## **ABSTRACT**

Nosocomial infection known as infections that only occur in hospitals, have become a crucial problem. This infection can be acquired and transmitted through patients, health workers and other healthcare facilities. Health workers in hospitals have a very vulnerable role in the transmission of nosocomial infections because they have more frequent direct contact with patients and contaminated medical equipment. Hospitals are in the hospital implementing standard precautions. Standard precautions are basic things that must be adhered to by hospital employees, such as using personal protective equipment (PPE) when in contact with patients or contaminated equipment, washing hands, using hand gloves, using masks and so on. To improve this, awareness is needed from hospital employees to comply with the rules that apply in the hospital. Therefore, in this research a safety climate approach will be used to measure employee awareness of existing rules and views of management. This safety climate approach will later be seen in relation to safety behavior, with the aim of seeing how employees act and their influence in improving disease transmission in the work environment. Apart from that, we will also look at the relationship between nosocomial risk infection and safety behavior. The relationship between these variables will be processed using hypothesis testing with the Structural Equation Modeling (SEM) approach. The results of the interpretation and analysis of the hypothesis will then be developed in the form of an application so that it can be used as a measuring tool that can be used to prevent the transmission of nosocomial infections at XYZ Hospital. The application development will be carried out using the Design Thinking method.

Keywords: Nosocomial Infection, Safety Climate, Digital Measurement Tool