

# Information Security

Client Case Study

Burtel

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## Opportunity

In 2017, a nationally-recognized teaching hospital in the United States began a multi-week security assessment. As a result, several vulnerabilities were found in their security infrastructure. Burtelson sent in its red team to test the facility's security controls. After gathering intelligence during the reconnaissance phase, the red team leader was able to bypass security and was given access to over 50 patient records over a period of six hours. The Burtelson team was retained to work with the organization to close these security holes.

## Solution

Confronted with a need to gather information from a threat assessment standpoint, the Burtelson Security team worked with this organization to locate security holes that were missed by previous and meaningless automated penetration tests that were performed by another security firm months earlier. It became clear that hospital staff members were unfamiliar with methods by which hackers can bypass physical and technical security, such as firewalls and other security hardware and software, and launch a DMA attack made possible by gaining physical access to computer terminals located in central stations as well as at bedside.

By simulating spear phishing as well as other attacks, we were able to demonstrate how their infrastructure continued to be vulnerable to cyber attacks that were not detectable using automated scanning tools. We completed a fresh analysis of the client's then-current security protocols and discovered new attacks to which they were vulnerable. We were able to utilize security awareness training to help strengthen their security weaknesses based on a customized security assessment.

## Results

As security threats are ongoing and always changing, conversations and assessments continue on an ongoing basis. We were able to help this client save more than \$500,000 in costs, not to mention a public relations nightmare, by showing them what was missed in a standard series of penetration tests. By simulating real world attacks, we were able to illustrate to the client how much their vulnerability could cost them. While cyber criminals count on new exploits and a lack of security awareness on the part of their large *and* small healthcare targets, we were able to catch these vulnerabilities in time. We continue to monitor this client's risk.

## About Burtelson

As a leader in healthcare cyber-physical security, Burtelson is affecting change for an entire industry – one that impacts the quality of life for millions of people.

We work with some of the most respected healthcare organizations and clinical research institutions in the world to fulfill our mission to contribute to the world by protecting health information and making people, and the world in which they live, more secure.



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