Set Theory Relationship Mapping (STRM)



Reference Document: Secure Controls Framework (SCF) version 2024.4

Focal Document: HIPAA Administrative Simplification

Focal Document URL: https://www.hhs.gov/sites/default/files/ocr/privacy/hipaa/administrative/combined/hipaa-simplification-201303.pdf

STRM URL: https://securecontrolsframework.com/content/strm/scf-strm-hipaa-hitech.pdf

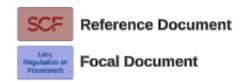
Set Theory Relationship Mapping (STRM) is well-suited for mapping between sets of elements that exist in two distinct concepts that are mostly the same as each other (e.g., cybersecurity & data privacy requirements). STRM also allows the strength of the mapping to be captured.

STRM relies on a justification for the relationship claim. There are three (3) options for the rationale, which is a high-level context within which the two concepts are related:

- 1. Syntactic: How similar is the wording that expresses the two concepts? This is a word-for-word analysis of the relationship, not an interpretation of the language.
- 2. Semantic: How similar are the meanings of the two concepts? This involves some interpretation of each concept's language.
- 3. Functional: How similar are the results of executing the two concepts? This involves understanding what will happen if the two concepts are implemented, performed, or otherwise executed.

Based on NIST IR 8477, STRM supports five (5) five relationship types to describe the logical similarity between two distinct concepts:

- 1. Subset Of
- 2. Intersects With
- 3. Equal
- 4. Superset Of
- 5. No Relationship

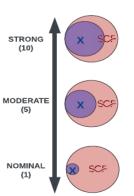


Relationship Type #1:

Focal Document Element is a subset of SCF control. In other words. SCF control contains everything that Focal Document Element

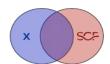


Relative Relationship Strength (control versus control)

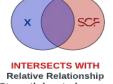


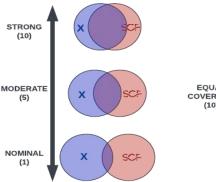
Relationship Type #2:

SCF control has some overlap with Focal Document Element, but each includes content that the other does not.



Relative Relationship Strength (control versus control)



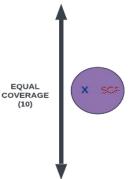


Relationship Type #3: **EQUAL**

SCF control and Focal Document Element are the same, although not necessarily identical



EQUAL Relative Relationship Strength (control versus control)



Relationship Type #4: SUPERSET OF

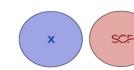
Focal Document Element is a superset of SCF control. In other words. Focal Document Element contains everything that SCF control does and



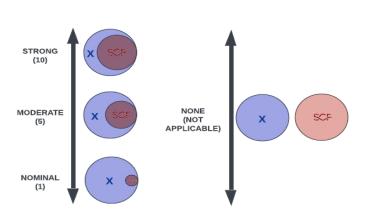
SUPERSET OF Relative Relationship Strength (control versus control)

Relationship Type #5:

SCF control and Focal Document Element are unrelated; their content does not overlap.



NO RELATIONSHIP Relative Relationship Strength (control versus control)



HIPAA-HITECH FDE #	NIST SP 800- 66 R2	HIPAA-HITECH FDE Name	HIPAA-HITECH Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF#	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
§ 164.306		Security standards: General rules	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.306(a)		General requirements	Covered entities and business associates must do the following:	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
				Functional	Subset Of	Cybersecurity & Data Protection Governance Program	GOV-01	Mechanisms exist to facilitate the implementation of cybersecurity & data protection governance controls.	10	
				Functional	Subset Of	Operationalizing Cybersecurity & Data Protection Practices	GOV-15	Mechanisms exist to compel data and/or process owners to operationalize cybersecurity & data privacy practices for each system, application and/or service under their control.	10	
				Functional	Subset Of	Select Controls	GOV-15.1	Mechanisms exist to compel data and/or process owners to select required cybersecurity & data privacy controls for each system, application and/or service under their control.	10	
§ 164.306(a)(1)		N/A	Ensure the confidentiality, integrity, and availability of all electronic protected health information the covered entity or business associate creates, receives,	Functional	Subset Of	Implement Controls	GOV-15.2	Mechanisms exist to compel data and/or process owners to implement required cybersecurity & data privacy controls for each system, application and/or service under their control.	10	
			maintains, or transmits.	Functional	Subset Of	Assess Controls	GOV-15.3	Mechanisms exist to compel data and/or process owners to assess if required cybersecurity & data privacy controls for each system, application and/or service under their control are implemented correctly and are operating as intended.	10	
				Functional	Subset Of	Authorize Systems, Applications & Services	GOV-15.4	Mechanisms exist to compel data and/or process owners to obtain authorization for the production use of each system, application and/or service under their control.	10	
				Functional	Subset Of	Monitor Controls	GOV-15.5	Mechanisms exist to compel data and/or process owners to monitor systems, applications and/or services under their control on an ongoing basis for applicable threats and risks, as well as to ensure cybersecurity & data privacy controls are operating as intended.	10	
§ 164.306(a)(2)		N/A	Protect against any reasonably anticipated threats or hazards to the security or integrity of such information.	Functional	Subset Of	Cybersecurity & Data Protection Governance Program	GOV-01	Mechanisms exist to facilitate the implementation of cybersecurity & data protection governance controls.	10	
				Functional	Subset Of	Risk Management Program	RSK-01	Mechanisms exist to facilitate the implementation of strategic, operational and tactical risk management controls.	10	
§ 164.306(a)(3)		N/A	Protect against any reasonably anticipated uses or disclosures of such information that are not permitted or required under subpart E of this part.	Functional	Subset Of	Cybersecurity & Data Protection Governance Program	GOV-01	Mechanisms exist to facilitate the implementation of cybersecurity & data protection governance controls.	10	
				Functional	Subset Of	Data Protection	DCH-01	Mechanisms exist to facilitate the implementation of data protection controls.	10	
§ 164.306(b)		Flexibility of approach	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
				Functional	Intersects With	Define Control Objectives	GOV-09	Mechanisms exist to establish control objectives as the basis for the selection, implementation and management of the organization's internal control system.	5	
				Functional	Subset Of	Operationalizing Cybersecurity & Data Protection Practices	GOV-15	Mechanisms exist to compel data and/or process owners to operationalize cybersecurity & data privacy practices for each system, application and/or service under their control.	10	
§ 164.306(b)(1)		N/A	Covered entities and business associates may use any security measures that allow the covered entity or business associate to reasonably and appropriately implement the standards and implementation specifications as specified in this subpart.	Functional	Subset Of	Secure Engineering Principles	SEA-01	Mechanisms exist to facilitate the implementation of industry-recognized cybersecurity & data privacy practices in the specification, design, development, implementation and modification of systems and services.	10	
				Functional	Intersects With	Alignment With Enterprise Architecture	SEA-02	Mechanisms exist to develop an enterprise architecture, aligned with industry-recognized leading practices, with consideration for cybersecurity & data privacy principles that addresses risk to organizational operations, assets, individuals, other organizations.		
				Functional	Intersects With	Defense-In-Depth (DiD) Architecture	SEA-03	Mechanisms exist to implement security functions as a layered structure minimizing interactions between layers of the design and avoiding any dependence by lower layers on the functionality or correctness of higher layers.	3	
§ 164.306(b)(2)		N/A	In deciding which security measures to use, a covered entity or business associate must take into account the following factors:	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
				Functional	Intersects With	Defining Business Context & Mission	GOV-08	Mechanisms exist to define the context of its business model and document the mission of the organization.	5	
§ 164.306(b)(2)(i)		N/A	The size, complexity, and capabilities of the covered entity or business associate.	Functional	Intersects With	Business Process Definition	PRM-06	Mechanisms exist to define business processes with consideration for cybersecurity & data privacy that determines: (1) The resulting risk to organizational operations, assets, individuals and other organizations; and (2) Information protection needs arising from the defined business processes and revises the processes as necessary, until an achievable set of protection needs is obtained.	5	
§ 164.306(b)(2)(ii)		N/A	The covered entity's or the business associate's technical infrastructure,	Functional	Intersects With	Cybersecurity & Data Privacy Requirements Definition	PRM-05	Mechanisms exist to identify critical system components and functions by performing a criticality analysis for critical systems, system components or services at predefined decision points in the Secure Development Life Cycle (SDLC). Mechanisms exist to develop an enterprise architecture,	5	
			hardware, and software security capabilities.	Functional	Intersects With	Alignment With Enterprise Architecture	SEA-02	aligned with industry-recognized leading practices, with consideration for cybersecurity & data privacy principles that addresses risk to organizational operations, assets, individuals, other organizations.		
§ 164.306(b)(2)(iii)		N/A	The costs of security measures.	Functional	Subset Of	Allocation of Resources	PRM-03	Mechanisms exist to identify and allocate resources for management, operational, technical and data privacy requirements within business process planning for projects / initiatives.	10	
				Functional	Subset Of	Risk Management Program	RSK-01	Mechanisms exist to facilitate the implementation of strategic, operational and tactical risk management controls.	10	
				Functional	Intersects With	Risk Framing	RSK-01.1	Mechanisms exist to identify: (1) Assumptions affecting risk assessments, risk response and risk monitoring; (2) Constraints affecting risk assessments, risk response and risk monitoring; (3) The organizational risk tolerance; and (4) Priorities, benefits and trade-offs considered by the organization for managing risk.	5	
§ 164.306(b)(2)(iv)		N/A	The probability and criticality of potential risks to electronic protected health information.	Functional	Intersects With	Risk-Based Security Categorization	RSK-02	Mechanisms exist to categorize systems and data in accordance with applicable laws, regulations and contractual obligations that: (1) Document the security categorization results (including supporting rationale) in the security plan for systems; and (2) Ensure the security categorization decision is reviewed and approved by the asset owner.	5	
				Functional	Intersects With	Risk Identification	RSK-03	Mechanisms exist to identify and document risks, both internal and external.	5	



Secure Controls Framework (SCF) 2 of 11

HIPAA-HITECH FDE #	NIST SP 800- 66 R2	HIPAA-HITECH FDE Name	HIPAA-HITECH Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF#	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
				Functional	Intersects With	Risk Catalog	RSK-03.1	Mechanisms exist to develop and keep current a catalog of applicable risks associated with the organization's business operations and technologies in use.	5	
				Functional	Intersects With	Risk Assessment	RSK-04	Mechanisms exist to conduct recurring assessments of risk that includes the likelihood and magnitude of harm, from unauthorized access, use, disclosure, disruption, modification or destruction of the organization's systems and data.	5	
				Functional	Intersects With	Threat Catalog	THR-09	Mechanisms exist to develop and keep current a catalog of applicable internal and external threats to the organization, both natural and manmade.	5	
				Functional	Intersects With	Threat Analysis	THR-10	Mechanisms exist to identify, assess, prioritize and document the potential impact(s) and likelihood(s) of applicable internal and external threats.	5	
§ 164.306(c)		Standards	A covered entity or business associate must comply with the applicable standards as provided in this section and in § 164.308, § 164.310, § 164.312, § 164.314 and § 164.316 with respect to all electronic protected health information.	Functional	Subset Of	Statutory, Regulatory & Contractual Compliance	CPL-01	Mechanisms exist to facilitate the identification and implementation of relevant statutory, regulatory and contractual controls.	10	
§ 164.306(d)		Implementation specifications	In this subpart:	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.306(d)(1)		N/A	Implementation specifications are required or addressable. If an implementation specification is required, the word "Required" appears in parentheses after the title of the implementation specification. If an implementation specification is addressable, the word "Addressable" appears in parentheses after the title of the implementation specification.	Functional	Subset Of	Statutory, Regulatory & Contractual Compliance	CPL-01	Mechanisms exist to facilitate the identification and implementation of relevant statutory, regulatory and contractual controls.	10	
§ 164.306(d)(2)		N/A	When a standard adopted in § 164.308, § 164.310, § 164.312, § 164.314, or § 164.316 includes required implementation specifications, a covered entity or business associate must implement the implementation specifications.	Functional	Subset Of	Statutory, Regulatory & Contractual Compliance	CPL-01	Mechanisms exist to facilitate the identification and implementation of relevant statutory, regulatory and contractual controls.	10	
§ 164.306(d)(3)		N/A	When a standard adopted in § 164.308, § 164.310, § 164.312, § 164.314, or § 164.316 includes addressable implementation specifications, a covered entity or business associate must—	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
				Functional	Intersects With	Cybersecurity & Data Protection Controls Oversight	CPL-02	Mechanisms exist to provide a cybersecurity & data protection controls oversight function that reports to the organization's executive leadership.	5	
§ 164.306(d)(3)(i)		N/A	Assess whether each implementation specification is a reasonable and appropriate safeguard in its environment, when analyzed with reference to the likely contribution to protecting electronic protected health information; and	Functional	Intersects With	Cybersecurity & Data Protection Assessments	CPL-03	Mechanisms exist to ensure managers regularly review the processes and documented procedures within their area of responsibility to adhere to appropriate cybersecurity & data protection policies, standards and other applicable requirements. Mechanisms exist to regularly review technology assets	5	
				Functional	Intersects With	Functional Review Of Cybersecurity & Data Protection Controls	CPL-03.2	for adherence to the organization's cybersecurity & data protection policies and standards.	5	
§ 164.306(d)(3)(ii)		N/A	As applicable to the covered entity or business associate—	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.306(d)(3)(ii)(A)		N/A	Implement the implementation specification if reasonable and appropriate; or	Functional	Subset Of	Implement Controls	GOV-15.2	Mechanisms exist to compel data and/or process owners to implement required cybersecurity & data privacy controls for each system, application and/or service under their control.	10	
§ 164.306(d)(3)(ii)(B)		N/A	If implementing the implementation specification is not reasonable and appropriate—	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.306(d)(3)(ii)(B)(1)		N/A	Document why it would not be reasonable and appropriate to implement the implementation specification; and	Functional	Subset Of	Exception Management	GOV-02.1	Mechanisms exist to prohibit exceptions to standards, except when the exception has been formally assessed for risk impact, approved and recorded.	10	
§ 164.306(d)(3)(ii)(B)(2)		N/A	Implement an equivalent alternative measure if reasonable and appropriate.	Functional	Equal	Compensating Countermeasures	RSK-06.2	Mechanisms exist to identify and implement compensating countermeasures to reduce risk and exposure to threats.	10	
§ 164.306(e)		Maintenance	A covered entity or business associate must review and modify the security measures implemented under this subpart as needed to continue provision of reasonable and appropriate protection of electronic protected health information, and update documentation of such security measures in accordance with § 164.316(b)(2)(iii).	Functional	Equal	Functional Review Of Cybersecurity & Data Protection Controls	CPL-03.2	Mechanisms exist to regularly review technology assets for adherence to the organization's cybersecurity & data protection policies and standards.	10	
§ 164.308	164.308	Administrative safeguards	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.308(a)		N/A	A covered entity or business associate must, in accordance with § 164.306:	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.308(a)(1)	164.308(a)(1)	N/A	[no content]	Functional	No Relationship	N/A Publishing Cybersecurity &	N/A	No applicable SCF control Mechanisms exist to establish, maintain and	N/A	
				Functional	Subset Of	Data Protection Documentation	GOV-02	disseminate cybersecurity & data protection policies, standards and procedures.	10	
		Standard: Security	Implement policies and procedures to prevent, detect, contain, and correct	Functional Functional	Subset Of Subset Of	Configuration Management Program Change Management	CFG-01 CHG-01	Mechanisms exist to facilitate the implementation of configuration management controls. Mechanisms exist to facilitate the implementation of a	10 10	
§ 164.308(a)(1)(i)	164.308(a)(1)	management process	security violations.	Functional	Subset Of	Program Continuous Monitoring	MON-01	change management program. Mechanisms exist to facilitate the implementation of enterprise wide manitoring controls.	10	
				Functional	Subset Of	Incident Response Operations	IRO-01	enterprise-wide monitoring controls. Mechanisms exist to implement and govern processes and documentation to facilitate an organization-wide response capability for cybersecurity & data privacy-	10	
		Implementation					,	related incidents. No applicable SCF control		
§ 164.308(a)(1)(ii)	164.308(a)(1)	specifications:	[no content]	Functional	No Relationship	N/A	N/A	Mechanisms exist to conduct recurring assessments of	N/A	
§ 164.308(a)(1)(ii)(A)	164.308(a)(1)	Risk analysis (Required)	Conduct an accurate and thorough assessment of the potential risks and vulnerabilities to the confidentiality, integrity, and availability of electronic protected health information held by the covered entity or business associate.	Functional	Equal	Risk Assessment	RSK-04	risk that includes the likelihood and magnitude of harm, from unauthorized access, use, disclosure, disruption, modification or destruction of the organization's systems and data. Mechanisms exist to establish control objectives as the	10	
§ 164.308(a)(1)(ii)(B)	164.308(a)(1)	Risk management	Implement security measures sufficient to reduce risks and vulnerabilities to a reasonable and appropriate level to comply with § 164.306(a).	Functional	Intersects With	Define Control Objectives	GOV-09	Mechanisms exist to establish control objectives as the basis for the selection, implementation and management of the organization's internal control system. Mechanisms exist to compel data and/or process	5	
		(Required)		Functional	Subset Of	Implement Controls	GOV-15.2	owners to implement required cybersecurity & data privacy controls for each system, application and/or service under their control.	10	
§ 164.308(a)(1)(ii)(C)	164.308(a)(1)	Sanction policy (Required)	Apply appropriate sanctions against workforce members who fail to comply with the security policies and procedures of the covered entity or business associate.	Functional	Equal	Personnel Sanctions	HRS-07	Mechanisms exist to sanction personnel failing to comply with established security policies, standards and procedures. Mechanisms exist to facilitate the implementation of	10	
				Functional	Subset Of	Continuous Monitoring	MON-01	Mechanisms exist to facilitate the implementation of enterprise-wide monitoring controls. Mechanisms exist to review event logs on an ongoing	10	
§ 164.308(a)(1)(ii)(D)	164.308(a)(1)	Information system activity review (Required)	Implement procedures to regularly review records of information system activity, such as audit logs, access reports, and security incident tracking reports.	Functional	Intersects With	Reviews & Updates	MON-01.8	basis and escalate incidents in accordance with established timelines and procedures. Mechanisms exist to document, monitor and report the	5	
				Functional	Intersects With	Situational Awareness For Incidents	IRO-09	status of cybersecurity & data privacy incidents to internal stakeholders all the way through the resolution of the incident. Mechanisms exist to assign one or more qualified	5	
§ 164.308(a)(2)	164.308(a)(2)	Standard: Assigned security responsibility	Identify the security official who is responsible for the development and implementation of the policies and procedures required by this subpart for the covered entity or business associate.	Functional	Equal	Assigned Cybersecurity & Data Protection Responsibilities	GOV-04	individuals with the mission and resources to centrally-manage, coordinate, develop, implement and maintain an enterprise-wide cybersecurity & data protection program.	10	
§ 164.308(a)(3)	164.308(a)(3)	N/A	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
				Functional	Subset Of	Publishing Cybersecurity & Data Protection	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	10	
§ 164.308(a)(3)	164.308(a)(3)	N/A	[no content]			Publishing Cybersecurity &		Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies,		



Secure Controls Framework (SCF) 3 of 11



Secure Controls Framework (SCF) 4 of 11

HIPAA-HITECH FDE #	NIST SP 800- 66 R2	HIPAA-HITECH FDE Name	HIPAA-HITECH Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF#	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
								Mechanisms exist to provide role-based cybersecurity & data privacy-related training:	(орионат)	
§ 164.308(a)(5)(ii)(D)	164.308(a)(5)	Password management (Addressable)	Procedures for creating, changing, and safeguarding passwords.	Functional	Equal	Role-Based Cybersecurity & Data Privacy Training	SAT-03	(1) Before authorizing access to the system or performing assigned duties;(2) When required by system changes; and(3) Annually thereafter.	10	
§ 164.308(a)(6)	164.308(a)(6)	N/A	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
				Functional	Subset Of	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	10	
§ 164.308(a)(6)(i)	164.308(a)(6)	Standard: Security incident procedures	Implement policies and procedures to address security incidents.	Functional	Subset Of	Incident Response Operations	IRO-01	Mechanisms exist to implement and govern processes and documentation to facilitate an organization-wide response capability for cybersecurity & data privacy-related incidents. Mechanisms exist to cover:	10	
§ 164.308(a)(6)(ii)		Implementation specification: Response and reporting (Required)	Identify and respond to suspected or known security incidents; mitigate, to the extent practicable, harmful effects of security incidents that are known to the covered entity or business associate; and document security incidents and their outcomes.	Functional	Equal	Incident Handling	IRO-02	 (1) Preparation; (2) Automated event detection or manual incident report intake; (3) Analysis; (4) Containment; (5) Eradication; and (6) Recovery. 	10	
§ 164.308(a)(7)	164.308(a)(7)	N/A	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
				Functional	Subset Of	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	10	
§ 164.308(a)(7)(i)	164.308(a)(7)	Standard: Contingency plan	Establish (and implement as needed) policies and procedures for responding to an emergency or other occurrence (for example, fire, vandalism, system failure, and natural disaster) that damages systems that contain electronic protected health information.	Functional	Subset Of	Business Continuity Management System (BCMS)	BCD-01	Mechanisms exist to facilitate the implementation of contingency planning controls to help ensure resilient assets and services (e.g., Continuity of Operations Plan (COOP) or Business Continuity & Disaster Recovery (BC/DR) playbooks). Mechanisms exist to implement and govern processes	10	
				Functional	Subset Of	Incident Response Operations	IRO-01	and documentation to facilitate an organization-wide response capability for cybersecurity & data privacy-related incidents.	10	
§ 164.308(a)(7)(ii)	164.308(a)(7)	Implementation specifications:	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.308(a)(7)(ii)(A)	164.308(a)(7)	Data backup plan (Required)	Establish and implement procedures to create and maintain retrievable exact copies of electronic protected health information.	Functional	Equal	Data Backups	BCD-11	Mechanisms exist to create recurring backups of data, software and/or system images, as well as verify the integrity of these backups, to ensure the availability of the data to satisfying Recovery Time Objectives (RTOs) and Recovery Point Objectives (RPOs).	10	
§ 164.308(a)(7)(ii)(B)	164.308(a)(7)	Disaster recovery plan (Required)	Establish (and implement as needed) procedures to restore any loss of data.	Functional	Equal	Information System Recovery & Reconstitution	BCD-12	Mechanisms exist to ensure the secure recovery and reconstitution of systems to a known state after a disruption, compromise or failure. Mechanisms exist to facilitate the implementation of	10	
§ 164.308(a)(7)(ii)(C)	164.308(a)(7)	Emergency mode operation plan	Establish (and implement as needed) procedures to enable continuation of critical business processes for protection of the security of electronic protected	Functional	Subset Of	Business Continuity Management System (BCMS)	BCD-01	contingency planning controls to help ensure resilient assets and services (e.g., Continuity of Operations Plan (COOP) or Business Continuity & Disaster Recovery (BC/DR) playbooks).	10	
		(Required)	health information while operating in emergency mode.	Functional	Intersects With	Continue Essential Mission & Business Functions	BCD-02.2	Mechanisms exist to continue essential missions and business functions with little or no loss of operational continuity and sustain that continuity until full system restoration at primary processing and/or storage sites.	5	
§ 164.308(a)(7)(ii)(D)	164.308(a)(7)	Testing and revision procedures (Addressable)	Implement procedures for periodic testing and revision of contingency plans.	Functional	Intersects With	Contingency Plan Root	BCD-04	Mechanisms exist to conduct tests and/or exercises to evaluate the contingency plan's effectiveness and the organization's readiness to execute the plan. Mechanisms exist to conduct a Root Cause Analysis	5	
				Functional	Intersects With	Cause Analysis (RCA) & Lessons Learned	BCD-05	(RCA) and "lessons learned" activity every time the contingency plan is activated. Mechanisms exist to facilitate an IT Asset Management	5	
				Functional	Subset Of	Asset Governance Asset-Service	AST-01	(ITAM) program to implement and manage asset management controls. Mechanisms exist to identify and assess the security of	10	
S 4 S 4 200/ 1/7//*//F)	464 200(1)(7)	Applications and data	Assess the relative criticality of specific applications and data in support of other	Functional	Intersects With	Dependencies	AST-01.1	technology assets that support more than one critical business function. Mechanisms exist to identify and document the critical	0	
§ 164.308(a)(7)(ii)(E)	164.308(a)(7)	criticality analysis (Addressable)	contingency plan components.	Functional	Intersects With	Identify Critical Assets	BCD-02	systems, applications and services that support essential missions and business functions.	8	
				Functional	Intersects With	Third-Party Criticality Assessments	TPM-02	Mechanisms exist to identify, prioritize and assess suppliers and partners of critical systems, components and services using a supply chain risk assessment process relative to their importance in supporting the delivery of high-value services.	3	
								Mechanisms exist to regularly review technology assets for adherence to the organization's cybersecurity & data protection policies and standards.		
				Functional	Intersects With	Functional Review Of Cybersecurity & Data Protection Controls	CPL-03.2	protection policies and standards.	5	
§ 164.308(a)(8)	164.308(a)(8)	Standard: Evaluation	Perform a periodic technical and nontechnical evaluation, based initially upon the standards implemented under this rule and, subsequently, in response to environmental or operational changes affecting the security of electronic protected health information, that establishes the extent to which a covered entity's or business associate's security policies and procedures meet the requirements of this subpart.	Functional	Intersects With	Assessment Boundaries	IAO-01.1	Mechanisms exist to establish the scope of assessments by defining the assessment boundary, according to people, processes and technology that directly or indirectly impact the confidentiality, integrity, availability and safety of the data and systems under review.	5	
				Functional	Intersects With	Assessments	IAO-02	Mechanisms exist to formally assess the cybersecurity & data privacy controls in systems, applications and services through Information Assurance Program (IAP) activities to determine the extent to which the controls are implemented correctly, operating as intended and producing the desired outcome with respect to meeting expected requirements.	3	
§ 164.308(b)		Business associate contracts and other	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
		arrangements		Functional	Subset Of	Third-Party Management	TPM-01	Mechanisms exist to facilitate the implementation of third-party management controls.	10	
				Functional	Intersects With	Third-Party Services	TPM-04	Mechanisms exist to mitigate the risks associated with third-party access to the organization's systems and data.	5	



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HIPAA-HITECH FDE #	NIST SP 800- 66 R2	HIPAA-HITECH FDE Name	HIPAA-HITECH Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF#	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
§ 164.308(b)(1)	164.308(b)(1)	N/A	A covered entity may permit a business associate to create, receive, maintain, or transmit electronic protected health information on the covered entity's behalf only if the covered entity obtains satisfactory assurances, in accordance with § 164.314(a), that the business associate will appropriately safeguard the information. A covered entity is not required to obtain such satisfactory assurances from a business associate that is a subcontractor.	Functional	Intersects With	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	(optional) 5	
				Functional	Intersects With	Contract Flow-Down Requirements	TPM-05.2	Mechanisms exist to ensure cybersecurity & data privacy requirements are included in contracts that flow-down to applicable sub-contractors and suppliers.	5	
				Functional	Intersects With	Responsible, Accountable, Supportive, Consulted & Informed (RASCI) Matrix	TPM-05.4	Mechanisms exist to document and maintain a Responsible, Accountable, Supportive, Consulted & Informed (RASCI) matrix, or similar documentation, to delineate assignment for cybersecurity & data privacy controls between internal stakeholders and External Service Providers (ESPs).	5	
				Functional	Intersects With	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	5	
§ 164.308(b)(2)		N/A	A business associate may permit a business associate that is a subcontractor to create, receive, maintain, or transmit electronic protected health information on its behalf only if the business associate obtains satisfactory assurances, in accordance with § 164.314(a), that the subcontractor will appropriately safeguard the information.	Functional	Intersects With	Contract Flow-Down Requirements	TPM-05.2	Mechanisms exist to ensure cybersecurity & data privacy requirements are included in contracts that flow-down to applicable sub-contractors and suppliers.	5	
				Functional	Intersects With	First-Party Declaration (1PD)	TPM-05.6	Mechanisms exist to obtain a First-Party Declaration (1PD) from applicable External Service Providers (ESPs) that provides assurance of compliance with specified statutory, regulatory and contractual obligations for cybersecurity & data privacy controls, including any flow-down requirements to subcontractors.	5	
		Implementation specifications: Written	Document the satisfactory assurances required by paragraph (b)(1) or (b)(2) of	Functional	Intersects With	Adequate Security for Sensitive / Regulated Data In Support of Contracts	IAO-03.2	Mechanisms exist to protect sensitive / regulated data that is collected, developed, received, transmitted, used or stored in support of the performance of a contract.	5	
§ 164.308(b)(3)		contract or other arrangement (Required)	this section through a written contract or other arrangement with the business associate that meets the applicable requirements of § 164.314(a).	Functional	Equal	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	10	
§ 164.310	164.310	Physical safeguards	A covered entity or business associate must, in accordance with § 164.306:	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.310(a)	164.310(a)	N/A	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.310(a)(1)	164.310(a)	Standard: Facility access	Implement policies and procedures to limit physical access to its electronic information systems and the facility or facilities in which they are housed, while	Functional	Subset Of	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	10	
		controls	ensuring that properly authorized access is allowed.	Functional	Subset Of	Physical & Environmental Protections	PES-01	Mechanisms exist to facilitate the operation of physical and environmental protection controls.	10	
§ 164.310(a)(2)	164.310(a)	Implementation specifications:	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
				Functional	Intersects With	Accessibility	BCD-09.2	Mechanisms exist to identify and mitigate potential accessibility problems to the alternate processing site and possible mitigation actions, in the event of an areawide disruption or disaster.	8	
		Contingency operations	Establish (and implement as needed) procedures that allow facility access in	Functional	Intersects With	Defined Roles & Responsibilities	HRS-03	Mechanisms exist to define cybersecurity roles & responsibilities for all personnel.	5	
§ 164.310(a)(2)(i)	164.310(a)	(Addressable)	support of restoration of lost data under the disaster recovery plan and emergency mode operations plan in the event of an emergency.	Functional	Intersects With	Physical Access Authorizations	PES-02	Physical access control mechanisms exist to maintain a current list of personnel with authorized access to organizational facilities (except for those areas within the facility officially designated as publicly accessible).	5	
				Functional	Intersects With	Role-Based Physical Access	PES-02.1	Physical access control mechanisms exist to authorize physical access to facilities based on the position or role of the individual.	5	
				Functional	Subset Of	Publishing Cybersecurity & Data Protection Documentation Physical & Environmental		Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures. Mechanisms exist to facilitate the operation of physical	10	
§ 164.310(a)(2)(ii)	164.310(a)	Facility security plan (Addressable)	Implement policies and procedures to safeguard the facility and the equipment therein from unauthorized physical access, tampering, and theft.	Functional	Subset Of	Protections Protections	PES-01	and environmental protection controls.	10	
		(Addressable)	therein from unauthorized physical access, tampering, and thert.	Functional	Intersects With	Physical Access Control	PES-03	Physical access control mechanisms exist to enforce physical access authorizations for all physical access points (including designated entry/exit points) to facilities (excluding those areas within the facility officially designated as publicly accessible).	5	
				Functional	Subset Of	Identity & Access Management (IAM)	IAC-01	Mechanisms exist to facilitate the implementation of identification and access management controls.	10	
§ 164.310(a)(2)(iii)	164.310(a)	Access control and validation procedures	Implement procedures to control and validate a person's access to facilities based on their role or function, including visitor control, and control of access to	Functional	Intersects With	Physical Access Authorizations	PES-02	Physical access control mechanisms exist to maintain a current list of personnel with authorized access to organizational facilities (except for those areas within the facility officially designated as publicly accessible).	5	
		(Addressable)	software programs for testing and revision.	Functional	Intersects With	Physical Access Control	PES-03	Physical access control mechanisms exist to enforce physical access authorizations for all physical access points (including designated entry/exit points) to facilities (excluding those areas within the facility officially designated as publicly accessible).	5	
				Functional	Intersects With	Visitor Control	PES-06	Physical access control mechanisms exist to identify, authorize and monitor visitors before allowing access to the facility (other than areas designated as publicly accessible). Mechanisms exist to establish maintain and	5	
				Functional	Subset Of	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	10	
§ 164.310(a)(2)(iv)	164.310(a)	Maintenance records	Implement policies and procedures to document repairs and modifications to the physical components of a facility which are related to security (for example,	Functional	Subset Of	Maintenance Operations	MNT-01	Mechanisms exist to develop, disseminate, review & update procedures to facilitate the implementation of maintenance controls across the enterprise.	10	
,		(Addressable)	hardware, walls, doors, and locks).	Functional	Intersects With	Controlled Maintenance	MNT-02	Mechanisms exist to conduct controlled maintenance activities throughout the lifecycle of the system, application or service.	8	



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HIPAA-HITECH FDE #	NIST SP 800- 66 R2	HIPAA-HITECH FDE Name	HIPAA-HITECH Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF#	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
				Functional	Subset Of	Physical & Environmental Protections	PES-01	Mechanisms exist to facilitate the operation of physical and environmental protection controls.	10	
				Functional	Subset Of	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	10	
				Functional	Subset Of	Endpoint Security	END-01	Mechanisms exist to facilitate the implementation of endpoint security controls.	10	
				Functional	Intersects With	Terms of Employment	HRS-05	Mechanisms exist to require all employees and contractors to apply cybersecurity & data privacy principles in their daily work.	5	
				Functional	Intersects With	Rules of Behavior	HRS-05.1	Mechanisms exist to define acceptable and unacceptable rules of behavior for the use of technologies, including consequences for unacceptable behavior.	3	
§ 164.310(b)	164.310(b)	Standard: Workstation use	Implement policies and procedures that specify the proper functions to be performed, the manner in which those functions are to be performed, and the physical attributes of the surroundings of a specific workstation or class of workstation that can access electronic protected health information.	Functional	Intersects With	Use of Communications Technology	HRS-05.3	Mechanisms exist to establish usage restrictions and implementation guidance for communications technologies based on the potential to cause damage to systems, if used maliciously.	3	
				Functional	Intersects With	Standardized Operating Procedures (SOP)	OPS-01.1	Mechanisms exist to identify and document Standardized Operating Procedures (SOP), or similar documentation, to enable the proper execution of day-to-day / assigned tasks.	5	
				Functional	Intersects With	Service Delivery (Business Process Support)	OPS-03	Mechanisms exist to define supporting business processes and implement appropriate governance and service management to ensure appropriate planning, delivery and support of the organization's technology capabilities supporting business functions, workforce, and/or customers based on industry-recognized standards to achieve the specific goals of the process area.	3	
				Functional	Intersects With	Access To Information Systems	PES-03.4	Physical access control mechanisms exist to enforce physical access to critical information systems or sensitive/regulated data, in addition to the physical access controls for the facility.	3	
				Functional	Intersects With	Physical Security of Offices, Rooms & Facilities	PES-04	Mechanisms exist to identify systems, equipment and respective operating environments that require limited physical access so that appropriate physical access controls are designed and implemented for offices, rooms and facilities.	3	
		Standard: Workstation security	Implement physical safeguards for all workstations that access electronic protected health information, to restrict access to authorized users	Functional	Subset Of	Endpoint Protection Measures	END-02	Mechanisms exist to protect the confidentiality, integrity, availability and safety of endpoint devices.	10	
	164.310(c)			Functional	Intersects With	Physical Access Control	PES-03	Physical access control mechanisms exist to enforce physical access authorizations for all physical access points (including designated entry/exit points) to facilities (excluding those areas within the facility officially designated as publicly accessible).	5	
§ 164.310(c)				Functional	Intersects With	Access To Information Systems	PES-03.4	Physical access control mechanisms exist to enforce physical access to critical information systems or sensitive/regulated data, in addition to the physical access controls for the facility.	5	
				Functional	Intersects With	Physical Security of Offices, Rooms & Facilities	PES-04	Mechanisms exist to identify systems, equipment and respective operating environments that require limited physical access so that appropriate physical access controls are designed and implemented for offices, rooms and facilities.	5	
				Functional	Intersects With	Working in Secure Areas	PES-04.1	Physical security mechanisms exist to allow only authorized personnel access to secure areas.	5	
§ 164.310(d)	164.310(d)	Standard: Device and media controls	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
				Functional	Subset Of	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	10	
				Functional	Subset Of	Asset Governance	AST-01	Mechanisms exist to facilitate an IT Asset Management (ITAM) program to implement and manage asset management controls.	10	
				Functional	Intersects With	Removal of Assets	AST-11	Mechanisms exist to authorize, control and track technology assets entering and exiting organizational facilities.	5	
				Functional	Subset Of	Data Protection	DCH-01	Mechanisms exist to facilitate the implementation of data protection controls.	10	
54640461711	464.0401.		Implement policies and procedures that govern the receipt and removal of hardware and electronic media that contain electronic protected health	Functional	Intersects With	Media Access	DCH-03	Mechanisms exist to control and restrict access to digital and non-digital media to authorized individuals.	5	
§ 164.310(d)(1)	164.310(d)	N/A	information into and out of a facility, and the movement of these items within the facility.	Functional	Intersects With	Media Transportation	DCH-07	Mechanisms exist to protect and control digital and non-digital media during transport outside of controlled areas using appropriate security measures.	5	
				Functional	Intersects With	Custodians	DCH-07.1	Mechanisms exist to identify custodians throughout the transport of digital or non-digital media.	5	
				Functional	Intersects With	Portable Storage Devices	DCH-13.2	Mechanisms exist to restrict or prohibit the use of portable storage devices by users on external systems.	5	
				Functional	Subset Of	Maintenance Operations	MNT-01	Mechanisms exist to develop, disseminate, review & update procedures to facilitate the implementation of maintenance controls across the enterprise.	10	



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HIPAA-HITECH FDE #	NIST SP 800- 66 R2	HIPAA-HITECH FDE Name	HIPAA-HITECH Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF#	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
						Prevent Unauthorized		Mechanisms exist to prevent or control the removal of equipment undergoing maintenance that containing		
				Functional	Intersects With	Removal	MNT-04.3	organizational information.	5	
§ 164.310(d)(2)	164.310(d)	Implementation specifications:	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
				Functional	Subset Of	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	10	
§ 164.310(d)(2)(i)	164.310(d)	Disposal (Required)	Implement policies and procedures to address the final disposition of electronic protected health information, and/or the hardware or electronic media on which it is stored.	Functional	Subset Of	Asset Governance	AST-01	Mechanisms exist to facilitate an IT Asset Management (ITAM) program to implement and manage asset management controls.	10	
				Functional	Intersects With	Secure Disposal, Destruction or Re-Use of Equipment	AST-09	Mechanisms exist to securely dispose of, destroy or repurpose system components using organization-defined techniques and methods to prevent information being recovered from these components.	5	
				Functional	Intersects With	Secure Disposal, Destruction or Re-Use of Equipment	AST-09	Mechanisms exist to securely dispose of, destroy or repurpose system components using organization-defined techniques and methods to prevent information being recovered from these components.	5	
§ 164.310(d)(2)(ii)	164.310(d)	Media re-use (Required)	Implement procedures for removal of electronic protected health information from electronic media before the media are made available for re-use.	Functional	Intersects With	System Media Sanitization	DCH-09	Mechanisms exist to sanitize system media with the strength and integrity commensurate with the classification or sensitivity of the information prior to disposal, release out of organizational control or release	5	
				Functional	Intersects With	Asset Inventories	AST-02	for reuse. Mechanisms exist to perform inventories of technology assets that: (1) Accurately reflects the current systems, applications and services in use; (2) Identifies authorized software products, including business justification details; (3) Is at the level of granularity deemed necessary for tracking and reporting; (4) Includes organization-defined information deemed necessary to achieve effective property accountability; and (5) Is available for review and audit by designated organizational personnel.	3	
§ 164.310(d)(2)(iii)	164.310(d)	Accountability (Addressable)	Maintain a record of the movements of hardware and electronic media and any person responsible therefore.	Functional	Intersects With	Updates During Installations / Removals	AST-02.1	Mechanisms exist to update asset inventories as part of component installations, removals and asset upgrades.	3	
				Functional	Intersects With	Configuration Management Database (CMDB)	AST-02.9	Mechanisms exist to implement and manage a Configuration Management Database (CMDB), or similar technology, to monitor and govern technology asset-specific information.	5	
				Functional	Intersects With	Asset Ownership Assignment	AST-03	Mechanisms exist to ensure asset ownership responsibilities are assigned, tracked and managed at a team, individual, or responsible organization level to establish a common understanding of requirements for asset protection.	5	
				Functional	Intersects With	Accountability Information	AST-03.1	Mechanisms exist to include capturing the name, position and/or role of individuals responsible/accountable for administering assets as part of the technology asset inventory process.	5	
§ 164.310(d)(2)(iv)	164.310(d)		Create a retrievable, exact copy of electronic protected health information, when needed, before movement of equipment.	Functional	Intersects With	Data Backups	BCD-11	Mechanisms exist to create recurring backups of data, software and/or system images, as well as verify the integrity of these backups, to ensure the availability of the data to satisfying Recovery Time Objectives (RTOs) and Recovery Point Objectives (RPOs).	3	
§ 164.312	164.312	Technical safeguards	A covered entity or business associate must, in accordance with § 164.306:	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.312(a)	164.312(a)	Standard: Access control	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control Mechanisms exist to establish, maintain and	N/A	
				Functional	Subset Of	Publishing Cybersecurity & Data Protection Documentation	GOV-02	disseminate cybersecurity & data protection policies, standards and procedures.	10	
				Functional	Intersects With	Position Categorization	HRS-02	Mechanisms exist to manage personnel security risk by assigning a risk designation to all positions and establishing screening criteria for individuals filling those positions.	5	
			Implement technical policies and procedures for electronic information systems that maintain electronic protected health information to allow access only to	Functional	Intersects With	Defined Roles & Responsibilities	HRS-03	Mechanisms exist to define cybersecurity roles & responsibilities for all personnel.	5	
§ 164.312(a)(1)	164.312(a)	N/A	those persons or software programs that have been granted access rights as specified in § 164.308(a)(4).	Functional	Subset Of	Identity & Access Management (IAM)	IAC-01	Mechanisms exist to facilitate the implementation of identification and access management controls.	10	
				Functional	Intersects With	Role-Based Access Control (RBAC)	IAC-08	Mechanisms exist to enforce a Role-Based Access Control (RBAC) policy over users and resources that applies need-to-know and fine-grained access control for sensitive/regulated data access.	5	
				Functional	Intersects With	Least Privilege	IAC-21	Mechanisms exist to utilize the concept of least privilege, allowing only authorized access to processes necessary to accomplish assigned tasks in accordance with organizational business functions.	5	
§ 164.312(a)(2)	164.312(a)	Implementation specifications:	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control Mochanisms exist to uniquely identify and controlly	N/A	
§ 164.312(a)(2)(i)	164.312(a)	Unique user identification (Required)	Assign a unique name and/or number for identifying and tracking user identity.	Functional	Subset Of	Identification & Authentication for Organizational Users	IAC-02	Mechanisms exist to uniquely identify and centrally Authenticate, Authorize and Audit (AAA) organizational users and processes acting on behalf of organizational users.	10	
				Functional	Equal	Identifier Management (User Names)	IAC-09	Mechanisms exist to govern naming standards for usernames and systems.	10	
		_		Functional	Subset Of	Account Management	IAC-15	Mechanisms exist to proactively govern account management of individual, group, system, service, application, guest and temporary accounts. Automated mechanisms exist to disable or remove	10	
§ 164.312(a)(2)(ii)	164.312(a)	Emergency access procedure (Required)	Establish (and implement as needed) procedures for obtaining necessary electronic protected health information during an emergency.	Functional	Intersects With	Removal of Temporary / Emergency Accounts	IAC-15.2	temporary and emergency accounts after an organization-defined time period for each type of account. Mechanisms exist to establish and control "emergency	3	
				Functional	Equal	Emergency Accounts	IAC-15.9	access only" accounts. Mechanisms exist to develop, document and maintain	10	
§ 164.312(a)(2)(iii)	164.312(a)	Automatic logoff	Implement electronic procedures that terminate an electronic session after a predetermined time of inactivity.	Functional	Intersects With	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	5	
		(Addressable)	predetermined time of mactivity.	Functional	Intersects With	Session Termination	IAC-25	Automated mechanisms exist to log out users, both locally on the network and for remote sessions, at the end of the session or after an organization-defined period of inactivity.	5	



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HIPAA-HITECH FDE #	NIST SP 800- 66 R2	HIPAA-HITECH FDE Name	HIPAA-HITECH Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF#	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
§ 164.312(a)(2)(iv)	164.312(a)	Encryption and decryption (Addressable)	Implement a mechanism to encrypt and decrypt electronic protected health information.	Functional	Subset Of	Use of Cryptographic Controls	CRY-01	Mechanisms exist to facilitate the implementation of cryptographic protections controls using known public standards and trusted cryptographic technologies.	10	
				Functional	Subset Of	Continuous Monitoring	MON-01	Mechanisms exist to facilitate the implementation of enterprise-wide monitoring controls.	10	
				Functional	Intersects With	System Generated Alerts	MON-01.4	Mechanisms exist to generate, monitor, correlate and respond to alerts from physical, cybersecurity, data privacy and supply chain activities to achieve integrated situational awareness.	5	
				Functional	Intersects With	Reviews & Updates	MON-01.8	Mechanisms exist to review event logs on an ongoing basis and escalate incidents in accordance with established timelines and procedures.	5	
			Implement hardware, software, and/or procedural mechanisms that record and examine activity in information systems that contain or use electronic protected health information.	Functional	Intersects With	Analyze and Prioritize Monitoring Requirements	MON-01.16	Mechanisms exist to assess the organization's needs for monitoring and prioritize the monitoring of assets, based on asset criticality and the sensitivity of the data it stores, transmits and processes. Mechanisms exist to configure systems to produce	5	
§ 164.312(b)	§ 164.312(b) 164.312(b)	Standard: Audit controls		Functional	Intersects With	Content of Event Logs	MON-03	event logs that contain sufficient information to, at a minimum: (1) Establish what type of event occurred; (2) When (date and time) the event occurred; (3) Where the event occurred; (4) The source of the event; (5) The outcome (success or failure) of the event; and (6) The identity of any user/subject associated with the event.	5	
				Functional	Intersects With	Audit Trails	MON-03.2	Mechanisms exist to link system access to individual users or service accounts.	5	
				Functional	Intersects With	Anomalous Behavior	MON-16	Mechanisms exist to detect and respond to anomalous behavior that could indicate account compromise or other malicious activities. No applicable SCF control	5	
§ 164.312(c)	164.312(c)	Standard: Integrity	[no content]	Functional	No Relationship	N/A Publishing Cybersecurity &	N/A	Mechanisms exist to establish, maintain and	N/A	
				Functional	Subset Of	Data Protection Documentation	GOV-02	disseminate cybersecurity & data protection policies, standards and procedures. Mechanisms exist to facilitate the implementation of	10	
§ 164.312(c)(1)	164.312(c)	N/A	Implement policies and procedures to protect electronic protected health information from improper alteration or destruction.	Functional	Subset Of	Data Protection	DCH-01	data protection controls.	10	
				Functional	Intersects With	Sensitive / Regulated Data Protection	DCH-01.2	Mechanisms exist to protect sensitive/regulated data wherever it is stored.	5	
			ion: m to Implement electronic mechanisms to corroborate that electronic protected lectronic health information has not been altered or destroyed in an unauthorized lealth manner. ion	Functional	Intersects With	Sensitive / Regulated Data Access Enforcement	CFG-08	Mechanisms exist to configure systems, applications and processes to restrict access to sensitive/regulated data.	5	
		Implementation specification: Mechanism to authenticate electronic protected health information (Addressable)		Functional	Intersects With	Sensitive / Regulated Data Actions	CFG-08.1	Automated mechanisms exist to generate event logs whenever sensitive/regulated data is collected, created, updated, deleted and/or archived.	5	
§ 164.312(c)(2)	164.312(c)			Functional	Intersects With	File Integrity Monitoring (FIM)	MON-01.7	Mechanisms exist to utilize a File Integrity Monitor (FIM), or similar change-detection technology, on critical assets to generate alerts for unauthorized modifications.	5	
		(Addressusie)		Functional	Intersects With	Privileged User Oversight	MON-01.15	Mechanisms exist to implement enhanced activity monitoring for privileged users.	5	
				Functional	Intersects With	Anomalous Behavior	MON-16	Mechanisms exist to detect and respond to anomalous behavior that could indicate account compromise or other malicious activities.	5	
				Functional	Subset Of	Human Resources Security Management	HRS-01	Mechanisms exist to facilitate the implementation of personnel security controls.	10	
				Functional	Intersects With	Personnel Screening	HRS-04	Mechanisms exist to manage personnel security risk by screening individuals prior to authorizing access.	5	
				Functional	Intersects With	Identity Proofing (Identity	IAC-28	Mechanisms exist to verify the identity of a user before issuing authenticators or modifying access permissions.	5	
§ 164.312(d)	164.312(d)	Standard: Person or entity authentication	Implement procedures to verify that a person or entity seeking access to electronic protected health information is the one claimed.		Intersects With	Verification) Identity Evidence		Mechanisms exist to require evidence of individual identification to be presented to the registration authority.	5	
				Functional	Intersects With	Identity Evidence Validation & Verification	IAC-28.3	Mechanisms exist to require that the presented identity evidence be validated and verified through organizational-defined methods of validation and verification. Mechanisms exist to facilitate the implementation of	5	
				Functional	Subset Of	Third-Party Management	TPM-01	third-party management controls.	10	
§ 164.312(e)		Standard: Transmission security	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control Mechanisms exist to develop decument and maintain	N/A	
			Implement technical security measures to guard against unauthorized access to	Functional	Intersects With	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards. Cryptographic mechanisms exist to protect the	5	
§ 164.312(e)(1)	164.312(e)(1)	N/A	electronic protected health information that is being transmitted over an electronic communications network.	Functional	Intersects With	Transmission Confidentiality Network Security Controls	CRY-03	confidentiality of data being transmitted. Mechanisms exist to develop, govern & update procedures to facilitate the implementation of Network	5	
				Functional	Subset Of	(NSC)	NET-01	Security Controls (NSC).	10	
§ 164.312(e)(2)		Implementation specifications:	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control Mechanisms exist to develop, document and maintain	N/A	
54640401 1/51/2		Integrity controls	Implement security measures to ensure that electronically transmitted	Functional	Intersects With	System Hardening Through Baseline Configurations	CFG-02	secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards. Cryptographic mechanisms exist to protect the integrity	5	
§ 164.312(e)(2)(i)		(Addressable)	electronic protected health information is not improperly modified without detection until disposed of.	Functional	Intersects With	Transmission Integrity	CRY-04	of data being transmitted.	5	



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HIPAA-HITECH FDE #	NIST SP 800- 66 R2	HIPAA-HITECH FDE Name	HIPAA-HITECH Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF#	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
				Functional	Subset Of	Network Security Controls (NSC)	NET-01	Mechanisms exist to develop, govern & update procedures to facilitate the implementation of Network Security Controls (NSC).	10	
				Functional	Intersects With	System Hardening Through Baseline Configurations	CFG-02	Mechanisms exist to develop, document and maintain secure baseline configurations for technology platforms that are consistent with industry-accepted system hardening standards.	5	
			Implement a mechanism to encrypt electronic protected health information	Functional	Subset Of	Use of Cryptographic Controls	CRY-01	Mechanisms exist to facilitate the implementation of cryptographic protections controls using known public standards and trusted cryptographic technologies.	10	
§ 164.312(e)(2)(ii)		Encryption (Addressable)	whenever deemed appropriate.	Functional	Intersects With	Service Delivery (Business Process Support)	OPS-03	Mechanisms exist to define supporting business processes and implement appropriate governance and service management to ensure appropriate planning, delivery and support of the organization's technology capabilities supporting business functions, workforce, and/or customers based on industry-recognized standards to achieve the specific goals of the process area.	5	
§ 164.314	164.314	Organizational requirements	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.314(a)	164.314(a)	N/A	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.314(a)(1)	164.314(a)	Standard: Business associate contracts or other arrangements	The contract or other arrangement required by § 164.308(b)(3) must meet the requirements of paragraph (a)(2)(i), (a)(2)(ii), or (a)(2)(iii) of this section, as applicable.	Functional	Subset Of	Statutory, Regulatory & Contractual Compliance	CPL-01	Mechanisms exist to facilitate the identification and implementation of relevant statutory, regulatory and contractual controls. No applicable SCF control	10	
§ 164.314(a)(2)	164.314(a)	Implementation specifications (Required)	[no content]	Functional	No Relationship	N/A	N/A		N/A	
§ 164.314(a)(2)(i)	164.314(a)	Business associate contracts	The contract must provide that the business associate will—	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.314(a)(2)(i)(A)	164.314(a)	N/A	Comply with the applicable requirements of this subpart;	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.314(a)(2)(i)(B)	164.314(a)	N/A	In accordance with § 164.308(b)(2), ensure that any subcontractors that create, receive, maintain, or transmit electronic protected health information on behalf of the business associate agree to comply with the applicable requirements of this subpart by entering into a contract or other arrangement that complies with this section; and	Functional	Equal	Contract Flow-Down Requirements	TPM-05.2	Mechanisms exist to ensure cybersecurity & data privacy requirements are included in contracts that flow-down to applicable sub-contractors and suppliers.	10	
§ 164.314(a)(2)(i)(C)	164.314(a)	N/A	Report to the covered entity any security incident of which it becomes aware, including breaches of unsecured protected health information as required by § 164.410.	Functional	Equal	Security Compromise Notification Agreements	TPM-05.1	Mechanisms exist to compel External Service Providers (ESPs) to provide notification of actual or potential compromises in the supply chain that can potentially affect or have adversely affected systems, applications and/or services that the organization utilizes.	10	
§ 164.314(a)(2)(ii)	164.314(a)	Other arrangements	The covered entity is in compliance with paragraph (a)(1) of this section if it has another arrangement in place that meets the requirements of § 164.504(e)(3).	Functional	Subset Of	Statutory, Regulatory & Contractual Compliance	CPL-01	Mechanisms exist to facilitate the identification and implementation of relevant statutory, regulatory and	10	
		Business associate	The requirements of paragraphs (a)(2)(i) and (a)(2)(ii) of this section apply to the contract or other arrangement between a business associate and a	Functional	Intersects With	Third-Party Contract Requirements	TPM-05	contractual controls. Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	5	
§ 164.314(a)(2)(iii)	164.314(a)	contracts with subcontractors	subcontractor required by § 164.308(b)(4) in the same manner as such requirements apply to contracts or other arrangements between a covered entity and business associate.	Functional	Intersects With	Contract Flow-Down Requirements	TPM-05.2	Mechanisms exist to ensure cybersecurity & data privacy requirements are included in contracts that flow-down to applicable sub-contractors and suppliers.	5	
§ 164.314(b)	164.314(b)	N/A	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.314(b)(1)	164.314(b)		Except when the only electronic protected health information disclosed to a plan sponsor is disclosed pursuant to § 164.504(f)(1)(ii) or (iii), or as authorized under § 164.508, a group health plan must ensure that its plan documents provide that the plan sponsor will reasonably and appropriately safeguard electronic protected health information created, received, maintained, or transmitted to or by the plan sponsor on behalf of the group health plan.	Functional	Equal	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	10	
§ 164.314(b)(2)	164.314(b)	Implementation specifications (Required)	The plan documents of the group health plan must be amended to incorporate provisions to require the plan sponsor to—	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.314(b)(2)(i)	164.314(b)	N/A	Implement administrative, physical, and technical safeguards that reasonably and appropriately protect the confidentiality, integrity, and availability of the electronic protected health information that it creates, receives, maintains, or transmits on behalf of the group health plan;	Functional	Equal	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	10	
§ 164.314(b)(2)(ii)	164.314(b)	N/A	Ensure that the adequate separation required by § 164.504(f)(2)(iii) is supported by reasonable and appropriate security measures;	Functional	Equal	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	10	
§ 164.314(b)(2)(iii)	164.314(b)	N/A	Ensure that any agent to whom it provides this information agrees to implement reasonable and appropriate security measures to protect the information; and	Functional	Equal	Third-Party Contract Requirements	TPM-05	Mechanisms exist to require contractual requirements for cybersecurity & data privacy requirements with third-parties, reflecting the organization's needs to protect its systems, processes and data.	10	
§ 164.314(b)(2)(iv)	164.314(b)	N/A	Report to the group health plan any security incident of which it becomes aware.	Functional	Equal	Security Compromise Notification Agreements	TPM-05.1	Mechanisms exist to compel External Service Providers (ESPs) to provide notification of actual or potential compromises in the supply chain that can potentially affect or have adversely affected systems, applications and/or services that the organization utilizes.	10	
§ 164.316	164.316	Policies and procedures and documentation	A covered entity or business associate must, in accordance with § 164.306:	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
		requirements Standard: Policies and	Implement reasonable and appropriate policies and procedures to comply with the standards, implementation specifications, or other requirements of this subpart, taking into account those factors specified in § 164.306(b)(2)(i), (ii), and (iv). This standard is not to be construed to permit or excuse an action that	Functional	Subset Of	Cybersecurity & Data Protection Governance Program	GOV-01	Mechanisms exist to facilitate the implementation of cybersecurity & data protection governance controls.	10	
§ 164.316(a)	164.316(a)	procedures	violates any other standard, implementation specification, or other requirements of this subpart. A covered entity or business associate may change its policies and procedures at any time, provided that the changes are documented and are implemented in accordance with this subpart.	Functional	Subset Of	Publishing Cybersecurity & Data Protection Documentation	GOV-02	Mechanisms exist to establish, maintain and disseminate cybersecurity & data protection policies, standards and procedures.	10	
§ 164.316(b)	164.316(b)	N/A	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.316(b)(1)	164.316(b)	N/A	[no content]	Functional	No Relationship	N/A Publishing Cybersecurity &	N/A	No applicable SCF control Mechanisms exist to establish, maintain and	N/A	
§ 164.316(b)(1)(i)	164.316(b)	Standard: Documentation	Maintain the policies and procedures implemented to comply with this subpart in written (which may be electronic) form; and	Functional	Subset Of	Data Protection Documentation	GOV-02	disseminate cybersecurity & data protection policies, standards and procedures.	10	



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HIPAA-HITECH FDE #	NIST SP 800- 66 R2	HIPAA-HITECH FDE Name	HIPAA-HITECH Focal Document Element (FDE) Description	STRM Rationale	STRM Relationship	SCF Control	SCF#	Secure Controls Framework (SCF) Control Description	Strength of Relationship (optional)	Notes (optional)
§ 164.316(b)(1)(ii)	164.316(b)	N/A	If an action, activity or assessment is required by this subpart to be documented, maintain a written (which may be electronic) record of the action, activity, or assessment.	Functional	Intersects With	Periodic Review & Update of Cybersecurity & Data Protection Program	GOV-03	Mechanisms exist to review the cybersecurity & data privacy program, including policies, standards and procedures, at planned intervals or if significant changes occur to ensure their continuing suitability, adequacy and effectiveness.	3	
\$ 104.310(b)(1)(ii)	104.310(0)	N/A		Functional	Intersects With	Cybersecurity & Data Protection Assessments	CPL-03	Mechanisms exist to ensure managers regularly review the processes and documented procedures within their area of responsibility to adhere to appropriate cybersecurity & data protection policies, standards and other applicable requirements.	3	
§ 164.316(b)(2)	164.316(b)	Implementation specifications:	[no content]	Functional	No Relationship	N/A	N/A	No applicable SCF control	N/A	
§ 164.316(b)(2)(i)	164.316(b)	Time limit (Required)	Retain the documentation required by paragraph (b)(1) of this section for 6 years from the date of its creation or the date when it last was in effect, whichever is later.	Functional	Equal	Media & Data Retention	DCH-18	Mechanisms exist to retain media and data in accordance with applicable statutory, regulatory and contractual obligations.	10	
				Functional	Intersects With	Standardized Operating Procedures (SOP)	OPS-01.1	Mechanisms exist to identify and document Standardized Operating Procedures (SOP), or similar documentation, to enable the proper execution of day-to-day / assigned tasks.	5	
§ 164.316(b)(2)(ii)	164.316(b)	Availability (Required)	Make documentation available to those persons responsible for implementing the procedures to which the documentation pertains.	Functional	Intersects With	Service Delivery (Business Process Support)	OPS-03	Mechanisms exist to define supporting business processes and implement appropriate governance and service management to ensure appropriate planning, delivery and support of the organization's technology capabilities supporting business functions, workforce, and/or customers based on industry-recognized standards to achieve the specific goals of the process area.	5	
§ 164.316(b)(2)(iii)	164.316(b)	Updates (Required)	Review documentation periodically, and update as needed, in response to environmental or operational changes affecting the security of the electronic	Functional	Intersects With	Periodic Review & Update of Cybersecurity & Data Protection Program	GOV-03	Mechanisms exist to review the cybersecurity & data privacy program, including policies, standards and procedures, at planned intervals or if significant changes occur to ensure their continuing suitability, adequacy and effectiveness.	5	
		Opuates (nequireu)	protected health information.	Functional	Intersects With	Cybersecurity & Data Protection Controls Oversight	CPL-02	Mechanisms exist to provide a cybersecurity & data protection controls oversight function that reports to the organization's executive leadership.	5	



Secure Controls Framework (SCF)