Presenteeism and Health: Exploring the Link Between Employee Productivity And Common Physical and Mental Health Issues

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Executive Summary

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SITUATION ANALYSIS

Employers have always been concerned about the productivity of their employees. When employees are not on the job due to sickness or personal issues, the company loses their productivity for that period of time. More recently employers are realizing that absenteeism is not the only cause of lost productivity. Although an employee may be on the job physically, he or she may not be performing up to their potential. This lack of productivity while on the job has been dubbed "presenteeism." Many factors (such as job control, person-job fit, management style) have been examined that contribute to both absenteeism and presenteeism. Due to its applicability to 100 percent of employees, personal health is one area that merits more attention.

This study explored how personal health issues impact self-reported employee productivity. Clinical and self-report data were obtained from national samples of employees who in 1999 had voluntarily used services now commonly available to employees as part of their company's health benefit plan: 1) telephonic nurse information or 2) telephonic and in-person behavioral counseling. Each service operates a confidential, third party external, 24-hour by 7-day per week call center that is provided at no cost to employees. Access is offered through a toll-free phone number.

PROJECT OVERVIEW

An applied research design was used to gather archival clinical and survey data collected by a national provider of these services (Optum®). Because the data were obtained from the same provider, the data collection systems, research methodology and outcome survey items were the same for both nurse and behavioral counselor services. This allowed for the rare opportunity to directly compare findings between nurse and counselor services. All cases feature clinical assessment information generated by the nurse or counselor and outcomes information provided by the employee during standard follow-up interview surveys. A total of over 6,000 employees are represented in this project.

SAMPLE

In this study, the nurse call service sample had 4,789 callers and the behavioral counselor call service sample had 1,050 callers. Both samples were comprised of approximately 70% females and 30% males, which is typical for these kinds of services. The average age was about 36 years (age 18 to 65).

Profile of Nurse Callers.

The employees who called the nurse service had a variety of symptoms. The nurse identified the symptoms after listening to the person's description of their condition. The most common clinical symptom guidelines for this sample were: Abdominal pain, back pain, cough, sore throat, chest pain, headache, vomiting, diarrhea, sinusitis, cold/upper respiratory infection, and fever. These 11 conditions accounted for about a third of all cases, with the remaining cases distributed over more than 200 other topics. The callers to the nurse service were fairly evenly distributed across severity categories of self-care at home, called a doctor, visited a doctor office of clinic, or went to the urgent care or emergency room.

Profile of Counselor Callers.

Employees called the counseling service for a variety of reasons. The type of problem a caller had was determined by the judgement of the counselor. The most common problem area was personal and daily living issues (43%), which includes marital relationships, close relationships, legal problems, financial issues and family care. Mental health issues, such as depression and anxiety, were also common among employees (36%). Physical health issues (10%), individual work problems (16%) and organizational level work problems (4%) were also experienced. A caller could have issues in more than one of these five basic categories. There was also a clinician-assessed severity level classification for each problem. In this sample, 8% of callers had a high severity problem (defined as needing immediate assistance that same day), 71% of callers had a moderate severity problem (needing help within the next seven days) and 20% of callers had a low severity problem (not needing assistance within seven days). The most common sources of care received after calling the behavioral counselor were: Self-care or waiting (30%), using the call service's own counselors (on the phone or in-person – 31%), or using of outpatient mental health or medical services from insurance providers (39%).

Sample Summary. The nurse and counselor services provided a rich mix of clinical participants. The samples included callers with low severity (self-care or community services), moderate severity (doctor calls/visits or phone counseling), and high severity (ER visit or outpatient mental health treatment). Life-threatening or crisis level health issues were rarely experienced among the employees in this study. This composition of health problem types and clinical severity is typical for a population of working adults.

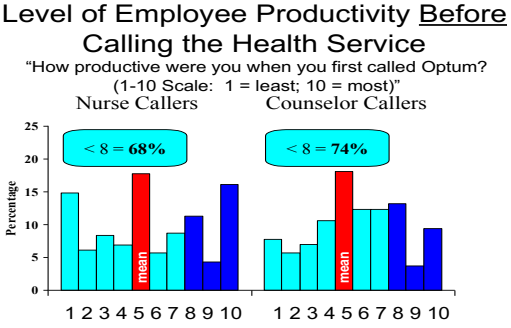
RESULTS

This study addressed five research questions (RQ).

RQ1: What is the level of self-reported work productivity for employees prior to use of call center health services?

The results indicated that before calling, employee users of both the nurse call service and the counselor call service were performing at an average rating of 5, on a 1 (lowest) to 10 (highest) rating scale of productivity. Thus, employees with a health issue prompting a call to the service were productive at a level corresponding to the mid-point of the rating scale (nurse sample = 5.54, counselor sample = 5.66). If one assumes that desirable productivity is at a level 8 or higher, then 68% of employees who called the nurse service and 74% of employees who called the counselor service were performing at less than a desired level of productivity.

Figure 1



RQ2: Is self-reported employee productivity before use of the call center health service related to personal or health factors (such as age, sex, type of clinical issue, or health problem severity)?

The results of regression analyses showed that demographic and clinical measures predicted the initial productivity levels prior to service usage, but to only a small degree. Less than 7% of the total variance in productivity level was accounted for in these statistical models. Thus, the factors assumed likely to be associated with lower productivity during a health problem episode did not do a very good job of predicting the extent of the productivity impairment. One implication is that using demographic and clinical variables in an attempt to target employees who may be at risk for low productivity does not seem a fruitful practice.

Figure 2
Correlates of Employee Productivity
Before Use of Health Service

	Nurse Callers	Counselor Callers
Results of Regression Model	R = .26 R^2 = .08 p < .001	R = .17 R^2 = .03 p < .001
Variables Associated with Low Productivity	Higher clinical severity Common clinical problems Female Older age	Higher clinical severity Mental health problems Physical health problems Younger age

The factor most associated with productivity level before use of the health service was the severity level of the clinical problem. The main finding from these tests is that employees with more severe clinical health issues also reported having the lowest productivity before use of the health service. This is not a surprising result and serves largely to validate the measure of productivity used in the study.

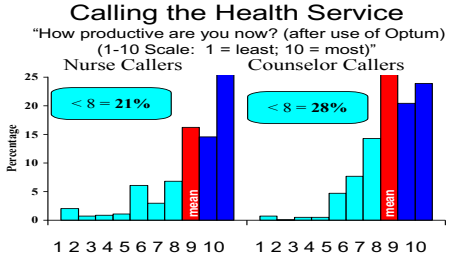
RQ3: To what extent does employee productivity change from before to after use of call center health information services?

The results indicated that after use of the health service, users of both kinds of services were performing at a much higher level of productivity (nurse sample = 8.54, counselor sample = 8.15). After using the health service, substantially fewer employees reported substandard productivity levels. Specifically, 21% of employees who called the nurse service and 28% of employees who called the counselor service were performing at less than a desired level of productivity, e.g., a 7 or below.

Conversely, after their use of the health service, about three-fourths of employees had high productivity. The change in productivity ratings from before versus after use of the call center represents a 35% average improvement for callers to the nurse service and a 31% average improvement for callers to the counselor service.

It should be noted that the survey questions answered by employees did not ask respondents to attribute the change directly to the service, rather only to estimate their level of work productivity before and after they called the health service. Changes in productivity pre and post service could be caused by several unspecified factors (such as natural process of healing, clinical provider actions, and changes in workplace environment).

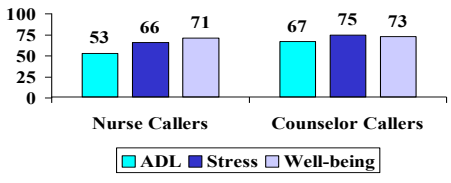
Figure 3
Level of Employee Productivity After
Calling the Health Service



RQ4: How does use of the call center health service affect the health of employees?

At the follow-up assessment, employees were asked questions about how their use of the service had affected three basic aspects of their health: Performance of routine daily activities, stress level, and overall health and well-being. Results indicate that the majority of employees who had called the nurse service and the majority of employees who had called the counselor service, reported they had improved in all three health outcome areas (see Figure 4).

Figure 4
Employee Health Status
After Use of Health Service:
Percentage with Improvement in Area

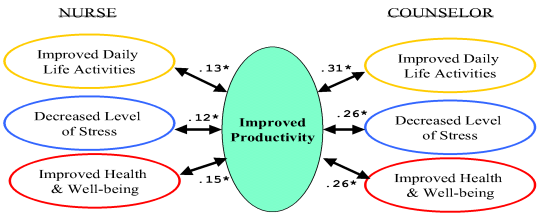


RQ5: Are improvements in employee productivity associated with improvements in employee health status?

Correlational tests indicated that reported improvements in ability to perform activities of daily living, improved stress, and improved overall health and well-being after use of the health service were all positively and significantly associated with reported improvements in work productivity after use of the health service (See Figure 5).

Figure 5

Correlation of Employee Health Outcomes with Improved Productivity



These findings support the argument that workplace performance outcomes are related to improvements in the personal health of employees after their use of health information services. As can be seen in Figure 5, the more that employees reported improved ability to perform daily life activities, stress, overall well-being after use of the health service, the more they also reported a higher level of work productivity after use of the health service. This pattern of results was found for users of both call services, except that it was somewhat stronger for mental health issues (counselor caller average correlation of +.28) than for medical issues (nurse caller average correlation of +.13).

CONCLUSIONS

This study explored how personal health issues impact employee productivity. Data were obtained from two self-report survey studies with national samples of over 6,000 employees who had voluntarily used a telephonic nurse information service or used a telephonic counselor employee service in the year 1999.

The results indicated that employee users of both kinds of services were initially performing at less than a desirable level of productivity (about a 5 on a 1 to 10 rating scale). While experiencing a health issue, employees were less productive than desired. The results of regression analyses showed that the initial level of productivity at the time of first use of the health information service was not predicted very well by the available demographic and clinical measures. After use of the health service, employee users of both kinds of health services were performing at about an 8 on the same 1 to 10 scale of productivity level. For the employees who had used the nurse service, there was an average increase of 35% in productivity level. For the employees who had used the counselor service, there was an average increase of 31% in productivity level. In addition, the majority of both the nurse and counselor service users reported positive changes in three basic aspects of their health: improved performance of routine daily activities, decreased stress level, and improved overall health and well-being. These three health outcomes were significantly and positively correlated with improved productivity. These findings support the argument that workplace performance is associated with improvements in the personal health of employees.

In sum, the results of this study indicate that employees with common mental and physical health issues appear to have a productivity deficit associated with the health episode. The demonstration of a statistical link between productivity and health should lead employers to consider offering services that improve the overall health of employees in order to improve the productivity of employees.