## Alert Generator System – UML sequence diagram explanation

The UML sequence diagram illustrates the lifecycle of an alert within the Alert Generation System. The cycle begins with a continuous flow of data coming from the patient's monitor into the Alert Generator System. The Alert Generator then compares the current data with the threshold criteria that is saved in DataStorage. In case the current values do not fall within the threshold, the system gets the message that the patient is in a stable condition and no further action is taken. However, if the current values do fall within the threshold, the Alert Generator is put into action and generates an alert for the medical staff. At this point the medical staff takes the appropriate measures and after the patient is stable, a message is sent back to the Alert Generator that confirms that the medical staff acknowledged the alert. It is also possible for the alert to be automatically fixed, and in this case the data flow from the patient's machine will show that now the signals are not within the threshold anymore and stop the alert.