IT Infrastructure and Security January 13, 2017

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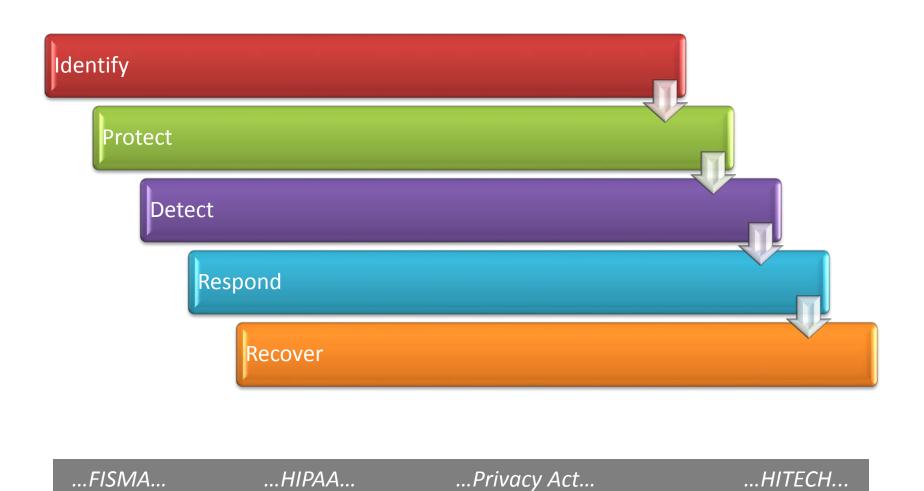
Risk
Confidentiality
Integrity
Availability
Privacy
Security



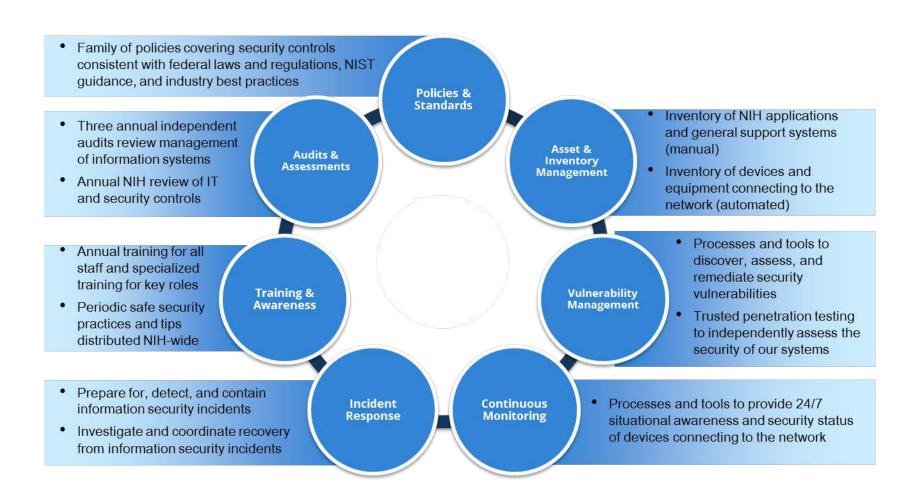
Value
Open Environment
for
Research
Collaboration, and
Clinical Care

Life & Safety
Loss of Personal Identifiable or Personal Health Information
Research Data Integrity
Financial Stewardship
Administration and Operations

Federal Laws, Policies, and Standards



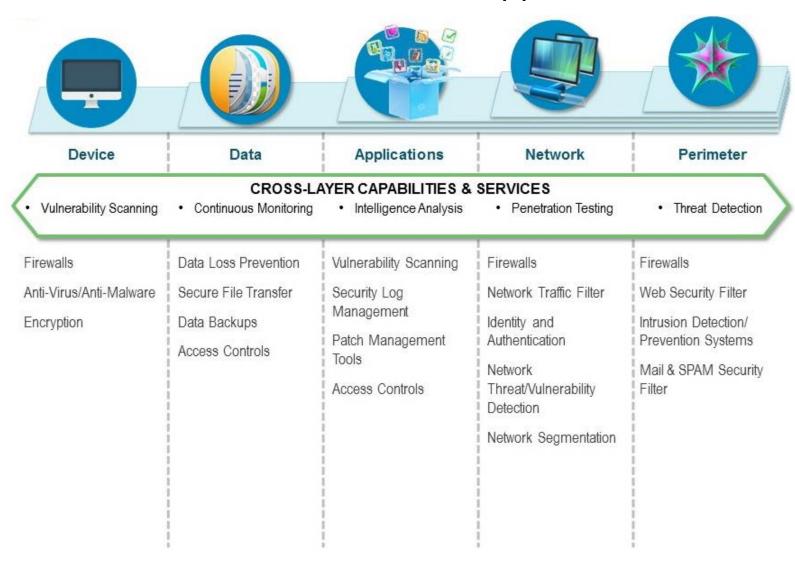
NIH Security Program



Clinical Center Technology Environment

- Electronic Health Record System
 - Clinical Research Information System (CRIS), Allscripts Sunrise Clinical Manager
- Clinical Research Data and Analytics
 - Biomedical Translational Research Information System (BTRIS)
- 70+ Commercial and Custom Applications Supporting Clinical Care and Clinical Research
- Complex IT Infrastructure
 - On Campus Data Centers Housing 750+ servers
 - 5,000 Laptops, Desktops and Mobile Devices
 - 900 Clinical Workstations

Multi-Dimensional Approach



Clinical Center Security Program

- Security integrated into IT management and governance processes
- Strong authentication and role-based access controls
- Data encryption and data loss prevention in progress
- Layered network security controls
- Frequent audits and assessments

Opportunities

- Real time visibility and understanding of systems and data assets
- Speed and agility to address known risk areas
 - Critical vulnerabilities in commercial and custom applications
 - End-of-life platforms and aging infrastructure
 - Remediation of penetration test findings
- Broader implementation of advanced security technologies to prevent and protect
- New approaches to meet demands for secure high availability, high quality IT services

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