Research fmea and hfmea

Health & Medicine, Nursing

FMEA and HFMEA Failure Mode and Effects Analysis (FMEA) has been in use in recent years as a means of assessing the risk that is prevalent in the aerospace and locomotive industries. FMEA also came to be adapted into the healthcare industry in the last decade of the twentieth century. It involves four main steps the first of which is the definition of the topic; usually a high risk process attempting to define the criticality of the situation. The second step that is undertaken when using FMEA is the assembly of a multidisciplinary team whose purpose is to deal with the issue at hand. Thirdly, there is the graphic description process which involves the identification of potential failures as well as their causes and effects. Finally, there is a process of calculating the risk, which involves the calculating the severity, the detectability and probability scores.

The Healthcare FMEA has been adopted specifically in healthcare for the purpose of analyzing the risks through the use of the detectability and criticality steps in such a way that it is presented as an algorithm (DeRosier, et al., 2002). In the adaptation of FMEA into healthcare, the calculation step is normally replaced by a hazard score that is indicated directly from a Hazard Matrix Table. HFMEA has five important steps which include defining the topic, assembling the team, graphically describing the process, conducting a hazard analysis, and finally, measuring actions and outcomes. HFMEA is an important process because it allows for the early detection of possible outcomes before medical procedures before they are undertaken.

Reference

DeRosier, J., Stalhandske, E., Bagian, J. P., & Nudell, T (2002). Using Health Care Failure Mode and Effect Analysis: The VA National Center for Patient

Safetys Prospective Risk Analysis System. The Joint Commission Journal on Quality Improvement, 27(5): 248-267. http://www. patientsafety. va. gov/docs/hfmea/HFMEA_JQI. pdf