

Hospital Information System – Team Building

Project Leader (Sponsor)

The HIS provider's implementation team will be headed by the project leader who will have the overall responsibility for the project. The project leader responsibility is managerial task. The leader will have extensive experience in project management with special relevance to computer based systems in the area of health-care. He should be able to communicate and advise the hospital staff and management during the implementation period. Also, he/she should be able to move and direct the implementation steps for the hospital. Moreover, the project Leader is responsible for the success of the project and should be empowered by the hospital executive management to enforce the mandatory decisions for the success of the project.

- Implementation scheduling, involving, planning and coordination of each phase of the project.
- Providing the necessary data required for the initial and final setup of the system for testing.
- Providing the actual hospital data for final and live run.
- Providing the approval (in coordination with the hospital executive management) for all steps of implementation.
- Providing the necessary progress Reports to hospital management.
- Resources and manpower allocation and coordination of the activities of the project team members.
- Handling administrative/commercial issues.
- Order coordination and follow up with the Hospital Management.
- Progress review.
- Coordinating all the activities requested from the hospital side to be completed on time.
- Final evaluation of implementation team's effort and preparation of presentations to users.

- Supervise the hand-over process of the documentation and users manuals to the hospital.
- Will coordinate/deliver to HIS provider's coordinator any comments/requests for specific actions.
- Acceptance and sign-off on the deliverables.
- Selection of hospital key users (who will give their input for HIS package customization).
- Coordinate and follow-up hospital activities such as data entry and assuring that people will attend the training for smoother future operation.
- Define the business aims of the project and its objectives. Also, justify it to the top management.
- Intercedes between the project manager and top management and keep the top management informed of progress.
- Monitor the business environment to ensure that the project still meets the business needs.
- Ensures that all top management's interests are appropriately represented.

Project manager or Coordinator

HIS provider to provide a project manager/coordinator throughout the project duration to monitor and coordinate the different projects tasks from hardware, system software, application software, delivery, installation, implementation ... etc. He/she will be working closely with the hospital project leader. He/she will merge his previous experience with the team to brainstorm/ guide the project. He/she will coordinate for the deliverables and follow them up to minimize the risk of deviating from the plan. Also, he/she will act as a facilitator between the hospital and HIS provider whenever there is a need.

- Prepare the project brief.
- Achieve the project's objectives within time, cost and quality/performance.
- Keep the project leader and HIS provider senior management informed of progress (especially milestone activities) and alert them to problems early.

- Managing and motivating the project staff (especially the hospital team where the project is depending on their achievement).
- Controlling and monitoring the project progress.
- Reconciling conflicts and managing the project's external relations.

HIS Consultant

HIS Consultant(s) will demonstrate the HIS sub-modules, relate the hospital's requirements to the features available, recommend the customization required based on the hospital input if any and after installation, coordinate the acceptance test procedures. Work role includes study of existing procedures, analysis of user requirements for the proposed automated system including the interfaces. The HIS Consultant(s) will be supported by the analyst programmer.

- Study of required functionality vs. HIS package.
- Finalize modifications to HIS package.
- Software delivery.
- Coordination of installation.
- Coordination of acceptance.

Training Team Leader

He/she should have experience in health-care sector and data processing industry in the areas of system analysis, estimation of resources, computer resource allocation and application software. Work role includes study of existing procedures, analysis of user requirements, matching the requirements with HIS functionality, providing day-to-day operational support and imparting user training. As a trainer, he/she will have thorough understanding of the HIS sub-modules and have good teaching and communication skills in order to impart training on the software, preparing course materials etc.

- Study of existing operations.
- Analyze and suggest proposed operations.
- Implementation support.

- Post-implementation review.
- Ongoing support.
- Training on each HIS sub-modules.
- Planning for training programs.
- Setting up of the training database.
- Tailoring of training course material.
- Evaluation of effectiveness of training.

We have to highlight the training strategies where it can be one of the critical success factors (CSF) in the HIS implementation project; training strategies are determined by who is being trained and who will train them. The project manager will want to ensure that anyone whose work is affected by the HIS package is properly trained the appropriate trainer. All people who will have secondary or primary use of the HIS must be trained. This includes everyone from data-entry personnel to those who will use output to make decisions without personally using a computer. The amount of training a system requires thus depends on how much someone's job will change because of the new HIS package. The training team leader must ensure that users of different skill levels and job interests are separated.

Also, the training team leader should consider the hospital size (number of beds), where for large project, many different trainers may be used depending on how many users must be trained.

Moreover, the training should be well-defined objectives that allow evaluating of the training when it is complete. Taken into consideration, some users learn best by seeing, others by hearing, still others by doing. Since it is usually not possible to customize training for an individual, a combination of methods is often the best way to proceed.

Analyst /Programmer

This person will be knowledgeable on the various application development tools using the DBMS (database management system) with extensive programming experience.

- Make minor modifications to the software based on instructions from HIS Consultant/Analyst.
- Correct any minor issues encountered in the software during implementation.
- Assist in programming special functions that may be required as part of the initial setup phase.
- Assist in initial data taken on.

Technical Support Specialist

The hospital technical support specialist / system programmer should be available from or before the first day of hardware installation to gain the hands-on experience on the new system throughout the project. The prime objective is achieved when user downtime is kept to an absolute minimum.

- Installation of all operation systems and application.
- Operating systems & other software support.
- Trouble Shooting any of the operating system/application software.
- Diagnosing which problem are user created and which need to be referred externally.
- Coordination between purchasing department and suppliers as and when necessary.
- Maintenance of Hospital's software legality and keeping hospital up to date with latest releases of updates send from HIS provider and version monitoring.

Database Administrator

This person should has experience in support of RDBMS (relational database management system), operating system (UNIX, NT etc.) and the Local Area Network.

- RDBMS installation and support.

- Helping in trouble shooting the operating system to RDBMS issues.
- RDBMS performance tuning.
- Consider database related issues vs. user requirements.
- Data conversion and migration.

Data conversion and migration is one of the important factors that should be taken into account during the implementation phases. There are many conversion strategies available to database administrator, and there is also contingency approach that takes into account several organizational variables in deciding which conversion strategy to use. The five strategies for converting from old system to the new are: direct changeover, parallel conversion, gradual conversion, modular prototype conversions and distributed conversion. Thus, the project manager has to decide with the hospital team which direction will be followed.

Operator

This person is experienced in computer operations and knowledgeable both in hardware and software operations. He/she reports to the Hospital Technical Support Specialist or MIS/DP manager. He/she should be capable of solving the operational problems and capable to perform the basic trouble shooting diagnosis to report it to the technical support specialist. Considering that the hospital requires the system to be running 24 hours a day and 7 days a week, an operator must be always on duty to provide operation level support whenever needed.

- Hardware peripherals (Workstation, Printer, Tape, etc.) operating knowledge.
- System operations, bring the network up, back-up/restore the system and the database ... etc.
- Running of periodic jobs (day-end, month-end, etc.).