Benchmarking
HIPAA Compliance

ABSTRACT

One of the nation’s largest academic medical centers is benchmarking its operations using internally developed software to improve privacy/confidentiality of protected health information (PHI) and to enhance data security to comply with HIPAA regulations. It is also coordinating the development of a web-based interactive product that can help hospitals, physician practices, and managed care organizations measure their compliance with HIPAA regulations.

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The challenges of protecting the confidentiality and security of health information at one of the nation’s largest academic medical centers prompted executives at the University of Iowa Health Care (UIHC) to create an interdisciplinary task force specifically charged with this responsibility. Initially convened two years ago, this advisory group meets on a regular basis and consists of representatives from throughout the enterprise (see table 1). By pooling resources with other agencies, this group created a multifaceted program designed to address Health Insurance Portability and Accountability Act (HIPAA) regulations. These collaborative efforts resulted in the development of a software product called “HIPAA Pathfinder” to assist healthcare organizations chart a course for regulatory compliance. This paper highlights the purpose and features of HIPAA Pathfinder and describes how it can be effectively utilized in various healthcare organizations.

KEYWORDS

HIPAA Compliance Benchmarking WebCT Training

Literature Review

The HIPAA legislation passed in 1996 has three parts for simplifying the complex administrative processes of today’s healthcare. The three dimensions of the Act include provisions governing Standards for Transactions/Code Sets, Privacy, and Security. While the regulations for Transactions/Code Sets and Privacy have been issued by the Department of Health and Human Services, the Security Standards had not yet been released when this article was submitted for publication.

One of the first activities undertaken by the UIHC task force was to conduct a thorough search for self-administering tools that perform gap analysis by identifying deficiencies in HIPAA compliance. Several products were commercially available, but they differed significantly in scope of features, and their prices ranged from a few hundred dollars to more than a hundred thousand dollars. As reported...
in Gartner Research (August 31, 2001), the three toolkits identified as most user-friendly are:

- NCHICA’s “HIPAA EarlyView”
- Healthlink’s “HIPAA TRAAC: A Viable Assessment Tool”
- “Xpediator: A Self-Administered HIPAA Assessment Tool”

HIPAA EarlyView is the result of collaborative efforts sponsored by NCHICA (North Carolina Healthcare Information and Communications Alliance). It focuses exclusively on the data security aspects of HIPAA and is marketed as a gap assessment tool with no interactive features. HIPAA TRAAC (Tool for Research and Assessment of Applications and Compliance) by Healthlink, a healthcare consulting firm, is a set of many separate components that operate in a transaction drill-down mode. Xpediator, marketed by Xpediate Consulting LLC, offers a more complete assortment of assessment tools, sample policies, and training modules. Even though Gartner Research cautions that Xpediator can be expensive for smaller healthcare organizations, it is offered on an application service provider basis to provide quick setup and a lower initial investment.

In addition to these licensed products, there are a variety of other discussion forums available on the Internet, such as those sponsored by the Healthcare Information and Management Systems Society (HIMSS) and the University HealthSystem Consortium (UHC). Although these resources are helpful, they do not fully address an organization’s needs to inexpensively monitor progress in achieving compliance, provide model policy/procedure templates, or assist in mandated staff training.

**Purpose of HIPAA Pathfinder**

The purpose of this initiative is to leverage the work done at UIHC to create a repository of best practices and benchmark compliance activities. This goal was addressed by the creation of an Internet-based product, “HIPAA Pathfinder,” which has the capability to optimize the collective efforts of multiple institutions focusing on compliance issues and to share their experiences. The software selected to enable this strategy is a web-based interactive tool called WebCT (Web Course Tools). The homepage leading to this program displays the HIPAA Pathfinder trademark, which resembles a compass. As illustrated in figure 1, navigating the implications of this far-reaching compliance legislation can be assisted by the functions listed on the left margin of the screen.

One of the primary components of HIPAA Pathfinder is an initial assessment to help organizations determine if their operations are governed by HIPAA regulations. For those who are affected by this federal legislation, it also provides a gap analysis and is designed to help monitor and document subsequent improvements in compliance. This software utilizes a secure website to allow participating organizations to share their HIPAA-compliant policies/procedures and provides unique capabilities to satisfy training requirements. A noteworthy feature of the HIPAA Pathfinder

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**Table 1. HIPAA Pathfinder Task Force**

The HIPAA Pathfinder Task Force at UIHC consists of an interdisciplinary team charged with the responsibility to assess implications of federal regulations for protecting the security and privacy of individually identifiable health information. As indicated by their functional titles listed below, the diverse backgrounds of these professionals enable them to address compliance regulations from a variety of perspectives. Members include:

- Privacy Officer
- Data Security Officer
- Legal Counsel
- Director, Health Information Management
- Director, Health Care Information Systems
- Physician Director, Clinical Informatics
- Director, Patient Fiscal and Registration Services
- Director, Community Medical Services
- Associate Director, Joint Office for Compliance
- Associate Director, Nursing
- Chief Executive Officer, Affiliated Rural Hospital
- Director, Telecommunications
- Director, Technical Operations
- Implementation Manager, Financial Systems
- Physician Director, Student Health
- Health Services Administrator
- Nurse Clinician
- Data Systems Manager
- Technical Writer
- Campus Security Officer, University of Iowa (ex-officio member)
- Graduate Research Assistant, Joint Office for Compliance (ex-officio member)
- PhD Candidate, Educational Design (ex-officio member)
- Masters Candidate, Educational Design (ex-officio member)

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is that it is designed for recurring use to document a chronology of improvements and encourage dynamic communication among security and privacy officers of participating organizations.

**Contents of HIPAA Pathfinder**

As shown in figure 2, the site map for HIPAA Pathfinder includes the following components:

**What’s New.** Since HIPAA Pathfinder is continually being refined to expand the content of its offerings and improve its ease of operation, a special section of the website is dedicated to highlighting enhancements to the software. This component of the program, entitled “What’s New,” also contains all the latest HIPAA clarifications and interpretations.

**Compliance Notebook.** Given the importance of maintaining documentation of all compliance activities, HIPAA Pathfinder facilitates the compilation of materials in electronic and hard copy format for audit purposes. The Compliance Notebook serves as a handy feature for healthcare executives to cross-reference their actual compliance with privacy and security regulations in the context of their organizational characteristics. Since the implications of the legislation vary depending upon the type of healthcare institution, HIPAA Pathfinder allows hospitals, physician practices, and managed care organizations to describe the uniqueness of their current practice. Each section of the Notebook includes assessment questions designed to determine the critical operational features of processes required to safeguard protected health information. As illustrated in figure 3, the structure provides links to the actual regulations, along with associated sample policies and procedures. The database also accommodates a reference pointer to any hard copy source documents related to HIPAA compliance. By preserving these documents in a single location, this computerized database provides a repository of all organizational policies and procedures related to patient confidentiality and security.

**Assessment Questionnaire.** To assist in the identification of non-compliant practices, HIPAA Pathfinder includes an Assessment Questionnaire that guides individuals unfamiliar with federal legislation to determine if their operations are governed by these regulations. If desired, the program can calculate a relative compliance score for an organization by comparing actual practice to mandated privacy/security provisions. HIPAA Pathfinder uses three types of questions: multiple choice, binary answer (True/False or Yes/No), and free text. By structuring the assessment questionnaire to utilize multiple choice and binary questions, the program can provide immediate feedback to the respondent concerning comparison data. Free text questions are used to capture descriptions of procedures that are maintained in the Compliance Notebook for future audits. A unique feature of the multiple-choice questions is the capability for respondents to describe their performance with respect to specific regulations. Answers in this category are assigned values based on a 10-point scale ranging from “Best of Class” or “Fully Implemented” to “Under
Consideration” or “Does Not Apply.” For example, the assessment question, “Do staff, maintenance, and vendor employees sign non-disclosure statements before being given access to PHI?” is graded according to the response. If the respondent indicates this process is “Only Partially Implemented,” then a score of “four” would be recorded in the database for this question. When operational improvements are subsequently implemented, the next iteration of the assessment may document a higher degree of compliance and yield an increased score.

Preemption Analysis. Since in some instances the state of Iowa regulations governing patient data confidentiality and security are more restrictive than federal guidelines, HIPAA Pathfinder includes a Preemption Analysis feature. It incorporates results of a study conducted by the State of Iowa Attorney General, Iowa Hospital Association, Iowa Medical Society, and other agencies to determine variance between federal and state regulations.

Sample Policies/Procedures. HIPAA Pathfinder provides a collection of policy and procedure templates that meet recommendations of the Iowa Health Information Privacy Task Force (HIPTF), the regulations of the state of Iowa, and HIPAA legislation. Participating organizations are encouraged to submit their policies and procedures for achieving compliance to the system administrator so they can be posted on the website. All organizational identifiers are removed from these documents to promote their use as model templates for others.

Online Communications. There are three modes of online communication available in HIPAA Pathfinder. The first mode is an “online chat” capability that permits instantaneous interaction among participants on topics of their choice. The second mode is a structured discussion list facilitated by a moderator. Third is an internal e-mail option for communicating with the moderator and with other participants.

Presentation Materials. HIPAA Pathfinder contains professionally prepared slide presentations that can be used for education of executives, clinical professionals, and general staff. These presentations include all materials necessary for a HIPAA coordinator to instruct healthcare personnel on the implications of complying with the regulations.

Training Sessions. This component of HIPAA Pathfinder consists of self-paced training, slide presentations, and video sessions, with provisions for registering and tracking individual progress in the modules. Audit reports can be generated to document staff training performance. At the completion of training exercises participants can also electronically sign documents that demonstrate their compliance with institutional regulations.

Management Reports. An ad hoc reporting tool allows peer organizations to anonymously benchmark their level of compliance with other participants throughout the state of Iowa. Comparative reports can also be produced from objective measures such as percentage of total staff who have completed training or the number of Chain of Trust Agreements that have been implemented to date. This benchmarking capability is designed to facilitate the recognition of trends among participating organizations to assist in identifying compliance areas that need to be examined more closely.

Related Resources. Since HIPAA Pathfinder is designed to serve as an entry portal to other compliance-related material, it provides links to more than 25 other sites on the Internet. These resources include websites supported by the federal government and a variety of other professional societies.

Software Platform for HIPAA Pathfinder

WebCT is online software designed for the development and delivery of learning resources via the Internet. Approximately 2,000 institutions throughout the world use WebCT to meet their distance learning needs or make course materials available to students outside of the regular classroom. WebCT was selected as the preferred platform for this compliance initiative because its capabilities closely matched the design criteria envisioned for HIPAA Pathfinder. Specifically, WebCT has the ability to store and distribute materials, manipulate content, evaluate staff training, track performance, and stimulate discussion among users.

Many online instructional tools are limited to basic-level or declarative information only. In the case of HIPAA regulations, for example, this instructional mode would merely explain the rules. HIPAA Pathfinder takes learning to the next level, aiming for a higher degree of understanding that leads to procedural knowledge. As students are presented with information in a training module, the best learning outcomes are achieved when the examples used in the instruction parallel the actual situation in which the principles will be used. This technique assists the learners in recognizing the value of the instruction and helps in their retention of the knowledge.

HIPAA Pathfinder uses a problem-based learning approach that presents realistic situations and challenges users to find solutions independently in the regulations and related documents. The training exercises include scenarios customized for various segments of staff to provide practical applications of HIPAA privacy and security principles. This approach develops cognitive flexibility and promotes personal competence, so staff are capable of applying the content to the specialized issues they face on the job.

WebCT can display content as separate pages or self-contained modules. Inside these modules the users can find all the subject matter related to the topic they are explor-
The widespread ramifications of HIPAA regulations have prompted the task force to approach leading healthcare associations in Iowa to determine their interest in pooling resources on this endeavor. As a result of these discussions, the Iowa Hospital Association and the Iowa Medical Society have expressed interest in further evaluating the advantages of collaborating with the UIHC on this long-term project. The possibility of expanding this potential alliance to include payer and managed care organizations is also being explored.

Many smaller hospitals and physician practices may benefit directly from this partnership by subscribing to the HIPAA Pathfinder. In addition to serving as a catalyst to launch their compliance activities, it can assist them in addressing privacy and security regulations without a substantial expenditure of time and money. Furthermore, the healthcare organizations participating in this alliance have the advantage of sharing best practices with the state’s only academic medical center.

**Conclusion**

Achieving HIPAA compliance requires a long-term commitment to implement processes that ensure privacy and security of protected health information. HIPAA Pathfinder is designed to support this sustained effort by providing a collection of useful benchmarking, communication, and educational tools for participating organizations. This software also serves a critical need by maintaining online documentation of baseline activities and subsequent improvements that will be essential in satisfying future queries from auditors.

Ultimately, this initiative has the potential to yield substantial benefits for more than just healthcare organizations within the state of Iowa. Over time, HIPAA Pathfinder may emerge as the premier tool for healthcare entities to document all regulatory activities. This innovative approach for sharing information via a secure website demonstrates the power that can result from synergistic efforts to address the monumental task of attaining HIPAA compliance.

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