

“Through the Amrita Solutions, we were able to streamline our Contributory Health Services Scheme workflow, which not only helped provide better service to our patient population, but also helped in eliminating our duplicate processes. Integrating our BARC Hospital with all the other dispensaries, distributed over a large area, helped in sharing the Electronic Medical Record of the patient, thereby optimizing our healthcare delivery services”

– *Dr Jaitly, Head Medical Division, BARC, Mumbai*

**Location:** Bhabha Atomic Research Center, Mumbai and other 14 surrounding dispensaries  
**Total Beds:** 350 in Main hospital  
**Recognition:** Provides FREE quality health care service to all of the DAE employees and their beneficiaries  
**Amrita Sol:** All the HIS modules, LIS, RIS along with custom build CHSS module

**Amrita Solution:**

Web based centrally installed HIS integrated with LIS and RIS

**Challenges:**

- Providing prompt service to growing patient population
- Frequent change in CHSS number which prevents the usage of unique ID
- Patient coming from Dispensary to Main hospital without continuation of Medical treatment
- Duplication of FREE drug prescription and lab service order

**Solution:**

- Streamlining of CHSS workflow processes
- Unique scheme to manage with initial CHSS number
- Connecting hospital and other distributed dispensaries

**Benefits:**

- Better patient care while reducing cost of service
- Timely and efficient health service care to population
- Reduction in drug and reagent usage saving money
- Optimal resource utilization
- Real time, seamless and transparent patient care

**Introduction:**

Bhabha Atomic Research Center hospital is located within the Anu Shakti Nagar campus of BARC. In order to keep this hospital as a referral unit, several dispensaries are available to provide the first level of primary service to the patient population. These dispensaries are spread around Mumbai and its suburban area, in order to provide convenience to the patient of being located close to their residential address. Upon visiting the dispensary, the patients are referred to the main Hospital, if the Physician feels that secondary care is required for the patient.

**History:**

Each of the beneficiary who is member of the CHSS (Contributory Health Service Scheme) is given a CHSS number which unfortunately changes for multiple reasons, preventing the usage of unique patient ID. CHSS workflow process involves time consuming redundant steps since the complete process is manual.

If the CHSS membership is active, each member can avail unlimited healthcare services from the hospital network. Since the dispensary and the hospital are not networked, and also the system used was not real-time and lacked transparency, it used to result in duplicate lab orders, repeat service orders, redundant prescriptions. This resulted in huge waste of costly drugs as well as reagents, while at the same time creating extra work for the hospital staff.

### Need for a Change:

After the usage of the existing system, it was realized that because of inherent limitations, and therefore need for a change was felt. The current system was not integrated enough and was not rich in feature / functions that the user desired for. The home-grown system lacked module like Lab Information System and Radiology Information System, and also did not have an EMR centric design, making it difficult to evolve with the ever-changing and growing need. It was time to change to a Seamlessly Integrated, EMR centric, Modular, Web based, Scalable and Secure Healthcare Informatics Suite (as opposed to simply a stand alone Hospital Information System)

### Amrita's contribution:

Amrita HIS solution matched with the vision of BARC management to move to a next level enterprise grade system. The vision was to provide the best quality healthcare services to its patient population while keeping in check the cost of delivery by optimal resource utilization and following some of the industries best practices as presented by the system. Also the deep domain expertise of the Amrita's consultants provided some out-of-the-box solution which challenged some of the long standing thought process, thereby re-engineer the workflows to simply the process while at the same time optimizing it.

The technical knowledge of the Amrita's engineering team, was contributory to providing user friendly elegant solutions to some of the most difficult problems and issues encountered during this project.

“We are very pleased to work with the team from Amrita, which by means of their dedication, knowledge and commitment, made this daunting task of HIS implementation look simple”  
– Dr Baneerjee, Director, BARC, Mumbai

### Benefits to Patients:

- Improved healthcare through continuity of clinical history, diagnosis and treatment
- Patient identified by unique number
- Various modes of getting appointments
- Patients no longer need to carry their medical records – electronically available

### Benefits to Doctors/Physicians:

- Can easily monitor patient status real-time
- Complete clinical data readily available
- Imaging integration allows viewing of imaging data, with rest of the patient data.
- User friendly and intuitive system for ease in user adoption
- Specialized / customized clinical templates

### Benefits to Administrators:

- Secure Electronic Medical Records
- Reduced wastage of expensive drug and reagents
- Optimal resource utilization
- Business Intelligence for monitoring and decision support system

### Partnership continues to Evolve:

With the successful and timely implementation, BARC and Amrita are further engaged in forging a new partnership for implementation of Amrita PACS solution.