



# Auriga Expertise in Health Information Systems (HIS) Development

AURIGA INC. is a software R&D and IT outsourcing services provider incorporated in the U.S. that has been operating development centers in Russia since 1990. Auriga has almost 20 years of experience combining onshore account and project management for U.S. and European clients with Russian offshore software engineering capabilities. Auriga focuses on delivering robust business and technology solutions to the high-tech and specialty equipment manufacturers worldwide.

In the complex world of medical technology, proven experience and expertise are critical assets. Auriga is committed to sharing its competence to anticipate and meet your needs. Our engineers have significant experience in the full-life cycle development of Health Information Systems designed to optimize IT support for patient care and administration by electronic data processing.

Auriga developed several information management systems for healthcare institutions, ranging in scale and primary functions, for implementation in in-patient care (hospitals), out-patient care (walk-on clinics), and pharmacies.

Developing solutions for this area requires a good knowledge of several domains ranging from specific data communication protocols, such as HL7, to more generic enterprise application development—databases, modern interface and business logic design based on J2EE or .Net. The ability to effectively build an integrated knowledge base within a project team is the skill that Auriga excels at, with its own portfolio including a variety of solutions from the deep system level components to Web-based enterprise systems.

With its expertise in information management and CRM solutions—from standalone applications to complex web-based systems—Auriga delivers open, scalable, and integrated solutions which allow users to locate, control, review, revise and distribute up-to-date information critical for effective patient treatment.

Upon request of its clients, Auriga developed HIS solutions offering:

- Flexible architecture to assure that the software can be easily tailored to the needs of a specific organization.
- Cross-platform development and compatibility with open source technologies to cut down costs
- Integration:
  - with third-party systems and legacy products
  - with internal hospital/clinics information and document management systems
- Compliance with official regulations for medical workflow procedures, reporting, medical coding and data exchange, for example:
  - HL7 standards for data communications
  - DICOM for handling images
  - HIPAA compliance for security and privacy aspects
  - ICD-9/ICD-10 coding classification for diseases & symptoms (The International Statistical Classification of Diseases and Related Health Problems)
  - HICFA-1500 (CMS) for insurance billing
  - Medical Administration Records (MAR) components

## Solutions and Services

Solutions and services provided by Auriga in the area of HIS include:

- Workflow analysis and requirements analysis
- Implementation and development from scratch:
- System architecture
- Functional design
- GUI Design
- Development
- Quality Assurance
- Product maintenance and support
- Re-engineering and porting



## **Project examples**

### ***Community Hospital & Clinic Information System (CHCIS)***

CHCIS was designed and created for in-patient/out-patient hospitals and clinics in the U.S. and Canada. CHCIS features customizable and scalable core functionality, and powerful integration capabilities that extend the functional scope of the system by leveraging legacy applications and other in-house and external provider systems. The CHCIS system architecture supports the creation of a powerful Healthcare Information Management System based completely on the open-source platforms, resulting in a cost-effective and yet reliable healthcare solution. CHCIS provides integration support for telemedicine, conferencing and mobile devices for better system interoperability as well as medical staff communications.

### ***Integrated Pharmacy automation system***

Auriga developed the operations management system for pharmacy, integrated it with the third-party general warehousing system and the clinics information system. The solution covered all aspects of pharmacy operations, from prescription management to generation of reports for external controlling bodies. The solution allowed the pharmacy to increase the efficiency of the operations by precise planning of the medicine stocks and improved patient management.