

ARIA ONCOLOGY INFORMATION SYSTEM v. 15.1 Enhanced security for clinics and patients

The ARIA® oncology information system version 15.1 is a security-focused release that addresses the serious, evolving, and escalating threats that cancer care clinics face to their systems, records, and patients. As healthcare providers have become prime targets for cyberattacks that compromise their ability to care for patients, Varian has taken steps to provide solutions that help block these incursions.

SECURITY ENHANCEMENTS TO ARIA 15.1

ARIA 15.1 is re-engineered with security enhancements, such as encrypted communications to help protect patient data traveling through the hospital network, and stronger authentication protocols that help prevent non-authorized persons from gaining access to patient information. The added data protection and improved user experience help fight against data breaches, so you can focus on providing seamless, simplified, and secure patient care. ARIA 15.1 helps to maximize the confidentiality of patient information, maintain the integrity of treatment delivery, and further enhance clinical availability by adding defenses against cyberattacks.

Enhanced secure access with Active Directory integration

ARIA 15.1 integrates directly with Microsoft® Active Directory™ systems, enhancing security while improving convenience. For convenience, users are able to use their existing login credentials to access the ARIA system and integrated Varian software. For security, ARIA users can be authenticated directly against your Active Directory identity management system. One set of credentials and one set of IT policies extend to all integrated Varian products. Users and administrators each have one identity to manage and track.

Low-risk maintenance and support

Varian has examined the tools it uses to install software on workstations in client environments and has taken steps to reduce the potential for anyone to use those tools for malicious purposes by providing two-factor authentication to authenticate to these tools.

Encrypted communications

All communication with the ARIA database is encrypted. Malicious actors are unable to eavesdrop on traffic passing in and out of the database along the hospital network. This encryption works by way of SSL certificates managed by the hospital.



KEY BENEFITS

- Higher barriers against cyber threats in Varian environments
- More convenient secure access for care teams
- Easier access management for IT
- Increased integrity for treatment systems
- Improved protection of patient data

Hospitals can implement different schemes with these certificates, including tying them to specific workstations.

Database integrity

Customers need to know if the integrity of their database becomes compromised. Varian has implemented processes that periodically assess the integrity of the ARIA database and logs abnormalities or suspicious changes. Varian doesn't monitor the changes; however, customers can access the database integrity logs to keep track of unusual activity.

More secure access to web services

Web service access to ARIA now requires additional verification from clients to prevent unauthorized access. Heightened security for accessing web services makes it more difficult for malicious actors to extract patient information from application program interfaces that exist for interconnectivity reasons.

Defense-in-depth features

Well-executed spearfishing attacks are often successful at obtaining valid user credentials. ARIA 15.1 has implemented measures to disrupt attempts to extract patient information even if credentials are compromised. ARIA employs defense-

in-depth techniques with multiple layers of security to make getting to or tampering with patient information much more difficult from within the security perimeter as well as from the outside.

Anti-malware validation

ARIA 15.1 has been validated to run with an industry-leading anti-malware platform. If customers do not have an anti-malware tool in place on the infrastructure where their protected health information resides, Varian can recommend one and ensure ARIA 15.1 performs well in that environment.

Stronger authentication for SmartConnect utility

SmartConnect® technology, the Varian utility for diagnosing and troubleshooting technology problems remotely, has been made more secure with the addition of a stronger authentication process. Out-of-band (OOB) two-factor authentication for ARIA 15.1 requires service personnel to use their cellular phones as a second step in the authentication process. Any unauthorized person trying to enter the network via SmartConnect would be blocked without access to an authorized cellular phone. This security enhancement significantly reduces the risk of an unauthorized person using SmartConnect.

SECURITY DEPENDENT ENHANCEMENTS

In addition to the comprehensive security enhancements engineered into ARIA 15.1, capabilities have been added that require and benefit from the heightened security, such as:

Electronic prescribing of controlled substances

Electronic prescribing of controlled substances, which helps prevent abuse, cuts costs, and saves time, is permitted in all U.S. states, but not all electronic medical

records (EMRs) support it. ARIA 15.1 does. Oncologists can prescribe controlled substances in ARIA with added confidence in the enhanced security.

Seamless information exchange with hospital EMRs

ARIA 15.1 employs a standard platform for interoperability with the information systems used by more than 4,000 U.S. hospitals. ARIA Connect links the ARIA information system that radiation oncology departments use to manage workflow with the hospital information system (HIS), where demographic, clinical, and billing information reside. This seamless information exchange gives radiation oncology teams real-time access to reliable, up-to-date HIS information.

Up-to-date support for CMS quality payment programs

ARIA 15.1 has built-in, ready-to-go data collection and reporting required for the evolving quality payment programs of the Centers for Medicare & Medicaid Services (CMS), including the Oncology Care Model (OCM).

CONCLUSION

Securing information systems, treatment systems, and patient data is a complex and continually changing challenge that involves healthcare providers, vendors, and government agencies working together. While Varian alone cannot solve all the serious security challenges facing healthcare providers today, we are committed to enhancing the security of solutions for our customers and their patients wherever possible. ARIA 15.1 takes an important step forward to address the security concerns of our customers. Data security will continue to be a priority in product development and in customer support processes.



A partner for **life**

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Not all features or products are available in all markets.

Intended Use Summary

The ARIA oncology information system and Radiation Therapy Management product are software solutions that provide the tools needed to manage administrative and financial activities in an oncology department along with treatment and image management associated with chemotherapy and radiotherapy delivery. Varian Medical Systems is not authorized or qualified to engage in activities that may be construed or deemed to constitute the practice of medicine.

Safety Statement

Side effects are related to the treatments delivered independent of our software and must be discussed by the clinician with the patient on a case-by-case basis. Medical providers shall retain the authority to direct all medical decisions regarding the care and treatment of their patients. Varian Medical Systems is not authorized or qualified to engage in activities that may be construed or deemed to constitute the practice of medicine.

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