**Tasks to be executed for the 3rd Stage completion of the Video Monitoring Project**

**3rd Stage**

**Test and implementation of patient HR & RR monitoring algorithm:**

* Implement real-time vitals monitoring algorithm, with heart rate (HR) and respiratory rate (RR) outputs, into Video Monitoring System (VMS) electronics
* Test measurement technique on simulated subjects and provide test code
* Determine limitations of technological approach:

1. Subject distance from camera
2. Subject positioning in bed
3. Subject’s face orientation with respect to camera

* Determine system accuracy for PR and RR measurement
* Implement codes to save pictures of beds every 5 minutes
* Implement codes to output HR/RR information to a file for easy access and use by Hill-Rom development team
* Hill-Rom to provide the frequency of measurement for HR and RR