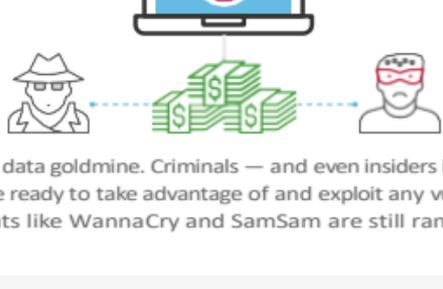




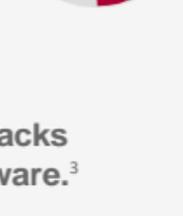
Ransomware: An epidemic for the healthcare industry

Prevention is the best medicine.



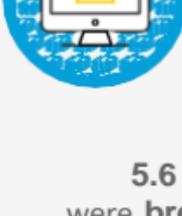
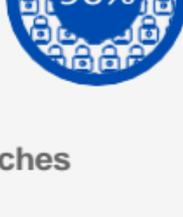
Healthcare is a data goldmine. Criminals — and even insiders intent on selling data — are ready to take advantage of and exploit any vulnerability. Threats like WannaCry and SamSam are still rampant.

Healthcare organizations constituted **45%**¹ of all ransomware attacks in 2017, and ransomware remains a top concern for 2018.²



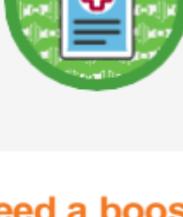
In healthcare, **85%** of malware attacks come from ransomware.³

90% of healthcare organizations have experienced a data breach since Q3 2016.⁴



Healthcare data breaches cost organizations **\$380 per record**.⁵

5.6 million patient records were breached in 2017, costing healthcare organizations billions.⁶

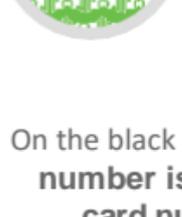


Training and security budgets need a boost



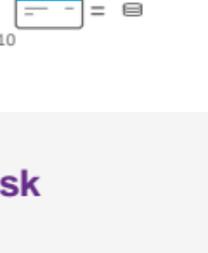
In 2017, more than **half of healthcare security breaches** came from **inside the organization**.⁷

Even more surprising: Among U.S. healthcare workers, **only 41%** received training on how to stay secure at work.⁸



Still, in this age of increasing threats and static budgets, **cybersecurity spending** is around **3%** of total annual IT spending.⁹

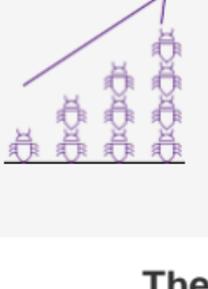
On the black market, a social security number is worth 10 cents, a credit card number is worth 25 cents, and an electronic medical health record (EHR) could be worth hundreds or even **thousands of dollars**.¹⁰



More devices = more risk

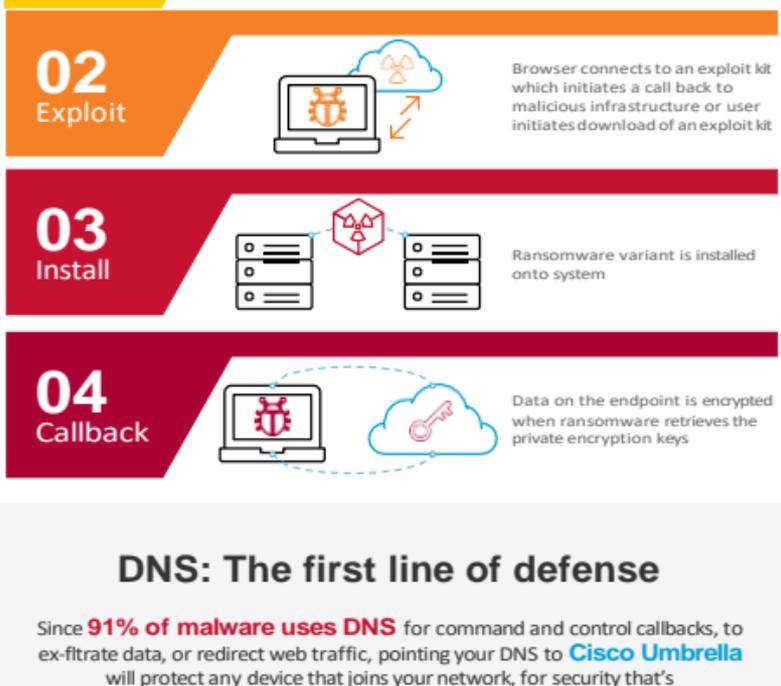


By 2020, it's expected IoT/MT devices will increase to between **20 and 30 billion**.¹¹



And ransomware attacks on healthcare will **quadruple**.¹²

The anatomy of an attack

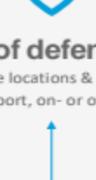


DNS: The first line of defense

Since **91%** of malware uses DNS for command and control callbacks, to ex-filtrate data, or redirect web traffic, pointing your DNS to **Cisco Umbrella** will protect any device that joins your network, for security that's easy to deploy and simple to manage.



Internet threats
malware, phishing, C2 callbacks and shadow IT



Healthcare's first layer of defense against ransomware
for clinic and medical office locations & roaming devices anywhere, over any port, on- or off-network



By implementing security at the DNS layer, Umbrella helps organizations:

- Predict** ransomware threats before they happen
- Learn** where ransomware attacks are being staged
- Block** access to known cryptomining pools, to protect against emerging cryptojacking malware.
- Prevent** ransomware from reaching the perimeter
- Provide** a critical layer of PHI/PII breach protection
- Pair** with Cisco Cloudlock, a cloud access security broker, to track how PHI data is shared, to protect data and help enforce compliance.

Ready to try Cisco Umbrella?

Sign up for a 14-day free trial today — and start blocking threats in minutes.

[START FREE TRIAL](#)

Protect yourself and your data against the next WannaCry or SamSam attack.

[LEARN MORE](#)

Source: 1. "Report: Healthcare Remained the 45% of All Ransomware Attacks in 2017," Healthcare Information Security, February 22, 2017. 2. "2018 HHS/CSS Cybersecurity Survey," HHS/CSS North America, 2018. 3. "2018 HHS/CSS Cybersecurity Survey," HHS/CSS North America, 2018. 4. "2018 HHS/CSS Cybersecurity Survey," HHS/CSS North America, 2018. 5. "Black Book's Annual Cybersecurity Survey Reveals Healthcare Organizations Are Not Making Fast Enough Progress," ProSecurity, 2018. 6. "Black Book's Annual Cybersecurity Survey Reveals Healthcare Organizations Are Not Making Fast Enough Progress," ProSecurity, 2018. 7. "2018 Data Breach Investigations Report," Verizon, 2018. 8. "Black Book's Annual Cybersecurity Survey Reveals Healthcare Organizations Are Not Making Fast Enough Progress," ProSecurity, 2018. 9. "2018 Data Breach Investigations Report," Verizon, 2018. 10. "The Internet of Medical Things Opens Health Organizations Up to Cyber Threats," HealthTech, April 24, 2018. 11. "Black Book's Annual Cybersecurity Survey Reveals Healthcare Organizations Are Not Making Fast Enough Progress," ProSecurity, 2018. 12. "2018 Data Breach Investigations Report," Verizon, 2018. © 2018 Cisco and/or its affiliates. All rights reserved. Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to the URL: www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of other trademarks does not imply a partnership, relationship or endorsement by Cisco and any other company. (15088)