This dissertation investigated the impact of patient-obtained medical information (POMI) on the physician-patient relationship. A game-theoretical model was built in which the physician interacts with a heterogeneously informed patient population. Major findings include that when the physician cannot distinguish information levels of individual patients, she would use the information characteristics of the patient population as surrogate for the POMI of a particular patient, and her behavior would be partially shaped by a “dominant” information level within the patient population. Then, using US counties as units of patient population, the relationship between per capita healthcare utilization and the portion of highly informed patients exhibits the nonlinearity suggested by the theoretical model. Finally, physicians’ of different demographic, socioeconomic and practice characteristics have different attitudes towards POMI. Physicians of male gender, older age, international training, race other than white, and overall personal financial incentive favoring expanding services are more likely to have positive attitudes towards POMI and are more willing to order tests, procedures or prescriptions upon patients’ requests.