case Management, Cost Transparency Tools, and a Preventative Prescription Drug list, which covers medications that are under the plan at 100%. Health Advocates are also available to all employees and family members to guide members through the healthcare features and teach them how to maximize benefits. Health advocates provide members with experience and support for routine care and complex medical situations.

Medical Referrals

Not applicable.

Follow-ups

To maintain regular follow-up, participants and HealthCheck360 staff have phone conversations in which they discuss personal goals, goalsetting, and interim accomplishments toward reaching the goals they have set for themselves. Participants are expected to self-monitor their accomplishments towards these goals and regularly assess their progress. Participants are free to stop participating in the voluntary H&W program at any point. Those enrolled in Condition Management are encouraged to complete the quarterly phone conversations to receive participation and medical premium incentives.

To ensure the program is meeting the needs of company personnel and their families and encourage ongoing growth and innovation, the H&W program is evaluated bi-annually to ensure effectiveness and accessibility, as well as identify areas to improve.

COVID-19 Impacts

Since the COVID-19 pandemic, not much has changed regarding the daily operations of the H&W program. All communications, materials, and resources continue to be sent via mobile applications or USPS. Biometric screenings were paused during 2020; however, incentives were modified so employees could still achieve them without completing a biometric screening.

Lessons Learned

Groendyke Transport personnel expressed strong support of their HealthCheck360 H&W program. Top-down support from upper management is important for leading by example and demonstrates the company's commitment to employee health and wellbeing. A main concept that the carrier strives to communicate to employees who participate in the H&W program is that overall health and wellbeing, including physical, mental, and emotional health, can improve general happiness. However, the industry realizes the challenge of healthy living for drivers considering their typical work and lifestyle, and making health a priority can be difficult for drivers. However, Groendyke, with support from HealthCheck360, engages drivers and facilitates positive health behaviors. The carrier also reinforces the privacy and data security of the program. HealthCheck360 provides de-identified aggregate information to the carrier to ensure participant identity is private and aggregate information is used to evaluate and modify the program. The carrier receives minimal individual employee information.

The wellness program is offered for the benefit of all employees and their families. Drivers and all participants are encouraged to provide feedback. Additionally, having a third party involved in offering and managing the H&W program gives drivers a layer of separation between detailed personal information and Groendyke. For example, Groendyke only has access to aggregated, company-level data regarding employee health. The carrier knows the overall percentage of employees with certain disorders (i.e. obesity, diabetes, hypertension, etc.) but not the identities of individual employees with these disorders.

Groendyke tracks metrics and data related to program outcomes to evaluate the program and ensure it evolves to meet employee needs. Data analyses have shown several positive impacts of the program since 2017, including the following:

- 46% of participants improved health
- Participants in the program experienced 24.5% fewer catastrophic claims
- Repeat participants improved risk categories and lowered nicotine usage by 12.1%
- Long term participants (5 years) lowered glucose levels by 46%
- In 2018, over 20+ undiagnosed diabetics were receiving treatment
- There was a 33% reduction in “Critical Value Indicators” (biometric readings requiring urgent medical attention)

Maverick Transportation LLC

Program Overview

Maverick Transportation’s H&W program was developed internally and is run and managed by carrier personnel within their HR department. The program originated in 2006, initially serving only non-driver employees but expanded in 2012 to include drivers. Managing the H&W program is one, rather than the entirety, of HR personnel’s job duties.

All Maverick employees (except owner-operators) are eligible to participate in the H&W program. The program encourages family members to support drivers participating in the program, as they recognize the importance of social support for driving participation and success. There is an email account to which family may send questions or concerns to H&W personnel as well as a Facebook page to engage family; however, family are not eligible to participate in the program.

Participant Recruitment

Program participation is voluntary and drivers are introduced to the program by HR representatives during new-hire orientation. Another opportunity to recruit drivers to participate is during driver appreciation week, when H&W representatives are sent to all Maverick terminals to introduce and market the program. Word of mouth is another means by which drivers hear about the program from other drivers. This is an effective recruitment strategy because drivers hear about the program first-hand from a trusted source (i.e., a fellow driver). They may also see or hear about other activities or prizes that drivers have won during program competitions and inquire about the program.

Overall participation in the challenges has been very low, with a recent challenge only engaging 1.7% of drivers. Maverick acknowledges the need to identify creative solutions to increase driver participation and engagement in challenge activities.

Health Assessments and Biometric Screenings

Program participants are not required to complete health assessments or biometric screenings; however, biometric screenings are available at health fairs for drivers who want this information for their own personal knowledge. To encourage individual health monitoring, Maverick terminals have self-administered blood pressure monitors on site for drivers to privately check their own blood pressure. There is no one to make any medical referrals based on the outcome of any of the optional driver screenings.

Review and Coaching

Maverick's H&W program does not offer any health coaching or review any medical information. All medical information that relates to the driver's safety while driving is handled by the Safety Department.

Program Components and Activities

During new-hire orientation, HR representatives introduce the H&W program and give resistance bands to all new employees to encourage exercise and assist with workout plans while on the road. Some Maverick terminals have on site gym facilities for employees' use as well. A weekly farmer's market is hosted by one major terminal where fresh produce, homemade juices, breads, and other local favorites are available for all employees at the terminal lounge. In addition to providing access to fresh produce, the farmers market is a social outlet to encourage gathering and community among employees.

The Maverick H&W program promotes regular competitions to encourage drivers to be physically active. Competitions that engage drivers to track their daily step count or achieve weight loss are all honor-based and focus on self-monitoring, accountability, and friendly competition. Data is not objectively measured or tracked and there is no official way of monitoring the driver's participation beyond self-reporting. Competition winners may receive prizes.

Education

The Maverick H&W program delivers messages via Facebook throughout the year on various mental and physical health topics that promote overall well-being and life balance. Information, education, and tips on financial wellness, nutrition and healthy eating options, physical activity, personal hygiene, sleep quality and quantity, weight loss, maintaining a healthy weight, and healthy living on the road are shared. Program participants can also post videos and share tips and information, such as planning meals, cooking, and exercising over the road, with other members.

Medical Referrals

This program does not make medical referrals.

Follow-ups

This program does not monitor or test any participants to follow-up or provide feedback. Drivers are free to stop participating at any point without reporting to anyone.

COVID-19 Impacts

During the COVID-19 pandemic, only social media was used to distribute messages and recruit employees to participate in the H&W program. In response to the pandemic, the program highlighted hygiene practices and the company's Employee Assistance Program (EAP), which has a COVID-19 resource page as well as resources to handle any work or personal issues associated with COVID-19, such as health, stress, family concerns, financial strain, etc. HR representatives noted that there was a slight increase in employee usage of the EAP after COVID-19 emerged. Additionally, program events, including wellness classes for new hires and weekly farmers markets, were put on hold due to the pandemic.

Lessons/thoughts

Drivers recruiting other drivers is the best and most effective recruitment path for driver participation in the program. Drivers receive a lot of messages via email and onboard communication devices, making it more difficult to relay and receive information through these channels. Messages about the program can be lower priority when more pressing information or issues are the focus of communications.

Performance Food Group

Program Overview

The H&W program in place at Performance Food Group (PFG), titled Healthy Together, has been in place since 2007 and is available for all full- and part-time (after 6 months of employment) employees. The health and benefit programs are also extended to family members who are covered under PFG insurance. PFG employs approximately 17,000 people, 7,000 of whom are drivers. Participation in their medical benefits program, Healthy Together, is over 90%. Participation in Healthy Together is voluntary and there are many layers and ways to participate; however, employees must be enrolled with a PFG benefit program in order to participate in Healthy Together programs and initiatives. PFG partners with third party providers to run and manage many of the Healthy Together wellness programs. Partners include United Healthcare, PFG's insurance provider; SleepSafe Drivers, a sleep apnea solutions provider; and CVS Caremark, a prescription benefit management organization.

Participant Recruitment

Employees are recruited to participate in wellness programs primarily during the annual benefit enrollment for health insurance, since Healthy Together is closely tied with health benefits. HR personnel meet with employees (usually in-person but since COVID-19 this has been done virtually) to discuss benefit enrollment and Healthy Together program options. Employees can elect to enroll in most program initiatives year-round. Employees also receive flyers and other physical and electronic recruitment materials throughout the year that market Healthy Together

initiatives and remind employees and family of program opportunities. Postcards are regularly sent to employees' homes, addressed to a driver's spouse or partner, making them aware of the Healthy Together program, the sleep apnea program, and other health benefit opportunities. Targeting marketing materials to the spouse and family increases drivers' awareness of program opportunities in hopes that they will elect to participate themselves and encourage their family member driver to participate. Households that make healthy commitments together may be more motivated to stay on a positive health track.

Everyone enrolled in PFG a health benefits plan, including family, can participate in Healthy Together programs at no cost. PFG does not note driver hesitancy to participate due to privacy or confidentiality concerns. Fleet management suggests that because drivers are accustomed to DOT-required medical and physical testing, perhaps they are more accepting of the H&W program and the health assessments.

Health Assessments and Biometric Screenings

The Healthy Together program includes six main health assessment components that employees have the option to complete in order to receive financial contributions toward their health savings account (HSA) or health reimbursement account (HRA). Health assessments include a biometric screening or general health physical, dental exam, eye exam, cancer screening, and personal coaching session. Each assessment completed contributes money to the employees HSA or HRA, totaling up to \$550 each year per employee for all assessments completed. Some assessment simply require completion, while others, like the biometric screening and general physical, require a passing score. If the employee does not pass the biometric screening, they can enroll in an online educational class or training that discusses targeted topics to meet their needs. These brief online educational classes are developed and hosted for PFG by United Healthcare and are accessible through the PFG employee portal. For example, if a driver's biometric screening indicates high total cholesterol and obesity, the driver can enroll in a cholesterol management and weight loss educational course through the PFG employee portal. Once completed, the driver receives credit for completing the biometric screen and the HSA/HRA contribution. Similarly, spouses or dependents are eligible to complete four health assessment components and may receive up \$200 in HSA/HRA contributions each year.

PFG partners with SleepSafe Drivers, a third-party sleep disorder management provider, to lead their sleep apnea screening, diagnosis, and treatment program for company drivers. Sleep disorder assessments may be mandatory for drivers who demonstrate risk for sleep apnea. There are several ways that drivers can be flagged to undergo a sleep apnea evaluation: (1) they present with risk factors, signs, or symptoms during their DOT-required medical examination; (2) they are flagged for erratic driving from the onboard camera system in their trucks; (3) they are referred to a SleepSafe Drivers physician. The sleep study to diagnose sleep apnea is provided through the benefit program and all testing and treatment is provided at no cost to the driver. Other than sleep apnea testing, the only other required health assessment is self-disclosing tobacco use each year during benefit enrollment. Employees who indicate no tobacco use receive a reduced insurance premium rate compared to rates for tobacco users. Tobacco users have the option to enroll in a nicotine cessation program offered through the Healthy Together program. Upon quitting nicotine, they are eligible to enroll as a non-user during the next benefit enrollment to receive the reduced rate.

Review and Coaching

Personal health coaching is provided through the United Healthcare Rally program—a health solutions website and mobile app that provides individualized education, resources, and action plans to achieve healthy living. Employees who elect to participate in personal health coaching will connect with a coach over the phone and work together to create a personalized healthy living plan that works with their unique lifestyle, goals, and motivation profile. Nursing professionals follow up with employees quarterly to check on progress, answer questions, address concerns, determine successes, and detect barriers. To encourage and motivate participation, participants earn Rally coins when they achieve minor and major milestones, such as logging in and using the app and completing missions and challenges. Rally coins are used to enter raffles to earn rewards and win prizes.

To mitigate worker injury, drivers receive training during orientation to ensure safe habits are practiced. To reinforce this training, PFG has a behavioral safety program in place which involves an electronic observation system that enables safety managers to observe driver habits from the driver perspective. Managers are able to observe and critique how drivers maneuver around customer lots during deliveries, including how they load and unload trucks. Managers use these data to provide drivers feedback and train them on proper lifting techniques to ensure safe lifting and loading habits are practiced. When a worker is injured, they have the opportunity to speak with a nurse immediately and then follow-up on recovery and rehabilitation procedures.

Program Components and Activities

The Healthy Together program includes six main health assessment components that employees may complete: a biometric screen or general health physical, dental exam, eye exam, cancer screening, and personal coaching session. The biometric screen includes assessing BMI, blood pressure, a blood panel for lipid and glucose measures, and other clinical and physical measures. PFG has seen some resistance from employees to participating in the biometric screen and the blood draw. There can be hesitancy and paranoia about sharing personal information, where that information goes, and who has access to it; however, this resistance is less among drivers than other employees. The biometric screen can be reassessed yearly during open enrollment for health benefits. The general health physical may be performed by the employee's general practitioner and other exams and screenings scheduled with in-network healthcare providers. Personal health coaching is available for employees who elect to participate. They connect with a personal health coach over the phone and work together to create a personalized healthy living plan that helps them achieve their goals. In addition to personal coaching, the Rally program offers additional custom-created programs designed to help employees live healthier lives. Participants receive a list of customized missions, based on their overall health assessment, designed to improve nutrition and eating habits, fitness level, and general mood and mental health. Participants can use the Rally app to track their physical activity and compete with other Rally members, including colleagues and family, to earn extra rewards and opportunities to win prizes.

Another component of the Healthy Together program is reimbursements for personal gym memberships. Employees who go to their personal gym a certain number of times per month receive a financial reimbursement toward their membership costs. The reimbursement is issued as a paycheck credit each month. Select fleet terminals also have fitness centers that are accessible to employees.

The only required program component is the sleep apnea program, which is managed by SleepSafe Drivers and is offered to drivers with health benefits at no cost. Per DOT regulations, drivers diagnosed with sleep apnea must demonstrate effective treatment compliance in order to receive medical certification to drive. SleepSafe Drivers monitors PFG driver compliance and reports it to the fleet. When a driver is non-compliant, the fleet works with that driver to achieve compliance. If adequate treatment compliance cannot be achieved, the driver is taken out of service.

Education

Educational and training programs offered through the Healthy Together program include tobacco cessation programs, healthy pregnancy education, weight loss programs, diabetes management, cholesterol management, healthy nutrition, and exercise education. These programs are accessed online through the United Healthcare PFG-portal and the Rally program. All educational programs are voluntary and can be accessed anytime by employees and spouses without cost. Marketing materials to inform employees and family about these educational opportunities are sent to homes via flyers and informational cards. Quarterly driver newsletters and monthly safety newsletters are also a source of health education, as they discuss topics such as ergonomics, safe driving, and a topic of the month that is often related to H&W. Employees are also reminded of these topics each year during the benefits program rollout.

If a driver does not pass the biometric screen or general physical, they can enroll in the Healthy Together educational class that addresses the topic that meets their need in order to receive the HRA/HSA credit. The fleet notes that the educational aspect of this is valuable, as drivers are identifying areas that they may need help in and learning about how they can make behavioral and lifestyle adjustments to improve those health factors. They are not just checking boxes to earn benefit incentives.

Worker injury education is a priority at PFG. Drivers receive flyers and weekly communications regarding timely and important topics, such as seasonal driving safety considerations and proper lifting form to avoid injury. Drivers receive worker injury education through both one-on-one coaching while on the job and small group coaching with safety managers.

Medical Referrals

Results from the biometric screening can flag a medical referral. If a risk factor or item of concern is noted on the results of the biometric screen, the employee receives a notification through the mail recommending they schedule an appointment with their physician to further explore or follow up on the issue. For example, if the blood panel results from the biometric screen indicate elevated glucose levels, the driver would receive a notice recommending they contact their physician regarding high blood sugar and potential diabetes.

Additionally, a driver is referred for a sleep apnea evaluation if they present with risk factors, signs, or symptoms during their DOT medical examination; they demonstrate erratic driving that is captured on the onboard camera system in their truck; or if a physician refers them. Finally, there are two ways an employee is referred to the Healthy Together tobacco cessation program: if they indicate tobacco use on their annual benefits enrollment form or if nicotine is detected in their system from the biometric screening assessment. The cessation program is optional, but if completed, the driver will receive the reduced, non-tobacco user insurance rate during the next health benefits enrollment period.

Follow-ups

If an employee fails a portion of the biometric screening but wishes to receive the HRA/HSA incentive, they must complete a training or educational class associated with the failed component. In these situations, driver follow-up would take place to ensure the training was completed in order to receive the benefit incentive. Nursing professionals will follow up with employees who elect to participate in health coaching quarterly to discuss progress, questions, and concerns, identify successes and barriers, and strategize plans moving forward. Long-term sleep apnea treatment compliance is monitored by SleepSafe Drivers for drivers in the sleep apnea program. The fleet is notified by SleepSafe Drivers when drivers are not adhering to treatment.

COVID-19 Impacts

The H&W program has largely been unaffected by the pandemic since most initiatives are virtual or over-the-phone. The fleet does note more pushback from drivers not wanting to go to a physician's office for their annual physical. Fortunately, DOT has put in place some exemptions that extend the timeline for medical exams.

Mask wearing and frequent handwashing has been added to driver training and communicated constantly. PFG complies with customer requests for contactless deliveries; however, they have also experienced customers that don't comply with mask wearing and note that it puts their drivers at risk. Orientation and training protocols have adapted to virtual communications to comply with physical distancing.

The PFG Healthy Together program is closely tied with HR and the HR workload has been impacted significantly by COVID-19. PFG notes that HR is stretched especially thin right now, as may likely be the case for other industry leaders as well.

Lessons Learned

PFG notes that the different program offerings and options work really well and are important for the success of the Healthy Together program. Drivers and employees can participate in as many program initiatives as they want and they get out of it what they put into it. The voluntary program works well for them. Specific elements that work well include the biometric screen to assess general and overall health and the United Healthcare Rally program. The personal coaching and targeted health programs that meet individual needs are positively received by employees.

From a corporate management perspective, fleet representatives feel that more could be done to embed health and safety culture into the organization. Engaging more with employees through team activities and challenges, social media content and interactions, and even utilizing fitness trackers as accountability and motivational tools could increase enthusiasm and active participation in the many health programs and opportunities available to drivers.

PFG notes that with so many moving parts that can impact company operations and employee factors, it is difficult to quantify outcomes impacted by the H&W program. Overall, the fleet has observed yearly decreases in rates of reportable injuries and collision. They have not looked at the data to support this, but they believe the program has helped improve these health and safety metrics.

PITT-OHIO

Program Overview

PITT OHIO's H&W program began in 2008 as a pilot program called "Occupational Athletics" offered through the fleet's health care provider. It was initially rolled out at a single terminal that was reporting a high number of worker injuries. The program focused on the importance of health for both work safety and general lifestyle wellness and quality of life. Information was distributed to employees, including drivers, to educate them on healthy eating habits, nutrition, and exercise; all drivers and dockworkers were also required to stretch for the first 15 minutes of the workday, just as an athlete warms up for their sport. In the first year of the pilot H&W program, PITT OHIO saw a 70% reduction in sprains and strains at the pilot terminal, which led to the rollout of the program at five additional terminals. PITT OHIO continued to see such positive results from the H&W program that it was implemented as a required program at all terminals for all employees in 2010.

All employees of PITT OHIO are required to participate in the H&W program and stretch for the first 15 minutes of their workday unless a doctor's note is provided stating that they are unable to do so. Family members or dependents of employees receive memos and newsletters outlining the importance of health, sleep, and rest for drivers in order to perform their job safely. In addition, family members who are covered on the same insurance policy are also eligible to participate in the program. The H&W Coordinator offers individualized health counseling and coaching for family members via an interview.

The current H&W program is managed by PITT OHIO employees with oversight from the Safety and Risk Management and HR Teams, as well as a Health and Wellness Coordinator. In addition to the established H&W Program, PITT OHIO added a sleep disorders program run by Fusion Health (currently Nox Health) in 2014 for all employees.

Participant Recruitment

Once an individual is hired at PITT OHIO, participation in the H&W program is mandatory; thus, the program has 100% participation. However, it can be challenging to gain employee acceptance, engagement, and active participation in a mandatory program. To address this, PITT OHIO obtains approval from employees to share their personal program stories and successes with other employees.

Health Assessments and Biometric Screenings

There are no requirements to complete any health assessments or biometric screenings as part of PITT OHIO's H&W program; however, these tools are available to interested drivers who would like to have the information for their own knowledge and health monitoring. Optional web-based health risk assessments are sent to employees yearly; these take about 20 minutes to complete. Terminals host health fair events at which biometric screenings are offered to employees; these take about 15 minutes to complete.

PITT OHIO notes that drivers do not seem resistant to completing health assessments since the information is collected for personal knowledge and self-monitoring and is not shared with the carrier. The purpose of offering the health assessments is to encourage employees to take positive actions to improve their health and demonstrate support for employees to live a healthy lifestyle, rather than for data collection and tracking purposes.

Review and Coaching

The Coordinator for PITT OHIO's H&W program offers assistance to employees with individual health goals. Employees can schedule a meeting with the Coordinator and discuss personal health goals they want to set for themselves. The Coordinator then creates an individualized plan that is tailored specifically to help them achieve their goal. All medical information that can impact medical certification or ability to operate a CMV (i.e., high or uncontrolled blood pressure, sleep disorders, uncontrolled diabetes, etc.) is handled by the Safety Department and is not shared or discussed with the H&W Coordinator unless an employee self-discloses a medical condition that they would like to discuss. These privacy policies are in place to develop driver trust and encourage active program participation from employees without fear of penalty or job loss.

Program Components and Activities

There are no incentives for participating in PITT OHIO's program. PITT OHIO covers employee insurance at 100% and therefore there can be no additional insurance benefit. In addition to the required 15 minutes of stretching before every shift for all employees, educational materials are sent to all employees each month via mail. Quarterly newsletters are also distributed that address healthy living and eating; nutrition; exercise; meal preparation for the road; and health disorders and diseases, such as hypertension and poor sleep, that can impact road safety. All terminals have TVs which display various H&W program information. Employees are also offered membership discounts at partnering gyms and fitness centers.

The H&W Coordinator travels to each terminal twice per year to discuss health topics with employees, from packing healthy lunches to controlling blood pressure. These visits also provide opportunities for face-to-face interactions to discuss personal health issues and goals. Throughout the year, the H&W program launches challenges to engage employees and encourage active participation and friendly competition. Challenges to promote walking, weight loss, and smoking cessation are a few examples of the types of competitions drivers can participate in. The H&W Coordinator details each challenge and sends the information to terminal managers who then distribute the information to all employees and create a list of

voluntary participants. To incentivize challenge participation, employees may receive equipment, apparel, or other “freebies.” For example, employees who participate in walking challenges are provided with Fitbits to track their steps; for other challenges, participants may receive items such as company t-shirts, a healthy lunch, etc. The top three challenge winners at each terminal receive a gift card prize and the overall winner among all terminals receives a larger prize.

Medical Referrals

This program does not make medical referrals. If an employee has health or medical concerns they are instructed to contact their physician or call their insurance company for a referral.

Follow-ups

If an employee begins a plan or program that has been initiated by the H&W Coordinator, it is up to that employee to track their progress and follow up with the Coordinator, should they decide to do so. Formal follow-up assessments and participant monitoring are not elements of the PITT OHIO H&W program; however, resources are available through the program for employees to self-monitor and track their own progress. Resources include the online health risk assessment, biometric screenings, voluntary health counseling and check-ins with the H&W Coordinator, and challenge participation and assessments. All employees remain in the program as long as they are employed by PITT OHIO.

Impacts from COVID-19

Due to the COVID-19 pandemic, travelling between terminals is no longer an option for face-to-face counseling and coaching with the H&W Coordinator. All conversations with the Coordinator now happen over the phone. Hygiene and safety topics related to COVID-19 are sent to employees via the quarterly newsletters. Additionally, the HR and Safety Departments send out weekly communications regarding protocols for staying healthy and minimizing exposure to the virus.

Lessons/thoughts

PITT OHIO strives to create a strong workplace safety culture for employees through their mandatory, carrier-wide H&W program. A primary message of the program emphasizes that a healthy lifestyle benefits not only work life, but improves all aspects of life, including family and leisure time, hobbies, and longevity into retirement. A significant support of the program are driver advocates, who share with other drivers the positive health changes they have made in their own lives. Driver advocates play an important role in influencing active participation and driver engagement, inspiring other drivers to pursue and achieve health themselves. A significant challenge of the program is creating a healthy life mindset in uninterested or disengaged individuals; however, the daily stretching routine that marks the start of each day is helpful for getting drivers in a healthy mindset and setting them up for success to think about how their daily behaviors impact their health.

Overall, PITT OHIO saw a 70% reduction of sprain and strain injuries after implementation of the pilot stretching program. They have also seen a high return on investment from implementing the sleep apnea program, largely attributed to the reduction in health care costs for participants.

The carrier has observed a steady decline in yearly crash rates, but the impact of the H&W program on safety is unknown. Other carrier improvements over the years, including the use of safety technologies on the trucks, make it difficult to isolate and identify the contributing factors that have reduced carrier crashes.

Prime Inc.

Program Overview

Prime Inc. offers two H&W programs that target drivers: the Driver Health and Fitness Program (DHFP) and the Company Driver Wellness Program (CDWP). The DHFP began in 2012 as a 13-week weight loss program. Although the company noted success with the program, they were seeing drivers gain the weight back following the 13-week program. To address this and make the program a more sustainable lifestyle solution, Prime redirected the DHFP in 2019, adding program components, resources, and strategies that support more than just weight loss. The DHFP is available to all drivers (i.e., company drivers, independent owner operators, lease drivers) as well as driver spouses and dependents because Prime Inc. recognizes the important role spouses, partners, and family play in supporting driver health. The DHFP is only available to Prime drivers; however, other in-house employees may participate in the wellness program managed by Trinity Healthcare, Prime's third-party healthcare provider.

Within the DHFP, Prime Inc. also offers the CDWP, which has been in place since April of 2020 and is associated with health insurance and reimbursement incentives. Because of this, only drivers who are paying second year insurance rates are eligible to participate in the CDWP. Spouses are not included in this program since it is incentive-based. Prime limits participation eligibility to keep the program costs effective considering the high rates of driver turnover during the first year of employment.

Approximately 8,000 total drivers at Prime Inc. are eligible to participate in at least one program (since the DHFP is open to all drivers). Since January 2020, 890 drivers have participated in at least one of the five programs offered through the DHFP. Since July of 2019, when the scope and offerings of DHFP were expanded, a total of 1,092 drivers have participated in program activities. Since April 2020, the CDWP has engaged 125 drivers, 70 of whom are regularly active and 55 of whom are semi-active with program activities. Prime notes that the relative newness of the program, combined with the rollout during the COVID-19 pandemic contributes to the low participation numbers; however, participation continues to grow each quarter. Driver participation is free of cost and voluntary with no plans by the fleet to make it mandatory.

Participant Recruitment

At new hire orientations held each week, new drivers are introduced to the DHFP through in-person presentations given by the DHF Coordinator and Dietitian. During the pandemic, orientations went virtual; however, the same DHFP information is presented to new drivers.

Prior to the pandemic, Prime Inc. hosted weekly *Breakfast with the Boss* meetings, which included a Friday safety meeting to discuss driver health and fitness and update drivers on program offerings and upcoming events for both the DHFP and the CDWP. These meetings enabled Prime to speak to between 200 and 300 drivers each week, face-to-face, and were

valuable opportunities for recruiting drivers to participate in either or both programs. Since the pandemic, these weekly meetings and recruitment opportunities have been hosted as virtual video updates that are available on YouTube. Anyone associated with Prime can access these videos, which are linked on Prime's company website, and have approximately 10,000 YouTube followers. For increased exposure, driver health and fitness videos are created and shared through Prime Inc.'s and DHFP's social media pages. The Prime Inc. Podcast-*Driven by the Best* is another high visibility source for spreading information to drivers, including information about the H&W programs and recruiting driver participation.

Prime Inc. has a Driver Health Task Force that is made up of health-conscious drivers and company leaders to help guide the DHFP initiatives, ensuring they are beneficial and well-received by drivers. The Task Force includes 25 Prime drivers and 5–6 Prime staff who work directly to recruit and engage with drivers. Other program marketing and recruitment strategies include word of mouth by program staff, Prime employees, and other drivers; recruitment posters hung at fleet terminals; program updates and messages communicated through Qualcomm; the Prime Inc. mobile app; and the email newsletter, which is received by about 1,200 drivers. *Prime Ways*, a quarterly magazine received by employees, always includes an article about the DHFP and covers a topic related to driver health or discusses an aspect of the program activities. One new tactic used by Prime to recruit drivers is using wait line voice messages. On one day a week, drivers hear a message informing them of the program and how to sign up while they are on hold when calling to reach the company. The DHFP Coordinator notes that it can be difficult to reach drivers so they are constantly working to improve communication and looking for new ways to reach drivers.

Health Assessments and Biometric Screenings

Drivers who elect to participate in the DHFP begin by signing up. After sign-up, they receive a call from a health coach for a baseline evaluation, including which stage of behavior change the driver is currently in based on the theoretical behavior of change model. Drivers are given an individualized plan and strategy based on their stage of behavior change.

Once drivers sign up for the CDWP program, they complete a blood panel analysis and are assessed for six primary risk factors: cholesterol (HDL and LDL), blood sugar, blood pressure, sleep apnea, BMI, and smoking and tobacco use. The blood panel is repeated once a year but may be recommended more frequently based on the individual. For example, high blood sugar may flag a driver to have a blood panel re-check before a year. In this case, Trinity Healthcare works closely with the driver to monitor and log their blood glucose and a dietician provides nutrition counseling and support. Based on the number of risk factors identified from the blood panel analysis, drivers are categorized into a category: Category 1 = 1 risk factor; Category 2 = 2 risk factors; Category 3 = 3 or more risk factors. Drivers who have a risk factor consult with a physician or nurse practitioner at Trinity Healthy Care, and are recommended to join either the fitness logging or nutrition tracking program. In order to receive the financial incentive, drivers must join one of the two offered groups. There are guided online videos to support participants in either program (dhf.com). Drivers may also undergo mental health assessments as part of the H&W programs and be referred to a *Primed for Life* program which offers certified therapist services to help with lifestyle issues.

All medical information and laboratory data is stored by Trinity Healthcare and drivers go to either Trinity Healthcare or LabCorp to get their blood panel. The fleet does not have access to any protected medical information, and thus driver privacy and confidentiality concerns have not been an issue with the Prime Inc. H&W programs. All health assessments are voluntary and Prime has never received feedback that drivers are resistant to participating.

Review and Coaching

The Prime Inc. dietician uses a counseling and coaching method called motivational interviewing to work with drivers and help them create their own goals. Motivational interviewing helps people address personal insecurities and feelings of ambivalence to find the internal motivation to change their own behavior (Hettema et al., 2005). It is a practical, empathetic, and short-term process that considers the difficulties involved in making life changes. The program dietician follows up with drivers by email with additional resources that are relevant to the goals set by the drivers themselves. Check-ins by phone may be weekly, bi-weekly or monthly, depending on the individual, and it is the responsibility of the driver to set up the appointment via an online scheduling link.

Personal training is also available for drivers at no cost at all terminal locations. Trainers are able to create individual personal training plans for drivers, and there is also a virtual option. Drivers may purchase gym equipment and quit trackers for tobacco cessation at the Prime company store.

The driver health and fitness website is a stand-alone website that provides health related content and resources. On this website, drivers can complete health forms and receive targeted feedback, as well as receive a health coaching call from the DHFP Coordinator or Dietician to learn more about the H&W program and specific offerings that target the issues or concerns they face, including one-on-one health coaching. Success stories from other drivers posted on the website and shared in the program are also effective tools for getting drivers excited and engaged, as they demonstrate the feasibility of health over the road through the personal accounts and experiences of peers. Accountability forums on Facebook where drivers can post questions, tips, etc. are also helpful for supporting and motivating drivers. The Driver Task Force and program staff also communicate with drivers to identify gaps in knowledge and create sustainable ways to instill health behavior changes.

When drivers are not making progress toward their goals, whether due to lack of motivation, challenges, or a progress plateau, the health coach will reassess the drivers' plan and/or goals and simplify them into smaller, more manageable and achievable steps. For example, breaking a goal down into three mini-goals can keep the driver from feeling overwhelmed. The coaches are mindful of showing support and encouragement rather than pointing out what the driver is not doing well or has not achieved. However, it is important to note that these reassessments and follow ups with the health coach are voluntary and occur only by driver request. However, when Prime Inc. feels that a driver is at high risk for medical conditions that may pull them from the road, they do reach out to health coaches and drivers to initiate these program services.

Program Components and Activities

Drivers participating in the Company Driver Wellness Program are involved in different activities each quarter. In addition to the yearly blood panel analysis and fitness and nutrition tracking program, drivers can participate in extra credit activities, including participating in additional programs and challenges (i.e., move challenge, meal prep challenge), and watching informative presentations. Drivers can earn up to \$200 each quarter based on their active participation—participation does not affect drivers’ costs towards health insurance premiums.

Prime notes that competitions are an effective tool for motivating drivers to reach their goals. In the *Simply Fit* competition, drivers received points for completing healthy behavior tasks, such as limiting fast food, drinking water, etc. The Winter Warriors weight loss competition included meal prep and exercise habits. Drivers were encouraged to achieve healthy and sustainable weekly weight loss goals of no more than two pounds per week. In the company-wide walking competition, drivers competed against in-house personnel to increase their daily step counts. Challenge participants and winners are incentivized with random drawings to win items like gift cards, fitness equipment, and DHFP swag. Prime also utilizes a DHF reward system through which drivers are rewarded for participating in DHF. This rewards system deposits money onto the driver’s associate I.D. badge, which they can then use in the terminals for meals, apparel, spa treatments, and other incentives.

Prime has a sleep center testing facility on site and they work with a third-party provider, Cardinal Sleep, to evaluate drivers for sleep disorders. *Rigs Without Cigs* is a tobacco cessation program implemented by St. Christopher’s Trucker Relief Funds, who has partnered with Prime for this effort.

Drivers are free to stop participating in any H&W program or activity if they wish, though the quarterly financial incentive through the CDWP encourages drivers to stay in the program. Program leaders also highlight to drivers the potential indirect incentives for remaining in the program, such as saving money on medications and not eating out.

Education

Following their initial conversation with a health coach upon signing up for the DHFP, drivers receive a summary of their consultation with links to helpful information that targets their needs and goals. Prime disseminates educational content and resources to drivers on a variety of topics that are relevant to drivers, including back pain, diabetes, hypertension, high cholesterol, GI issues, weight loss and management, meal prep, nutrition, food intolerance, macro and micro nutrients, nutrition on the go, disordered and mindful eating, sleep hygiene, stress coping, relief, and management, and smoking and tobacco use. Informative handouts and resources may be given to drivers on various topics.

Education is often delivered in group settings, including during new driver orientation, in presentations created by the CDWP, or during the weekly *Breakfast with the Boss* meetings. The Prime Inc. podcast, *Driven by the Best*, is another high visibility source for educating drivers about H&W topics, including sleep, fitness, and nutrition. The podcast engages 200–500 listeners each episode and hosts guest speakers, many of whom are health professionals,

including physical therapists and diabetes professionals, who discuss specific and timely driver topics. The podcast used to host weekly shows, but since the pandemic, frequency has dropped to 2–3 shows per month. Personal health coaching is available and provides an opportunity to educate drivers individually for those who prefer one-on-one learning.

Medical Referrals

Trinity Healthcare may refer drivers to a program dietician or an off-site specialist to manage health concerns such as sleep apnea, high blood pressure, or weight loss. Follow-up is voluntary and is the responsibility of the driver.

Drivers may be referred to the *Primed for Life* program following a mental health assessment, which offers certified therapist services to help with lifestyle issues. This is also a voluntary service.

Follow-ups

Follow-ups with health coaches and program staff are encouraged but it is the responsibility of the driver to request or initiate those follow-ups. Appointment and consultation requests can be scheduled through a website.

COVID-19 Impacts

Prime has made many operational adjustments due to the pandemic, and the H&W programs are no exception. Program offerings are delivered primarily virtually now, either online or over the phone. In response to the pandemic, Prime added the *Primed for Life* program to address stress, mental health, and lifestyle counseling. A telehealth option was also added through Trinity Healthcare, as well as resources for employees on accessing urgent care and medications on the road. Drivers participating in the Company Driver Insurance program have access through Live Health Online, a telehealth platform offered through Anthem that includes virtual physician visits for acute conditions. Drivers can sign up for telehealth appointments via Anthem's app, or Trinity Healthcare's website. Live Health Online is convenient for drivers to access virtually over the road for acute conditions, like the common cold, instead of having to get routed in to a doctor.

The CDWP was significantly impacted by the pandemic subsequent to its roll-out in Spring 2020. Driver enrollment and participation has been slow but is increasing. Prime is also building a completely new website through a learning management system called LearnDash as a result of covid. This will help reach drivers more effectively with increased programs and resources. Launch date was expected summer of 2021.

Lessons Learned

Key aspects of Prime's H&W programs that work well include the driver success stories that encourage and motivate other drivers to participate. These success stories often discuss challenges drivers faced and ways they overcame them, which resonate with drivers. The DHFP Driver Task Force is also a program support because it represents driver opinions and voices in shaping the programs. The DHFP website and Facebook group with virtual health programs and

driver forums have been successful in supporting the program missions, especially during the pandemic. H&W personnel note that having management support, leadership, and buy-in for the H&W programs is a huge support and driver of success that enables a comprehensive program development to meet the evolving needs of drivers and the industry to address health and safety.

Prime notes that reaching all drivers is challenging and they strive to reach and engage more drivers. Even with all the outreach and marketing mediums to get the word out about the programs, Prime recognizes that they still don't reach all drivers. Communicating with drivers is another barrier that has improved with recent program changes, but remains a challenge and improved communication is a goal moving forward.

Prime does monitor data related to the H&W programs; however, because several program changes occurred around the time of the pandemic, it has not been possible to isolate and explain all contributing factors to the positive outcomes they have observed. Between August 2018 and July 2020, Prime saw a 22% reduction in major diagnostic category costs across all driving associates, a 32.8% reduction in high-cost claimants (i.e., the top 40–50 high cost drivers), a reduction in prescription claims (16.4%), medical claims (37.6%), and total cost of high cost claimants (15%). To be clear, these data are not definitively linked to the H&W programs but the fleet believes they contribute to the improvements observed.

Transport America LLC

Program Overview

Transport America LLC (TA) has offered a H&W program for drivers for the past 5–6 years. All drivers are eligible to participate, including company drivers, independent contractors, and both full- and part-time drivers. The program is not associated with health insurance or benefits and program offerings do not include family. Driver participation is very low, estimated at around 10% across all fleet drivers. The H&W program includes both mandatory components and voluntary options. H&W education and training through TA's Straightforward Safety Injury Prevention Program is required for new and existing drivers. TA also has a sleep apnea program in place for fleet drivers that is managed by a third party sleep solutions provider. A voluntary program component is 24-hour access to support center gyms.

Participant Recruitment

Drivers first learn of the H&W program during new-hire orientation where they complete TA's Straightforward Safety Injury Prevention Program, a required education and training program that covers topics related to safety and health. At orientation, drivers are assigned to one of eight support center terminals across the country. During a welcome, which includes a one-on-one tour of their main terminal with the Support Center Manager, drivers are introduced to the terminal facilities, including the 24-hour fitness center that they may access. They are also told about the TA H&W program during this meeting.

Additional ways drivers are reminded of the H&W program offerings are through advertising and information posts on the company website, fleet newsletter, Facebook Workplace, and Omnitracs Fleet Platform. However, since the pandemic, COVID-19 information has largely taken over the information pushed through these resources. The fleet newsletter was a mailed

resource prior to the pandemic, but now is accessed online. Workplace, a communication tool from Facebook, is another way TA shares information with drivers. Information is posted to Workplace, where it can be accessed by drivers and fleet personnel via computer, smartphone, or tablet. For drivers who don't utilize the internet or social media often, information is pushed through Omnitracs, the fleet electronic logging device platform. The same content is accessible through all mediums to ensure all drivers are receiving information. Since the pandemic, TA has made information more accessible online in order to disseminate it more quickly.

Drivers are required to complete the Straightforward Safety Injury Prevention Program training courses and participate in the sleep apnea program if they are diagnosed with sleep apnea. Use of the fitness facilities are voluntary.

There are no costs or incentives associated with participation in the H&W program.

Health Assessments and Biometric Screenings

There are no required health assessments or biometrics screens with the TA H&W program; however, drivers who are identified as at risk for sleep apnea from the third party sleep solutions provider are required to undergo a sleep apnea test. Diagnosed drivers are required to be treated in order to continue driving.

Review and Coaching

Currently the TA H&W program does not include health coaching; however, the fleet would like to take steps toward a coaching program by prepping drivers in advance for the required DOT physical.

Drivers do utilize the support center fitness centers and some drivers pack exercise equipment with them in their trucks, including biking equipment. Drivers receive tips for exercising on the road and the fleet has received positive feedback regarding drivers walking around their truck for exercise opportunities.

Program Components and Activities

The Straightforward Safety Injury Prevention Program is a comprehensive education and training program developed by TA that covers overall workplace safety, including driving safety and injury prevention, including H&W. At the time of this interview, TA was preparing to launch a security program to cover security on the road, load security, and active shooter emergency plans. TA has a unique fleet demographic with women comprising 17% of their driver workforce; therefore, an important component of the security program trains and educates women specifically to stay safe over the road. The Straightforward Program is delivered to all new hire drivers in person during orientation, then quarterly trainings are thereafter delivered online through the Infinite platform, a learning management system (LMS). Drivers can access the quarterly trainings via computer (personal or terminal computers), tablet, or smartphone. Their training progress and completion is tracked through the LMS, they are quizzed on information, and their scores are monitored. Trainings must be repeated if not passed, and upon completion drivers receive a certificate. Drivers can access trainings anytime, as they are stored

in the driver's resource library. The Straightforward Safety Injury Prevention Program training is required for drivers and fleet staff.

Drivers have access to 24-hour fitness centers at eight fleet support centers around the country. A previous initiative of the program involved selling portable truck gym kits that included compact, easy-to-use, and mobile fitness tools and equipment for exercising over the road. This program effort was not well utilized and was discontinued. Driver H&W education, tips, and strategies are posted on the fleet webpage, e-newsletter, Facebook Workplace, and Omnitrac. Education initiatives are detailed in the next section.

TA has partnered with a sleep solutions provider to deliver and manage their sleep apnea program, which involves screening, testing, diagnosing, treating, and managing drivers with sleep apnea. Participation in the sleep apnea program is mandatory for drivers diagnosed with sleep apnea, in accordance with DOT guidelines.

Education

Drivers receive H&W education through the fleet e-newsletter, the TA website, the Facebook Workplace platform, and Omnitrac. During the pandemic, the content centered around COVID-19 and personal and workplace hygiene; however, in non-pandemic times, the posts include content related to exercise, stretching, and nutrition guidance, sleep health, prevalent medical conditions among CMV drivers and how to manage those conditions, smoking cessation, preventing worker injury, and over-the-road health, including eating healthy and exercising on the road and food planning and preparation.

During orientation, as part of the Straightforward Safety Injury Prevention Program, drivers participate in a 1-hour presentation on eight H&W topics. New drivers receive materials and tools at orientation to support their health and safety, including an instructional book on stretching exercises and shoe traction slips. Current drivers receive a similar training online, rather than in-person. Drivers also receive daily safety and health reminders and discussion points that are sent over the Qualcomm system and posted on Workplace. During the holidays, TA publishes a short educational piece for drivers discussing safe working, driving, and health topics.

Medical Referrals

Drivers can be referred for a sleep evaluation through the sleep apnea program. No other medical referrals are associated with the H&W program

Follow-ups

The fleet tracks driver completion of the Straightforward training modules through the Infinite LMS and will follow-up, if needed, to ensure modules are completed with passing scores. The sleep solutions provider monitors driver sleep apnea treatment and compliance and will follow up as needed to ensure drivers are meeting requirements. Other H&W program components are voluntary and are not monitored or followed up.

COVID-19 Impacts

The pandemic has affected everyday fleet training and operations, with changes including smaller and shortened orientation class sizes and new-hire trainings, mandatory masking policies and temperature checks, and improvements to the air filtration systems at support centers and more frequent deep cleanings. TA has also put protocols in place for more frequent and deeper truck cleanings and has quarantine parking for trucks driven by COVID-19-positive drivers to ensure the trucks are not accessed for a proper quarantine period following driver diagnosis. TA also has contact tracing protocols in place for when fleet personnel, drivers, and customers are diagnosed with COVID-19.

Quarterly small group trainings that were previously held in person have gone online and now primarily cover topics related to COVID-19, including personal hygiene and COVID-19 safety at home and work, proper truck cleaning, and truck stop safety. Quarterly trainings have also become more frequent, if needed, in order to disseminate time-critical information to drivers. The pandemic also caused the fleet to temporarily close the support center gyms. They are now reopened with new safety protocols in place, including physical distancing, cleaning protocols, and caps on how many people can be in the facilities. The fleet noted that there are fewer drivers coming into the support center terminals and using the gyms due to COVID-19.

Lessons Learned

Fleet management notes that involving drivers in building the H&W program is a key support. It is important to get feedback from drivers to determine what works and doesn't work in order to build the program around what drivers want and feel is realistic and feasible for them to participate in. To improve their H&W program, the fleet would expand the opportunities offered to make it more comprehensive and robust. To make headway on expanding the H&W program after COVID-19, the fleet discussed forming a committee of drivers to advise on building a program they want and would use.

Fleet A

Program Overview

Fleet A, who wished to remain anonymous, initiated their current H&W program in 2009, at which point it was only available to company office employees. However, in 2013, Fleet A transitioned the program to include drivers, and currently all individuals covered through the company's health insurance plan are eligible to participate in the voluntary H&W program. Program activities are overseen primarily by three fleet positions: the Manager in Corporate Wellness (a registered dietitian) leads every program and initiative offered to drivers; the Vice President of Safety and Compliance trains drivers on fatigue management and safety; and the Vice President of HR integrates the wellness program into employee benefits. Participant health data is managed by a third-party company who securely tracks, reports, and stores all data.

As the H&W program is voluntary, employee participation is incentivized via a reduction in insurance premiums 1 year after program enrollment. There is no incentive for spouses of employees to participate; however, a "non-member" portal is available to spouses to encourage engagement in the program. This feature, which enables spouses, partners, and family members

to participate in program activities side-by-side with employees, increases the social support for drivers, which can benefit program outcomes and overall success.

Participant Recruitment

Drivers learn about the H&W program a variety of ways: during driver orientation, through messages from the HR Benefits team, via messages that are delivered to the truck cabin tablet, by signage throughout the terminals, from quarterly reports that are sent through email and the USPS, and through a DRIVE app. The DRIVE app is not a required download for drivers; however, it provides easy access to information that is useful for their job, such as paystubs and load information. Fleet A has observed high acceptance and use of the DRIVE app by drivers; 80% of their approximately 10,000 drivers log in regularly. Thus, the DRIVE app is an effective medium to disseminate H&W program information to a large number of drivers. Drivers wanting to participate in the program have 9 months to complete the required steps to enroll. If drivers have begun the process for enrollment but not completed it, they receive a call from the Manager in Corporate Wellness as a reminder to complete all required steps in order to join the program.

Health Assessments and Biometric Screenings

To enroll in the H&W program, drivers must complete a risk assessment questionnaire and schedule a preventative appointment with a medical professional. Tobacco users must also enroll in a tobacco management program. The health risk assessment takes 15–30 minutes to complete and includes questions about mental and financial health, as well as activity level. It can be completed as many times as an individual would like in order to assess and monitor health changes. The preventative appointment with a medical professional, such as a physical or cancer screening appointment, generally takes about 2 hours. If the employee is a tobacco user, they must also complete the tobacco management program. There are various educational and cessation options drivers can choose from depending on their level of desire and readiness to quit. The options range from a 2-hour video discussing managing tobacco usage to a 6-week cessation course.

All medical data acknowledged or collected as part of the program, beyond what is required for the DOT Medical Examination Report Form, is stored by the third-party provider. The fleet does not have access to this private health data. The third-party company provides Fleet A with a snapshot of medical conditions that are present within the fleet population without identifying individual employees. This separation of health and medical information from employer is a critical element of the program, as it helps to reduce fears of termination for disclosing private medical issues. Fleet A indicates the main hurdle or barrier to recruiting drivers to participate in the program is the time commitment to complete all the required assessments at enrollment.

Review and Coaching

Currently, Fleet A does not engage in any type of health coaching as part of the H&W program; however, there is an option to discuss goals and obtain coaching through the company insurance plan.

Follow-up and Long-term Coaching

All follow-up and long-term coaching is conducted through the company's health insurance provider.

Program Components and Activities

The insurance incentive for participating in Fleet A's H&W program is a reduced insurance premium that begins 1 year after enrollment and is available as long as the employee completes the health assessments at least yearly. Once an individual is enrolled in the program, they begin receiving push messages through the portal with information that is directly related to their personal health information gathered from the assessments. For example, if an individual reported high alcohol consumption on the health assessment, they would receive information on alcohol consumption and management. Participants also receive print materials with messaging from the Manager in Corporate Wellness. Educational resources include videos about flu shots, hydration, hygiene, sleep management, mental and financial health, exercise and healthy eating on the road, blood pressure management, rest, and fruit and vegetable consumption.

The H&W program at Fleet A offers physical activity challenges to participants, challenging individuals to achieve daily active minutes or cumulative daily steps. Employees can compete against other individuals or teams to make the program fun and engaging. More than half of all Fleet A terminals have fitness facilities available to employees and corporate discounts are available for employees to join outside gyms. The fleet notes that many employees use their personal smartphones, Fitbits, and other wearable fitness monitors to record data for reporting to the program. Recently, Fleet A developed a digital platform for employees to use for step counting. The platform manages both company- and user-created activity challenges by syncing with the user's smart device. Employees who complete challenge requirements are eligible to win prizes such as gift cards, fleet-branded items, and activity trackers.

Fleet A also works with a third party sleep health provider to provide sleep disorder screening, testing, treatment, and management to drivers.

Medical Referrals

This program does not make medical referrals. If an employee is concerned about specific medical conditions they contact their insurance company for a referral.

Follow-ups

Beyond the required yearly health self-assessments for H&W program participants, this program does not track or monitor driver progress, nor is follow-up testing conducted. Participants may complete follow-up health assessments as frequently as they wish to monitor their progress and health status on their own. If drivers participate in any health assessments, they are able to do that on their own and can compare results from assessment to assessment.

Impacts from COVID-19

Fleet A's H&W program has been significantly impacted by the COVID-19 pandemic. Participation has dropped approximately 80%, likely due to fear and hesitancy of going to an in-person preventative care visit, which is required for program enrollment. In addition, on-site screenings for on-site employees (non-drivers) were cancelled for 2020. Despite these hurdles, most of the employee education continued throughout the pandemic since messages, resources, and materials are delivered electronically or through the mail (rather than in person).

Lessons/thoughts

In order for Fleet A's program to make a difference, the leaders of the H&W program feel that getting individuals involved and engaged in program activities is key. One way to increase engagement is to provide individual attention and have one-on-one interactions with participants; however, because communication preference is largely individual, program leaders must be able to gauge these preferences and apply appropriate communication styles, approaches, and tactics to successfully reach participants. In addition, program leaders feel that the lengthy 9-month window for enrollment into the program may be a hinderance to the program's success. Without an immediate deadline, there is no pressure to complete the requirements quickly, increasing the likelihood that the program may be forgotten or not prioritized.

CHAPTER 4. DISCUSSION

Over the past decade, the prevalence of fleet-driven health outreach and intervention programs aimed at improving long-term health outcomes for drivers has grown significantly. One of the first fleet-implemented H&W programs was documented in a case study by Mabry et al. (2013). Since then, many more national carriers have implemented H&W programs of varying sizes, scopes, and with unique program objectives and goals, features, characteristics, and strategies to address driver health issues that plague the industry. The purpose of this study was to identify, review, and document fleet H&W programs and initiatives that target CMV drivers and identify fleet best practices that have the most impact on improving health outcomes for drivers.

BEST PRACTICES

The following best practices were identified from detailing and aggregating program procedures, activities, strategies, outcomes, and lessons learned from eight fleet-implemented H&W programs.

Offering H&W programs that were free of costs to participants to increase participation was a common strategy among surveyed fleets. Programs that featured enrollment incentives, whether they were participation-based or progress-based, saw the added benefit of increased engagement among participants. Program models that were a hybrid of both voluntary and mandatory driver participation were common. Some programs required enrollment but participation in program activities was not mandatory; others required participation in some program activities without requiring program enrollment. Several fleets had sleep health programs in place that were mandatory if a driver was indicated to be at risk for or diagnosed with sleep apnea. Among the fleets interviewed, approximately half managed and led the program internally, while others hired third party, population health solutions and program providers to manage their programs. Fleets noted the importance of implementing a program that is tailored to the individual needs and work culture of each fleet. Several fleet-managed programs hired third party data management solution providers to securely track, store, manage, and report participant health data in consideration of driver privacy concerns. Fleets noted the importance of monitoring data trends to inform and determine H&W program initiatives. Implementing H&W programs and initiatives that are flexible and able to evolve with driver and company needs is key.

Programs varied in their eligibility requirements—some were available to all employees regardless of schedule, insurance status, etc., while others were only available to full-time employees who were with the company for a defined period of time. More than half of programs included offerings for drivers' families, recognizing the importance of social support for increasing participation and success. Programs also varied in their association with health insurance—some were closely tied with incentives and only eligible to drivers with fleet health insurance, while others were independent and separate from health insurance. Prime Inc. noted that offering the H&W program and reimbursement incentives to company-insured, eligible drivers helped keep program costs effective, considering the high rates of driver turnover during the first year of employment.

Recruitment

Many fleets first introduce drivers to the H&W program and what it offers at new hire orientation. For programs that require enrollment to participate, this introduction offers convenience for signing drivers up on the spot. Some fleets include opportunities to participate in program activities at new-hire orientation. Fleets noted the recruitment benefit of marketing the H&W program and recruiting drivers to participate beyond hire and orientation activities. Fleets marketed their H&W program throughout the year at company activities and events. Driver advocates and word of mouth recruiting are major drivers for disseminating information about programs to boost recruitment. Fleets that offer programs and services to families report that targeting marketing materials to the spouse and family increases awareness of program opportunities in hopes that they will elect to participate and thus encourage the driver in their family to participate. Households that make healthy commitments together may be more motivated to stay on track.

Fleets stress the importance of driver privacy, noting a major barrier to driver participation is privacy and confidentiality concerns. Ensuring HIPAA compliance, and highlighting confidentiality and privacy of health data during recruitment and program messaging, marketing, and communications regarding H&W program initiatives and events is critical. Fleets noted a key support for gaining driver participation in voluntary programs and activities was offering insurance incentives and benefits. Several fleets offered reduced insurance premiums for enrollment in the program and/or completion of program activities or assessments, such as biometric screens, health risk assessments, or yearly physicals.

To maximize driver recruitment efforts, fleets utilize multiple platforms and methods to disseminate consistent information about the H&W program and program activities to ensure all drivers are receiving information. Drivers receive updates and reminders through advertising and posts on company websites and e-newsletters. Social media, including Facebook Workplace, is an effective way to get information out quickly, while Qualcomm, Omnitrac, and employee newsletters ensure information reaches drivers who may not have social media or do not use it regularly. Several fleets also utilize fleet apps or third-party apps to disseminate information to drivers.

Health Assessment and Screenings

Many fleet programs include voluntary or mandatory health assessments or screenings upon enrollment. Some assessments collect information just for driver knowledge and encourage repetition over time in order to track progress and self-monitor health changes. Some fleets use information gleaned from the screenings and assessments to customize health missions and goal setting, while some recommend or require health programs for drivers to participate in and educational resources, as based on their specific health needs. For example, the health assessment in place at Epes proactively identifies risk factors for medical concerns, such as diabetes, to mitigate disease progression, and Fleet A requires tobacco users to enroll in a tobacco management program. Fleets with sleep apnea programs require mandatory assessments for drivers who demonstrate risk, and mandatory treatment if diagnosed. Several fleets require drivers to complete a health assessment, such as a biometric screening or risk assessment questionnaire, to receive insurance incentives. Fleets cite the importance of making these

assessments accessible and convenient, by providing drivers protected time and space to complete them. Groendyke equips major terminals with staff and equipment to complete biometric screens on-site for drivers; they also have partnerships with participating labs to make it convenient for drivers to complete screens off-site, should they prefer. Maverick encourages drivers to self-monitor blood pressure by providing blood pressure machines in private areas at fleet terminals. Pitt Ohio offers a web-based health assessment in consideration of driver privacy and convenience. Health fairs and similar events are other opportunities to offer convenient health assessment and screening opportunities for drivers. Other fleets, however, indicate that by not offering or requiring health assessments, drivers are more encouraged and open to participating in an H&W program. The time commitment to complete assessments at enrollment can be overwhelming and a barrier to recruiting drivers. The separation of health and medical information from the fleet is a critical element of these programs, helping to reduce the fear of termination based on private medical issues or health information. Many fleets use third-party companies to store and manage health data to ensure fleets are not privy to protected health information. Fleet A, for example, receives a snapshot of medical conditions that are present in their fleet population without any information identifying individual employees.

Coaching

Several fleets offer, or plan to offer soon, qualified and personal health coaches to drivers to assist with goal setting, monitoring, and self-assessments. Health coaching websites and mobile apps are utilized by fleets, and coaching options are offered through company insurance providers. The individualized health coaching offered by PITT OHIO includes a driver interview to ensure coaching and goal setting cater to individual driver needs and motivations. Some coaching programs are incentive based to encourage participation and motivation. H&W program coaching encourages drivers to self-monitor their behaviors and progress. Groendyke's H&W program offers drivers quarterly phone check-ins with representatives from the health insurance provider to discuss any topic related to physical and mental health. Similarly, Fleet A drivers have access to coaches provided by their company insurance. Fitness trackers and wearable devices are popular among Epes drivers and are valuable for encouraging self-monitoring. Some fleet terminals offer fitness centers while other programs cover some or all the costs of gym memberships to encourage fitness over the road. TA encourages their drivers to pack exercise equipment in the trucks and provides drivers with tips for exercising on the road, for which they have received positive feedback from drivers.

Monitoring and Follow-ups

Several fleet programs included driver monitoring and follow-up opportunities with drivers to assess progress, accomplishments, and setbacks, as well as maintain accountability and continued improvements and goal-setting. These services were optional and available by request for some fleets, while others scheduled regular check-ins on a regular quarterly or even yearly basis. Follow-ups with health coaches and phone support to check in on personal goals, goalsetting, and interim accomplishments were helpful for keeping drivers on track and accountable for achieving their goals. Other fleets had no formal follow-up procedures in place, but encouraged self-monitoring. Fleet sleep disorder programs did require regular follow up with drivers for consistent compliance monitoring.

Program Components and Activities

Fleets indicated that H&W programs with activities and challenges in place to engage driver participation were a strong support, as driver participation and active engagement is a significant challenge. Rewarding healthy behaviors and goal achievements were cited by fleets as driving elements for long-term driver participation. Creating a work environment that fosters a work health culture is also important, considering drivers often spend time at fleet terminals before, after, and during shifts. Terminal fitness centers that are accessible 24 hours, self-monitor blood pressure machines, and on-site clinic and laboratory services are employed by fleets to offer drivers convenient health services. Epes notes that their free clinic for drivers and families is convenient and easily accessible, but still separate from the fleet terminal. This design is an important detail that makes drivers feel comfortable utilizing the clinic resources, giving them confidence that their health and medical information is confidential and protected from fleet access.

Providing over-the-road workout plans and portable gym kits for drivers, including compact and easy-to-use mobile fitness tools and equipment, supports healthy behaviors while on the road. Several fleet programs also offer corporate discounts or subsidize fees for employees to cover costs to join outside gyms. A resource Epes is proud to offer to support over the road drivers is a telephone hotline to help drivers locate and access health resources wherever they are across the country. With women comprising 17% of their driver workforce, TA will soon launch a security program that trains and educates women specifically in the area of staying safe over the road. Fleets stress the benefit of getting in front of drivers and engaging in face-to-face communications and interactions to foster trust and rapport. PITT OHIO has regular, in-person visits to fleet terminals to discuss health topics with employees and TA provides in-person tours at orientation for new hires to show drivers fleet facilities and services, including the 24-hour fitness centers. More fleets are implementing sleep disorder programs managed by population health solution providers for their drivers, which shows their recognition of the importance of screening, diagnosing, and treating drivers to improve driver health and safety.

Program components and activities specifically designed to engage drivers' families, including education, resources, and support systems, were offered in several fleet programs and viewed as a critical component for encouraging social support for drivers and ultimately benefitting program outcomes and overall success. Involving spouses/partners is a way to indirectly reach drivers by influencing, facilitating, and supporting healthy driver behaviors. Spousal/partner support programs, quarterly newsletters, and health insurance supports are activities targeted toward spouses/partners to help support drivers.

Hosting social events to promote wellness and health with coworkers and family encourages driver participation in a fun and active way. Driver Appreciation Week, health fairs, and seasonal events strive to promote mental health in a relaxing and fun environment. Fleets note that offering a variety of creative initiatives, events, and challenges offers something for everyone to participate in, with the main goal of widespread participation and having fun while making healthy choices. Fleets indicate that group challenges and competitions encourage driver participation in a fun and engaging manner. Fleets note success with incentive-based activities, as well as individual and group challenges that encourage friendly competition. Drivers can receive gift cards and other prizes for winning, achieving goals, or even just participating. Some

fleets encourage competitions that are honor-based to encourage self-monitoring, accountability, and friendly competition. Other programs use fitness trackers and other monitoring tools and apps to track and record data for program monitoring purposes, citing that collecting objective data is motivating and encouraging to drivers.

Education

Fleets highlighted the importance of including driver health education as a core element of their H&W programs. Educating drivers on basic health principles and implementation strategies to improve health stimulates self-awareness, intrinsic motivation, and skills to learn and grow. Improving drivers' understanding of general wellness and their own health enables them to develop physical, social and emotional health values to further support purpose and motivation. Fleet programs prioritize education to help employees identify health risks and implement realistic strategies to mitigate those risks. Many fleets begin educating drivers at hire. TA developed a comprehensive education and training program that includes H&W information that is required for new hires and is refreshed with quarterly training through an online platform and LMS. Drivers must take and pass all trainings in order to receive a certificate that is required for employment.

Fleet websites, employee portals, and apps offer a variety of information, resources, and links related to general health, nutrition, exercise, fleet health program and initiatives, and COVID-19 information. Epes shares current articles and publications on these sites, that can be accessed by computer, smartphone, or tablets. Sharing educational resources on many mediums and modalities is critical. Websites, apps, fleet portals, Qualcomm or Omnitrac, social media, flyers, brochures, mailers, and fleet newsletter disseminate health-focused content, such as nutrition and exercise tips, sleep health and hygiene, stretching guidance, how to manage common medical conditions among CMV drivers, smoking cessation, personal hygiene, weight loss, maintaining a healthy weight, and preventing worker injury. Over the road health is an important topic, including eating healthy and exercising on the road and food planning and preparation. Daily safety and health reminders delivered via Qualcomm and social media provide opportunities to passively educate with more frequency. Social media enables and encourages drivers to post videos and share tips and information, such as meal planning, food prep and recipes, and tips for where and how to exercise over the road, with other drivers.

Some programs suggest personalized educational training programs that are recommended for individual driver needs based on the findings of the biometric screen. Several offer condition management education programs, such as diabetes management, and nursing support through third-party insurance providers. Fleets also utilize robust health insurance provider programs and apps to support their drivers and program needs. The health insurance provider app available to Groendyke drivers offers health coaching newsletters, webinars, recipes, blogs, fitness devices, and other tracking tools to employees through the HealthCheck360 Lifestyle Rewards program.

Medical Referrals

Medical referral processes were in place in some H&W programs to ensure drivers at risk for a medical condition or concern did not slip through the cracks of the healthcare system. Fleet clinic physicians and nurse practitioners at Epes and PFG can make medical referrals for employees to

see their general practitioner or specialists depending on flags or concerns for medical risk factors. Having a telehealth option for these referrals is a significant support for over the road drivers. Fleets with sleep disorder programs in place had a medical referral in place for drivers indicating or presenting at risk for sleep apnea.

Impacts of COVID-19

All of the fleets included in this report indicated that COVID-19 impacted their H&W programs, whether through changes in delivery of programs and activities, additional training curriculums and educational content, or updates to everyday fleet operations. Fleets noted declines in program participation, especially among programs that relied on in-person activities, such as physician visits for preventative care. Fleets modified their training curriculums to include content on personal hygiene and social practices to mitigate disease spread. Many adapted operations to support virtual orientations for new hires, driver training, and communication methods, including virtual coaching and counseling. Fleets also reduced the in-person class sizes for orientations and trainings for those that remained in person. Fleets put into practice quarantine parking for trucks operated by COVID-19-exposed drivers and contact tracing protocols to reduce the spread of the virus. Everyday fleet practices were modified to incorporate onsite COVID-19 testing, terminal kiosks for temperature checks, and masking policies for drivers during deliveries and interactions with colleagues and customers. Improved air filtration systems and more frequent and rigorous deep cleans for support centers, terminal facilities, and truck cabs were also implemented. Fleets noted that like many other industries, the trucking industry was stretched thin in terms of personnel during the height of COVID-19, with high workload demands and a reduced workforce.

LESSONS LEARNED

Program Supports

Fleets noted many supports that impacted the effectiveness of their H&W programs. A key message of the H&W programs was that a healthy lifestyle benefits not only work life, but improves all aspects of life, including family and leisure time, hobbies, and longevity into retirement. Involving drivers in building a program can be helpful by collecting driver opinions and feedback from the very beginning. Building an H&W program around what drivers want and what they will participate in will support driver acceptance, participation, and overall effectiveness of the program.

Keeping participation voluntary rather than mandatory was a significant support for gaining driver participation and engagement. Maverick and PFG noted that the single most effective recruitment path for driver participation in their H&W program involved driver advocates, or drivers recruiting drivers who encourage active participation, driver engagement, and inspire fellow drivers to pursue and achieve health themselves. Targeting recruitment and program marketing materials to the spouse/partner and family was indicated as a support for increasing driver participation, as households that make healthy commitments together may be more motivated to stay on track. PFG attributed program supports to the biometric screen to assess general and overall health and the personal coaching and targeted health programs that meet individual needs. Epes cited transparent communication, constant engagement opportunities with

employees, and repeated marketing opportunities for the H&W programs and initiatives offered as supports for the success of their H&W program. Epes also noted that the H&W program plays an important role in reducing driver turnover. Groendyke highlighted the importance of top-down support from management and leading by example to demonstrate the company's commitment to employee health and wellbeing.

Reinforcing data privacy and security is critical to gain driver trust and buy in. Having a third party involved in managing and reporting health sensitive data gives drivers a layer a separation between the fleet and their personal information. Access to company-level data, rather than individual data, still allows fleets to track metrics and data related to program outcomes to regularly evaluate the programs and ensure they are evolving to meet employee needs. By ensuring that the health assessments are collected for drivers' personal knowledge and self-monitoring, rather than for data collection and tracking purposes by the fleet, PITT OHIO was able to overcome driver fear and hesitancy in participating. The goal of the health assessments are to encourage employees to take positive actions to improve their health and support healthy lifestyle behaviors. All medical information that can impact driver medical certification is handled externally and is not shared or accessible by personnel involved in the H&W program. These privacy policies support gaining driver trust and encourage active program participation without fear of penalty or job loss.

Driver participation and engagement is a significant challenge, but also a key factor, for program success. Providing individual attention and one-on-one interactions, coaching, and support is helpful for increasing driver engagement. To consider individual communication preferences, it is important for program leaders to gauge drivers' preferences and apply appropriate communication styles, approaches, and tactics to successfully engage participants. Offering drivers educational classes that address topics and issues that meet their individual needs is valuable, as drivers are identifying areas that they need help in and learning about how they can make behavioral and lifestyle adjustments to improve those health factors. PFG indicates that offering a wide variety of different program options works well and contributes to a successful program, as drivers can participate in as many initiatives as they want and will get out of it what they put into it. PITT OHIO's program features a daily stretching routine, a seemingly small but consistent health behavior that helps drivers get in a healthy mindset and sets them up for success by considering how small daily behaviors impact long-term health. Fleets with sleep apnea programs in place reported a high return on investment, largely attributed to reductions in health care costs for drivers.

Program Challenges

Due to the over-the-road nature of the industry it can be difficult to get drivers to participate in a voluntary program. Limited face-to-face interactions adds to these challenges, making regular check-ins and accountability opportunities more difficult. Gaining driver acceptance and active participation is just as challenging for mandatory programs. Fostering a healthy life mindset in uninterested, unmotivated, and disengaged individuals is increasingly challenging. A need voiced by all fleets was identifying creative solutions to increase driver participation, engagement, and enthusiasm in program activities and challenges. Despite addressing health privacy and confidentiality concerns, fleets still note driver hesitancy to participate in fleet H&W programs. Fleets recognized that more could be done to embed health and safety culture into

their organizations and daily fleet operations. Quantifying positive outcomes impacted by the H&W program in order to evaluate the efficacy of the program is another challenge, especially when balancing the need for data to evaluate outcomes with driver privacy, confidentiality, and voluntary participation.

This report discusses key aspects of fleet health and wellness programs for CMV drivers, including program recruitment methods, health assessments and testing, health education and coaching, and follow-up and maintenance activities. Findings from this study, including best practices and lessons learned from fleets, may assist the industry in adopting programs and health initiatives targeting CMV drivers. Findings may also inform recommendations for a larger study to evaluate the effectiveness of an H&W program for motor carrier operations.

APPENDIX A. FLEET RECRUITMENT SURVEY QUESTIONS

Thank you for agreeing to take this survey. It should take you approximately one minute to complete.

1. What is your company's name?

2. Is your company's central business primarily to transport freight or people?
_____ Yes
_____ No

3. Does your company offer a Health and Wellness Program to Commercial Motor Vehicle Drivers?
_____ Yes
_____ No

4. What is the name of the Health and Wellness Program offered? (If there is no name write N/A)

5. Would someone at your company be willing to complete an over-the-phone interview answering questions about this program? (approximately 60mins)
_____ Yes
_____ No

6. What is the contact information of the best person(s) for this interview?
_____ Name(s)
_____ Email(s)
_____ Phone Number(s)

APPENDIX B. RECRUITMENT EMAIL

Subject: CMV Driver Health and Wellness Program Research

Body:

Hello, I am a researcher at the Virginia Tech Transportation Institute. We are currently conducting a study to create a comprehensive catalog of existing health and wellness programs in CMV operations to identify and detail programs and best practices. We have developed a 1-minute survey inquiring about a health and wellness program at your fleet. You could greatly assist our research by completing this survey linked below. I appreciate your feedback in advance.

Thank you,
XXXXXX

<Link to survey>

APPENDIX C. FOLLOW-UP EMAIL AND PHONE SCRIPTS FOR FLEET RECRUITMENT

Subject line: VTTI Health and Wellness Study

Dear XXXX,

I am inviting you to participate in a research project to detail and evaluate (FLEET NAME)'s Health and Wellness (H&W) Program (if using a 3rd party program include the following "with 3RD PARTY NAME). We are conducting phone interviews with key personnel to detail H&W Programs at various fleets. We will use the information we gather to develop a catalogue of available H&W programs for commercial drivers.

You are not obligated to participate and your participation, or lack thereof, will have no impact on your job status. You may find the questions presented to be interesting and your participation will help in the development of a publicly available catalogue that may be used by other companies that want to start similar H&W programs. We will be audio recording the phone interviews but your responses to the questions will be kept strictly confidential and your name will not be associated with any comments that you make, however the fleet and/or program's name will be linked to any comments. The phone interview will last no longer than 40-60 minutes and may include between 1 and 2 other participants. You are eligible to participate in this study if you are employed at (FLEET NAME) and are a part of the H&W program at that company.

Please respond to this email if you are or are not interested in participating in the phone interview. If we do not receive an email response from you, you may be contacted by a VTTI researcher in the next 3-7 days to inquire about your participation. Again, you are not obligated to participate in this study and your participation, or lack thereof, will have no impact on your job status.

If you are interested in participating, I will work with you to schedule a convenient date and time to conduct the phone interview. I will also send you Informed Consent information via email to review prior to the phone interview. This information simply discusses your rights and responsibilities as a participant involved in a research study.

If you have any questions or concerns prior to the phone interview, please feel free to contact me (XXXX at XXX@vtti.vt.edu or at 540-231-XXX).

Thank you in advance for your time and looking forward to hearing from you!

Sincerely,
The VTTI Research Team

Phone Interview Request Script if Person Answers the Phone (IRB# 20-399)

Hello, my name is XXXXX and I am a researcher at the Virginia Tech Transportation Institute (VTTI). I am contacting you today regarding recruitment for a research study at VTTI about Health and Wellness Programs for CMV drivers (IRB 20-399). The researchers are interested in discussing (FLEET NAME)'s Health and Wellness Program [if using 3rd party provider also state the following: with (3rd party provider name)] via a brief (~60 minute) ZOOM interview.

All the information obtained will be confidential and only linked to the program, not individual participants. You are not obligated to participate, nor does your participation or lack of participation have any bearing on your job status with (FLEET NAME). Your participation will help researchers create a catalog for the public of different H&W programs and could help other fleets with their H&W program for the overall safety and health of CMV drivers. You are eligible to participate in this study if you are employed at (FLEET NAME) and are a part of the H&W program at that company.

*Do you have any questions about this project?
(Answer any questions)*

*Does this sound like something in which you would like to participate?
If NO: Ok, thank you for your time and have a wonderful day.
If YES: Wonderful. Is there a best time for you for this interview? (Schedule time)*

Is there anyone else you work with that you feel would be helpful to include in this interview who works with the program that I should contact? (take notes)

Ok, I have you scheduled for a ZOOM interview for (give date and time). I will be sending you a link to the ZOOM meeting via email along with a document with more information on this research. Please read over the information I send before our interview and feel free to call or email me with any questions.

*Do you have any other questions for me at this time?
(Answer any questions)*

Thank you so much for your time, I look forward to speaking with you on (interview date). Bye.

Phone Interview Request Script if Voicemail (IRB# 20-399)

Hello, my name is XXXXX and I am a research at the Virginia Tech Transportation Institute (VTTI). I am contacting you today regarding recruitment for a research study at VTTI regarding Health and Wellness Programs for CMV drivers (IRB 20-399). The researchers are interested in discussing (FLEET NAME)'s Health and Wellness Program [if using 3rd party provider also state the following: with (3rd party provider name)] via a brief (~40-60 minute) ZOOM interview.

All the information obtained will be confidential and only linked to the program, not individual participants. You are not obligated to participate, nor does your participation or lack of participation have any bearing on your job status with (FLEET NAME). Your participation will help researchers create a catalog for the public of different H&W programs and could help other fleets with their H&W program for the overall safety and health of CMV drivers. You are eligible to participate in this study if you are employed at (FLEET NAME) and are a part of the H&W program at that company. If you are interested in participating please give me a call back at your convenience at (540)XXX-XXXX. Thank you and I hope to hear from you soon.

APPENDIX D. INFORMATION EMAIL AND INFORMED CONSENT FORM

Subject line: VTTI Health and Wellness Study: Interview Date and Time Scheduled

Dear XXXX,

Thank you for your interest in this research project to detail (FLEET NAME)'s Health and Wellness Program. We will conduct the meeting on [DATE] at [TIME]. Please find the call-in instructions below:

1. Join Zoom Meeting by clicking the following link:

<https://virginatech.zoom.us/XXXXXXXX>

OR

2. Dial [1 800 NUMBER]
3. Enter [MEETING ID] when prompted to join the conference call

Once everyone has joined the call we will briefly discuss the Informed Consent information that you were previously sent. Once everyone has verbally agreed to consent we will begin the audio recorded phone interview. I will be asking questions about the Health and Wellness Program for (FLEET/H&W PROGRAM NAME) drivers, including questions about recruitment and initiation into the program, the health assessments and testing drivers undergo, education drivers receive, health coaching and follow-up with drivers. The phone interview will last no longer than 40-60 minutes and may include between 1 or 2 other participants. We will be audio recording the phone interview so that we may accurately capture the discussion; however, your responses will be kept strictly confidential and your name will not be associated with any comments that you make, however the fleet or company name will be referenced with any comments you make.

The consent information and interview questions are attached to this email for your review. If you have any questions or concerns prior to the phone interview, please feel free to contact me (XXXX at XXXX@vti.vt.edu or at 540-231-XXX).

Thank you in advance for your time and looking forward to speaking with you on [DATE] and [TIME].

Sincerely,
The VTTI Research Team
IRB# XXXXX

VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

Consent to Take Part in a Research Study

Title of research study:

Catalog of Worksite Health and Wellness Programs for Commercial Drivers

Principal Investigator: Laurel Glenn; (540) 231-1543; lglenn@vtti.vt.edu

Key Information: The following is a short summary of this study to help you decide whether or not to be a part of this study. More detailed information is listed later on in this form.

This study will use phone interviews to gather information from various companies with Commercial Motor Vehicle (CMV) drivers about their current Health and Wellness Program offered to drivers. The information gathered will be used to create a catalog of existing Health and Wellness programs in CMV operations, outlining details of the programs, best practices and program outcomes.

Detailed Information: The following is more detailed information about this study in addition to the information listed above.

Who can I talk to?

If you have questions, concerns, or complaints, or think the research has hurt you, talk to the research team: Laurel Glenn; (540) 231-1543; lglenn@vtti.vt.edu

This research has been reviewed by the Virginia Tech Institutional Review Board (IRB). You may communicate with them at 540-231-3732 or irb@vt.edu if:

- You have questions about your rights as a research subject
- Your questions, concerns, or complaints are not being answered by the research team
- You cannot reach the research team
- You want to talk to someone besides the research team to provide feedback about this research

How many people will be studied?

We plan to include about 50 fleets (up to 100 participants) in this research study.

What happens if I say yes, I want to be in this research?

- The research interview will begin after you provide your verbal consent of participation.
- You will participate in a phone interview with a researcher.
- There may be 1-2 other participants involved in the phone interview.

- The interview is an informal discussion where you will discuss your company's Health and Wellness Program for CMV drivers.
- The interview will last no more than 40-60 minutes
- The interview will be audio recorded.

What happens if I say yes, but I change my mind later?

You can leave the research at any time, for any reason, and it will not be held against you.

If you decide to leave the research, contact the investigator so that the investigator can terminate the interview.

If you ask to withdraw during the interview, you will be asked if you would instead like to continue at another time. You will not be asked why you decided to withdraw.

Is there any way being in this study could be bad for me? (Detailed Risks)

There is a small risk of minor discomfort from expressing your opinions to a researcher or possibly other participants who may be taking part in the phone interview. In addition, any opinions you wish to disclose about the H&W program during the interview may be used anonymously in the publicly available report in reference to your particular H&W program. You are never required to answer any question you are not comfortable with discussing and are free to tell the researcher you would like to skip a section or terminate the interview at any time.

What happens to the information collected for the research?

The results of this research study may be presented in summary form at conferences, in presentations, reports to the sponsor, or as academic papers. Participant names will not be linked with any data collected however fleet and company or program names will be linked to all data. All data that is reported will be in summary form by the Health and Wellness Program, not interviewee, so that your participation will remain anonymous.

If identifiers are removed from your private information or samples that are collected during this research, that information or those samples could be used for future research studies or distributed to another investigator for future research studies without your additional informed consent.

What else do I need to know?

This research is being funded by the National Surface Transportation Safety Center for Excellence.

Verbal consent

A researcher will state the following to ask for your verbal consent before beginning the interview:

- Do you have any questions?
- I want to let you know that by participating in this interview you confirm that you are at least 18 years old and are currently working with the (COMPANY/FLEET NAME) Health and

Wellness Program. In addition, you acknowledge that you have read the consent information and give your voluntary consent to participate in this study.

Now I need to ask you for your verbal consent to participate in this interview. (Your Name)

Do you consent to participate in this study? Yes or No?

APPENDIX E. PHONE INTERVIEW PROCEDURES AND QUESTIONS

PHONE INTERVIEW SCRIPT AND PROCEDURES FOR FLEET EMPLOYEE RESPONSIBLE FOR RUNNING H&W PROGRAM

I. OVER-THE-PHONE: Greeting and Informed Consent (5 minutes)

Hello, our names are NAME and NAME. We are researchers at the Virginia Tech Transportation Institute. We want to thank you for taking the time to share your thoughts and opinions with us today.

I want to start by confirming that you had a chance to read over the informed consent document that we e-mailed to you?

o If no: Please take a moment and read through the informed consent form now and then we can discuss any questions you might have about the informed consent specifically or the project in general. (Note: If participants have not read the ICF and does not have the ICF in front of them to read they will be politely reminded that they can't participate in the phone interview).

o If yes: Great. Let me go over some key parts of the consent form and find out if you have any questions for me.

PURPOSE

The purpose of this interview is to discuss the Health and Wellness Program provided by (COMPANY/FLEET NAME). This information will help us document the details of existing health and wellness programs in CMV operations, best practices and program outcomes as it effects both drivers and fleet operations.

We're going to ask you a series of questions to collect some details regarding the (H&W PROGRAM NAME) with (COMPANY/FLEET) drivers.

CONFIDENTIALITY

This discussion is strictly for research purposes, we are not selling anything and we will not connect anything you say with your name.

We are recording the discussion so please speak loudly and clearly so that we get a good recording of your comments.

We will not match any specific comments we use with names, but will match them with the name of the company you work for.

If you ever feel uncomfortable, you can refuse to answer a question or you may stop the questioning at any time.

Your participation or lack of participation will have no impact on your job.

LOGISTICS

This meeting will run for a maximum of 40 mins but may be shortened according to your time constraints if necessary. We are very appreciative of the time that you are spending and will honor it by not running over.

COMPENSATION

You will not be compensated for your participation in this phone interview.

VERBAL CONSENT

- Do you have any questions?
- I want to let you know that by participating in this interview you confirm that you are at least 18 years old and are currently working with the (COMPANY/FLEET NAME) Health and Wellness Program. In addition, you acknowledge that you have read the consent information and give your voluntary consent to participate in this study.
- Now I need to ask (each of) you for your verbal consent to participate in this recorded interview. (Name)—Do I have your verbal consent to participate in this study? (Go through each name)
 - o If yes: Thank you! Now we can go ahead and get started.
 - o If no: Thank you very much for your time.

The following are primary probes. Secondary probes may be used and will depend upon the issues that arise during the discussion. Secondary probes will not stray from the general line of questioning. Time allotments for each set of questions are estimates and may be changed if more or less time is required for a particular set of questions.

II. Introductions and Warm-up (5 minutes)

Facilitator Question/Directions:

- To get started, I'd like to know your position(s) at (COMPANY/FLEET NAME) and what you do as part of the H&W Program.
- Activity: If multiple participants are in the interview, do a round-robin. Make sure and check in with the participant(s) to ensure you have captured their role(s) with the H&W Program
- Let's take a moment and discuss your role(s) in the program.
 - o If unsure or need more information ask: Can you tell me a little bit more about what you do as part of this H&W Program?

III. Recruitment/Initiation into H&W Program (10 minutes)

Facilitator Question:

- How long has this program been available to your employees?
- Who is eligible to participate in the program (all drivers, fleet drivers, owner operators, full time/part time, employee families?)
- How many employees are currently/normally engaged in program? The number of drivers specifically?
- Can you tell me about how drivers are recruited to participate in the H&W Program? What tactics are used for recruitment (flyers, health professional contact?) Are they selected? Are drivers screened for participation? Do drivers volunteer? Is there a cost to participate for the participant? Is it a mandatory program or are there plans to make it a mandatory program? Incentives to participate? Is it in anyway connected with health insurance?
- How do you address privacy/confidentiality concerns /fear of disclosing medical issues or fear of termination.
- Does this program include/engage any family support system?

- Note the recruitment process may vary pending health assessments or whether participation is voluntary vs. mandatory. Please describe pathways for different ways drivers begin the H&W Program.

IV. Driver Health Assessments/Testing (8 minutes)

Facilitator Question/Directions:

- Once the driver is initiated into the H&W Program, can you please walk me through any health assessments they may undergo? Do all drivers complete all assessments? Are assessments required for program participation? How long does it take for drivers to complete this battery of assessments? How often are drivers re- assessed (on their own or with a program leader)?
- Are drivers resistant to completing health assessments? Which ones? How does (COMPANY/FLEET NAME) overcome driver resistance?
- Does anyone in the program make medical referrals?

V. Education (8 minutes)

Facilitator Question/Directions:

- Can you please detail the education provided to drivers regarding health and wellness? What topics are covered, i.e., nutrition, exercise, weight loss, healthy living on the road, worker injury, sleep, common health disorders, hygiene? How is information delivered? Do drivers receive one-on-one education or are they taught in a group setting? Do drivers receive specialized information to cater to their disorders and/or interests? Are drivers provided any written materials, handouts, etc. that they may refer to later?

VI. Health Coaching (8 minutes)

Facilitator Question/Directions:

- Does (COMPANY/FLEET NAME) staff work with the driver to set individual goals? How are these goals monitored/tracked? How frequent are “check-ins”?
- What kind of coaching/motivational techniques does (COMPANY/FLEET NAME) employ to help drivers meet their goals (i.e. feedback/competitions)? What is the most effective tool? Is group coaching helpful?
- Does (COMPANY/FLEET NAME) employ a rewards system for drivers that stay on track?
- Are there any physical tools you use to track/aid driver progress (notebook, mobile phone application, podcasts/audio files, gym equipment)? What tools do you see used frequently by drivers? What do you see as driver reactions to tracking?
- How does (COMPANY/FLEET NAME) staff handle drivers that are not making progress toward their goal(s)?

VII. Long-term Driver Follow-up (5 minutes)

Facilitator Question/Directions:

- Once a driver has met his/her goals, does (COMPANY/FLEET NAME) continue to follow up and check in on the driver? If so, how is this accomplished? Does (COMPANY/FLEET NAME) continue monitoring the driver with health assessments and tests?
- Can drivers “drop out” or “quit” the program whenever they wish to? Is there an incentive for the driver to remain in the program? If so, how does this work?

VIII. Program Outcomes (5mins)

The following two questions are about your opinion of the program. As a reminder, these responses may be used as anonymous, direct quotations in the final report available to the public. You do not have to answer any question you do not wish to answer.

Facilitator Question/Directions:

- What are some key aspects you felt as worked really well or are very important within your program for success?
- What are some aspects you feel aren't working well within your program or could be improved? How?
- What changes/outcomes have you seen in your drivers for (COMPANY/FLEET NAME)? (i.e. job performance, health and safety, crash data, productivity, retention, financial benefits from program (ROI)? Any data?

IX. COVID-19 Issues (3mins)

Facilitator Question/Directions:

- Have you changed delivery methods of your program due to COVID-19?
- Have you added any additional program components due to COVID-19?
- Have you noticed any effects of COVID-19 on the H&W program and participation?

IX. Closing Suggestions (7 minutes)

Facilitator Question/Directions:

- In closing, I'd like to ask if there was an important issue that you think should've been covered during this interview that wasn't covered. Is there something that I did not ask about that you feel is important to discuss regarding the H&W Program with (COMPANY/FLEET NAME)? If so, please tell us now—your opinions are important to us.
- Activity: Open discussion. If multiple participants, make sure quiet ones get to contribute by asking each person specifically if you covered everything he/she wanted to cover.

Thank you for your time today and for sharing your thoughts and opinions with us. We really appreciate it!

PHONE INTERVIEW SCRIPT AND PROCEDURES FOR FLEET EMPLOYEE

I. OVER-THE-PHONE: Greeting and Informed Consent (5 minutes)

Hello, our names are NAME and NAME. We are researchers at the Virginia Tech Transportation Institute. We want to thank you for taking the time to share your thoughts and opinions with us today.

I want to start by confirming that you had a chance to read over the informed consent document that we e-mailed to you?

o If no: Please take a moment and read through the informed consent form now and then we can discuss any questions you might have about the informed consent specifically or the project in general. (Note: If participants have not read the ICF and does not have the ICF in front of them to read they will be politely reminded that they can't participate in the phone interview).

o If yes: Great. Let me go over some key parts of the consent form and find out if you have any questions for me.

PURPOSE

The purpose of this interview is to discuss the Health and Wellness Program provided by (COMPANY/FLEET NAME). This information will help us document the details of existing health and wellness programs in CMV operations, best practices and program outcomes as it effects both drivers and fleet operations.

We're going to ask you a series of questions to collect some details regarding the (H&W PROGRAM NAME) with (COMPANY/FLEET) drivers.

CONFIDENTIALITY

This discussion is strictly for research purposes, we are not selling anything and we will not connect anything you say with your name.

We are recording the discussion so please speak loudly and clearly so that we get a good recording of your comments.

We will not match any specific comments we use with names, but will match them with the name of the company you work for.

If you ever feel uncomfortable, you can refuse to answer a question or you may stop the questioning at any time.

Your participation or lack of participation will have no impact on your job.

LOGISTICS

This meeting will run for a maximum of 40 mins but may be shortened according to your time constraints if necessary. We are very appreciative of the time that you are spending and will honor it by not running over.

COMPENSATION

You will not be compensated for your participation in this phone interview.

VERBAL CONSENT

- Do you have any questions?
- I want to let you know that by participating in this interview you confirm that you are at least 18 years old and are currently working with the (COMPANY/FLEET NAME)

Health and Wellness Program. In addition, you acknowledge that you have read the consent information and give your voluntary consent to participate in this study.

- Now I need to ask (each of) you for your verbal consent to participate in this recorded interview. (Name)—Do I have your verbal consent to participate in this study?
 - o If yes: Thank you! Now we can go ahead and get started.
 - o If no: Thank you very much for your time.

The following are primary probes. Secondary probes may be used and will depend upon the issues that arise during the discussion. Secondary probes will not stray from the general line of questioning. Time allotments for each set of questions are estimates and may be changed if more or less time is required for a particular set of questions.

II. Introductions and Warm-up (5 minutes)

Facilitator Question/Directions:

- To get started, I'd like to know your position(s) at (COMPANY/FLEET NAME) and what you do as part of the H&W Program.
- Activity: If multiple participants are in the interview, do a round-robin. Make sure and check in with the participant(s) to ensure you have captured their role(s) with the H&W Program
- Let's take a moment and discuss your role(s) in the program.
 - o If unsure or need more information ask: Can you tell me a little bit more about what you do as part of this H&W Program?

III. Recruitment/Initiation into H&W Program (10 minutes)

Facilitator Question:

- How long has this program been available to your employees?
- Who is eligible to participate in the program (all drivers, fleet drivers, owner operators, full time/part time, employee families?)
- How many employees are currently/normally engaged in program? The number of drivers specifically?
- Can you tell me about how drivers are recruited to participate in the H&W Program? What tactics are used for recruitment (flyers, health professional contact?) Are they selected? Are drivers screened for participation? Do drivers volunteer? Is there a cost to participate for the participant? Is it a mandatory program or are there plans to make it a mandatory program? Incentives to participate? Is it in anyway connected with health insurance?
- How do you address privacy/confidentiality concerns /fear of disclosing medical issues or fear of termination.
- Does this program include/engage any family support system?
- Note the recruitment process may vary pending health assessments or whether participation is voluntary vs. mandatory. Please describe pathways for different ways drivers begin the H&W Program.

IV. Program Outcomes (5mins)

The following two questions are about your opinion of the program. As a reminder, these responses may be used as anonymous, direct quotations in the final report available to the public. You do not have to answer any question you do not wish to answer.

Facilitator Question/Directions:

- What are some key aspects you felt as worked really well or are very important within your program for success?
- What are some aspects you feel aren't working well within your program or could be improved? How?
- What changes/outcomes have you seen in your drivers for (COMPANY/FLEET NAME)? (i.e. job performance, health and safety, crash data, productivity, retention, financial benefits from program (ROI)? Any data?

V. COVID-19 Issues (3mins)

Facilitator Question/Directions:

- Have you changed delivery methods of your program due to COVID-19?
- Have you added any additional program components due to COVID-19?
- Have you noticed any effects of COVID-19 on the H&W program and participation?

VI. Closing Suggestions (7 minutes)

Facilitator Question/Directions:

- In closing, I'd like to ask if there was an important issue that you think should've been covered during this interview that wasn't covered. Is there something that I did not ask about that you feel is important to discuss regarding the H&W Program with (COMPANY/FLEET NAME)? If so, please tell us now—your opinions are important to us.
- Activity: Open discussion. If multiple participants, make sure quiet ones get to contribute by asking each person specifically if you covered everything he/she wanted to cover.

Thank you for your time today and for sharing your thoughts and opinions with us. We really appreciate it!

PHONE INTERVIEW SCRIPT AND PROCEDURES FOR PROGRAM PROVIDER
EMPLOYEE

I. OVER-THE-PHONE: Greeting and Informed Consent (5 minutes)

Hello, our names are NAME and NAME. We are researchers at the Virginia Tech Transportation Institute. We want to thank you for taking the time to share your thoughts and opinions with us today.

I want to start by confirming that you had a chance to read over the informed consent document that we e-mailed to you?

o If no: Please take a moment and read through the informed consent form now and then we can discuss any questions you might have about the informed consent specifically or the project in general. (Note: If participants have not read the ICF and does not have the ICF in front of them to read they will be politely reminded that they can't participate in the phone interview).

o If yes: Great. Let me go over some key parts of the consent form and find out if you have any questions for me.

PURPOSE

The purpose of this interview is to discuss the Health and Wellness Program provided by (COMPANY/FLEET NAME). This information will help us document the details of existing health and wellness programs in CMV operations, best practices and program outcomes as it effects both drivers and fleet operations.

We're going to ask you a series of questions to collect some details regarding the (H&W PROGRAM NAME) with (COMPANY/FLEET) drivers.

CONFIDENTIALITY

This discussion is strictly for research purposes, we are not selling anything and we will not connect anything you say with your name.

We are recording the discussion so please speak loudly and clearly so that we get a good recording of your comments.

We will not match any specific comments we use with names, but will match them with the name of the company you work for.

If you ever feel uncomfortable, you can refuse to answer a question or you may stop the questioning at any time.

Your participation or lack of participation will have no impact on your job.

LOGISTICS

This meeting will run for a maximum of 60 mins but may be shortened according to your time constraints if necessary. We are very appreciative of the time that you are spending and will honor it by not running over.

COMPENSATION

You will not be compensated for your participation in this phone interview.

VERBAL CONSENT

- Do you have any questions?
- I want to let you know that by participating in this interview you confirm that you are at least 18 years old and are currently working with the (COMPANY/FLEET NAME) Health and Wellness Program. In addition, you acknowledge that you have read the consent information and give your voluntary consent to participate in this study.
- Now I need to ask (each of) you for your verbal consent to participate in this recorded interview. (Name)—Do I have your verbal consent to participate in this study?
 - o If yes: Thank you! Now we can go ahead and get started.
 - o If no: Thank you very much for your time.

The following are primary probes. Secondary probes may be used and will depend upon the issues that arise during the discussion. Secondary probes will not stray from the general line of questioning. Time allotments for each set of questions are estimates and may be changed if more or less time is required for a particular set of questions.

II. Introductions and Warm-up (5 minutes)

Facilitator Question/Directions:

- To get started, I'd like to know your position(s) at (COMPANY/FLEET NAME) and what you do as part of the H&W Program.
- Activity: If multiple participants are in the interview, do a round-robin. Make sure and check in with the participant(s) to ensure you have captured their role(s) with the H&W Program
- Let's take a moment and discuss your role(s) in the program.
 - o If unsure or need more information ask: Can you tell me a little bit more about what you do as part of this H&W Program?

III. Recruitment/Initiation into H&W Program (5 minutes)

Facilitator Question:

- Who is this program catered to (all drivers, fleet drivers, owner operators, full time/part time, employee families?)
- Can you tell me about how drivers are recruited to participate in the H&W Program? What tactics are used for recruitment (flyers, health professional contact?) Are they selected? Are drivers screened for participation? Do drivers volunteer? Is there a cost to participate for the participant? Is it a mandatory program or are there plans to make it a mandatory program? Incentives to participate? Is it in anyway connected with health insurance?
- How do you address privacy/confidentiality concerns /fear of disclosing medical issues or fear of termination?
- Does this program include/engage any family support system?
- Note the recruitment process may vary pending health assessments or whether participation is voluntary vs. mandatory. Please describe pathways for different ways drivers begin the H&W Program.

IV. Driver Health Assessments/Testing (8 minutes)

Facilitator Question/Directions:

- Once the driver is initiated into the H&W Program, can you please walk me through any health assessments they may undergo? Do all drivers complete all assessments? Are assessments required for program participation? How long does it take for drivers to complete this battery of assessments? How often are drivers re- assessed (on their own or with a program leader)?
- Are drivers resistant to completing health assessments? Which ones? How does (COMPANY/FLEET NAME) overcome driver resistance?
- Does anyone in the program make medical referrals?

V. Education (8 minutes)

Facilitator Question/Directions:

- Can you please detail the education provided to drivers regarding health and wellness? What topics are covered, i.e., nutrition, exercise, weight loss, healthy living on the road, worker injury, sleep, common health disorders, hygiene? How is information delivered? Do drivers receive one-on-one education or are they taught in a group setting? Do drivers receive specialized information to cater to their disorders and/or interests? Are drivers provided any written materials, handouts, etc. that they may refer to later?

VI. Health Coaching (8 minutes)

Facilitator Question/Directions:

- Does (COMPANY/FLEET NAME) staff work with the driver to set individual goals? How are these goals monitored/tracked? How frequent are “check-ins”?
- What kind of coaching/motivational techniques does (COMPANY/FLEET NAME) employ to help drivers meet their goals (i.e. feedback/competitions)? What is the most effective tool? Is group coaching helpful?
- Does (COMPANY/FLEET NAME) employ a rewards system for drivers that stay on track?
- Are there any physical tools you use to track/aid driver progress (notebook, mobile phone application, podcasts/audio files, gym equipment)? What tools do you see used frequently by drivers? What do you see as driver reactions to tracking?
- How does (COMPANY/FLEET NAME) staff handle drivers that are not making progress toward their goal(s)?

VII. Long-term Driver Follow-up (5 minutes)

Facilitator Question/Directions:

- Once a driver has met his/her goals, does (COMPANY/FLEET NAME) continue to follow up and check in on the driver? If so, how is this accomplished? Does (COMPANY/FLEET NAME) continue monitoring the driver with health assessments and tests?
- Can drivers “drop out” or “quit” the program whenever they wish to? Is there an incentive for the driver to remain in the program? If so, how does this work?

VIII. Program Outcomes (5mins)

The following two questions are about your opinion of the program. As a reminder, these responses may be used as anonymous, direct quotations in the final report available to the public. You do not have to answer any question you do not wish to answer.

Facilitator Question/Directions:

- What are some key aspects you felt as worked really well or are very important within your program for success?
- What are some aspects you feel aren't working well within your program or could be improved? How?

IX. COVID-19 Issues (3mins)

Facilitator Question/Directions:

- Have you changed delivery methods of your program due to COVID-19?
- Have you added any additional program components due to COVID-19?
- Have you noticed any effects of COVID-19 on the H&W program and participation?

IX. Closing Suggestions (7 minutes)

Facilitator Question/Directions:

- In closing, I'd like to ask if there was an important issue that you think should've been covered during this interview that wasn't covered. Is there something that I did not ask about that you feel is important to discuss regarding the H&W Program with (COMPANY/FLEET NAME)? If so, please tell us now—your opinions are important to us.
- Activity: Open discussion. If multiple participants, make sure quiet ones get to contribute by asking each person specifically if you covered everything he/she wanted to cover.

Thank you for your time today and for sharing your thoughts and opinions with us. We really appreciate it!

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