

<html><head></head><body><pre style="word-wrap: break-word; white-space: pre-wrap;">NAME: gardasil.dat  
TYPE: Retrospective Study (Potential Predictors for Completion or Non-Completion of the Three-Shot Anti-HPV Gardasil Vaccine Regimen)  
SIZE: 1413 observations, 10 variables

ARTICLE TITLE: Examining Potential Predictors for Completion of the Gardasil Vaccine Sequence Based on Data Gathered at Clinics of Johns Hopkins Medical Institutions

DESCRIPTIVE ABSTRACT: The tab-delimited data set gives characteristics of young female patients between the ages of 11 to 26 who came to clinics of Johns Hopkins Medical Institutions between 2006 and 2008 to begin the three-shot regimen of vaccinations with the anti-human papillomavirus (HPV) medication Gardasil.

SOURCES: The data were gathered from written and electronic records at four clinics of Johns Hopkins Medical Institutions (JHMI) at which the Gardasil vaccine is currently available. Two of the clinics (Odenton, White Marsh) are located in suburban Baltimore, while the other two (Bayview and Johns Hopkins Hospital Outpatient Center) are located in Baltimore City.

VARIABLE DESCRIPTIONS:  
Age = the patient's age in years  
AgeGroup = the age group in which the patient falls (0 = 11-17 years, 1 = 18-26 years)  
Race = the patient's race (0 = white, 1 = black, 2 = Hispanic, 3 = other/unknown)  
Shots = the number of shots that the patients completed during a period of 12 months from the time of the first shot  
Completed = did the patient complete the three-shot regimen within the recommended period of 12 months (0 = no, 1 = yes)  
InsuranceType = the type of insurance that the patient had (0 = medical assistance, 1 = private payer [Blue Cross Blue Shield, Aetna, Cigna, United, Commercial, CareFirst], 2 = hospital based [EHF], 3 = military [USFHP, Tricare, MA])  
MedAssist = did the patient have some type of medical assistance (0 = no, 1 = yes)  
Location = the clinic that the patient attended (1 = Odenton, 2 = White Marsh, 3 = Johns Hopkins Outpatient Center, 4 = Bayview)  
LocationType = was the clinic in a suburban or an urban location (0 = suburban, 1 = urban)  
PracticeType = the type of practice that the patient visited (0 = pediatric, 1 = family practice, 2 = OB-GYN)

SPECIAL NOTES: n/a

STORY BEHIND THE DATA: The Gardasil vaccine for human papillomavirus (HPV) has been available since 2006, but its adoption has been a slow process. An early study of young female patients in Southern California (1) suggested that race and socioeconomic status are particularly useful factors in predicting the likelihood that a patient will complete the three-shot Gardasil regimen within the recommended period of 12 months. This data set was gathered in an attempt to identify similar potential predictors for patients attending JHMI clinics in Baltimore County and Baltimore City. The potential predictors, chosen from the available demographic information, were type of insurance coverage the patient had, location of the clinic the patient visited (suburban or urban), type of practice the patient visited, patient age group (11-17 or 18-26 years), and patient race. To simplify analysis of the insurance predictor, an indicator variable was created to indicate patients who did or did not possess some type of government-sponsored medical assistance.

PEDAGOGICAL NOTES: The data set presented in this paper provides an excellent source of "raw material" for introductory lessons and assignments in categorical data analysis. The instructor may choose to use the data to illustrate simple graphical techniques for depicting the distribution of a single categorical variable, inference procedures appropriate for categorical data (such as two-proportion z tests and chi-square tests), and graphical and numerical methods of analyzing relationships between categorical

variables (including the effects of the presence of a confounding variable on the relationship). Advanced classes may also use the data set to practice logistic regression techniques for identifying the "best" subset of potential predictors for predicting membership in the "Completed" categories.

REFERENCES:

(1) Chao, C., et al. (2009). "Correlates for Completion of 3-Dose Regimen of HPV Vaccine in Female Members of a Managed Care Organization." Mayo Clinical Proceedings 84, 864-870.

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