

ABSTRACT

Health is an important thing for human life. In times of illness especially for those requiring special treatment people should go to the hospital to get the appropriate treatment. Hospitals in Banda Aceh City that have been and/or will be built begin to equip their facilities to meet the needs of the people in Banda Aceh. However, there are still constraints in determining which hospitals that should be chosen by the patients, as they often do not match the needs/conditions of the patients, and require considerable time in determining the suitable hospital. So a tool is needed in choosing a hospital by considering the needs of patients, as well as to accelerate the process of determining the suitable hospital.

There are several criteria to be considered for hospital selection, consisting of: facilities, insurance, cost, availability of specialists and distance. Simple Additive Weighting method is used in the selection process of the hospital because it is able to make recommendations from many criteria and has a fast processing time compared to other methods. This system is built based on mobile because most of the people today already have a smartphone, aside from the fact that smartphone helps the patients to get the information about the distance from their location to the hospital.

Based on the test results, the average time required by the system to give a hospital recommendation is 28.99 seconds. Based on the comparison of recommendations by experts and system for 51 test cases, the system performance level is 88.24%. With these results the system can already be used in hospital selection recommendations based on patient needs.

Keywords: Hospital Selection in Banda Aceh City, Patients Needs, Simple Additive Weighting, Recommendation System.