This research is a cross-sectional descriptive study with the following objectives: study the needs and satisfaction of the consumer of diagnostic radiology in the community hospitals in Krabi, compare the levels of consumer needs to consumer satisfaction to gain knowledge responding to the consumer need. The information was gathered in a one-month period from October 1 to 31, 2003. The total of the population for the external consumer study is 320 people. The interview process was used to perform research on the external consumer. The research was carried out at five 30-bed hospitals in Krabi province. The questionnaire process of data collection was used for internal consumers, doctor, nurses, film reader or other x-ray room staff.

The analysis for this information used SPSS 11.0 for windows. The measurements used were frequency, percentage, standard deviation of the needs and satisfaction of the consumer. The average scores of the needs and satisfaction were compared using Paired T-Test.

The result of this study found the consumer needs and satisfactions of the consumer right of the patient and the x-ray service system were at the highest level. The working method, environment and safety categories found the consumer needs and satisfaction at the high level. The comparison of the average score between needs and satisfaction of the consumer separated by the categories, x-ray service system, working method, environment and safety and consumer right of the patient found the average scores to be different at the level \( p < 0.05 \). In the categories of working method, environment and safety and consumer right of the patient, the consumer needs were found to be greater than their satisfaction. And the services in each category which should be improved are x-ray safety warning sign and information board, comfort in the x-ray room and fire warning sign, staff explanation of the x-ray process, pregnancy warning sign and comfort of changing room, waiting time from registration to receiving film and staff politeness in addressing customer and staff listening abilities.

In the x-ray service system the consumer needs and satisfaction level were not different at \( p > 0.05 \). The actual score shows the average score of needs is less than that of the satisfaction.

For the internal consumer, the levels of need and satisfaction of the quality of film found the results in the highest level. The total service system also found the needs and satisfaction at the highest level.

From the results of this study, it is apparent the consumer should be the focal point of the research, the providers, including the doctor and technicians should continuously monitor the consumer need and satisfaction to provide high level of services.