

**Medical Equipment Pre-Implementation Worksheet**

1. For networked medical devices and medical devices storing ePHI, utilize the Medical Equipment Evaluation Matrix below to determine the assessment/documentation requirements.
2. Where indicated, obtain a Manufacturer Disclosure Statement for Medical Device Security (MDS<sup>2</sup>) Form from the equipment manufacturer. This document covers most pertinent information related to networking and risk exposure for medical devices.  
<http://www.himss.org/content/files/MDS2FormInstructions.pdf>
3. Complete the Medical Device Pre-Procurement Assessment (PPA) as required.
4. Once required concurrences are obtained, notify procurement that the equipment is ready for purchase.
5. In conjunction with the facility ISO and OI&T Field Ops, develop implementation, support, and upgrade, remediation plans including roles and responsibilities based on the attached Pre-Implementation Worksheet or additionally acquired documentation.

		<b>Medical Equipment Evaluation Matrix</b>			
		<b>1</b>	<b>2</b>	<b>3</b>	
<b>CONNECTIVITY</b> →	<b>STORAGE</b> ↓	<b>A</b>	N/A	PPA	PPA
		<b>B</b>	MDS <sup>2</sup>	MDS <sup>2</sup> & PPA	MDS <sup>2</sup> & PPA
		<b>C</b>	N/A	MDS <sup>2</sup> & PPA	MDS <sup>2</sup> & PPA

**CONNECTIVITY:**

- 1 = Stand Alone Device, Computer Based
- 2 = Network Connected Device, Replacement or additional with similar infrastructure impacts
- 3 = Network Connected Device, New Device

**STORAGE:**

- A = Does Not Store ePHI
- B = Short Term ePHI Storage/Input of Results into CPRS
- C = Long Term ePHI Storage Repository

Medical Equipment Pre-Procurement Assessment  
(to be completed by potential vendors)

Equipment Description:

Vendor/Model:

Vendor Contact:

Requesting Clinical Service:

**Medical Equipment Configuration**

- What OS does the system utilize?
- Can critical security patches be installed without prior vendor approval?  YES  NO
- Does the device incorporate a switch or hub into its design?  YES  NO
- Is the switch or hub required as part of the system configuration?  YES  NO
- Which Anti-virus software is approved by the device manufacturer?
- If server based, does the system require a specific version of Java for proper client operation?  YES  NO
- If server based, does the system utilize an ActiveX control for client interaction?  YES  NO
- If yes, specify configuration requirements.

**Authentication and User Accounts**

- Is an administrator or power user account required to operate the device?  YES  NO
- Is an administrator account required for service?  YES  NO
- Can the device be made to require user authentication?  YES  NO
- Does user authentication support Strong Passwords?  YES  NO
- Does user authentication support password aging?  YES  NO
- Can the device be part of the facility's Windows domain?  YES  NO

**Data Handling**

- Will the medical device require data backups?  YES  NO
- Is ePHI stored only on a drive partition to assist with end of service media sanitization?  YES  NO
- What ePHI data elements are stored on the device?
- Can ePHI be stored directly to a network drive, rather than local (machine) storage?  YES  NO

**Networking**

- What are the LAN/WAN bandwidth requirements for full connectivity/performance?
- What ports in the TCP/IP stack are utilized for network communication?
- Can unutilized ports be closed without negatively impacting device operation?  YES  NO
- Can the device support DHCP for network address configuration?  YES  NO
- How many IP addresses does the device require?
- Can the device operate properly without connection to the Internet?  YES  NO
- Can the target system be addressed via a fully qualified domain name (FQDN)?  YES  NO

**Wireless**

- Does the device utilize wireless communication?  YES  NO
- If so, what protocols are used?
- Is any ePHI transmitted via the wireless link?  YES  NO
- Does the device support installation of FIPS 140-2 certified wireless security clients?  YES  NO
- If so, which ones?

**Integration with VA Health Care Information Systems**

- Has the device been validated with VA's Clinical Procedures package?
- Has the device been validated with VA's Vista Imaging?
- Does the device have a bi-directional HL7 interface?
- Provide a DICOM conformance statement.

- YES     NO
- YES     NO
- YES     NO
- YES     NO

*(to be converted to a VA form)*

Medical Equipment Pre-Implementation Worksheet

Equipment Description:

Vendor/Model:

Vendor Contact:

Requesting Clinical Service:

Contact Information & Sign-Off

Clinical Service POC:	Phone:
Biomedical Engineering POC:	Phone:
ISO:	Phone:
IT POC:	Phone:

Medical Equipment Documentation Review

- Manufacturer Disclosure Statement for Medical Device Security (MDS<sup>2</sup>)
- Existing Site-to-Site or One-VA VPN Agreement
- Purchase documents and associated equipment quotations
- Business Associate Agreement
- Equipment description, information flow, and network connectivity requirements
- Documentation of network configuration and installation requirements
- Clinical Procedures integration documentation provided with VA contacts, if applicable
- DICOM conformance statement provide, if applicable

Security Precautions

- Does the equipment support Anti-virus protection with updates via McAfee ePolicy Orchestrator?  YES  NO
- Does the equipment support automated OS critical patch installation?  YES  NO
- Will the medical equipment be configured for Device Authentication using Active Directory?  YES  NO
- Will the medical equipment be configured for User Authentication using Active Directory?  YES  NO
- Who will provide and manage: Disaster Recovery?
- Will vendor require Remote Access via VPN?  YES  NO
- Will vendor provide a network device (switch, router)? Needs risk assessment.  YES  NO
- Will vendor provide any wireless devices? Needs risk assessment.  YES  NO

Network Design and Constraints

- Notification to network administrator to configure medical VLAN Medical VLAN:
- Medical equipment installation location(s)
- Network administrator reviews risk assessment for any network or wireless devices.
- List all target systems that the device will communicate with
- Network administrator configures the ACL with input from Biomedical Engineering, verifies connectivity, and documents configuration.

**Post Installation Support Strategy**

- Post implementation support strategy developed.
- Post implementation secure use strategy developed.(i.e. frequency of removal of ePHI from device, physical security of device, etc.)

*(to be converted to a VA form)*