

To fully evaluate an application to be used in gathering and viewing information within a hospital ward, a clinical trial would need to be carried out. The users and stakeholders involved, in this instance, would be the medical staff (nurse(s) assigned to the ward, doctors doing rounds, any other staff that might happen to use the system). The patients could also be considered stakeholders, as it is important to them that the system works well so the medical staff can provide them the best possible care. To evaluate the system, it ought to be compared to some previous “gold standard” - likely, this being the medical profession, the currently used method of gathering and recording data on patients. If it can be proven that the new system works equally well when compared to this “gold standard” in, say, upwards of 95% of cases, and has some additional functionality (in this case, perhaps the graph displaying the past hour's worth of data), then it could be considered as a new method of collecting and parsing patient data.

To actually evaluate whether the new system is achieving these goals, some gathering of information would need to take place. The aforementioned “compare to gold standard” would require that the data collected by the system be recorded, to be compared to other methods. This could require data anonymization, or consent from patients to use their data. In any case, care must be taken to ensure anyone providing their data does so knowingly, and gives their full consent. Interviews or questionnaires could be conducted with the medical staff known to be using the system, to discover what they thought of it, if it was effective, and how easy to adopt it was. It would be helpful, in this case, to have records of who had used the system. Any nurses in the ward would obviously come into contact with it, but, say, a doctor doing their rounds could have used the system, and it could be insightful to interview them, and receive their feedback. In either case, when gathering data in an interview or questionnaire, the questions asked should encourage helpful responses, and be kept to a minimum to try and ensure the quality of any responses. Besides such methods, other observations could be made of staff using the system. These could be integrated into the software, and would ideally be invisible, not affecting how the person used the system, as this could skew results. This would naturally require a prior agreement to gather such data.

Ideally, as many methods of gathering feedback should be employed, hopefully while keeping any additional workload incurred in doing so off the medical staff. Other issues may come into play – monetary restrictions, or having a limited time to carry out a clinical trial. Any prototypes to be used in a trial would therefore need to be as close to complete as possible.