

# Hospital Introduces Trend Micro Threat Management System

Network-wide analysis and visibility identify malware on medical devices before it can impact patient care.

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—Ty Smallwood, Information Services Security Officer, Medical Center of Central Georgia

## EXECUTIVE SUMMARY

**Customer Name:** The Medical Center of Central Georgia

**Industry:** Healthcare

**Location:** Macon, Georgia

**Web site:** [www.mccg.org](http://www.mccg.org)

**Number of Employees:** 4,600

## CHALLENGE:

- Identify and block advanced targeted threats before they can impact patient care
- Protect medical devices that cannot run standard antivirus protection
- Cost-efficiently track down and mitigate risks from malware
- Minimize the IT time required to monitor security

## SOLUTION:

- Introduce Trend Micro™ Threat Management System
- Give feedback to medical equipment providers about the security issues on their devices
- Provide summary reports to management

## BUSINESS RESULTS:

- Cost savings, with less time spent cleaning up malware
- Improved protection of the overall network, patient data, and devices that impact patient care
- End-to-end protection, underscoring the hospital's strong commitment to security
- Increased visibility and control that provides the confidence that risks are minimized

## Challenge

Security assessments consistently show that advanced targeted threats can easily evade conventional perimeter and endpoint security. And the new era of personal and mobile device usage opens the network even further to exploitation. Within medical facilities such as the Medical Center of Central Georgia (MCCG), the serious risk is actually compounded.

Besides laptops, notebook computers, and smartphones, the hospital's network hosts numerous biomedical devices that are not under the control of the in-house technology team. With the increasing reliance on built-in microprocessors, software, and network connectivity, today's medical devices are vulnerable to viruses and other malware threats. However, due to FDA regulations, memory, or proprietary issues, these devices are typically not able to run antivirus or other security protection, and MCCG has no way of monitoring or controlling their status without impacting performance or processes.

Such unprotected and unmanaged biomedical devices are a risk issue for several reasons:

- Malfunctioning devices put patient care at risk.
- An infected device can act as the source of network-wide infections, causing disruption and/or repeated cleanup costs.
- Many of these devices are subject to security compliance controls for HIPAA.

When the MCCG security team began to see an alarming increase in time being spent on threat remediation, they called on Trend Micro to help them assess end-to-end security, including security for their networked medical devices. While it is always a priority to reduce costs and increase productivity, MCCG puts patient care first and therefore wanted to maximize the protection of private healthcare information and avoid any malware that could compromise the quality of patient care or privacy.

A security assessment identified several challenges with the current levels of protection built into the MCCG infrastructure, including infected medical equipment and public kiosks.

## Solution

As a first step, MCCG updated the previously deployed Trend Micro solutions, and took advantage of many new security advancements including enhanced control over USB devices, file, email, and web reputation checks, and an intrusion defense firewall.

However, even with strengthened endpoint security, MCCG still needed a better way to oversee medical devices on the hospital's network, registration kiosks, and other thin-client technology. The local Trend Micro team recommended the introduction of Trend Micro™ Threat Management System. This additional layer of security includes a Threat Discovery Appliance for 24x7 monitoring.

Trend Micro Threat Management System is a network analysis and visibility solution that uniquely detects evasive intrusions, automates remediation, and provides the real-time visibility, insight, and control to protect a company from advanced targeted attacks. Powered by the Trend Micro™ Smart Protection Network™ infrastructure, an array of threat detection and analysis engines, and the latest intelligence of Trend Micro Threat Researchers, Threat Management System provides the best and most up-to-date threat deterrence capability.

“The deployment of the proactive Threat Management System is saving our IT team time, and is giving us the visibility into the overall security of our infrastructure,” said Ty Smallwood, Information Services Security Officer for MCCG.

## Results

Before strengthening on-premise security solutions and introducing Threat Management Services, MCCG was spending valuable resources troubleshooting malware. Today, the hospital has simultaneously improved security and lowered the cost of protection by minimizing risks.

“Trend Micro Threat Management System has already paid for itself,” said Smallwood. “In the first 48 hours, this tool detected viruses on vendor owned and maintained biomedical devices from several manufacturers. Bottom line, our policies are only as good as our mitigation and verification. Threat Management System gives us the visibility that we never had before—now we can see in real time what is going on. We can monitor the network while mitigating risks, and at the same time educate users and vendors regarding equipment that is not protected with on-device agents.

“With the reports from Threat Management Services, it gives us the tools we needed to approach the medical equipment manufacturers, and push them to patch their machines. It is always about improving the quality of care we provide. The service also helps us avoid legal liability issues in the future by maintaining high standards with our partners. And we can use the reports to push for necessary resources to address the types of security issues that this solution highlights.”

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## DEPLOYMENT ENVIRONMENT

- 4,000 PCs
- 275 virtual servers
- Trend Micro™ Enterprise Security
- Trend Micro Threat Management Services

## Customer Profile

The Medical Center of Central Georgia (MCCG), an entity of Central Georgia Health System (CGHS), is a tertiary regional teaching medical center, a designated Level I Trauma Center, a perinatal center, and is one of 42 twice-designated Magnet® hospitals for nursing excellence. MCCG serves a primary and secondary service area of 30 counties and nearly 750,000 persons in central and South Georgia. It has over 4,600 employees and a medical staff of over 590 physicians. MCCG is the second largest hospital in Georgia with a capacity of 637 beds including medical-surgical, obstetric, pediatric, psychiatric, and specialized individual intensive care units for neurology, pediatric, neonatal, surgical trauma, cardiac and cardiac surgery. The Emergency Center, with helipad capability and three urgent care centers, treats over 120,000 visitors per year. MCCG provides a broad range of community-based, outpatient diagnostic, primary care, extensive home health and hospice care, and comprehensive rehabilitation services. MCCG is the primary teaching hospital for Mercer University School of Medicine, providing residency and fellowship programs for over 100 residents and fellows, and is affiliated with multiple universities as a clinical education site.

## Trend Micro Security

- **Trend Micro Enterprise Security**  
<http://us.trendmicro.com/us/home/enterprise/>
- **Trend Micro Threat Management Services**  
<http://us.trendmicro.com/us/solutions/enterprise/security-solutions/threat-management/key-components/>

## Trend Micro Enabling Technology

- **Trend Micro Smart Protection Network**  
<http://us.trendmicro.com/us/trendwatch/core-technologies/smart-protection-network/>



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