

Cigna Study: Predictive Analytics Supporting a Nurse's Intervention Can Reduce Employee Short-Term Disability up to 15 Percent

PHILADELPHIA, December 18, 2012 - Employee absence prevention health interventions are associated with a relative reduction in short-term disability incidence of 15 percent among employees at high-risk of experiencing a disability in the next 12 months, according to a study of 118,000 American workers by global health service company [Cigna](#) (NYSE:CI). The results of the study are published in the December 2012 issue of the independent, peer-reviewed [Journal of Occupational and Environmental Medicine](#).

The Cigna study found that a combination of predictive analytics and a nurse health advocate-led intervention can produce a measurable reduction in future disabling illness or injury incidents among employees at high risk of short-term disability. The intervention resulted in a short-term disability incidence rate of 16.8 percent vs. 19.8 percent for those not in the intervention group - overall a 15 percent relative reduction in incidence of disability.

"By identifying customers at high risk of a future short-term disability and providing individualized intervention that includes coaching, incentives and other outreach, our study shows that the onset of disability absence can be measurably reduced, benefitting both employers and employees alike," said Dr. Robert N. Anfield, chief medical officer for Cigna's disability business. "Future studies should address how intervention impacts short-term disability duration, return-to-work rates, and total medical costs."

Cigna conducted a prospective, randomized controlled trial with 118,000 employees from 24 employers. The employees were identified by the predictive model as high risk for short-term disability and randomly assigned to the intervention or control groups. The study defined high risk as greater than or equal to a ten percent probability of short-term disability during the next 12 months. Employees eligible for the study were full-time, actively at work and covered by Cigna-administered medical and disability plans.

Called the Absence Prediction and Prevention (APP) program, it established a nurse health advocate-led intervention that included early identification of employees at high risk for future short-term disability, proactive outreach to these employees, clinical assessment, and a range of disability absence prevention strategies.

"It's important to note the value of using sound research methods to efficiently and effectively answer the questions about program impact," said Disability Analytics Lead Doug Melton, MPH, PhD for Cigna. "The program serves as one of many proactive interventions leveraging analytic insight about customers' physical state and personal preferences in order to develop customized absence management plans."

"It's part of Cigna's mission to provide customers with tools and resources that can help people stay healthy and potentially prevent or lessen the impact of an injury or illness," said Mark Marsters, senior vice president of operations for Cigna's disability insurance business. "By proactively identifying individuals who may be struggling, before their condition worsens and they need to leave work, we're helping to fulfill that mission."

About Cigna

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