Current Vulnerabilities and Threats Affecting Healthcare
Week of December 2, 2019

New Jersey's Largest Health Network

The facilities associated with Hackensack Meridian Health, which includes 17 hospitals, nursing homes and urgent care centers across the state were affected by some externally-driven technical issues that had shut down the computer systems at their facilities. Although unsure if it was ransomware, these issues affected patient care as they had to utilize the manual patient records during the remediation process, even driving patients to reschedule some elective surgeries. Since then, the IT team has implemented structures that minimize the risk of unauthorized external access to their systems and allow for early detection, reconstruction and recovery.

Trojans

A new Python-based Remote Access Trojan (RAT) has been used to target healthcare, technology, IT and educational industries. The Dubbed PyXie malware has been active since last year and has been observed in conjunction with Cobalt Strike beacons and a downloader linked to the Shifu banking trojan. This attack could perform network scanning, data exfiltration and cookie theft along with other major threats. The ransomware was discovered on several devices belonging to the healthcare industry.

Telehealth

For CaroMont Health of North Carolina, a not-for-profit health system, telehealth has helped reduce ER overflow hours from 1700 to 148. Since the launch of their telepsychiatry, their emergency department has reduced the length of stay for psychiatric patients by approximately 70%. By having a psychiatric nurse assessor interact with patients to address their immediate concerns and gather information first, the telemedicine psychiatrist receives a more thorough review of the patient's unique needs. From efficiencies in patient flow to alleviating significant patient loads from employed providers, telemedicine can extend your medical staff while ensuring your patients get the specialized care they require.

Population Health Analytics

Bridges Health Partners MSSP ACO, a health system based in Pittsburgh, used their new population health tools to better manage patient care, ER use, pre-visit planning and value-based care. Previously, the care teams had to go to multiple sources to find the information, which was very inefficient. The implementation of this new scalable health analytics platform saved them $8 million in the first year with its intuitive user interface and data visualization techniques. It combines all of the data using one source and on one dashboard, which was proven to be highly efficient.