

Healthcare organizations

attacks in 2017, and ransomware remains a top concern for 2018.² In healthcare, 85% of malware attacks

constituted 45%¹ of all ransomware

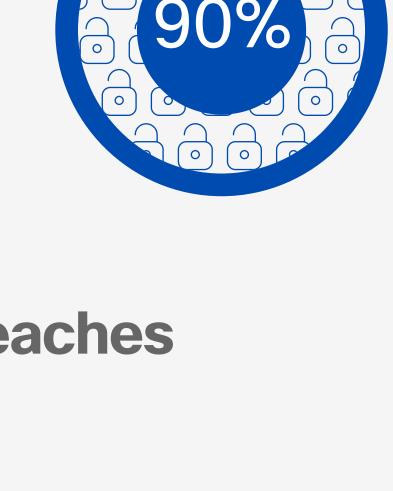




90% of healthcare

come from ransomware.3

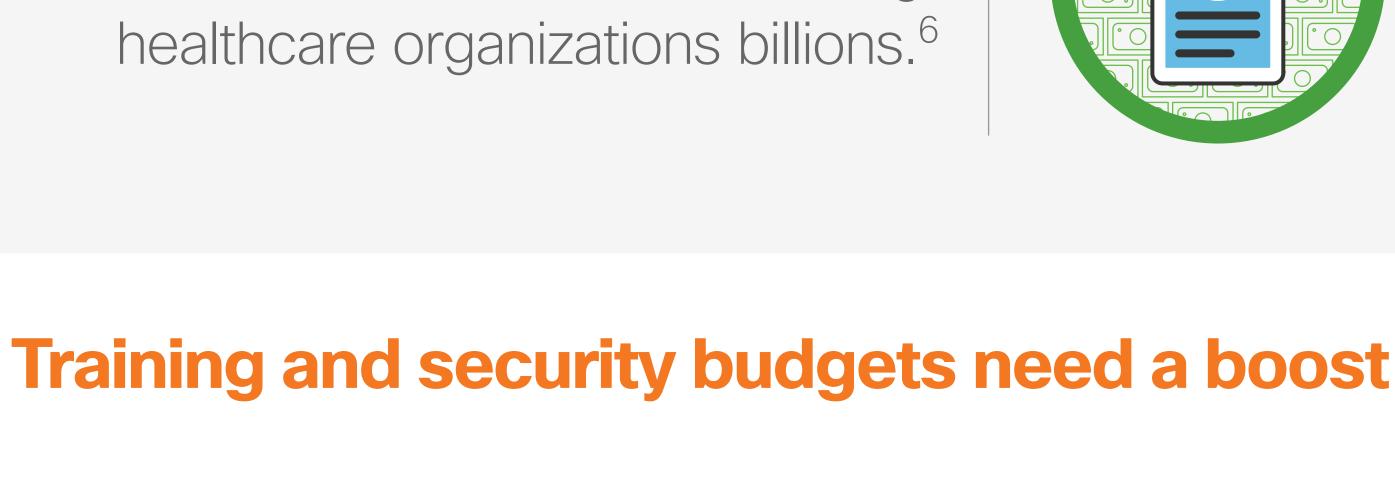
Healthcare data breaches cost organizations \$380 per record.⁵





were breached in 2017, costing healthcare organizations billions.⁶

In 2017, more than



half of healthcare security breaches came from



Even more surprising:

inside the organization.

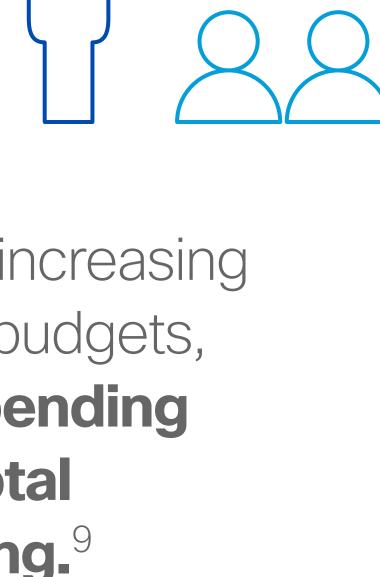
Still, in this age of increasing threats and static budgets, cybersecurity spending is around 3% of total annual IT spending.9

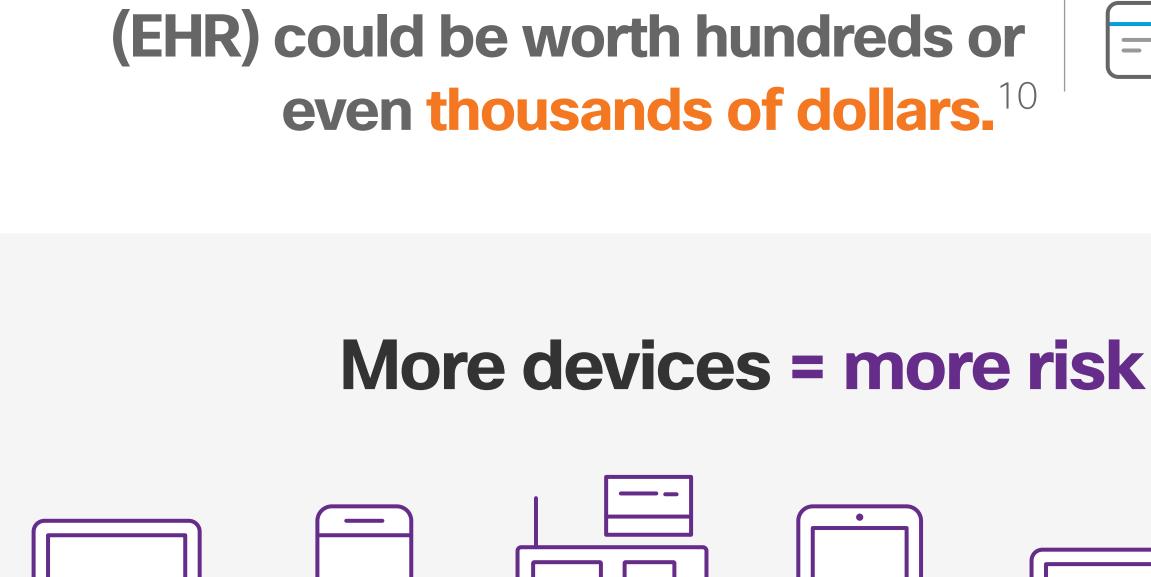
On the black market, a social security

and an electronic medical health record

number is worth 10 cents, a credit

card number is worth 25 cents,







The anatomy of an attack

And ransomware attacks on

healthcare will quadruple. 12

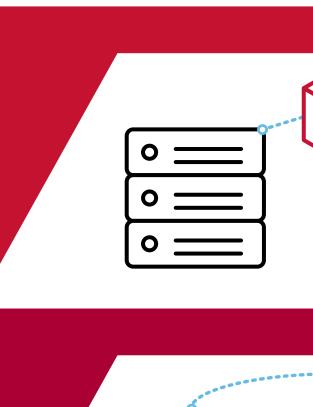
By 2020, it's expected IoMT devices will

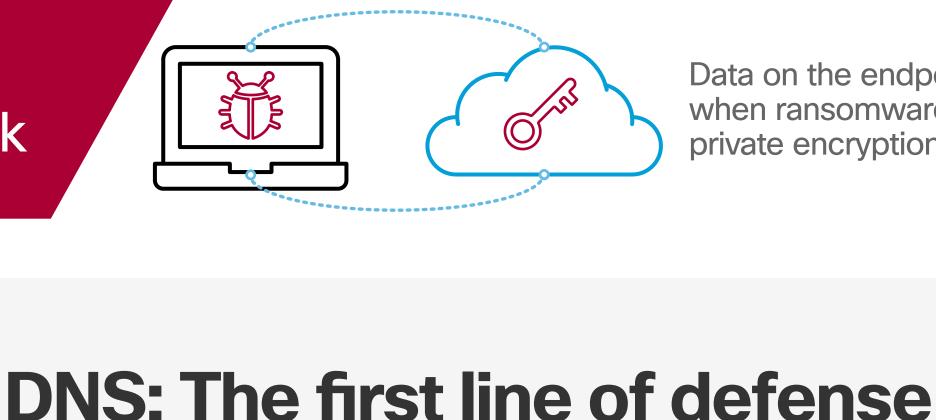
increase to between 20 and 30 billion. 11



Install

Callback





Since 91% of malware uses DNS for command and control callbacks, to

exfiltrate 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.

onto system

Healthcare organization employee

Browser connects to an exploit kit

initiates download of an exploit kit

which initiates a call back to

malicious infrastructure or user

Ransomware variant is installed

Data on the endpoint is encrypted

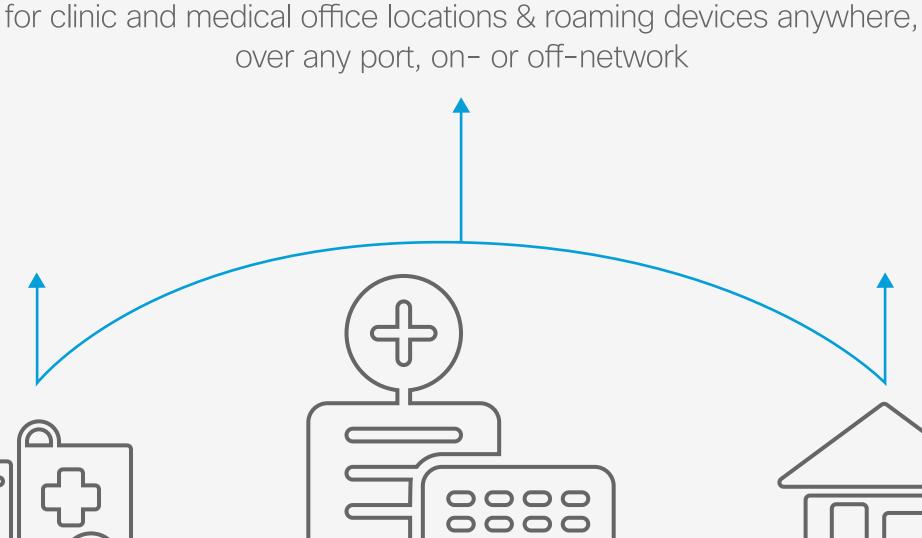
when ransomware retrieves the

private encryption keys

visits a compromised site

or opens an infected email file

Internet threats malware, phishing, C2 callbacks and shadow IT



On-site

Visiting doctor

and staff BYOD

Remote

Patient

devices

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,

Internet of Medical Things

endpoints

Healthcare's first layer of defense against ransomware



Block access to known

protect against emerging

cryptomining pools, to

CISCO



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 Sources 5. "Approaching the Top 5 Healthcare Cloud Security Concerns," 9. Only 41% of Healthcare Workers Report Receiving Security 1. "Report: Healthcare Accounted for 45% of All Ransomware HealthIT Security, May 21, 2018 Training, Forrester, January 16, 2018 Attacks in 2017," Healthcare Informatics, February 22, 2017 6. "2017 Breach Report: 477 Breaches, 5.6M Patient Records 10. "Your Electronic Medical Records Could Be Worth \$1000 2. "2018 HIMSS Cybersecurity Survey," HIMSS North America Affected," Healthcare Informatics, January 23, 2018 To Hackers," Forbes, April 14, 2017 3. "Healthcare Industry Worst in Stopping Insider Data 11. "The Internet of Medical Things Opens Health Organizations Breaches," HealthIT Security, April 11, 2018 7. "2018 Data Breach Investigations Report," Verizon, 2018 4. "Black Book's Annual Cybersecurity Survey Reveals 8. "Black Book's Annual Cybersecurity Survey Reveals Healthcare Enterprises Are Not Maturing Fast Enough, Processes Healthcare Enterprises Are Not Maturing Fast Enough, Processes 12. "Top 5 cybersecurity facts, figures and statistics for 2018,"

Continue Underfunded and Understaffed," Newswire, CSO, January 23, 2018 May 14, 2018 11 111 11 © 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 this URL: www.cisco.com/go/trademarks. Third-party trademarks mentioned are the

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Data systems Corporate and for PHI & PII guest Wi-Fi **Predict** ransomware threats before they happen **Learn** where ransomware attacks are being staged

Roaming