



The UML sequence diagram shows how to monitor patients streamlined process. Real-time patient data is continually collected by the Patient Monitor (Sensor). The Alert Generator receives this data and compares it to pre-established thresholds and previous data kept in Data Storage. The Alert Generator sounds an alert when the data goes over safe limits. The alarm component promptly notifies the medical professionals of this alarm. The Medical Staff confirms that they are aware of the issue and acknowledges receiving the notice. Next, they evaluate the patient's status either by using the Patient Monitor directly or indirectly. The Medical Staff takes the appropriate measures to stabilise the patient and address the alarm based on their evaluation.

Alert Generator: The Alert Generator's lifeline begins to function when it gets information from the Patient Monitor and ends when it has sent an alarm (if required) and obtained historical information from Data Storage.

Data Storage: A relatively brief lifespan is required for data storage. It becomes active when the Alert Generator asks for historical data, and it becomes inactive after it has that data. This suggests that it serves data on request and is essentially reactive in nature.

Alert: When an alarm is initiated, the Alert component's lifeline shows. It stays active until the Medical Staff recognises it.