Alert Generator Diagram:

The AlertGenerator module could work in a way where the AlertGenerator object receives a constant stream of data, evaluates it in realtime, and if necessary creates an alert by instatiating an Alert object and notifying the AlertManager in someway through its manageAlert method. This class will then send alerts to medical staff through its sendAlertToStaff method, where staff could be implemented with a MedicalStaff class, or something of that kind. The Alert class then has four primary fields specifying the nature of the Alert, being patientID, alertType, alertValue and timestamp.