This thesis estimates cost efficiency of 99 general hospitals in the Czech Republic during 2001-2008 using Data Envelopment Analysis and Stochastic Frontier Analysis. It tests comparability of their results finding out a certain qualitative similarity. Next, determinants were added into SFA and efficiency of Czech hospitals examined. The presence of inefficiency is group specific even having accounted for various determinants. The effects of determinants were tested. Inefficiency increases with teaching status, more than 20,000 treated patients a year, not-for-profit status, larger share of the elderly in the municipality and average salary in the district. Inefficiency decreases with less than 10,000 patients treated a year, larger population, higher unemployment rate and more hospitals in the region.