TUTORIAL

Business Administration in a Medical Industry: Determining Possible Predictors for Days with Hospice Service for Patients with Dementia

Linda A. Miner, Ph.D., James Ross, MD, and Karen James, RN, BSN, CHPN

Medicare has a set of guidelines for hospices for admitting patients with dementias to their care. The ideal number of days with the service is 6 months or less, but prognostication is difficult for the noncancer patient. The following example is part of a project that we did to determine what variables might predict length of stay and particularly which might predict a stay of ≤ 180 days.

Data were gathered for 6 years from a large hospice on patients with dementia, many of whom, had Alzheimer’s disease. There were 449 cases in the data set. The following tutorial provides the steps we used while attempting to find predictors that would accurately separate the patients into the 180 days or less or the greater than 180 days group.

First, the 449 cases were separated randomly into two groups—50/50 using a random selection. We did this by first opening a Data Mining Workspace, inserting the data set and selecting classification and discrimination under the node browser, and finally, selecting the first option, Split Data into Training and Testing Sets (see Figures I.1 and I.2).