



Medical Imaging Technology Consulting

The Intellix Medical Imaging Specialty Unit

ABOUT INTELLIX

2006

Founded to specifically service the IT and Health Information Technology (HIT) sector for commercial and government clients.

2010

Technology Solutions practice was established to provide innovative solutions to various IT organizations

2012

Medical Imaging specialty unit was established to serve advanced technological needs of the various clinical departments

2015

Enterprise Resource Planning (ERP) specialty unit established with Lawson as the primary focus

2019

Intellix became a Managed Services Provider (MSP), providing Cloud-based infrastructure and application services

25+

Average years of leadership team skills that draw upon application knowledge, implementation, and executive experience.

IMAGING SYSTEMS EXPERTISE

OVERVIEW

- Enhance our clients' medical imaging environments in measurable outcomes
 - Efficiency
 - Reliability
 - Realized value today and with each future implementation, upgrade and replacement
- Emphasis on clinical user experience and the use of artificial intelligence algorithms to enhance it
- Insightful, prospective architecture for all forms of imaging (white light, video, radiographic) providing full integration across the various PACS and imaging systems, biomedical devices and the EHR

PACS SYSTEMS & MAJOR IMAGING APPLICATIONS

- Major PACS systems such as Philips IntelliSpace PACS, Hyland PACSGear, GE Centricity PACS, Fuji Synapse and others
- Endoscopy – GI ProVation
- EEG Neuro -Natus Neuroworks (XLTek)
- Hemodynamics – GE MacLab and IBM Merge
- Dictation for Imaging – Nuance PowerScribe
- Dose Reporting –Bayer Radimetrics and Nexodose
- ECG / EKG – Philips IntelliSpace ECG, Epiphany
- 3D Imaging – Vitrea
- Latest AI-based applications such as the following:
 - ‘Illuminate’ for the diagnosis and monitoring of aneurysms and lung nodules
 - Remote patient monitoring with AI customizations
- Also, imaging applications for nuclear planning, stroke response, point of care ultrasound, etc.

Note: This is not intended to be a complete list and provides a perspective of our breadth of skills and experience. Experience includes pediatric and neo-natal Implementations.

INTEGRATED IMAGING SYSTEMS ARCHITECTURE

- Design and implementation of HL7 interfaces using all major interface engines as well as DICOM interfaces
- Web service and FHIR interfaces as needed for specialized interactions between systems
- Use of AI / NLP to integrate disparate functions and provide innovative features to patients and clinicians alike
- Full integration with the EHR to ensure that the patient chart contains or references imaging studies from the various imaging systems
- Creation of an integrated architecture to fit the customer's requirements
- Phased integration to arrive at the final integrated solution over a reasonable duration
- Accounting for biomedical device configuration needs

IMPLEMENTATION OF IMAGING SOLUTIONS

- Systems integration projects
- New PACS and other imaging application implementations, upgrades and migrations
- Image Exchange solutions – inbound, outbound and patient downloadable
- Integrated implementation of outside reading services
- Custom development for predictive analytics using AI and to incorporate machine learning algorithms for diagnosis and patient monitoring
- Vendor selection services
- Emphasis on Information Security
 - Full integration for secure authentication and single sign on
 - Security audits for internal and external facing functions
 - Biomedical device security through suitable network configurations

Note: All implementations include full systems integration with the EHR and other relevant clinical, business and financial applications

VENDOR NEUTRAL ARCHIVE & UNIVERSAL VIEWER

- Solution design for the complex infrastructure installation and technical configuration
- Selection and deployment of universal viewer based on clinical requirements
- Solution design for optimum user experience to view images from multiple departments and the EHR
- Performance optimization
- Suitable, efficient integration with PACS and other imaging systems
- Upgrade and Migration Services - ensuring version compatibility, regression testing, proper upgrade sequence and accounting for deployment impacts
- Disaster recovery provision