Analysis of Patient No-Shows According to Health Conditions

Authors : Sangbok Lee

Abstract : There has been much effort on process improvement for outpatient clinics to provide quality and acute care to patients. One of the efforts is no-show analysis or prediction. This work analyzes patient no-shows along with patient health conditions. The health conditions refer to clinical symptoms that each patient has, out of the followings; hyperlipidemia, diabetes, metastatic solid tumor, dementia, chronic obstructive pulmonary disease, hypertension, coronary artery disease, myocardial infraction, congestive heart failure, atrial fibrillation, stroke, drug dependence abuse, schizophrenia, major depression, and pain. A dataset from a regional hospital is used to find the relationship between the number of the symptoms and no-show probabilities. Additional analysis reveals how each symptom or combination of symptoms affects no-shows. In the above analyses, cross-classification of patients by age and gender is carried out. The findings from the analysis will be used to take extra care to patients with particular health conditions. They will be forced to visit clinics by being informed about their health conditions and possible consequences more clearly. Moreover, this work will be used in the preparation of making institutional guidelines for patient reminder systems.

Keywords : healthcare system, no show analysis, process improvment, statistical data analysis
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