

# Employee Assistance Program Counseling in the U.S. Transportation Industry: Clinical and Work Outcome Risks and Results for 10,227 Cases at CuraLinc Healthcare

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**Abstract:** This applied study explored the role of behavioral health issues in the transportation industry in the United States. The 6.6 million employees in the transportation industry accounted for about 4% of the total workers in the U.S. in year 2024. Workers in the transportation industry are mostly male (74%) and most are of average working age (43 years). The study primarily featured EAP data collected over a 7-year period from employee users of individual counseling or coaching from a single national EAP business in the United States (CuraLinc Healthcare). The larger full sample included 85,432 clients who worked at 2,679 different employers. The EAP user sample for the transportation industry group included 10,227 employee clients who worked at 77 different employers. Longitudinal data at 30-days post use was obtained from 9,063 cases in the full sample including 573 in the transportation industry. The transportation industry EAP client sample was 57% women and 43% men, average age of 41 years, 95% used the EAP for counseling (5% for coaching), 98% were voluntary self-referrals (2% formally referred by their manager at work), 56% meet with a counselor in person at a local clinical office and 44% used online video, and the typical treatment episode lasted about 7 weeks (50 days). The reasons why employees in the transportation industry used the EAP was to address issues of mental health (43%), stress and personal life issues (34%), marriage and family issues (16%), work-related issues (5%) and substance use problems (4%). The EAP user profile for workers in transportation – compared to the 7 other industries – was relatively higher in use of remote online video modality for counseling, but similar on the other EAP use factors. When starting to use the EAP many cases in transportation reported having clinical level symptoms on standardized measures for anxiety disorder (42% at-risk), depression disorder (32% at-risk), alcohol misuse disorder (12% at-risk) and low work productivity (48% at problem level). Among those cases initially at clinical risk status on outcomes in the total sample, over three-fourths recovered to healthy status after use. Among the roughly half of the total cases who initially had a work productivity problem, the hours of lost work productivity per case per month changed from 64 hours to 23 hours. The hours of restored work productivity was estimated to be a \$1,413 value per month per case who initially had this problem. Most of these same EAP risk rates and outcome improvement results were also found at similar levels for the other industries. Recent data on number of worker, number of employers, worker age, gender, private/public sector, union representation, compensation, and safety from the U.S. Bureau of Labor Statistics for 7 other industry categories was presented to provide context for this one industry.

**Index Terms:** absenteeism, airlines, alcohol, anxiety, counseling, depression, employee assistance program, industry, presenteeism, railways, transportation, trucking, shipping, work

## I. INTRODUCTION

This study profiles employees in the transportation industry who used employee assistance program (EAP) services at one large national provider. The United States (U.S.) civilian labor market includes over 157 million workers in January of 2024 [1-3]. These employees work in hundreds of different industries [4]. Workers in the transportation industry represent 4.3% of all workers [5]. This industry has 4.3 million workers in total with sub-types of transportation via trucking (1.5 million workers), airlines (568,000), railways (153,000), waterways (93,000) and pipelines (32,000). This industry also includes passenger and scenic transportation (465,000), personal courier delivery services (1.1 million) and general warehousing and storage (2.6 million).

In this industry 3 in every 4 workers are men (74%) and the average worker is 43 years old. The typical transportation worker earns \$35 per hour in compensation and works 38 hours per week. Of the over 367,000 employers in this industry, 91% are in private sector

and 9% in the government or public sector. This industry has an annual rate of 4.8 cases per every 100 employees who experience a workplace injury or illness – which is the highest rate. The rate of 17% of workers represented by a union is almost three times the private sector norm. The transportation industry has a similar profile to the manufacturing industry and together these two male-dominated and heavy labor industries account for 1 in every 4 workers.

### *1.1. Literature Review on EAP and the Transportation Industry*

Behavioral health disorders such as anxiety, depression and substance misuse affect about 25% employees each year in the U.S. [6,7]. These disorders adversely impact organizational success in many areas, including increased health care costs, losses from excess absence and lost work productivity, employee turnover, workplace accidents, violence, disability, suicide and death [8-10]. Most employers try to support their workers in a variety of ways including offering an employee assistance program benefit [11]. EAPs are designed to help workers resolve acute but modifiable behavioral health issues and use of individual confidential counseling can restore the emotional, mental and work performance of employees [12-14]. Recent national U.S. data from March of 2023 shows that overall, 64% of full-time workers have an EAP available to them as part of employee benefits package [15]. In the private sector, a total of over 3.2 million employers sponsor an EAP and the majority of public sector organizations in the U.S. – such as local and state governments and the federal government – also offer an EAP benefit to their workers [16,17].

The transportation industry has long-hours and shift work for many in trucking, airlines, railways and other contexts [18-20]. It also has various legal requirements for employee drug-testing and safety procedures. Some work environment conditions in the transportation industry involve high occupational stress, low access to and use of health care, and limited opportunities for social support [21-23]. These work conditions often result in stress, sleep deprivation and use of stimulants and alcohol by employees as a coping mechanism and poor mental health [24]. Three older studies from the 1990s documented that the transportation industry was more likely than many other industries to have an EAP benefit [25-27]. Our review of the social science literature discovered only three studies in EAP that specifically involved the role of EAP services in the transportation industry. These are briefly described below.

A 1992 article described the philosophy, structure and practice of the internal EAP at British Airways in the United Kingdom [28]. At the time, there was a substantial focus on substance use issues among workers and providing prevention, counseling, referral and support services for the small numbers of employees with alcohol or drug risks. Their program included peer helpers, professional counselors, outside expert consultants and a variety of employee-led support groups. Most of the major airlines today do have EAPs.

Another employer case study from 1997 investigated the effectiveness of an EAP at a transportation company in Canada [29]. The study focused on work performance indicators and clinical treatment outcomes. The data sources included a questionnaire completed by the EAP users, reports from EAP counselors on treatment diagnoses and outcomes, and company archival records on employee absenteeism and other performance criteria over a 5-year time period. The EAP clients reported positive outcomes regarding the quality of services received and post use improvement on wellbeing. The counsellors also reported successful treatment outcomes for their clients. However, employee records on performance outcomes indicated that EAP clients had higher rates of problems before, during and after treatment, compared to a matched control group of other employees who did not use the EAP. Additionally, rates of sick days significantly increased from before to after treatment among the EAP users.

The third EAP study in the transportation industry was done more recently in 2015. It explored user experiences with Flight Attendants Drug and Alcohol Program (<https://www.fadap.org>) [30]. Flight attendants reported via an online survey ( $n = 52$ ) and through phone interviews ( $n = 12$ ) that they observed improvements in multiple areas before and after finishing their last counseling treatment episode and entering their most recent recovery phase, including outcomes of: absenteeism, engagement, presenteeism, safety, and interpersonal relationships.

The literature on behavioral health in the transportation industry shows that EAPs have been popular among employers in this field for many decades and that the nature of the work conditions in transportation can pose safety risks for some workers. Many of these workers endure long hours, overnight shifts, multiple time zone changes, lack of access to rest and nutrition, as well as social isolation and extended periods of time away from home, family and friends. The frequent contact between workers and the public also raises concerns for managing behavioral health risks and helping these employees to cope more effectively with challenging working conditions and difficult customers.

The transportation industry has received only limited research attention historically with EAPs and just one study in the last 20 years that examined how EAP services were used and if they were effective with workers from this population. Moreover, none of these past studies involved large sample sizes of EAP users, assessed multiple different employers in the transportation industry, assessed behavioral health risk rates in the EAP user population or used scientifically validated measures of clinical and work outcomes. The present study was done to fill this gap in our understanding for these types of workers.

## *1.2. EAP Study of Eight U.S. Industries – Focus on Transportation*

CuraLinc Healthcare has been in business since 2008 and now this company has over 4,200 employer customers that offer the EAP as a benefit to over 8 million employees. We leveraged the available client background and operational data to construct profiles of eight different major industries. Clinical risk and work outcome data was also routinely collected on many of these employees. This company has conducted six other empirical studies examining a variety of aspects of their EAP services and outcomes [30-35]. In the newest study, we analyzed recent national data collected over a 7-year period from over 85,000 cases from this EAP to profile employee users in eight different industries [35]. We identified the prevalence rates among EAP users for clinical risks for common behavioral health conditions (anxiety, depression and alcohol misuse) and also the rate of employees with problem levels of work absenteeism and work presentation that manifest in hours of lost productive time. We learned how workers use employee assistance program counseling and coaching services. We also discovered how effective use the EAP was in reducing these behavioral health and work-related problems. For details on the study methodology and analytical procedures, please see our earlier comprehensive report on all of the different industries in the U.S. [35]. The present study highlights key findings from the previous study for workers in the transportation industry and compares it to the other seven major industry types.

## II. METHODOLOGY

### *2.1. Archival Business Data and EAP Use Profile*

Users were made aware of the service as a benefit open to all covered employees through a variety of digital, interpersonal and workplace promotional practices. There was no direct cost to the employees in this study, as access to the EAP was sponsored by their employer. Employees participated voluntarily and were not paid for using the services. The study period spanned 80 months, from April of 2017 through December of 2023, based on the start date of program use. The last case included in the study had a Post use data collection date of January 4 of 2024. The year of use was defined by date of when the employee contacted the program and completed the initial intake assessment (2017 to 2023). The case-level raw data was aggregated into one master dataset and analyzed for the present paper. The full sample included 85,432 clients who worked at 2,679 different employers in the United States.

Some data came from the operational business processes used by the staff and clinicians who provided the services. Part of this process involves recording core aspects of the business customer context, employee demographics and the clinical use experience. For this study we extracted the following information from the operational data system: name of employer/customer, industry, maximum clinical sessions allowed per case in the employer/customer contract, date of first use of the service, date of follow-up survey, employee age (date of birth), employee gender, source of referral to the EAP (self or formal referral from management), type of EAP service used (counseling or mental health coaching), primary clinical issue (alcohol, depression, work and so on) and the modality of how the service was delivered via online video or in-person at the counselor's office.

### *2.2. Counseling Intake and Intervention*

As per the clinical practice model, every employee who requested support from CuraLinc was referred to a clinician with a specialty that matched their presenting issue or concern who also had confirmed appointment availability. All counselors involved in the delivery of the clinical treatment services were fully licensed and trained professionals, with earned master's or doctoral degrees in social work, mental health or other related fields. Clients had a use model determined by their employer that limited the maximum number of counseling sessions allowed per treatment episode. This per case treatment limit ranged from a limit of 3 sessions to 10 or more (the average was 6 sessions of EAP counseling allowed at no cost to the employee).

### *2.3. Self-Report Outcomes Measures Collected at Pre and Post Use*

During the initial assessment, the multiple self-report measures were collected, either over the telephone or from a brief online survey. After the treatment phase was completed, the EAP conducted individual follow-ups with clients about 30 days after the last clinical session to collect outcome measures and evaluate other quality of use metrics. The follow-up for coaching clients was at one week after the final session. Standardized measures of behavioral health and work outcomes were assessed using published and validated self-report scales. All of these measures had acceptable levels of psychometric validity and reliability. See the full study for details on how these measures were scored and standardized across time involving the two study phases [35].

When the research project started in 2017 it featured two clinical measures, one for general depression symptoms (Patient Health Questionnaire 2-item brief scale; PHQ-2) and the other for hazardous alcohol use and binge drinking (Alcohol Use Disorders Identification Test brief 3-item version; AUDIT-C). Later in August of 2021, an additional clinical measure was added to assess anxiety disorder symptoms using the brief 2-item version of the Generalized Anxiety Disorder scale (GAD-2). Two work-related outcomes were also measured throughout the entire project. Employee work absenteeism was assessed using two different measures over the

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seven-year study period. During Phase 1 (2017 to July 2021), the full 5-item Absenteeism Scale from the Workplace Outcome Suite was used. In Phase 2 (August of 2021 through all of 2023), the single-item work absenteeism question from the WOS was used. The outcome of work presenteeism was assessed using two different measures over the study period. During Phase 1, the 6-item Stanford Presenteeism Scale was used while during Phase 2, the single-item work presenteeism question from the WOS was used. The work absenteeism and presenteeism measures were combined into a single metric useful for conducting analyses in the severity of the work productivity problem. Following standard research practices established in the EAP field for this approach, an estimated specific number of hours of lost work productivity per case per month was created.

2.4. Study Full Sample of EAP Users by Industry Type

Figure 1 shows the mix of eight different industry types in the full study sample. Please see the source paper for details on how these types were defined [35]. Each industry group had many different specific employers included in the data, ranging from 77 employers for transportation to 629 employers for manufacturing. The most prevalent industry in the study was the manufacturing which accounted for 1 in every 5 cases in the sample (20% of the total). Employees in healthcare were the second most common industry in the sample (18%). The restaurants and retail trade industry workers accounted for 12% of the sample. Workers in the education industry accounted for 9% of the sample. Employees in the government and municipality industry accounted for 8% of all cases. Workers in technology represented 7% of all EAP cases. Employees in the transportation industry represented 12% of the sample. Table 1 shows the employee demographics and use experience at the EAP for the transportation industry.

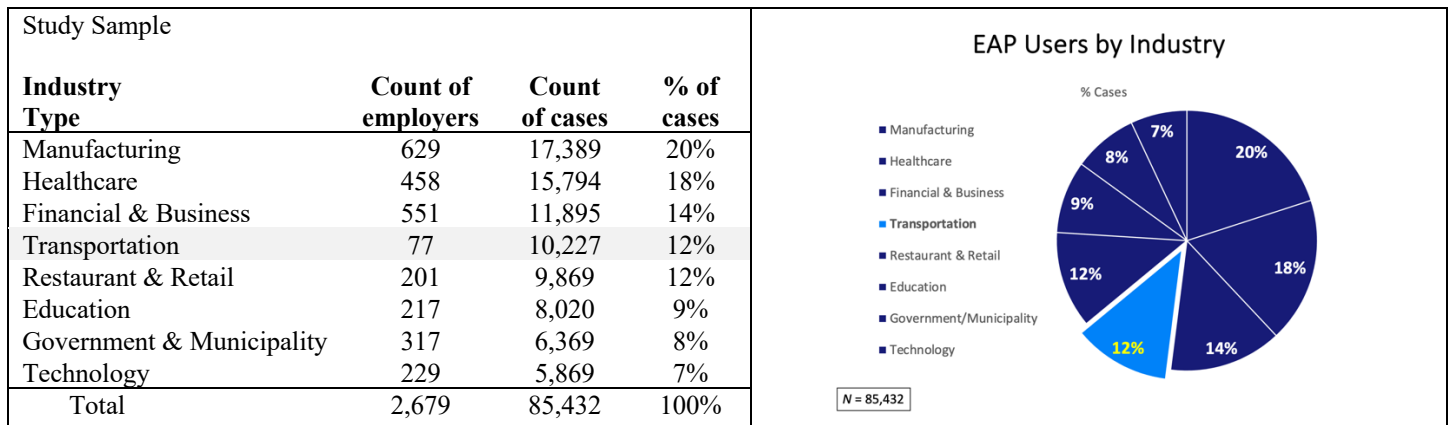


Figure 1. Mix of 8 Industries in EAP Study Sample

Table 1. Profile of Cases on Demographics and EAP Use: Transportation Industry

Factor	n count	%
<b>Total EAP users</b>	10,227	100
<b>Year of use of EAP</b>	All	
2017	46	<1
2018	120	1
2019	89	1
2020	71	<1
2021	60	<1
2022	1,034	10
2023	8,807	86
<b>Client age</b>	10,077	
Under 30 years	2,118	21
30-39 years	2,753	27
40-49 years	2,459	24
50 plus years	2,747	27
Average (range: 17-82)	41 years	
<b>Client gender</b>	9,944	
Female	5,709	57
Male	4,235	43

<b>EAP service type used</b>	All	
Counseling	9,676	95
Coaching	551	5
<b>EAP referral source</b>	All	
Self / family / other	10,063	98
Formal management at work	164	2
<b>EAP modality of use</b>	All	
In-person office (face-to-face)	5,684	56
Online video	4,543	44
<b>EAP presenting issue</b>	All	
Mental health – anxiety	1,238	12
Mental health – depression	1,348	13
Mental health – other	1,605	16
Substance use – drug or alcohol	355	4
Stress personal / other life issues	3,496	34
Marital or family relationship	1,664	16
Work stress or occupational	521	5
<b>EAP use duration (if post data)</b>	552	
1-30 days	136	25
31-59 days	265	48
60-89 days	91	16
90 plus days (max 276 days)	60	11
Average:	50 days	
<b>Longitudinal follow-up</b>	All	
Any outcome data – yes	573	6

### III. RESULTS

#### 3.1. PART 1: Profile of the Transportation Industry in General and EAP Users

**Workforce Profile.** These characteristics of the transportation industry are compared to 7 other major industries on the same BLS data sources (see Figure 2). The average level of employee compensation for transportation of \$35 per hour is lower than all but one of the other industries which ranged from \$24 to \$69 per hour. The average number of hours worked per week per employee in transportation (38 hours) is the second highest when compared to other industries, which ranged from 28 to 39 hours. The level of union status for transportation is in the top 3 at 17%, with other industries that ranged from only 2% to 33% of employees with union representation at their workplace. The transportation industry has the most safety risks in the workplace – at 4.8 cases per every 1000 workers – when compared to the other industries which ranged widely from 0.4 to 4.2 (healthcare was the next highest).

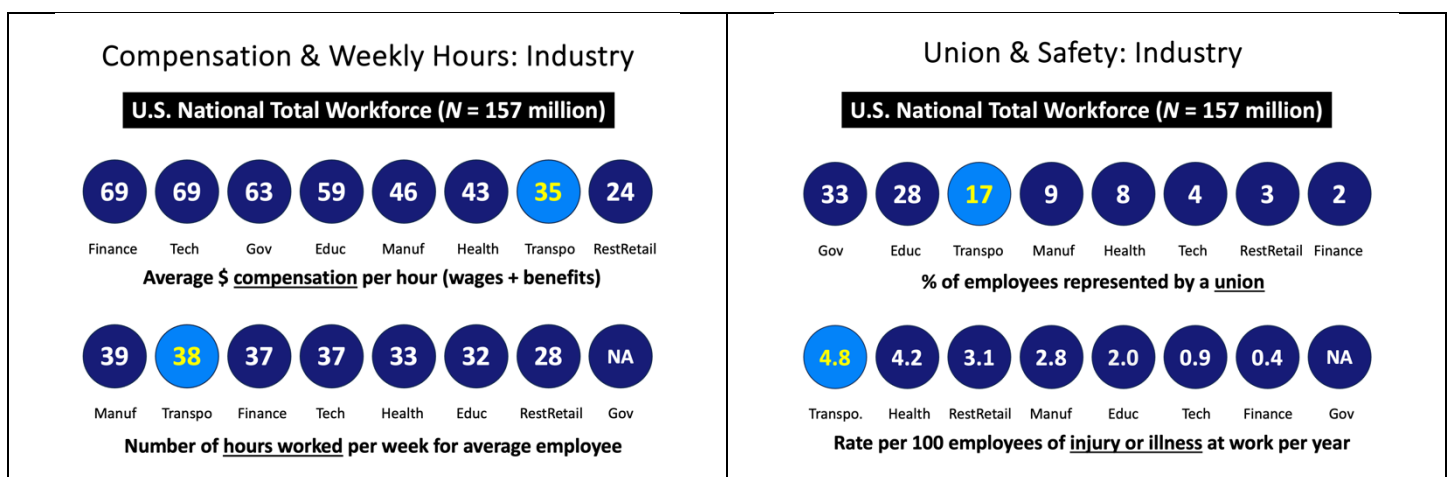
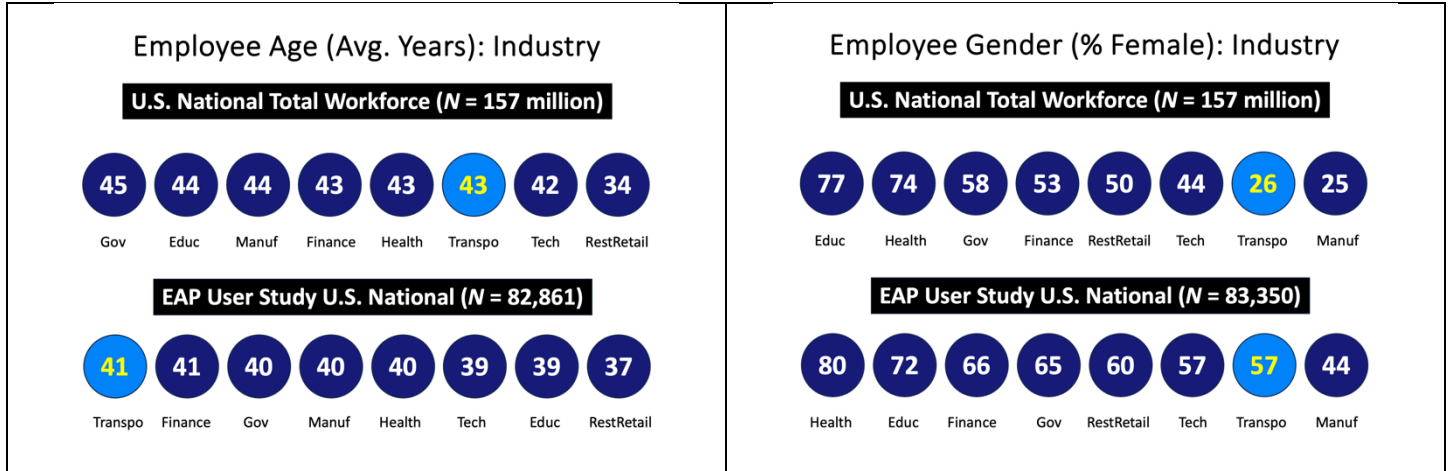


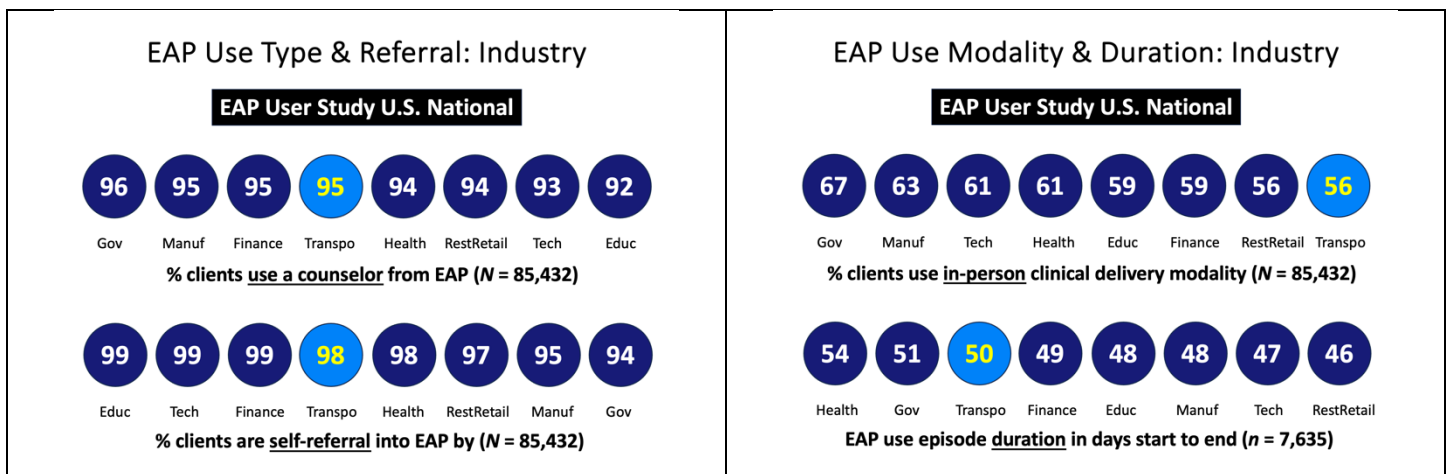
Figure 2. U.S. National Total Workforce BLS Data by Industry

**Employee Age and Gender.** The demographic characteristics of the transportation industry are compared to 7 other major industries based on the same BLS data sources and also from the EAP user data (see Figure 3). The employees in the transportation industry had an average age of 43 years in the BLS workforce data and an average 41 years in the EAP user study. This industry was similar to most of the other industries in age, except for workers in the restaurant and retail industry who tended to be younger. Employees in the transportation industry had a gender mix of 74% men and 26% women in the BLS workforce data and 43% men and 57% women in the EAP user study data. Note this pattern of industry differences in EAP users matches the same rank ordering of industries by gender mix for the U.S. total workforce, although the EAP users were characterized by more women overall than in the total workforce.



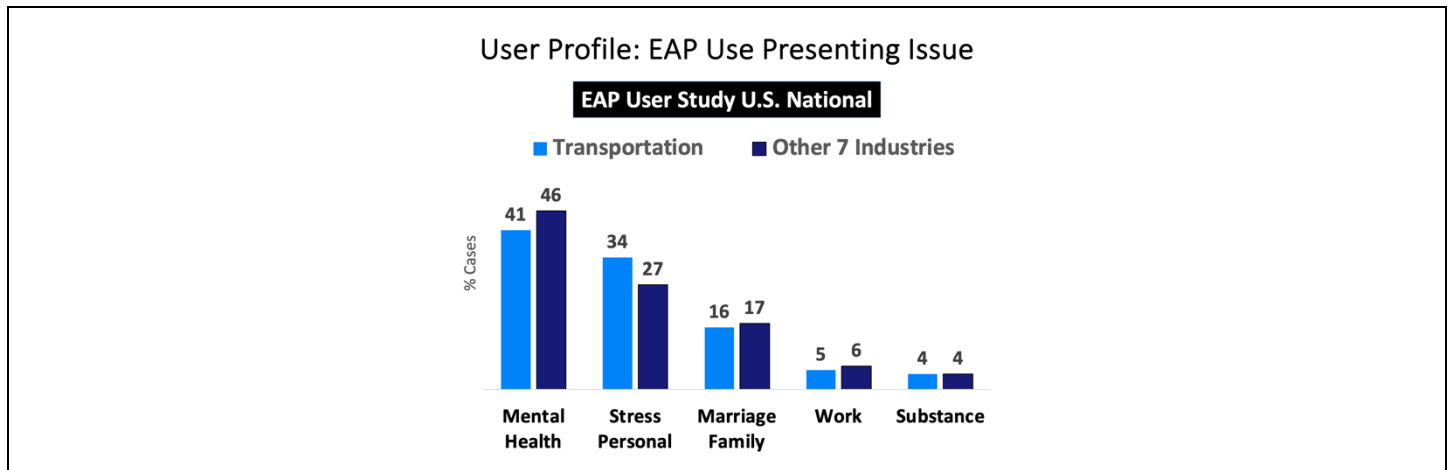
**Figure 3.** Client Age and Gender of Employees by Industry in BLS Data and EAP Study Data

**Employee Use of the EAP.** The transportation industry group was also compared to the other industry types on how the EAP service was used (see Figure 4). The vast majority of the employees in the transportation industry chose to use a counselor at the EAP (95%) with only 5% using a mental health coach. This same finding was also observed for EAP users in the other industries. The vast majority of employees in the transportation industry were self-referrals (98%) with only 2% of all cases being formally referred to use counseling by their manager at work. This same finding was observed for EAP users in all of the other industries but there was more range in the formal referral part of the total cases ranged from 1% to 6%. Users of the EAP could choose to engage with a counselor in-person at a local office clinical setting or remotely using an online video connection. The number of days, on average, for the EAP treatment episode was 50 for employees in the transportation industry. This duration was similar to the employees in other industries, which ranged from 46 to 54 days. The most interesting finding for EAP use was the modality type for having treatment sessions with the counselor or coach. Most of the employees in the transportation industry used the in-person modality (56%) but 44% used the online video modality. This use of remote connection to the counselor was the highest of all 8 industries and likely reflects the fact that workers in the trucking and other transportation methods are away from home and travelling and thus cannot meet with counselors in local offices near their home.



**Figure 4.** EAP Use Characteristics by Industry

**EAP Use - Presenting Issue.** The mix of five general types of presenting issues among EAP users in the transportation industry is shown in Figure 5. The most common issue type for EAP use was mental health, which accounted for 41% of the cases in the transportation industry and 46% in the other industries combined. The next common issue type was stress and personal life problems, which accounted for 34% of the cases in transportation and 27% in the other industries. Problems with marriage or family accounted for 16% of the cases in transportation and 17% in the other industries. Problems with work or other occupational stressors accounted for only 5% of the cases in transportation and 6% of cases in the other industries. Issues involving substance abuse and addictions comprised 4% of the cases in the transportation industry and also the other industries. The stress and personal life issues category is the only one where the transportation industry workers are higher than other users of the EAP.



**Figure 5.** Presenting Issues for EAP Use by Industry

### 3.2. PART 2: Clinical and Work Outcomes for Employees Users of EAP in Transportation Industry

The clinical and work outcome profile of the transportation industry cases were compared to 7 other major industries.

**Clinical Anxiety.** About 4 in every 10 employees in the transportation industry met the criteria for clinical anxiety disorder when starting their use of the EAP service (see Figure 6). This 42% prevalence rate for anxiety disorder risk was at the lower end compared to the other industries, which ranged from 40% to 47% at-risk. Reduction in anxiety risk was tested in the subsample of cases in the transportation industry who had data at both the start of use and again at the follow-up 30 days after the last counseling session and who had started at-risk on anxiety. The prevalence rate for anxiety in the longitudinal sample of transportation industry cases changed from 37% at Pre to 11% at Post. The results found that 72% of these cases had recovered after EAP use to no longer be at risk anymore for anxiety. This recovery rate for transportation was similar to results in other industries, which ranged from 74% to 82% of cases who recovered from anxiety.

**Clinical Depression.** About 3 in every 10 employees in the transportation industry met the criteria for clinical depression disorder when starting their use of the EAP service (see Figure 6). This 32% prevalence rate for depression disorder risk was the second highest of 27% to 36% in other industries. Reduction in this risk was tested in the subsample of cases in the transportation industry who had data at both the start of use and again at the follow-up 30 days after the last counseling session and who had started use being at-risk on depression. The prevalence rate for depression in the longitudinal sample of transportation industry cases changed from 24% at Pre to just 3% at Post. The results found that 93% of these cases in transportation had recovered after EAP use to no longer be at risk anymore for depression. This recovery rate for transportation was toward the higher end of the results in other seven industries in the study, which ranged from 82% to 93% of cases who recovered from depression.

**Clinical Alcohol Misuse.** About 1 in every 8 employees in the transportation industry met the clinical criteria for hazardous alcohol use when starting their use of the EAP service (see Figure 6). This 12% prevalence rate for alcohol disorder risk was in the middle when compared to the employees in the other industries, which ranged from 10% to 15% at-risk. Reduction in this risk was tested in the subsample of cases in the transportation industry who had data at both the start of use and again at the follow-up 30 days after the last counseling session and who had started at-risk on alcohol misuse. The prevalence rate for alcohol misuse in the longitudinal sample of transportation industry cases changed from 13% at Pre to 3% at Post. The results found that 72% of these cases had recovered after EAP use to no longer be at risk anymore for alcohol misuse. This recovery rate for transportation was similar to the six other industries in the study with enough data to test, which ranged from 67% to 78% of cases who recovered from alcohol misuse.

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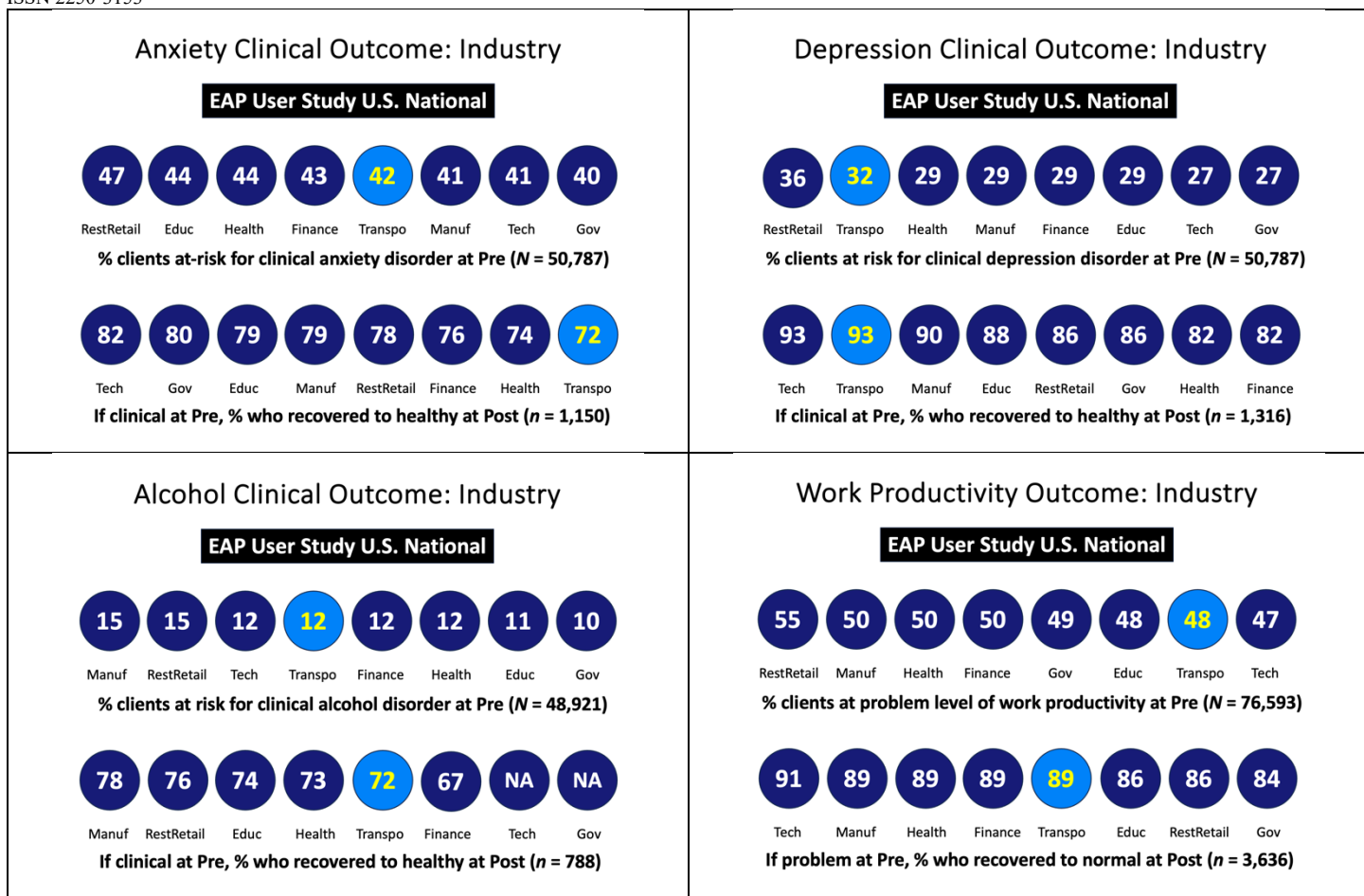


Figure 6. Clinical and Work Outcome Results for EAP Users: By Industry

**Problem Work Productivity.** Half of the employees in the transportation industry met the criteria for abnormally low work productivity when starting their use of the EAP service (see Figure 6). These problem cases had excess levels of work presenteeism and/or work absenteeism. This 48% prevalence rate for work productivity problem similar to the other industries, which ranged from 47% to 55% of cases at a problem level for work productivity. Reduction in this risk was tested in the subsample of cases in the transportation industry who had data at both the start of use and again at the follow-up 30 days after the last counseling session and who had started at a problem level on work productivity. The prevalence rate for a work productivity problem in the longitudinal sample of transportation industry cases changed from 51% at Pre to 7% at Post. The results found that 89% of these cases had recovered after EAP use to no longer have a problem with work productivity. This recovery rate for transportation was better than most of the other industries in the study, which ranged from 84% to 91% of cases who recovered from having a work productivity problem.

**Hours of Lost Work Productivity.** In terms of specific hours, the typical EAP case in the transportation industry with a work productivity problem had an estimated 66.65 hours of lost productivity during the month before using the EAP (based on a combined 55.23 hours of presenteeism and 11.42 hours of absenteeism). After the employee had completed treatment, this adverse outcome changed to be much lower at an estimated 23.29 hour of lost productivity during the month after using the EAP (based on a combined 22.16 hours of presenteeism and only 1.13 hours of absenteeism). The level of LPT hours at Post is lower than the 27 hour norm for the typical “healthy” worker. This is a difference of 40.33 hours of restored work productivity per month per employee initially with a problem on this outcome area.

The typical employee in the transportation industry in 2024 earned \$35.03 per hour in compensation (wages & benefits) in 2024 [1]. Thus, the financial burden to the employer during the month before using the EAP for was \$2,335 per case in lost work productivity (based just on compensation value alone). However, this cost burden was reduced by \$1,413 after using the EAP. Depending on how many months the initial level of impaired work productivity may have continued on without the employee receiving any treatment, this savings amount could be much greater when multiplied over a 6 or 12 month period. Considering the modest total annual investment



in an EAP service benefit, these kinds of workplace-related cost savings could quickly add up to a break-even ROI even at low levels of program utilization.

The key findings from the study for the profile of EAP users and the four outcomes for the transportation industry EAP cases are shown in Table 2.

**Table 2.** Summary of Key Findings for EAP Cases in the Transportation Industry

		EAP User Characteristics			
<b>Profile factors</b>  <i>N</i> = 10,227 employees	Size:	12% of all EAP cases 2017-2023			
	Gender:	57% women and 43% men			
	Age:	Average 41 years			
	Service:	95% counseling / 5% coaching			
	Referral:	98% self-referrals / 2% formally referred by manager at work			
	Modality:	56% in-person office / 44% online video			
	Duration:	7 weeks (50 days)			
	Issues:	41% mental health			
	why used	34% stress and personal life			
	EAP	16% marriage and family			
		5% work-related			
		4% substance use			
		Outcomes			
Test		Mental Health Anxiety	Mental Health Depression	Alcohol Misuse	Low Work Productivity
Prevalence of at-risk clinical or work problem status before EAP use; <i>all cases at Pre (n = 9,225 to 10,012)</i>	At-risk Pre: Industry Rank:	<b>42%</b> <b>No. 5</b>	<b>32%</b> <b>No. 2</b>	<b>12%</b> <b>No. 4</b>	<b>48%</b> <b>No. 7</b>
Reduction in prevalence of at-risk or problem status cases from Pre to Post <i>all cases with longitudinal data (n = 422 to 539)</i>	At-risk Pre: Post:	<b>37%</b> <b>11%</b>	<b>24%</b> <b>3%</b>	<b>13%</b> <b>3%</b>	<b>51%</b> <b>7%</b>
Change to no-risk status after EAP as percentage of subgroup at-risk at start; <i>at-risk cases with longitudinal data (n = 58 to 277)</i>	Recovered at Post:	<b>72%</b>	<b>93%</b>	<b>72%</b>	<b>88%</b>

#### IV. DISCUSSION

This applied exploratory study focused on the transportation industry. The study provided a profile of this workforce in the U.S. in general and also for EAP users specifically. The transportation industry is the smallest segment of the total national workforce (1 in every 25 workers) and also for EAP users nationally of the eight types examined. Workers in the transportation industry are mostly male and most are of average age. The average employee in this industry works more hours per week than all but the manufacturing industry. Compared to other industries, the transportation industry is next to the lowest in employee compensation level, third highest for union representation and it has the highest rate of workplace safety incidents of any industry.

The EAP user profile for workers in transportation – compared to the 7 other industries – was similar in use of coaching, similar in formal management referrals, similar on the duration of use episode and similar on most of the presenting issues but was slightly higher for stress and personal life issues. What was most interesting was that transportation workers were relative higher than employees in other industries in their use of remote access video counseling modality. This finding makes sense when many of these workers travel for their job and have less access to in-person counseling at an office near their home. When starting to use the EAP many of the cases in transportation reported having clinical level symptoms on standardized measures for anxiety disorder (42% at-risk), depression disorder (32% at-risk), alcohol misuse disorder (12% at-risk) and low work productivity (48% at problem level). Among those cases initially at clinical risk status on outcomes in the total sample, a large majority had recovered from Pre to Post for anxiety, depression, alcohol misuse and hours lost work productivity (change from 67 hours lost per month to 23 hours). Most of these same EAP risk rates and outcome improvement results were also found at similar levels for employees in other industries.

These findings were obtained from a “real world” business context involving national data that was collected using validated scientific measures over seven years from a large sample of over 10,000 employee users who worked at 77 different employers in the transportation industry. Thus, this study has a high degree of external validity for the findings. Thus, employers in the transportation industry can be confident that these results are likely to describe their industry fairly well. Overall, the study results demonstrate both the need to supporting worker behavioral health and for considering an effective employee assistance program as one resources for employers to use to manage these kinds of worker wellbeing and work performance risks.

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#### DECLARATIONS

**Funding:** The research was financed by the authors’ own resources. No external research grant funding was involved.

**Author Contributions:** MA performed the statistical analyses of the aggregated dataset, conducted the literature review and drafted the manuscript. DP developed the study design, selected the measures involved, coordinated the data collection and led preparation of annual reports of preliminary results. All authors discussed the results and contributed to the final manuscript.

**Conflict of interest/Competing interests:** MA is an independent research scholar and consultant who received financial support from CuraLinc Healthcare for preparing this research manuscript. MA has also occasionally worked on other projects for this company. DP works for CuraLinc Healthcare company.

**Ethical Considerations:** The privacy of users was protected by having all program use and survey data deidentified before being shared with the independent consultant (first author) who conducted all statistical analyses. As this was an applied study of archival anonymized data collected from routine use of the service, additional informed consent from individual participants beyond their initial consent agreement in terms of use of the EAP service was not required. All data was collected as part of the normal business practices and not for a separate specific research project. Project approval from a university internal review board was not required. The use and analysis of archival operational data in this manner for applied research is consistent with the published ethical guidelines of the American Psychological Association [36]. All counselors involved in the delivery of the clinical treatment services were fully licensed and trained professionals.

**Institutional Review Board Statement:** No formal ethical approval of the study was required due to the retrospective archival naturalistic design of the study. All employees who used the counseling and completed the outcome measures participated voluntarily and had their personal identity protected as all unique identifiers were removed from the data prior to analysis. All counselors involved in the delivery of the clinical treatment services were fully licensed and trained professionals.

**Informed Consent Statement:** All data was collected as part of the normal business practices and not for a separate specific research project. Consent for participation in a research study and use of data for publication of study results was therefore not necessary.

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