One of the most expensive services used by older persons is hospitalization or nursing home use in developed countries. It is a great challenge of the policy-makers for the cost-effective allocation of health care resources for aging populations. It is important to identify that elderly people living in the community are at risk for a variety of adverse outcomes which might lead to hospitalization. In this paper we presented a predictive model based on a regressive model approach to predict future hospitalizations among the elderly. The application is based on repeated measure data from Health and Retirement Study (HRS) in USA.