**Related literature**

As of 2015, R.Dale Hall, a managing Director of Research in Society f Actuaries defined the predictive analytics that it’s a process of using modeling and data analysis techniques on large data sets to discover predictive patterns and relationships for business use. And also He said that despite of many different types of companies and practice areas, the predictive models have to emerged to help guide in business decisions and opportunities. Predictive analytics techniques have help a quick development far beyond the well-known examples of technology-dependent business model like amazon and Netflix. R.Dale Hall says that “more than ever, it has been financial services firms, healthcare providers and all levels of government agencies getting into the predictive analytics mix.”

The Research of Society of Actuaries­ team have selected examples of predictive analytics from a recent Call for Articles issued by Society Actuaries. Those articles gives insights on the largening scale of ways that the actuarial profession is using these kinds of method in affecting business decision. These example demonstrates the expanding ways that actuaries are putting predictive modeling techniques into practices.

One of their research about is “Predicting Emergency Room Frequent Flyers”. The Predictive modeling that can help them to identify the people who are more likely to use the emergency room many times a year. The patients is referred as “Frequent flyers”. The patient or so called frequent flyers is defined as three or more ER visits per year.