

Penn State Health Milton S. Hershey Medical Center

Leverages FireEye Integrated Solutions and Threat Intelligence



PennState Health Milton S. Hershey Medical Center

FACTS AT A GLANCE

INDUSTRY



Healthcare

SOLUTIONS

FireEye Network Security

FireEye Endpoint Security

FireEye Email Security

FireEye Central Management

FireEye as a Service

BENEFITS

Seamless extension of SOC capabilities

Integrated protection across entire attack surface and threat vectors

Single console for entire security stack

CUSTOMER PROFILE

The Penn State Health Milton S. Hershey Medical Center – located in Hershey, Pennsylvania – is a renowned institution committed to research, patient care, and the training of students seeking a career in the healthcare field. Each year, Hershey Medical Center admits 30,000 patients and treats a million outpatients. With 550 beds, the facility is staffed with over 3,000 healthcare professionals.



As a preeminent academic medical center, The Milton S. Hershey Medical Center is home to many top-tier academics focused on cutting-edge healthcare research. It is not uncommon for a scientist to dedicate his or her entire career to conducting exploration into a single disease or medical device. Matthew Snyder, chief information security officer at Hershey Medical Center, observed, "A single data compromise can negate the work that a researcher has performed over a 20-to-30 year span. This is just one of a multitude of reasons why cyber security is a mission-critical imperative for us."

Cyber Challenges Facing the Healthcare Industry

Multiple sources cite that the healthcare industry has experienced a triple-digit increase in the annual number of cyber-related breaches. Within one ten-month period the Hershey Medical Center identified 83 million malicious attempts to penetrate its infrastructure. Snyder described, "These were not just run-of-the-mill scanning attempts; these were attacks where someone was attempting a specific threat action."

"The comprehensive capabilities and intuitive integration between the multiple FireEye solutions enables us to stay at the forefront of the threat protection space. On top of this, FaaS fills a critical support role for us where the FireEye experts are an extension of our existing incident response capability."

- Matthew Snyder, chief information security officer, Penn State Health Milton S. Hershey Medical Center

Seeking an Integrated Solution

Drawing a parallel between unified electronic health records (EHR) and developing an integrated solution for cyber security, Snyder noted, "An electronic record is an assimilation of data from multiple diverse sources - including medical device data, diagnostic information, physician notes, etc. – all assembled in one place. We wanted a similar capability for our cyber defense and threat intelligence."

Hershey Medical Center has a rigorous process for evaluating new technology. "Before we purchase a new security-related solution, we ensure that it makes a unique and quantifiable contribution to what we already have in place from a risk and value perspective," Snyder recounted. "Once the cyber security team decides to pursue a particular offering a structured onsite proofof-concept is conducted to aggressively test both performance and fit."

The FireEye Advantage

Having passed the testing process with the highest scores related to performance, Snyder and his team deployed an integrated set of solutions from FireEye: FireEye Network Security (NX), FireEye Email Security (EX), FireEye Endpoint Security (HX), FireEye Central Management (CM), and FireEye as a Service (FaaS).

"We rely heavily on intelligence from HX, EX and NX. The solutions communicate with each other and the amalgamated data is displayed on a single screen in the CM console – our equivalent of the electronic health record – and that is of great value to us," highlighted Snyder. "In addition, HX doesn't simply tell us what just occurred, it promptly shows us what happened immediately before and after an attack; giving invaluable intelligence and context to each alert. We can replay an attack scenario or look at specific network traffic at the exact time the incident happened. If determined to be necessary, we can then leverage FaaS to execute a forensic deep-dive."

Operating 24/365, FaaS acts as an extension to Hershey's security team. Snyder commented, "We didn't want to end up with a managed security service provider that would simply throw alerts at us; we chose FaaS because it provides quality reporting as well as high-fidelity detection, investigation and hunting. The FireEye experts augment and complement our in-house capabilities, and keep watch during our off-line hours."

He continued, "A compromise report from FaaS contains a valuable step-by-step list of actions taken by the incident responder and the reasoning behind their conclusions. My incident response team then takes that information and performs the internal remediation actions necessary to ensure that we eliminate the threat and possible vulnerabilities associated with the alert. The timeliness of the FaaS reporting is vital because it enables us to mitigate risks in near real-time."

Cost-effective and Innovative

Hershey Medical Center appreciates the cost-effective nature of FireEye as a Service. Snyder estimated, "Building out a security operations center would have required 12-15 additional full-time staff members but with FaaS we can accomplish an equivalent or better coverage for far less expense." "Building out a security operations center would have required 12-15 additional full-time staff members but with FaaS we can accomplish an equivalent or better coverage for far less expense."

- Matthew Snyder, chief information security officer, Penn State Health Milton S. Hershey Medical Center

FireEye is viewed a strategic partner to Hershey. "The comprehensive capabilities and intuitive integration between the multiple FireEye solutions enables us to stay at the forefront of the threat protection space. On top of this, FaaS fills a critical support role for us where the FireEye experts are an extension of our existing incident response capability," summarized Snyder. He concluded, "Our organization derives confidence from our partnership with FireEye. We can combine threat intelligence not just from our own network indicators but also from FireEye's worldwide intelligence platform. This enables us to be aware of attacks that are occurring in other places around the globe; and to know what the indicators of compromise look like, as well as what needs to be done to address the risk. FireEye threat intelligence plays a business-critical role for us in intrusion detection, prevention and response."

To learn more about FireEye, visit: www.FireEye.com

FireEye, Inc.

601 McCarthy Blvd. Milpitas, CA 95035 408.321.6300/877.FIREEYE (347.3393) info@FireEye.com

© 2018 FireEye, Inc. All rights reserved. FireEye is a registered trademark of FireEye, Inc. All other brands, products, or service names are or may be trademarks or service marks of their respective owners. CS.PSHMSHMC.US-EN-052018

About FireEye, Inc.

FireEye is the intelligence-led security company. Working as a seamless, scalable extension of customer security operations, FireEye offers a single platform that blends innovative security technologies, nation-state grade threat intelligence and world-renowned Mandiant[®] consulting. With this approach, FireEye eliminates the complexity and burden of cyber security for organizations struggling to prepare for, prevent and respond to cyber attacks. FireEye has over 6,600 customers across 67 countries, including more than 45 percent of the Forbes Global 2000.

