

Hospital Information System

High quality patient care, Optimisation of hospital resources and Revenue tracking are the challenges for running a successful hospital. Availability of information is the key for a quick and right decision for say, it may be treating the patient or deciding on the inventory control. A well-integrated Information system is essential in true means to improve the quality of healthcare delivery.

Enterprise wide '**IIIMS – Integrated Image & Information Management System**' from **Avanttec** is an integrated solution by all means, for example the patient at the ward who is ordered for a special X-Ray investigation, the system automatically allows to book an appointment for the procedure and generates a task list for X-Ray department. Immediately after the procedure the physician can now straight away access the X-Ray images & reports without waiting for X-Ray films and paper reports. The patient X-Ray images & Reports are electronically transferred to the Physician's PC for instant viewing, eliminating the long wait time to collect the film. Similarly the old reports are now retrieved from the server by the physician in less than few seconds for comparisons and advice. The physician advice is now added to the patient progress notes/EMR and is available as part of the discharge summary after the treatment. The process is not complete yet, the IIIMS tracks the films & contrast usage for such a procedure and automatically deducts from the hospital inventory and apparently bills the procedure charges to the patient's bill!

The challenge is to offer an easy to use interface with few clicks for the healthcare providers but yet powerful to meet the organizational objectives. The enterprise wide 'IIIMS' built by Avanttec having 12+ years of experience in healthcare domain & hundreds of customers worldwide, offers comprehensive enterprise wide automation.

Front office Management

Powered with the comprehensive 'Appointment' system the user can now create appointment slots for any complex situation for all regular and visiting consultants.

An auto-generated number becomes the unique 'Patient/hospital ID' for lifetime reference during the registration process. The system triggers a task list to the Physician, based on the 'consulting Physician name' captured during the visit or triggers an admission process if it is an IP patient.

The front office modules empower the users to handle any kind of enquiries with regard to appointments, registration process, consultant's availability, various charges, investigation durations, bed allocation and patient movements.

Automatic Integrated Health Insurance

At the time of 'Registration' the system tracks if it is an insurance patient and the entire billing is performed automatically according to the Contract & Plan. The system prompts the user on the limits, Exclusions, pre authorization requirements etc., automatically. The system tracks every facility offered to the patient and automatically bills the patient based on the insurance eligibility.

The high degree of intelligence built within the system allows preparing the 'Statement for claims' by touch of a button, eliminating the cumbersome manual process and helps tracking the receivables from the companies.

Revue Tracking

The system tracks the patients visit and generates appropriate work list for the Physicians for consultation. Also system triggers work list for all investigation areas based on the physicians' orders. The prescription made at the OPD is now available electronically at Pharmacy for issuance & billing.

Incase of IP patient, the billing is integrated with all the service areas such as Investigations/Ward/ICU/OT/Kitchen etc., and all services used are automatically billed online to the patient's billing.

The billing module also facilitates company & insurance billing i.e., the tariff and eligibility criteria based on the different contracts with companies are taken care by the system at the background while billing the patient.

Automated Laboratory & Enterprise wide online inventory

The bar coded patient 'sample' at laboratory offers electronic tracking during investigations and the results generated from the equipments are automatically transferred to the patient reports. The information system provides facility for automatic data transfer from the lab equipments and ensures 100% accuracy and quick report delivery with reduced patient wait time.

More importantly the 'Online Inventory' feature automatically deducts the quantity of reagents and other chemicals used for every test from the stock. Hence giving an accurate correlation between the number of test performed and the balance stock left!

It is possible to have an 'on line inventory' through out the enterprise means every item used or consumed is automatically deducted say from the OT stores or from the ward Pharmacy!

Electronic Medical Record (EMR/EPR)

All patient data generated at various stages of treatment, say it may be a Consultant's remarks, electronic prescriptions, investigation results, Vital sign charts etc., are stored instantly in electronic format in the patient folder with relevant 'Coding' at the main Information server for simultaneous reference by all concerned professionals. Instant access to patient information 'Any where Any time' results in improved patient care and efficiency, eliminating needless wait time during critical hours.

The IP Module used at wards & ICUs by nurses helps capture patient vital data at bedside and transfers the information to the Electronic Medical Record folder of the patient for the immediate reference of the doctors for better care and quick decision making.

The **IIIMS** either captures or allows connectivity through PACS interface to patient's relevant images generated by various imaging equipments such as CT, MRI, CR, Ultrasound scanner, OT equipments etc., thus offering a capability for physicians to view not only the patient's text information but also the images.

Back Office Support & **I**nterfaces

The information system seamlessly integrates all back office facilities such as Materials Management, Human Resources, Canteen, House Keeping, Blood Bank, etc., to ensure quality service at every point to improve patient care.

The interfaces include solution for connecting Accounting Interface, Attendance Recording System, EPABX System, Barcode/RFID Interface, Local Language Interface, ICD & CPT Codes etc.,

- Features mentioned are not standard part of the solution and it may vary depending on the modules ordered.