**Architectural context \***

**The architectural context is well described.**

**System qualities \***

**The effect of the main required system qualities is well explained.**

|  |  |
| --- | --- |
| **Software Quality Features** | **Functionalities** |
| **Availability** | Server will be always up and running 24/7. Ensures zero% downtime. Doctors, carers and patients |
| **Performance** | This ensures correct data, components are very responsive, the cohesion ensures faster processing data speed between components. |
| **Reliability** | If the system is not responding, it will alert the officials. Self-diagnosing. Backup database. Officials (carer/doctor) has to respond to abnormality. |
| **Security** | If there is any external change in the algorithm or in the other components of the system in the server or the database, Official will be alerted with the activity. |
| **Scalability** | If number of devices increases we can add more servers. Makes room for more devices. We can add more “RAM”. |

**Significant scenarios \***

**Scenarios illustrate how the most important competing qualities are resolved by the architecture.**

|  |  |
| --- | --- |
| **Features** | **Components / System** |
| **Availability** | Server has continuous power supply, network access. |
| **Performance** | Multiple Analytics layers. Offsite big data analysis, Onsite small data comparison for increase speed. Also lowers cost of local components |
| **Reliability** | SMS service, RSVP, Timer/ Alerting system, Backup database |
| **Security** | Additional security component in the server,  Login WPA. eg Ossec, Sitelock. |
| **Scalability** | More features can be added/ more WHD. multiple servers setup through the localised design characteristics. |

**Architecture alternatives \***

**At least one alternative architectural response to the significant scenarios is described.**