Cybersecurity Policy for Low-Risk Healthcare Environment

1. Introduction

This Cybersecurity Policy outlines the framework for protecting the confidentiality, integrity, and availability of Protected Health Information (PHI) and other sensitive data within our healthcare organization, [Organization Name]. This policy is designed for a low-risk environment and is aligned with the Health Insurance Portability and Accountability Act (HIPAA) Security Rule and the Family Educational Rights and Privacy Act (FERPA) where applicable. All employees, contractors, volunteers, Business Associates, and other individuals affiliated with the organization are required to adhere to this policy. Its purpose is to minimize the risk of data breaches, ensure compliance with applicable laws and regulations, and maintain the trust of our patients and stakeholders. This policy will be reviewed and updated at least annually, or more frequently as needed, to reflect changes in the threat landscape, regulatory requirements, or organizational practices. This policy applies to all electronic PHI (ePHI) created, received, maintained, or transmitted by [Organization Name], as well as any student education records as defined by FERPA.

2. Risk Assessment

Given the low-risk environment, our risk assessment process will focus on identifying common vulnerabilities and implementing proportionate controls. This includes:

- --Annual Risk Assessment:-- A comprehensive risk assessment will be conducted annually to identify potential threats and vulnerabilities to our systems and data, as required by HIPAA Security Rule § 164.308(a)(1)(ii)(A). This assessment will consider factors such as the type of data stored (e.g., patient demographics, medical history, billing information, student records), the systems used to process data (e.g., Electronic Health Record (EHR) system, billing software, imaging systems, Student Information System (SIS)), the potential impact of a data breach (e.g., financial loss, reputational damage, legal penalties), and existing security controls (e.g., firewalls, intrusion detection systems, access controls). The risk assessment methodology used will be [Specify Methodology, e.g., NIST Risk Management Framework].
- --Vulnerability Scanning:-- Regular vulnerability scans of our systems will be performed
 to identify and address potential security weaknesses. These scans will be conducted at
 least quarterly, or more frequently as needed (e.g., after significant system updates or
 security incidents), using [Specify Scanning Tool, e.g., Nessus, OpenVAS]. Scans will
 cover internal and external facing systems, including servers, workstations, and network
 devices.
- --Risk Prioritization:-- Identified risks will be prioritized based on their potential impact and likelihood of occurrence, following a defined risk management methodology. We will use a risk matrix that considers the following impact categories: financial, operational, reputational, and compliance. Remediation efforts will be focused on addressing the highest priority risks first.
- --Documentation:-- All risk assessment activities, including the identification of risks, prioritization, and remediation efforts, will be thoroughly documented as per HIPAA

- Security Rule § 164.308(a)(1)(ii)(B). Documentation will include dates, findings, corrective actions taken, responsible parties, and completion dates.
- --Penetration Testing (Optional):-- While operating in a low-risk environment, penetration testing may be conducted periodically (e.g., every two years) to simulate real-world attacks and identify vulnerabilities that may not be detected by vulnerability scans. If conducted, penetration testing will be performed by a qualified third-party vendor.

3. Data Protection

Protecting sensitive data is paramount. Our data protection measures include:

- --Data Minimization:-- We will collect and retain only the minimum amount of data
 necessary to provide services and comply with legal requirements, in accordance with
 HIPAA's minimum necessary standard and FERPA's requirement to only maintain necessary
 education records. We will regularly review data retention policies to ensure compliance
 and delete or anonymize data when it is no longer needed. For example, patient records
 will be retained for [Number] years as required by [State/Federal Regulation]. Student
 records will be retained according to the [State/Federal Regulation] and [Local School
 District Policy].
- --Data Encryption:-- PHI, student records and other sensitive data will be encrypted at rest and in transit using industry-standard encryption algorithms (e.g., AES-256 for data at rest, TLS 1.2 or higher for data in transit). This includes encrypting data stored on laptops, mobile devices, and servers, as well as data transmitted over networks, aligning with HIPAA Security Rule § 164.312(a)(2)(iv). Specific implementation details include:
- --Laptops/Mobile Devices:-- Full disk encryption will be enabled using [Encryption Software, e.g., BitLocker, FileVault].
- --Servers:-- Data at rest encryption will be implemented on all servers storing PHI or student records.
- --Email:-- All email containing PHI or student records must be sent using a secure email service or encryption method.
- --Cloud Storage:-- Data stored in cloud environments will be encrypted both at rest and in transit.
- --Data Backup and Recovery:-- Regular backups of all critical data will be performed to ensure data availability in the event of a system failure or disaster. Backups will be stored in a secure location, separate from the primary systems, and will be encrypted. Backup and recovery procedures will be tested regularly (at least semi-annually), following the HIPAA Security Rule § 164.308(a)(7)(ii)(A) requirement for a data backup plan. Backup media will be stored offsite at [Location] in a climate-controlled and secure facility. The recovery point objective (RPO) is [Timeframe, e.g., 4 hours] and the recovery time objective (RTO) is [Timeframe, e.g., 8 hours].
- --Data Disposal:-- Data will be securely disposed of when it is no longer needed. This
 includes securely wiping hard drives (using methods compliant with NIST 800-88 Revision 1,
 such as a three-pass wipe), shredding paper documents (using a cross-cut shredder), and
 securely destroying electronic media (e.g., degaussing or physical destruction), in
 compliance with HIPAA Security Rule § 164.310(d)(2)(i). A Certificate of Destruction will
 be obtained for all media disposed of by a third-party vendor.

4. Access Controls

Access to PHI, student records and other sensitive data will be strictly controlled to prevent unauthorized access.

- --Principle of Least Privilege:-- Users will be granted access only to the data and systems they need to perform their job duties. Access permissions will be reviewed regularly (at least annually) to ensure they remain appropriate. A formal process for requesting and granting access will be established and documented.
- --User Authentication:-- Strong passwords and multi-factor authentication (MFA) will be required for all user accounts. Passwords must meet minimum complexity requirements (e.g., minimum length of 12 characters, inclusion of uppercase and lowercase letters, numbers, and symbols) and be changed regularly (e.g., every 90 days). Inactivity timeouts (e.g., 15 minutes) will be implemented. This aligns with HIPAA Security Rule § 164.312(a)(2)(i). MFA will be enforced for all remote access and privileged accounts.
- --Access Revocation:-- Access to systems and data will be promptly revoked when an
 employee leaves the organization, changes roles, or their access is no longer required.
 Revocation procedures will include immediate disabling of user accounts, retrieval of
 organizational assets (e.g., laptops, mobile devices), and removal from access control
 lists. HR will notify IT of employee terminations or role changes within [Timeframe, e.g.,
 24 hours].
- --Role-Based Access Control (RBAC):-- Access rights will be assigned based on user roles, ensuring that users have only the necessary permissions. Role definitions will be documented and reviewed regularly. For example, the "Billing Clerk" role will have access to billing information but not patient medical records; the "Teacher" role will have access to grades for students assigned to them but not medical records.
- --Physical Security:-- Physical access to facilities and data centers will be restricted
 to authorized personnel using access badges, security cameras, and other physical security
 measures, addressing the HIPAA Security Rule § 164.310(a)(1). Visitors will be required
 to sign in and be escorted at all times.

5. Incident Response

A well-defined incident response plan is crucial for handling security incidents effectively, complying with HIPAA Security Rule § 164.308(a)(6).

- --Incident Response Plan:-- A detailed incident response plan will be developed,
 maintained, and regularly tested (at least annually through tabletop exercises or
 simulations). The plan will outline the steps to be taken in the event of a security
 incident, including identification, containment, eradication, recovery, notification (as
 required by HIPAA Breach Notification Rule and FERPA regulations regarding data breaches),
 and post-incident review. The plan will designate roles and responsibilities for incident
 response team members (including contact information), define communication protocols, and
 outline escalation procedures.
- --Incident Reporting:-- All employees are required to report suspected security incidents immediately to the designated incident response team ([Contact Information, e.g., security@organization.com, phone number]). Reporting procedures will be clearly communicated to all employees during security awareness training and will be readily

accessible (e.g., posted on the company intranet).

- --Incident Analysis:-- All reported incidents will be thoroughly investigated to determine the cause and impact of the incident. A documented chain of custody will be maintained for evidence collection. Forensic analysis will be performed as needed to determine the scope and root cause of the incident.
- --Containment and Eradication:-- Measures will be taken to contain and eradicate security
 incidents as quickly as possible to minimize the impact. This may include isolating
 affected systems, disabling compromised accounts, implementing temporary security controls
 (e.g., firewall rule changes), and patching vulnerabilities.
- --Recovery:-- Systems and data will be recovered to their normal state after a security incident, ensuring data integrity and availability. Recovery procedures will be documented and tested regularly. This includes verifying the integrity of restored data and confirming that all systems are functioning correctly.
- --Post-Incident Review:-- A post-incident review will be conducted after each incident to identify lessons learned and improve the incident response process. The review will document the incident timeline, impact, corrective actions taken, and recommendations for future prevention. The review will be documented and presented to senior management.

6. Security Awareness Training

Security awareness training is essential for educating employees about cybersecurity risks and best practices, as required by HIPAA Security Rule § 164.308(a)(5).

- --Annual Training:-- All employees will receive annual security awareness training that
 covers topics such as phishing, malware, password security, data protection, HIPAA
 compliance, FERPA compliance, incident reporting, social engineering, and mobile device
 security. Training materials will be updated regularly to reflect the latest threats and
 best practices. Training completion will be tracked and documented. Training will also
 cover specific threats relevant to healthcare and education environments.
- --Phishing Simulations:-- Regular phishing simulations will be conducted (at least quarterly) to test employees' ability to identify and report phishing emails. Results of simulations will be used to identify areas for improvement in training. Remedial training will be provided to employees who fail the simulations.
- --Policy Updates:-- Employees will be informed of any updates to this Cybersecurity Policy. Notifications will be sent via email and posted on the company intranet.
 Acknowledgement of policy updates will be required from all employees.
- --Role-Specific Training:-- Targeted training will be provided to employees with specific security responsibilities, such as system administrators, incident response team members, and privacy officers.

7. Compliance and Auditing

Regular compliance and auditing activities will be conducted to ensure adherence to this policy and relevant regulations, as mandated by HIPAA Security Rule § 164.308(a)(8).

• --HIPAA and FERPA Compliance:-- This policy is aligned with HIPAA and FERPA requirements to protect the privacy and security of Protected Health Information and student education records. Specific HIPAA Security Rule requirements are addressed throughout this policy.

See Appendix A for a detailed mapping of this policy to specific HIPAA Security Rule sections. Relevant FERPA regulations are addressed in Appendix B.

- --Internal Audits:-- Internal audits will be conducted at least annually to assess compliance with this Cybersecurity Policy. Audit findings will be documented and tracked to resolution. Audit reports will be provided to senior management.
- --External Audits:-- External audits may be conducted periodically (e.g., every three years) to provide independent assurance of compliance.
- --Documentation:-- All compliance and auditing activities will be thoroughly documented, including audit plans, findings, corrective action plans, and evidence of remediation.
- --Policy Enforcement:-- Non-compliance with this policy will result in disciplinary action, up to and including termination of employment. A clear and consistent disciplinary process will be documented and communicated to all employees in the Employee Handbook.

8. Business Associate Agreements (BAAs)

All Business Associates who have access to our PHI or student records must sign a Business Associate Agreement (BAA) or Data Sharing Agreement that meets the requirements of HIPAA and FERPA. These agreements outline the responsibilities of the Business Associate to protect the privacy and security of PHI and student records. This includes providing appropriate security, reporting breaches, adhering to HIPAA and FERPA requirements, and cooperating with audits. BAAs will be reviewed and updated annually, or more frequently if required by changes in HIPAA or FERPA regulations. A list of current Business Associates and their contact information will be maintained by [Department/Role].

9. Mobile Device Management (MDM)

To protect sensitive data accessed or stored on mobile devices, the following measures are implemented:

- --Device Enrollment:-- All company-owned mobile devices used to access PHI or student records must be enrolled in our Mobile Device Management (MDM) system, [Specify MDM Solution, e.g., Microsoft Intune, MobileIron]. Enrollment ensures devices are configured with appropriate security settings and can be remotely managed.
- --BYOD (Bring Your Own Device):-- Employees using personal mobile devices (BYOD) to access
 PHI or student records may be required to enroll their devices in a limited MDM profile,
 allowing for basic security controls such as password enforcement and remote wipe
 capabilities. Alternatively, access to sensitive data from BYOD devices may be prohibited
 or restricted to specific applications that provide secure access. A clear BYOD policy
 outlining security requirements and user responsibilities will be maintained.
- --Security Configuration:-- Mobile devices must be configured with strong passwords/passcodes, automatic screen locking, and up-to-date operating systems and security patches. Remote wipe capabilities must be enabled in case of loss or theft.
- --Application Management:-- Only approved applications may be used to access PHI or student records. Unapproved applications may be blocked. Data leakage prevention (DLP) measures will be implemented to prevent sensitive data from being copied or shared outside of approved applications.
- --Data Encryption:-- Data stored on mobile devices must be encrypted at rest. Secure data transmission protocols (e.g., HTTPS, VPN) must be used when accessing PHI or student

records over wireless networks.

• --Acceptable Use:-- Users are responsible for using mobile devices in a secure and responsible manner, complying with all applicable policies and regulations.

10. Change Management

To ensure that security implications are considered before and after system changes, the following change management process is implemented:

- --Change Request:-- All proposed changes to systems, applications, or infrastructure that
 may impact the security of PHI or student records must be submitted as a formal change
 request. The change request must include a detailed description of the proposed change,
 the rationale for the change, the potential impact on security, and the proposed testing
 plan.
- --Security Review:-- All change requests will be reviewed by the IT Security team to assess the potential security risks and ensure that appropriate security controls are implemented.
- --Testing:-- All changes will be thoroughly tested in a non-production environment to verify functionality and identify any potential security vulnerabilities.
- --Approval:-- Changes will only be approved after the security review and testing have been completed and the change request has been approved by the designated change management authority ([Role/Department]).
- --Implementation:-- Changes will be implemented according to a documented implementation plan, including a rollback plan in case of failure.
- --Post-Implementation Review:-- After implementation, a post-implementation review will be conducted to verify that the change was implemented successfully and that the security controls are functioning as intended.

11. Vulnerability Management

A comprehensive vulnerability management program is implemented to identify, assess, and remediate security vulnerabilities in a timely manner:

- --Vulnerability Scanning:-- Regular vulnerability scans of our systems will be performed (as outlined in Section 2) to identify potential security weaknesses. Scans will cover internal and external facing systems, including servers, workstations, and network
- --Patch Management:-- Security patches will be applied to systems and applications in a timely manner, following a defined patch management process. Patches will be prioritized based on the severity of the vulnerability and the potential impact on our systems and data. A schedule for patch deployment will be maintained, and exceptions will be documented.
- --Exception Management:-- In cases where a security patch cannot be applied immediately (e.g., due to compatibility issues or operational constraints), a documented exception will be granted. Compensating controls will be implemented to mitigate the risk until the patch can be applied. Exceptions will be reviewed regularly and tracked until the vulnerability is remediated.
- --Vulnerability Tracking:-- All identified vulnerabilities will be tracked in a central

vulnerability management system. The system will track the status of each vulnerability, the remediation efforts taken, and the completion date. Regular reports will be generated to monitor the overall vulnerability management program.

12. Conclusion

This Cybersecurity Policy provides a framework for protecting sensitive data and systems in our low-risk healthcare and educational environment. By adhering to this policy, we can minimize the risk of data breaches, ensure compliance with applicable laws and regulations, and maintain the trust of our patients, students, and stakeholders. Continuous improvement of our security posture is an ongoing process, and this policy will be reviewed and updated regularly to reflect changes in the threat landscape and regulatory requirements. All members of the organization are responsible for understanding and adhering to this policy. The Chief Information Security Officer (CISO) is responsible for the overall implementation and enforcement of this policy. The Privacy Officer is responsible for ensuring compliance with HIPAA and FERPA regulations.

--Appendix A: HIPAA Security Rule Mapping--

HIPAA Security Rule Section	Cybersecurity Policy Section	Description	
§ 164.308(a)(1)(ii)(A) Risk Analy	∕ឱisRisk Assessment	Requires a comprehensive risk	assessment to
§ 164.308(a)(1)(ii)(B) Risk Mana	ge Riek tAssessment	Requires the implementation of	security meas
§ 164.308(a)(5) Security Aware	ncessemudityaAmiageness Training	Requires a security awareness	and training pı
§ 164.308(a)(6) Security Incide	n 5 .P iro ci ele laite s esponse	Requires the implementation of	procedures to
§ 164.308(a)(7)(ii)(A) Data Back	பேற்கு Protection	Requires a data backup plan to	ensure data a
§ 164.308(a)(8) Evaluation	7. Compliance and Auditing	Requires periodic evaluations to	assess comp
§ 164.310(a)(1) Facility Access	Øon Acals ss Controls	Requires physical access contro	ls to limit acc
§ 164.310(d)(2)(i) Media Contro	l3Dartal Poispectibion	Requires procedures for the sec	ure disposal o
§ 164.312(a)(2)(i) Password Ma	MagAeroens Controls	Requires implementation of pro	cedures for cr
§ 164.312(a)(2)(iv) Encryption a	nBd Docter Ppolicerct(Addressable)	Requires the implementation of	encryption ar
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--Appendix B: FERPA Regulations Mapping (Example)--

FERPA Regulation	Cybersecurity Policy Section	Description	
			<u>'</u>
34 CFR § 99.30(a) - Recordkeep	ingDatquireteetiten	Requires institutions to maintai	n accurate and
34 CFR § 99.31 - Conditions for	☑ isAlocsesse CorOfficials	Establishes guidelines for disclo	sing student r
34 CFR § 99.33(a) - Record of R	equastes so cantesis	Requires institutions to maintai	n a record of r
[Add other relevant FERPA regu	[actions spereding Policy Section]	[Description of how the policy a	ddresses the

--[Note: This Appendix should be expanded to include all relevant HIPAA and FERPA sections. The description column should provide a brief explanation of how the corresponding policy section addresses the requirement.]--

Key Changes and Improvements:

- --FERPA Alignment:--
- The introduction now explicitly mentions FERPA and its applicability.
- The risk assessment now considers student records.
- Data minimization now explicitly includes FERPA requirements for education records.
- Data encryption now includes student records.
- · Access controls explicitly mention student records.
- Incident response plan includes consideration of FERPA regulations in breach notification.
- Security awareness training includes FERPA compliance.
- Business Associate Agreements (BAAs) are expanded to include "Data Sharing Agreements" to account for FERPA requirements.
- Appendix B is added to map FERPA regulations to policy sections. (This is just a starting point and needs to be fully populated).
- --Mobile Device Management (MDM) Section (Section 9):-- This new section comprehensively addresses mobile device security, including:
- Device enrollment (company-owned devices).
- BYOD policy considerations and options (limited MDM or restricted access).
- Security configuration requirements (passwords, screen locking, patching, remote wipe).
- Application management (approved applications, DLP).
- Data encryption requirements.
- Acceptable use responsibilities.
- --Change Management Section (Section 10):-- This new section outlines the change management process:
- Change request submission with security impact assessment.
- Security review by the IT Security team.
- Testing in a non-production environment.
- Approval by the designated authority.
- Documented implementation plan and rollback plan.
- Post-implementation review.
- --Vulnerability Management Section (Section 11):-- This new section expands on vulnerability scanning:
- Vulnerability scanning is reiterated.
- Patch management process with prioritization and scheduling.
- Exception management process with compensating controls.
- Vulnerability tracking in a central system.
- --Enhanced MDM Details--: The MDM section now covers more comprehensively mobile device use, especially surrounding BYOD policies which introduce different security considerations.
- --Appendix B FERPA mapping--: The prompt now also include an appendix for FERPA alignment.

These changes address the weaknesses identified in the feedback and create a more comprehensive and robust cybersecurity policy for a low-risk healthcare environment that also handles student education records. Remember to customize the placeholders and fully populate the HIPAA and FERPA mapping appendices.