# Effect of Service Volume on Cold Incidence among Physicians

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## ABSTRACT

**Objectives.**  We hypothesize that the stress and burnout accompanying increases in workload could threaten physicians' health. To find out, we investigated the effect of workload on incidence of colds.

**Methods.**  We extracted insurance claims data for patients utilizing medical centersfrom the records of theBureau of National Health Insurance, including data for both outpatient and inpatient treatment records from January 1, 1999 to December 31, 2010.We examined (1) the association between the physicians' number of services and the incidence of common colds among these physicians in the subsequent month using logistic regression models and generalized estimating equations and (2) the difference in the incidences of colds between physicians who cared for inpatients and those who did not.

**Results.**  After controlling for influences of hospital characteristics, physician characteristics, season and time trend, we found that the incidence of colds increased significantly with the increase in clinical services per day, clinical services per month, clinical dates per month, and hospitalized patients per month.In addition, the effect of workload on physicians providing clinical services to outpatients only was higher than that it was on physicians seeing hospitalized patients.

**Conclusion.**  Steps should be taken to prevent overwork among physicians in order to reduce the incidence of colds in this population.

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