

ARIA Oncology Information System



ARIA takes the complexity out of the treatment



environment.

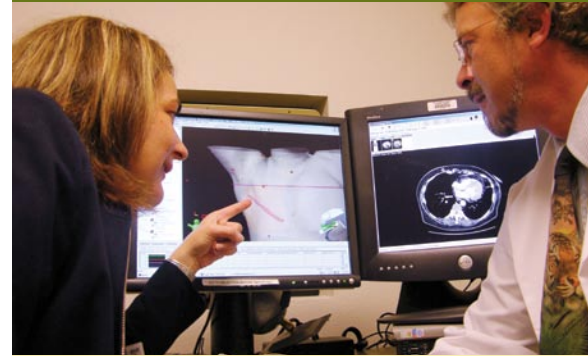
The ARIA™ oncology information system

ARIA is a comprehensive software solution designed to manage all of your department's clinical and administrative activities. The electronic medical record (EMR) is rapidly becoming the standard for managing patient information. In keeping with the times, ARIA aggregates treatment records and digital images into a complete, oncology-specific EMR—so you are prepared for the future of medical information management.

Expect more

An effective EMR does more than simply display your existing paper chart on a computer monitor. A true EMR consolidates medical records and images into an organized, easy-to-use system that enhances department workflow and eliminates paper. ARIA ensures that important patient information is never more than a few mouse-clicks away. The patient chart is always current, and is always available at your workstation, enabling you to make informed decisions quickly and allowing you to concentrate on patient care without distraction.

ARIA's comprehensive EMR allows clinicians to view radiation and medical oncology information in the chart for patients undergoing concomitant treatment. Dose information, treatment plans, drug orders and medical assessments can be reviewed any time during the course of care. ARIA incorporates image processing and review tools so that your patients can benefit from image-guided and emerging adaptive oncology techniques.



“Becoming a paperless department will allow us to provide better service and better medicine without having to add more staff.”

—Lisa Bidlack
Director of Radiation Oncology

As information systems become better at managing increasing volumes of patient data and images, oncology professionals are taking steps toward eliminating the use of paper charts in their departments. The staff at **Enloe Cancer Center** of Chico, California, is using the ARIA electronic medical record (EMR) to manage their clinical process and replace the paper and film records in their department.

By phasing in the use of certain modules, the treatment team at Enloe has been able to make gradual changes in the way they perform routine activities. The physics group has decided to use Chart QA to replace printouts of IMRT QA results, weekly treatment progress notes and hand calculations. Future plans include installing workstations in each exam room to give physicians instant access to patient notes for consultations and follow up appointments. They plan to use the Dynamic Documents module to reduce manual dictation and automate the documentation of patient encounters.

You face increasingly complex demands for the **oncology-specific data**



ARIA helps you give each patient the proven medical advantages associated with advanced image-based and concomitant treatment techniques.

Expect More

Assurance

With ARIA, physicians can write prescriptions, review treatment plans and images from a single workspace. To ensure that the right dose is given to your patient, all plans must be approved prior to treatment—so you can be confident that your prescription will be carried out safely as you had instructed.

Physicians can review treatment images at any ARIA workstation and instantly transmit patient setup instructions to the therapist at the treatment machine. ARIA's chart auditing module then allows you to quickly identify any variations between planned and actual treated values, including any overrides. This iterative data feedback loop helps improve radiation treatment accuracy for better clinical outcomes.

Precision

ARIA incorporates all clinical images in the patient EMR—helping physicians deliver more accurately targeted treatments. Its intuitive image review applications pinpoint tumor location using CBCT paired or unpaired digital images. Automatic image matching algorithms, and specialized tools such as correlated point matching for implanted seed markers, provide an added level of confidence that patients are positioned precisely for treatments.



that ARIA can provide.

Capabilities

ARIA supports the entire clinical process for medical oncology practices and comprehensive cancer centers. Physicians can prescribe chemotherapy and other medications electronically. Pharmacists can prepare and dispense drugs, and nurses can record all details related to the administered drugs. Customizable templates and electronic signature approval generate a reliable audit trail and promote document standardization throughout the department.

An embedded, rule-based decision engine suggests dose modifications and schedule delays depending on each individual patient's response to therapy—providing unprecedented levels of clinical decision support.

Conformance

ARIA supports the development and management of complex clinical trials for the collection and analysis of research data. The system helps you track administrative and regulatory information for trials and committee management. With ARIA you can easily select appropriate trials for your patients and adhere to trial guidelines for optimum results.



Ensure safe and effective treatments by improving communication between

ARIA enables oncology departments to streamline clinical processes, enhance workflow, and eliminate paper charts. Patient information and digital images are shared enabling your staff to make informed, confident treatment decisions.

Medical Oncology

1. Front Desk

- Patient registration
- Check-in, insurance/co-pay
- Patient self-data entry

2. Lab Station

- Vital signs
- Phlebotomy

3. Exam Room

- Patient summary, flow sheets
- Results (vitals, labs, pathology, diagnostic imaging)
- History (medical, physical, family, social)
- Medical assessments (RoS, PE, Toxicities)
- Diagnosis/staging, problems

- Chemo and other orders (labs, diagnostics, procedures, referrals)
- Documentation (CC/HPI, plan and impression, progress notes, visit summary)
- E/M review

4. Medical Oncologist's Office

- Provider in-box

5. Pharmacy

- Drug preparation/dispensing
- Inventory projections

6. Infusion Suite

- Drug administration and charting
- Documentation

7. Back Office

- Transcription
- Billing

8. Research Office

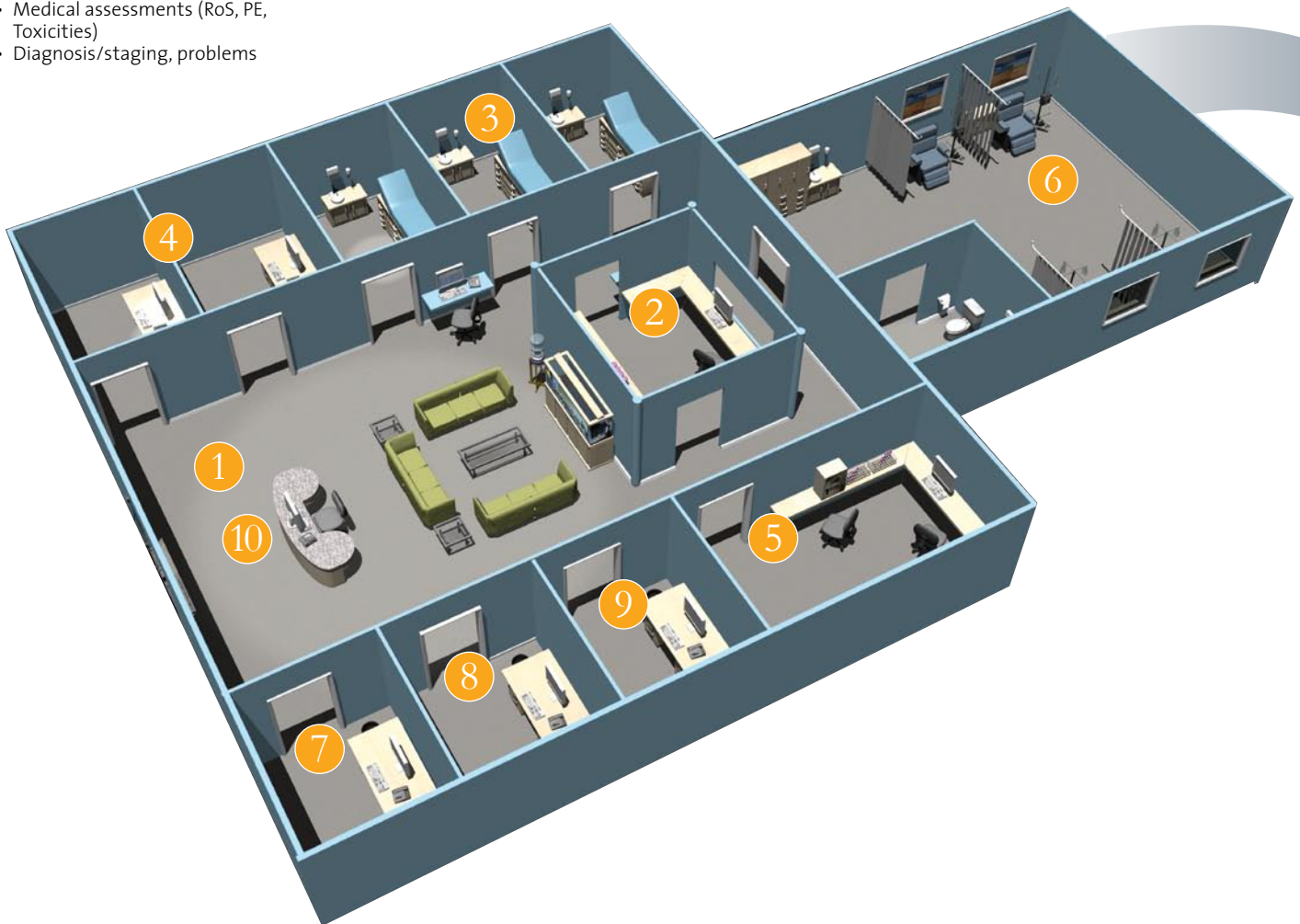
- Screening for eligibility
- Clinical trials management
- Reporting
- Trial administration

9. Administrator's Office

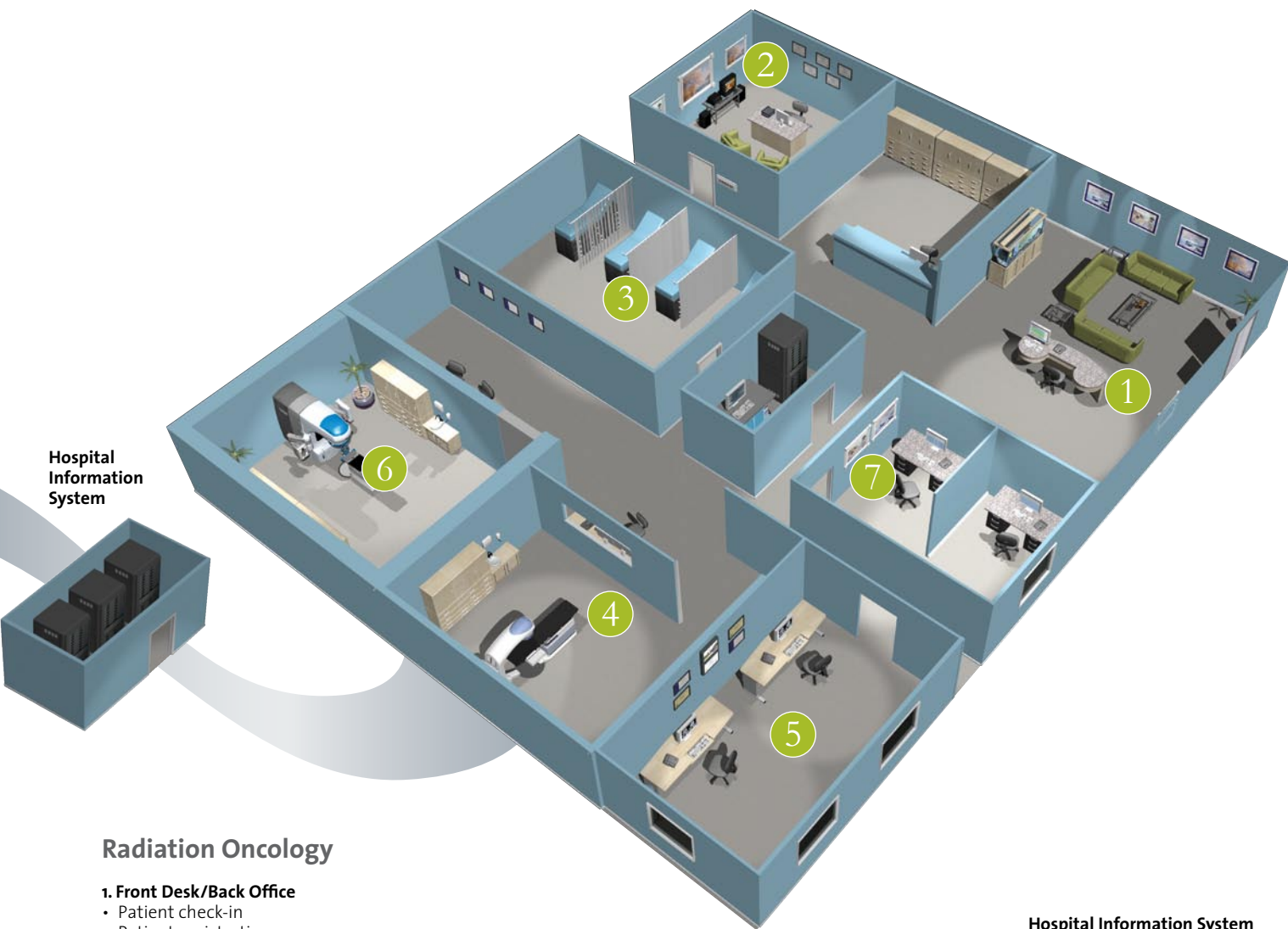
- Reports (operations, financial, quality)

10. Checkout Area

- Appointment scheduling
- Checkout



en departments.



Radiation Oncology

1. Front Desk/Back Office

- Patient check-in
- Patient registration
- Appointment scheduling
- Transcriptions
- Billing
- Clinical trials management

2. Radiation Oncologist's Office

- RT prescription and intent entry
- Offline image review
- RT plan approval

3. Exam Room

- Consultation
- Patient assessment
- Physical examination

4. Simulation

- Image acquisition
- Plan verification
- Reference image management
- Treatment verification

5. Physics / Dosimetry

- RT chart audits
- RT treatment plan review
- RT pre-treatment plan QA
- Plan development and optimization
- Portal dosimetry QA

6. RT Treatment Control Room

- Patient positioning and verification
- Image acquisition and online image review
- IMRT/IGRT treatments

7. Administrator's Office

- Charge review and export
- Productivity and efficiency analysis
- Reporting

Hospital Information System

ARIA uses standard HL7 interfaces to exchange patient data with HL7-compliant hospital information systems and ancillary departments including pathology, radiology, pharmacy, lab, billing, etc.

ARIA's extensive support for DICOM communication protocols (including DICOM RT) facilitates the transfer of images, treatment plans and patient history data to other DICOM-compliant systems.



“With Activity Capture, we were surprised to find a 10% increase in the amount of technical units generated in dosimetry.”

—Dominic Gelinas, M.Sc.

Centre Hospitalier Regional de Trois-Rivieres in Quebec has four Clinacs, treats 100-110 patients daily, and uses Varian’s oncology information system to manage its department processes. In Quebec, every radiation therapy department is required to present official statistics to the government regarding technical units of activities performed as a means of measuring the department’s overall efficiency. Technical units are defined per category and apply to all actions taken by therapists. These units of measure are roughly related to the amount of time required to complete each task.

Activity Capture, Varian’s charge management application, has played an integral role in helping Trois-Rivieres capture its technical units for accurate reporting to the government. By using Activity Capture, Trois-Rivieres was able to identify an increase in the computed technical units at the treatment machines because the application prompts the therapists to record any unusual activity they performed while providing treatment.

Automation

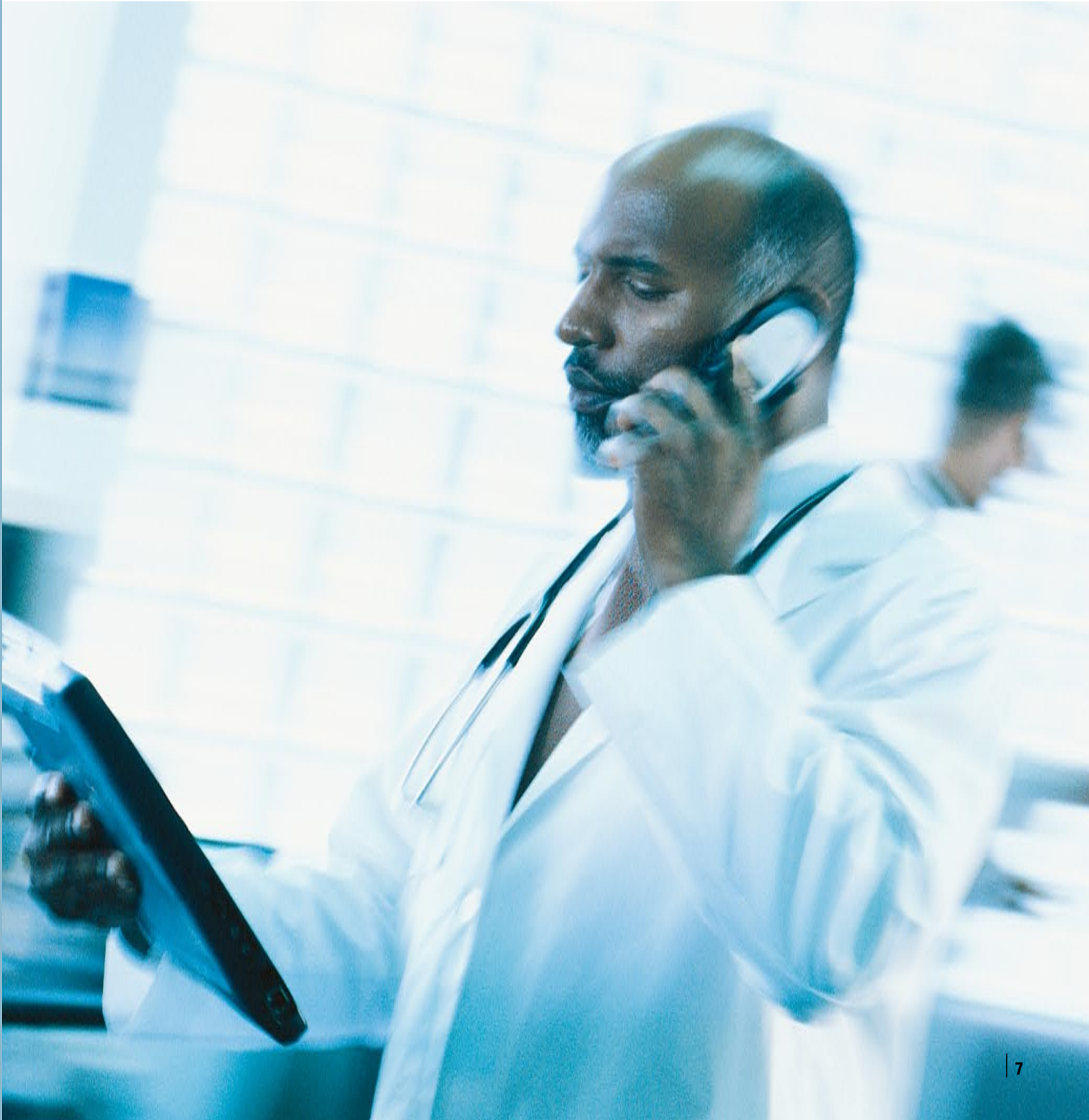
Users spend less time manually entering information into the patient chart with ARIA, which has automated tools for the collection and presentation of patient data. ARIA utilizes wizard technology to simplify tasks, such as matching images and generating reports. Features such as preset documentation templates and the automated transcription tool allow staff to complete routine activities more rapidly and accurately than ever before.

Integration

Varian Inspiration™, the integrated oncology environment within which ARIA operates, implements standard DICOM communication protocols for interoperability with compliant imaging and treatment equipment. Extensive support for DICOM Radiation Therapy (RT) objects facilitates the transfer of treatment plan data from any DICOM-compliant treatment planning system. This open-standards approach enables you to utilize complementary solutions that best suit your department.

ARIA’s powerful Health Level Seven (HL7) interface engine allows you to exchange records with other software systems. Additional support for hundreds of interfaces with many vendors improves connectivity to the broader healthcare organization.

Seamless integration allows you to
move information easily between systems.



A solid investment, valuable service.





The elements of ARIA

ARIA is a comprehensive oncology information system that combines the power of the electronic medical record with the promise of advanced cancer treatment techniques.

Key features and functionality available in ARIA:

- Activity, cost, and charge capture
- Chart quality assurance
- Chemotherapy management
- Clinical data storage
- Clinical trials management
- Data protection and recovery
- Drug safety support
- HL7-based interface engine
- Multi-department management
- Multi-modality image review
- Oncology-specific electronic medical record
- Patient encounter documentation
- Pharmacy preparation and dispensing
- Radiation therapy management
- Report generation and outcomes assessment
- Resource and activity scheduling
- Rule-based decision support
- Treatment plan/prescription workspace

More possibilities

Varian provides the tools that allow you to expand your clinical services and position your practice as a leading provider of cancer care. As treatment technology evolves, you expect your information system to keep pace and support emerging techniques as soon as they are introduced. Varian's clinical consultants can work with you to migrate patient data from your existing oncology information system to ARIA, so you can be sure that your software will continue to evolve as your practice does. As the leading provider of integrated oncology solutions, Varian is uniquely positioned to provide the oncology community with the software solutions required to help you grow the therapeutic capabilities of your practice and get the most from your equipment investment.

Support

Varian is committed to providing excellent customer service. Our world-class service organization has been rated number one by leading trade journals and the annual ServiceTrak™ imaging survey conducted by IMV Ltd.—a research and market analysis company specializing in science-based instrumentation.

Our remote monitoring and diagnosis service helps ensure your clinic stays up and running. With more than 800 service engineers worldwide, help is always close at hand when you need it.

Varian offers a wide range of support contracts that are designed to suit the needs of departments of any size. From site planning and logistical assistance to software support, clinical training and on-site equipment maintenance, Varian's service organization is dedicated to giving you the support you need.

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For more information on the ARIA Oncology Information System, please visit <http://www.varian.com/ARIA>.

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