



This UML diagram outlines the architecture of a health monitoring system, featuring various classes and their interactions. At the core, we have the 'Patient State', which receives input about a patient's condition. This is closely linked to the 'Vitals Monitor', tasked with streaming data possibly from sensors monitoring the patient's vital signs. When certain thresholds are met, an 'Alert' is generated; this is represented by the 'Alert.java' class with attributes such as patientId, condition, and timestamp, and is capable of creating an instance of an alert.

The 'AlertGenerator.java' class has methods to trigger and evaluate these alerts. When an alert is triggered, the 'AlertManager.java' comes into play, beginning the management process and facilitating communication with the medical staff through their devices, as shown by the 'Medical staff devices' class with its 'GetAlert' method, signaling that the medical staff receive notifications about the patient's state.

In addition, there's a connection to a 'Digital profile within the CHMS', suggesting that this system is part of a larger Comprehensive Health Monitoring System. This digital profile stores 'Current patient Data' and 'Patient History', and provides methods to update this historical data and thresholds that may influence when alerts should be generated.

