"With the use of Amrita Solutions, we were able to eliminate the issues we have been facing with the use of Siemens HIS and thereby meeting out Objective. Amrita Solution is seamlessly integrated, and therefore we can now create complete EMR, which has improved the service to our patient population. Also the customizability along with the intuitive UI has helped us in adoption of IT among our physician community. We have now successfully implemented all the modules, because of which we can proudly claim to be India's First paperless Super Specialty hospital. Now having the EMR of the patient, has eliminated the need for patient to carry any medical documents with them, while providing doctors the access to EMR from anywhere!!!"

# - Dr Prem Nair, Medical Director, AIMS, Kochi

Location:	AIMS, Kochi
Total Beds:	1350 including teaching hospital
<b>Recognition:</b>	Provides highest quality healthcare service at
	least possible cost to most number of patients
Amrita Sol:	All the HIS modules (consisting of PMS, CIS,
	HAS), LIS, RIS, PACS and Telemedicine

## Introduction:

AIMS hospital is a multi super specialty having over 36 well equipped clinical departments. In order to serve the patient population the objective is to "provide best care possible at least cost to most patients". This hospital caters to patients from all over the south India and also from western countries, who are looking for affordable healthcare, not compromising on the quality. It acts as a referral care unit to a large number of Telemedicine centers all over the country.

## History:

AIMS hospital was started in 1998, and from day one the senior management felt the need of an information system, in order to meet the desired objective. Therefore as early as 1998, it was decided to implement the Siemens HIS hospital wide including filmless PACS module.

With time, the AIMS hospital also focused on R&D, added Medical, Pharmacy, Nursing and Dental college to the healthcare campus, along with addition of the teaching hospital.

But as hospital grew in its size, range of activities and the workflow processes matured, the system was not able to scale and adapt to the demand. Also the cost of maintaining and supporting was increasing day-by-day.

## **Amrita Solution:**

Complete integrated solution consisting of HIS, LIS, RIS, PACS & Telemedicine.

### **Challenges:**

-Providing an integrated solution -Ability to create complete and integrated EMR for a patient (OP, IP, Casualty as well as Telemedicine) -User adoption of IT for physician where time saving is extremely critical -Keeping cost of care low, in order to meet the objective of "providing best care possible at least cost to most patients"

## Solution:

-Configuring the Amrita solution as per the standard hospital workflow processes -Completely integrated solution as opposed to distributed modules

#### **Benefits:**

-High end healthcare delivery (opinion to evidence based)
-Global visibility resulting in real time monitoring & tight control on financial processes
-Complete patient EMR accessible from everywhere

# Need for a Change:

Even after the usage of the existing system for over 4 years, it was felt that system was constraining and not able to meet the requirements, and therefore it was decided to change over the system completely. Since the limitations of the current system were well very understood and experienced, it was agreed that the new system should be enterprise grade, have integrated modules, support R&D, is configurable to accommodate future change in workflow processes, and scalable enough to meet the growing user base. It was understood that the only way to be successful is to have long-term strategic partners as opposed to short-term point vendor, and therefore Amrita's experience was valued and it was then decided to implement all of the solution modules in phased manner.

## Amrita's contribution:

Amrita HIS solution, consisting of different modules, was successfully implemented in phased manner ensuring that the services to patients are not effected. The management experience and the deep domain knowledge helped in winning the confidence of the user community. This was very critical in ensuring that the gaps between the expectation and solution were bridged and easy user adoption.

"It feel very proud to have completed the successful implementation of EMR across the hospital, and the key to it was choosing the right solution and working with the right partners – Amrita Technologies. I have worked and interacted with various other solution vendors in the past, but Amrita's commitment and dedication is unparalleled, and they are willing to go the extra mile to make it happen – that makes a great difference in challenging projects of this nature."

- Ron, Admin Director, AIMS, Kochi

Each and every aspect of the hospital was studied, understood and solution suggested, which was then integrated to provide the Business Intelligence capability for Decision Support System. Also the post implementation Support is

## **Benefits to Patients:**

- Improved and affordable healthcare
- Various modes of getting appointments resulting in lower waiting time
- Electronic Medical record available from anywhere, at anytime, to anyone

### **Benefits to Doctors/Physicians:**

- All medical data readily available
- Integrated solution helps in Decision Support System reducing human error
- Ergonomic GUI which is configurable to help in user acceptance and adoption
- Integration with Academic solution to help effective learning for students

## **Benefits for R&D:**

- Capture of complete clinical data
- Analysis of the clinical data by providing the clinical query
- Support for research activities by usage of the processed clinical data
- Helps in target identification and monitoring of target population

## **Benefits for Medical College:**

- Effective medical education delivery
- Control and monitoring of the complete administration
- Integration of HIS to provide real time medical cases and studies

very timely, effective and affordable, thereby addressing any new issues or problems.

### **KPI (Key Performance Indicators) improvements**

Inventory turns: Increased to 12 from earlier number of 9
Expired drugs: Wastage reduced to Zero with the tight batch control
ALOS: Reduced by 1 day from 9 days
Waiting time at registration: Reduction of over 33%, with easy to search unique ID
Average waiting time for consultation: Reduced by a factor of 2 by use of appointment system
Average Lab sample processing time: Over 40% improvement in time taken for processing of lab orders, with 2 way integration using bar code
OT utilization: Jumped by 18%, with central scheduling for optimal operations
Bed occupancy ratio: Bed occupancy ratio increased from 88% to 93% because of real-time bed status updates and global visibility

### **Partnership continues to Evolve:**

AIMS and Amrita are continuing to work with each other, engaging in futuristic model of healthcare delivery services to patients at their door step. Also are actively pursuing the use of IT in traditional healthcare practices, like Ayurveda and Homeopathy, thereby increasing the reach to rural population, and dreaming to have healthy citizens of the world, to make it more peaceful and harmonious to live in.