Presented by:

# IT SECURITY RISK ASSESSMENT A RATIONAL APPROACH TO MANAGING RISK

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### AGENDA

- 1. What is risk
- 2. Why do an IT Security Risk Assessment
- 3. What does the process entail
- 4. What elements of this approach can you apply



### STACKING UP THE RISKS



Winning PowerBall Grand Prize (1 in 175.2M)



Attacked and killed by shark (1 in 3.7M)



Getting a hole in one (1 in 12,750)



Getting struck by lightning (1 in 12,000)



Being audited by the IRS (1 in 175)



Having a security breach at your organization in the next two years (at least 1 in 5)

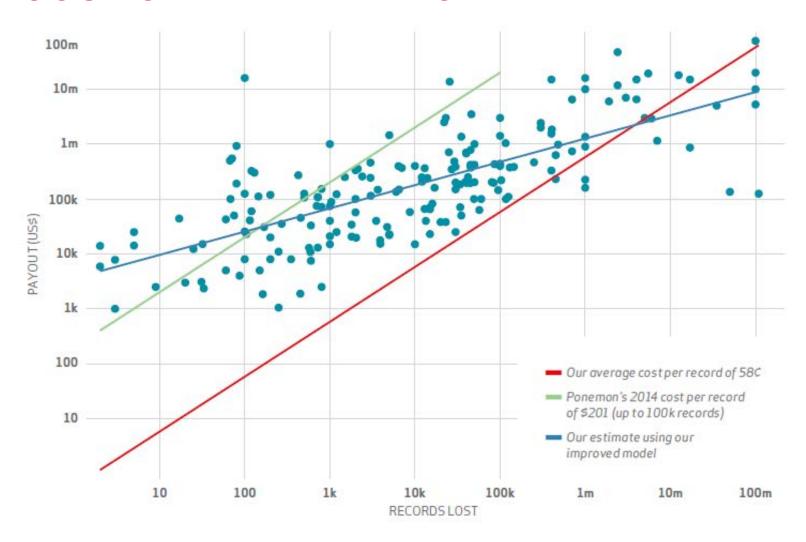
### COST OF A DATA BREACH

Estimates range from an average of \$0.58/record<sup>1</sup> to an average of \$201/record<sup>2</sup>

<sup>&</sup>lt;sup>1</sup> Verizon Data Breach Investigations Report

<sup>&</sup>lt;sup>2</sup> Ponemon Institute Report

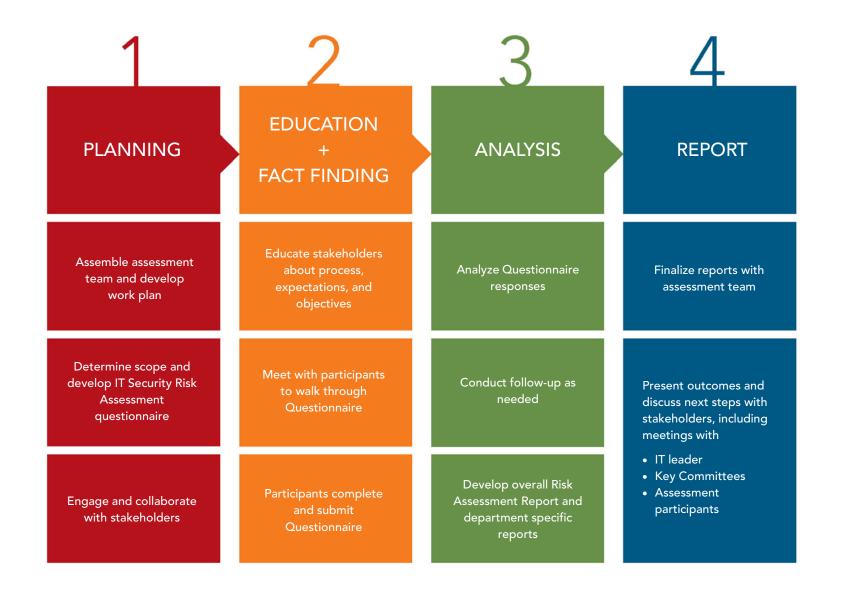
## **COST OF A DATA BREACH**



Source: Verizon 2015 Data Breach Investigations Report



## THE RISK ASSESSMENT PROCESS



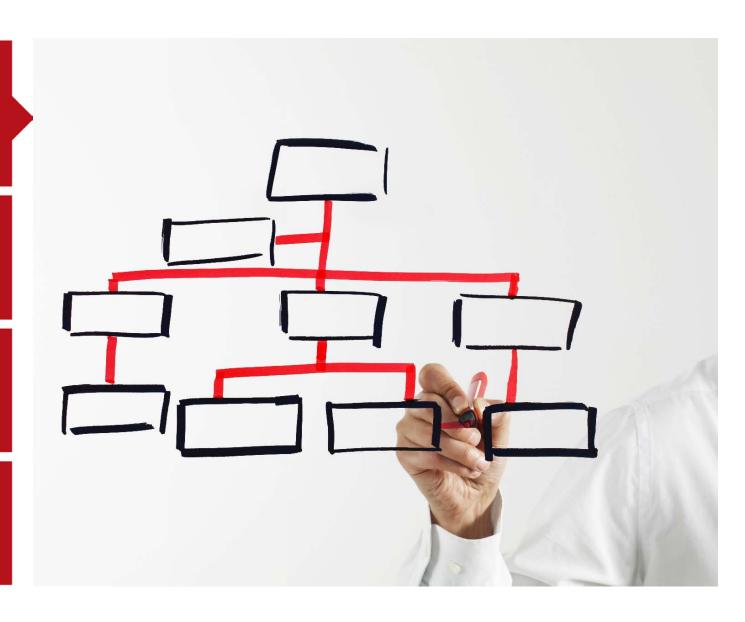
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#### **PLANNING**

Assemble assessment team and develop work plan

Determine scope and develop IT Security Risk Assessment questionnaire

Engage and collaborate with stakeholders



## THE QUESTIONNAIRE

IT Security Risk Assessment

	Respondent Information						
Department							
Completed by							
Contact Information		Date Submitted					

Qu	estion	Response	(
1.	Systems and Applications. Does your Department maintain (manage internally or license) systems or applications that store or access sensitive information including any cloud-based systems or applications?  If so, please describe.		()
2.	<b>Data Storage.</b> Does your Department store sensitive information or data on any storage service other than IT-provided network drives? If so, please specify (e.g., departmental servers, or cloud-based storage such as Google Drive or Dropbox).		
3.	Responsibility and Oversight. Has your Department assigned responsibility for information security to an individual or group?		
4.	Information Security Training and Awareness. Does your department participate in regular information security training? If so, how often and what topics are covered?		

#### Included 20 Risk Areas:

- Systems and Applications
- 2. Data Storage
- Responsibility and Oversight
- Information Security
   Training and
   Awareness
- 5. IT Security Incident Response
- 6. Access Controls
- 7. Audit Logs
- 8. Remote Access
- 9. Change Management
- 10. Incident Management
- 11. Physical Security
- 12. Data Transmission
- Service Provider/ Vendor Due Diligence
- 14. Disaster Recovery Planning
- 15. Data Backups
- 16. Copiers and Multi-Function Devices
- 17. Hardware Disposal
- 18. Mobile Devices
- 19. Compliance
- 20. Data Protection

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#### EDUCATION + FACT FINDING

Educate stakeholders about process, expectations, and objectives

Meet with participants to walk through Questionnaire

Participants complete and submit Questionnaire



#### **ANALYSIS**

Analyze Questionnaire responses

Conduct follow-up as needed

Develop overall Risk Assessment Report and department specific reports



## ALL ABOUT RESIDUAL RISK

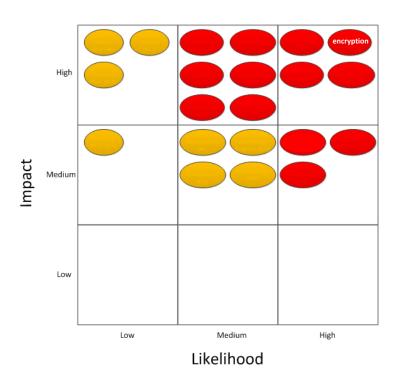
#### Populated before analysis

Description of the Vulnerability	Risk Summary	Likelihood and Impact	Risk Rating	Analysis Results	Residual Risk and Recommendations
Encryption The client does not have their entire inventory of devices encrypted.	Without encryption, a lost or stolen device has greater potential for PHI to be obtained.	Likelihood: High	High	Lost or stolen devices are the most frequent cause of HIPAA breach. Not only is	Residual Risk: Low
		Impact: High	encryption an addressable safeguard under the security rule, but without encryption in place, the client increases the likelihood that someone could gain unauthorized access to a device and it's PHI.	Recommendation: The client should deploy a centrally managed device encryption across their entire population of devices working from mobile devices back to fixed work stations.	

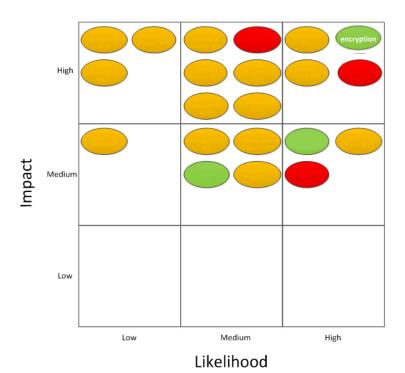
Populated during analysis

## **HEAT MAPS**

#### **Inherent**



#### Residual



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#### **REPORT**

Finalize reports with Project Team

Present outcomes and discuss next steps with stakeholders, including meetings with

- IT leader
- Key committees
- Assessment participants



## THE RISK ASSESSMENT CYCLE



## **OUTCOMES**



Collaboration



Sustainable Approach



**Security Awareness** 



**Priorities** 

### **TAKEAWAYS**

It is getting riskier

Engagement of stakeholders is critical

More than compliance...
It's about reducing *likelihood* and *impact* 

Doesn't have to be complicated



## INTERESTED IN MORE?

We are always available for your questions



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