



Vulnerability Management In The Healthcare Environment

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Welcome!

- Introduction
- Vulnerability Management
- Healthcare Challenges
- Information Breaches
- Vulnerability Management
- Conclusion
- Q & A

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- University of Delaware - MBA, MS IS/TM
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Christiana Care Health System

- 1,100 Beds
- 6,641 Births / year
- 40,220 Surgical Proc.
- Multiple Data Centers
- 50+ sites
- 17,000 Users
- 1,500 Servers
- 9,500 PCs & 1,000 Laptops
- 1,500 Mobile Devices
- 2,200 Networked printers

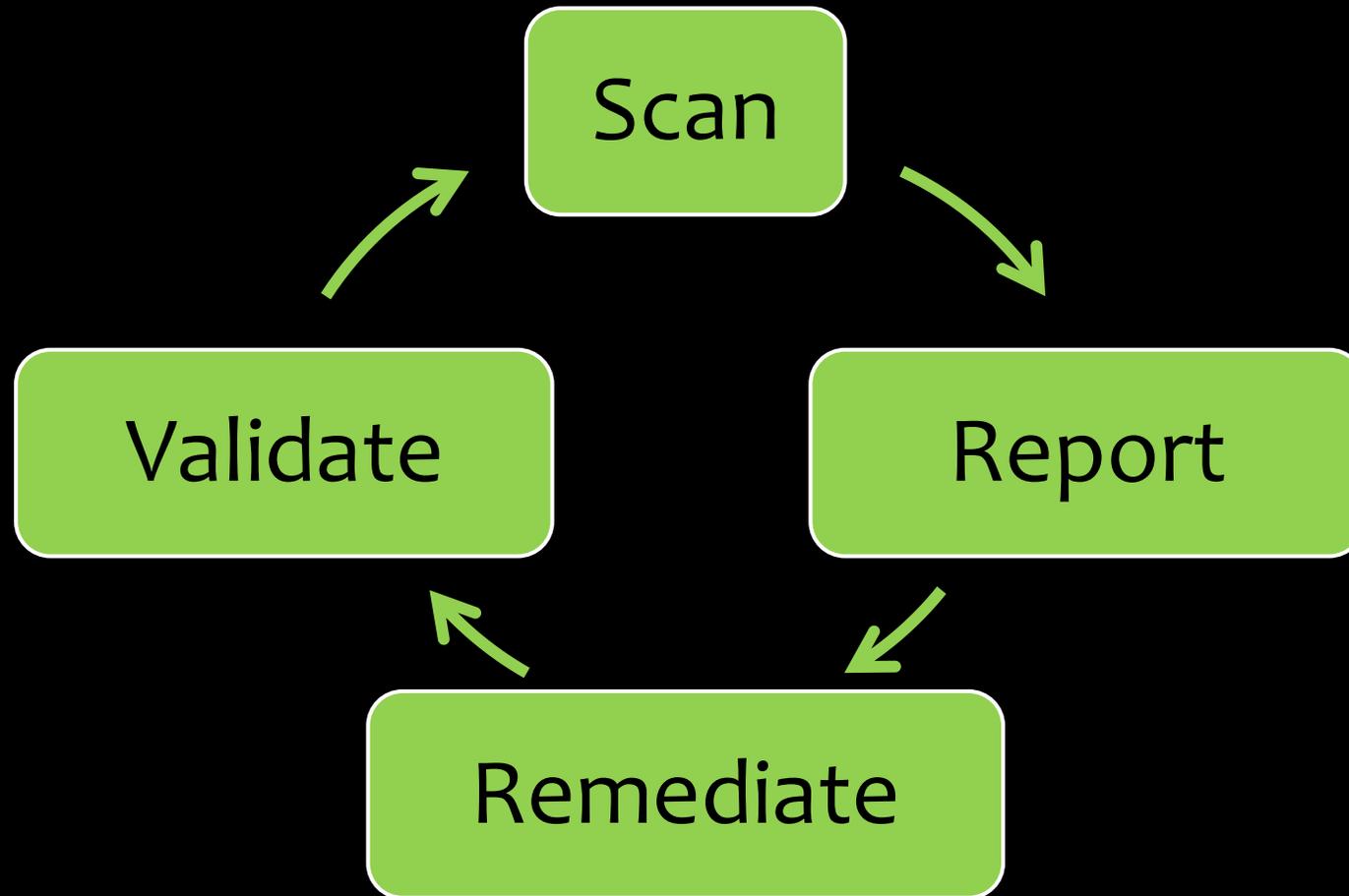


Definitions

- Vulnerability
- Threat
- Risk



Vulnerability Management



Healthcare Challenges

- Regulations
- Business Associates
- Asset Inventory
- Asset Classification
- Fast Paced Environment
- Clinical Devices / Legacy Systems



Clinical Devices

- OS Variety
- Vendors
- Support Levels
- Portable
- Encryption

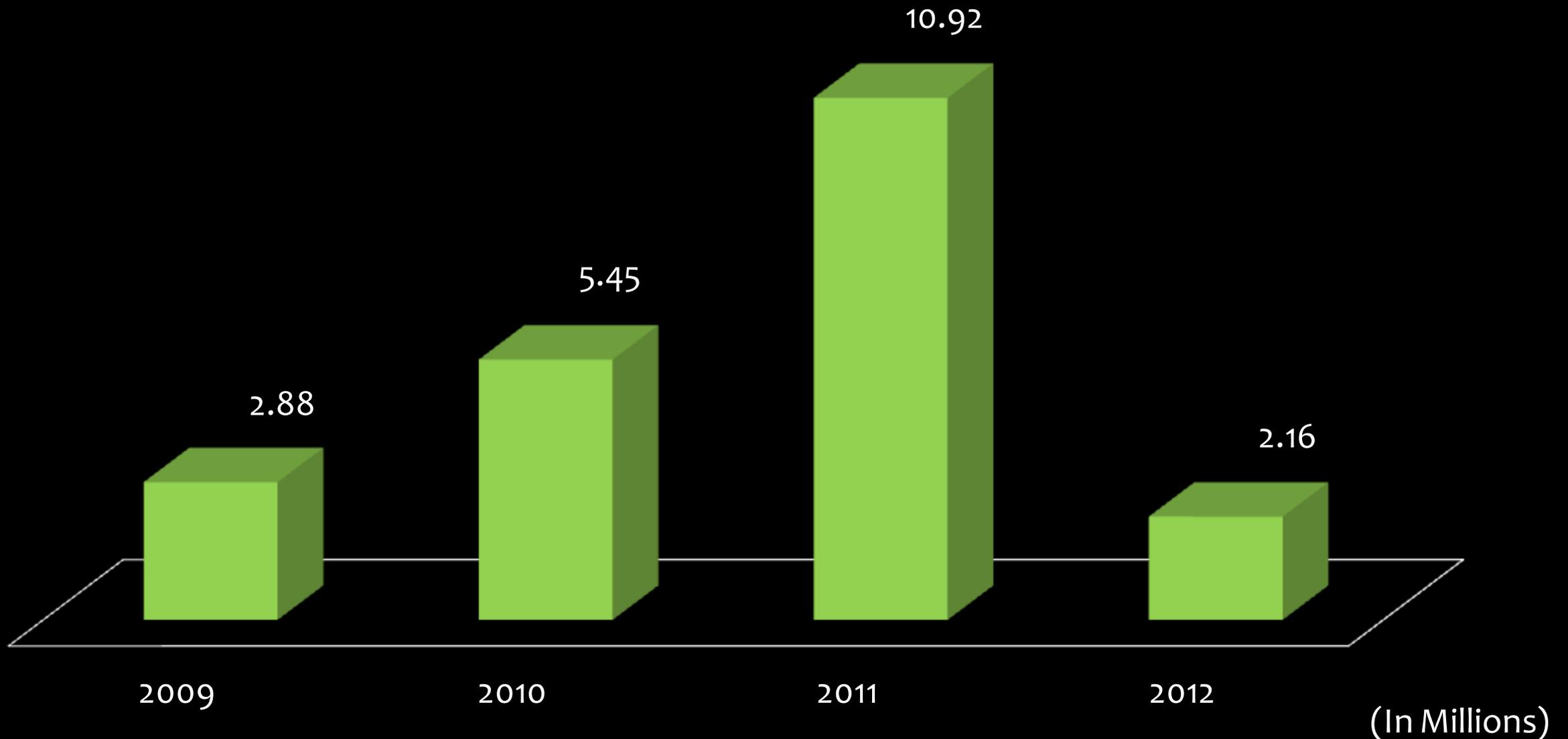


Patient Data Breaches

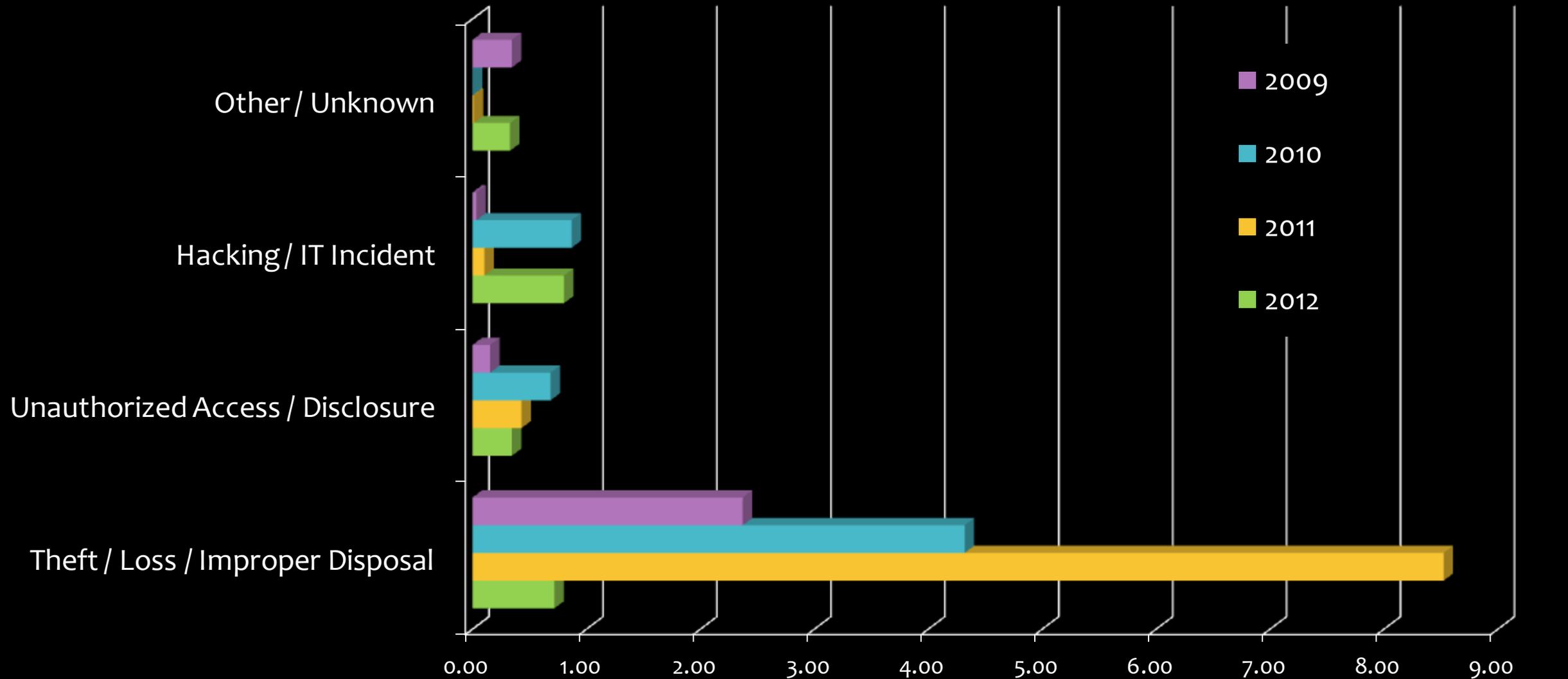
- Unauthorized acquisition, access, use, or disclosure
- Protected Health Information
- Unsecured data
- 500 individuals



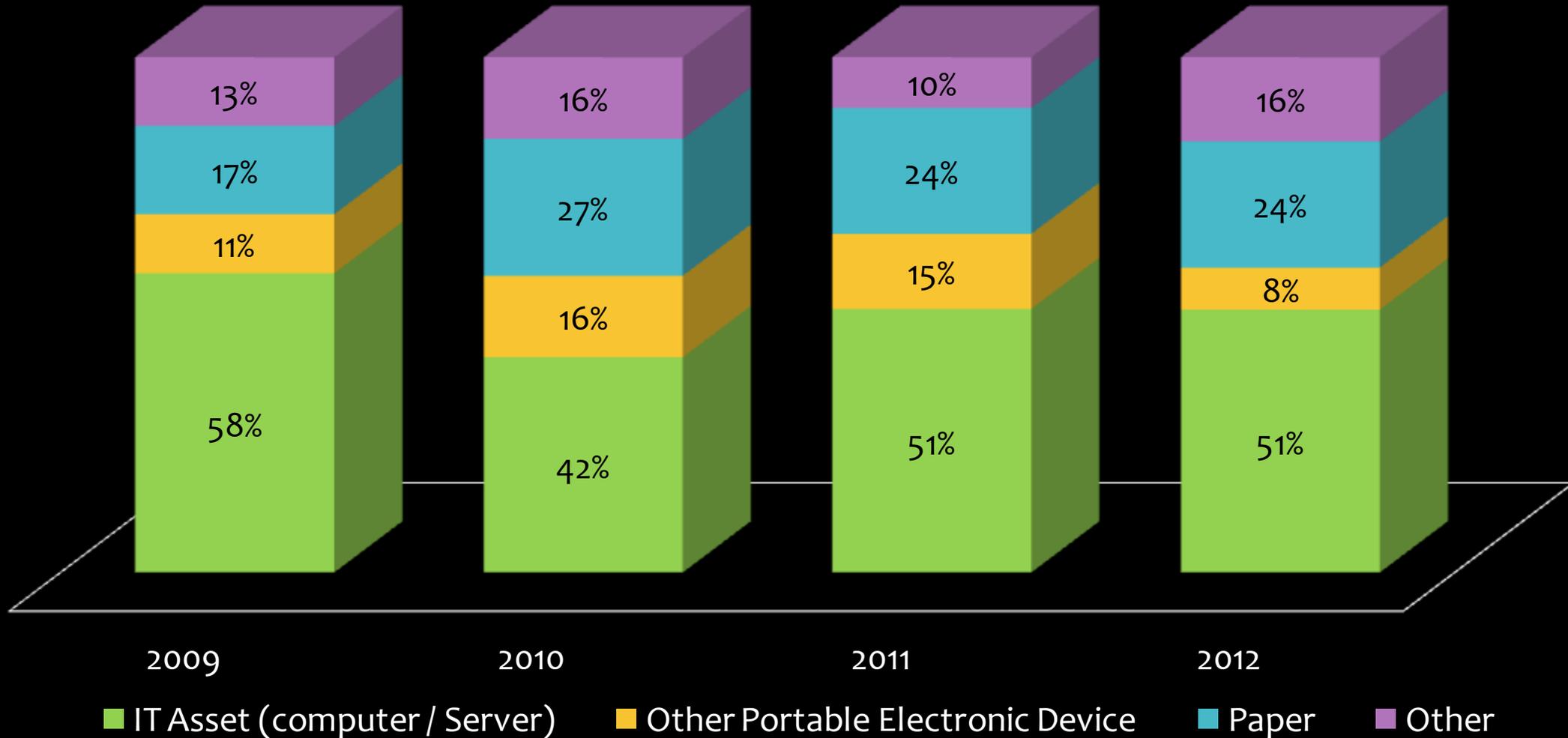
US Patient Records Breached



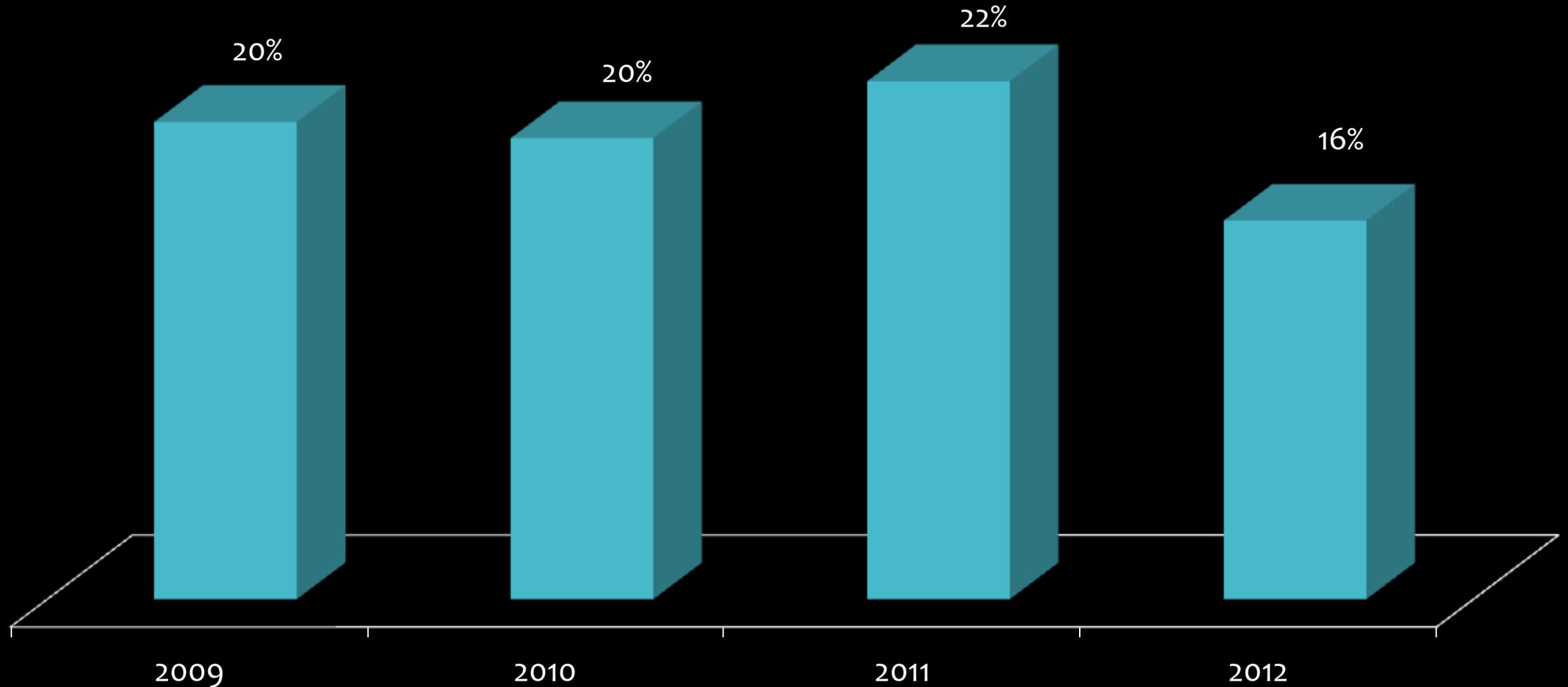
Cause



Data Location



Business Associate Involved



Vulnerabilities

- Theft / Loss / Improper Disposal
- Unauthorized Access / Disclosure
- Paper



Zero-Day Vulnerabilities

- New Employees
- Terminations
- New Equipment
- Acquisitions
- New Partnership
- New Process
- Social Media



Vulnerability Management

- Employee Education
- Employee Engagement
- Physical Security
- Vendor Management



Vulnerability Management

More patching

?

Thank you!

Questions?