

# Impact of Physician Engagement on Clinical Documentation Improvement Programs (AHIMA Practice Brief)

Save to myBoK

Physician engagement seems to be the buzzword in healthcare these days. Hospital administrators charged with various clinical improvement initiatives have come to realize that physician engagement is an essential element of success. While physician engagement in clinical documentation improvement (CDI) has its own challenges, the foundation of physician engagement as an industry-wide process has unifying objectives:

- Getting physicians involved early in the process
- Finding champions within the medical leadership
- Providing the necessary education to guide physicians to answer their own question of “What’s in it for me?”
- Sharing data-driven results and providing regular updates

While physician engagement is not a new concept, determining the best approach for a successful outcome can no longer be postponed. According to Pamela Hess, MA, RHIA, CDIP, CCS, CPC, an author and CDI director, “The recent implementation of ICD-10 offers additional opportunities to further specify the patient’s condition that enhances provider communication as well as accurate reimbursement.”<sup>1</sup> New reimbursement models being implemented now assess physician performance on the quality of care they provide—not quantity. This shift in compensation, as well as requirements for greater specificity of documentation, may be a good starting point to get physicians’ attention to focus on CDI program efforts—more accurate, precise, and timely documentation of the patient’s health problems that are being managed, evaluated, assessed, and treated equates to more accurate reimbursement received for the care provided.

No standard advice can be given on where to start the dialogue with physicians and how to succeed in gaining their ongoing trust in the CDI program efforts. As every healthcare organization strives to achieve the same goal of providing quality and safe patient care while maintaining costs, each organization faces boundaries imposed by the available technical and human capital resources as well as performance culture. These real or perceived boundaries may be overcome by employing best practice approaches of physician engagement that are centered around effective communication and ongoing interactions with physicians to promote buy-in of CDI programs.

## Role of Physicians in CDI

Physician involvement in a CDI program is crucial to its success. Their documentation serves as the core of any CDI program. If they do not document, there is no documentation to review and code for either reimbursement or quality measure reporting. Physician documentation is the only tool through which the severity of illness and risk of mortality of patients can be accurately captured; as such, physicians need to be fully involved in the CDI program to ensure their documentation is truly reflective of the severity of illness and quality of care for their patients.

Regardless of specialty, physicians have a common goal of ensuring their patients are diagnosed and treated accurately. There is usually no room for errors and in many cases physicians collaborate with other physicians and ancillary service staff to ensure patients have the best level of care required for their recovery.

Physicians have the ability to synthesize information and apply it, but there may be a barrier when it comes to physicians translating information into high quality clinical documentation. This is when the physician advisors (sometimes called physician champions or physician liaisons) come into play. Physician advisors are multifaceted individuals who are not only involved in CDI, but may also be involved in patient quality and safety, utilization review, case management, denials and appeals, and compliance for quality patient care and effective communication among physicians and staff members. The importance of their role in ensuring the effective and productive performance of a CDI program can never be overstated. They play a significant role in educating the physicians in CDI and they also act as a liaison with physicians who have poor query response rates. The physician advisor is crucial in educating the physicians on the importance of compliance to the various regulations

that impact CDI and act as a mediator in times when there are conflicts internally among medical staff or with other departments.

## Benefits of Physician Involvement

The following lists just a few of the benefits of having physicians actively involved in a CDI program.

### Reduction in Query Rates (Better Documentation)

The goal for any coding professional is to assign diagnosis and procedure codes that accurately reflect the patient's episode of care, which is based on clear and consistent documentation provided by providers within the patient's health record. In medical schools, physicians are not trained to document according to coding, reimbursement, or auditing specificity, but to communicate with other physicians who are also providing care for their patient. A CDI program assists coding professionals through the query process to promote greater accuracy and specificity of clinical documentation. The outcome desired from a query is an update to the health record documentation to better reflect a provider's intent and clinical thought processes.

To ensure an effective and compliant query design, CDI departments should consider involving multiple disciplines in the query creation process, such as coding professionals and healthcare providers. CDI departments may want to consider distributing ongoing information to practitioners through methods such as newsletters, flyers, or blogs based upon query trends. It is also recommended that a query process within a department or facility be tracked to identify trends. By identifying any recurring queried items, an educational plan can then be put in place to assist both coding professionals and physicians.<sup>2</sup>

Over time, the number of queries in well-designed CDI programs should decrease as physicians become better educated.<sup>3</sup> As a CDI department matures, queries will become more sophisticated as well.

### Increase in Query Responses (Quality Responses)

To increase the quality in query responses the query must be compliant and include clinical evidence from the patient record to justify the query. The query response should be documented in a manner that supports accurate code assignment. Healthcare facilities can also improve the quality of query responses by implementing a physician-to-physician model, in the form of a physician advisor or physician champion. This model will allow physicians to interact concurrently to clarify gaps in documentation while the patient is still in the hospital—making CDI part of the clinician workflow.<sup>4</sup>

### Accurate Physician Profiles

Coding and CDI professionals play a significant role in identifying and understanding the types of payment models and in-program success. They also play an important role in accurately reflecting physician profiles and severity of care provided to patients.<sup>5</sup>

An episode of care is defined as the set of services provided to treat a clinical condition or procedure. Key areas of CDI programs include documentation and coding related to relationship categories, the Episode Grouper for Medicare (EGM), and hierarchical condition categories (HCCs) for each episode of care. A patient's diagnoses of acute and chronic conditions are a critical component of the EGM. Specific diagnosis codes equate to HCCs and impact the Risk Adjustment Factor (RAF) for Medicare Advantage (MA) beneficiaries as well as some commercial payer beneficiaries. HCCs are also found within Advanced Alternative Payment Models (APMs) and are important in capturing the acuity, severity, and chronicity of patient conditions. Reimbursement is linked to severity of the patient's illness and adjusted risk is based on specific documented diagnoses. When there are multiple codes from the same HCC category, the one with the highest risk value supersedes the rest.<sup>6</sup> There are also disease interactions in conditions such as sepsis and pressure ulcers. The interactions within certain disease categories may impact scoring, much like with Major Complications and Comorbidities (MCCs) and Complications and Comorbidities (CCs) in Medicare Severity-Diagnosis Related Groups (MS-DRGs) in the Inpatient Prospective Payment System (IPPS). Assignment of HCC-related diagnosis codes requires specific documentation, as addressed by the provider, in most healthcare settings. Therefore, accurate documentation of a patient's condition plays a very important role in quality patient care, reimbursement processes, and the healthcare organization's overall financial well-being.

Much of healthcare is still provided in small office settings and as the Centers for Medicare and Medicaid Services' new Merit-based Incentive Payment System (MIPS) is implemented, the need for accurate, specific, and complete diagnosis documentation will be necessary in these practice settings. Therefore, solo or independent physician practices will need to implement CDI programs in their practice and work with documentation and coding experts to improve their documentation process. They may have to build alliances with hospitals or consider pooling resources for CDI through affiliations such as Medical Group Management Association chapters to improve hospital and physician practice documentation.<sup>7</sup>

## Quality of Patient Care

Inaccuracy in coded data because of insufficient documentation leads to poor data about patients and poor information about patient care outcomes.<sup>8</sup> Studies show a positive correlation between strong documentation and higher quality of care, and they also reveal that implementation of successful CDI programs leads to improved quality of care provided. Well-established CDI programs have a positive impact on all quality indicator priorities and help to produce a high-quality record that tells the patient's story. It also helps to reduce claim denials, reduce audit risks, and increase the chance of winning appeals, as well as increase the case mix index, increase the MCC/CC capture rate, increase the severity of illness and risk of mortality, and reduce the number of re-bills.<sup>9</sup> As noted by author Shannon M. Dunlay and coauthors, "patients treated at hospitals with better medical records [documentation] quality have significantly lower mortality... (and) the relationship between better medical charting and better medical care could lead to new ways to monitor and improve the quality of care."<sup>10</sup>

## Educating Physicians in CDI

Physicians are indispensable to the CDI program and must be educated both on the fundamentals of a CDI program and the role they play to ensure the program's success. There has to be significant program buy-in from the physician advisor, who will then encourage other physicians to be responsive to the program.

The CDI manager, or lead, prepares reports that show the various deficiencies in documentation and the resultant loss in reimbursement and downgrading of hospital and/or physician profiles. This gives the physicians something tangible to assimilate and understand the gravity of their documentation and the role it plays in ensuring that their patients' severity of illness, quality of care, and absence or presence of complications is accurately reported.

There are various ways physicians can be trained in CDI practices that will not only improve their documentation, but also the quality of care of their patients, their profile ranking, and the hospital's profile ranking. Incorporating CDI education into Continuing Medical Education (CME) is an effective way to get physicians trained. Through this approach, physicians not only get trained in relevant CDI requirements, but they also get CMEs for the training. Hospitals can employ consultants, vendors, or even utilize CDI staff in conducting CME with a CDI track.

Departmental meetings incorporated with CDI reports and specific cases in the spotlight can help physicians visualize the role their documentation plays in CDI—and consequently provide education needed to prevent any deficiencies noted. Various vendors organize conferences and workshops focused on physicians and CDI, providing expert opinions and tools for physicians to improve their documentation. Hospitals that are ready to invest in their CDI program can then utilize these opportunities and send their physicians to these educational sessions, who can in turn serve as trainers to other physicians in the hospital.

Physicians often run tight shifts and schedules, necessitating some flexibility in their training schedules. To encourage physicians to participate in CDI trainings, the department has to provide some level of flexibility and enable physicians to have access to tools when they are away from the hospital. Retreats can be organized for high admitters, where CDI training can be done in a relaxed environment and physicians can be afforded the opportunity to ask relevant questions regarding the program and how it benefits not only the quality of care to their patients, but also their own profiles. This might seem tedious, but it can be an effective way of gaining physician buy-in.

Physicians tend to be visual. One way to convey CDI strategies to the physicians is through the use of flashcards and tip sheets. Flashcards have to be created to address specific documentation requirements, such as acuity of a condition or laterality of a fracture. Tip sheets can also reflect acceptable and unacceptable documentation for coding.

CDI queries can be resourceful in getting physicians involved in the CDI program. A query is to get clarifications on documentation by the physicians. A CDI professional should never pass up the opportunity to educate the physician one-on-one when presenting the physician with a query. Physicians generally do not want to be bothered by queries; providing one-on-one education while querying helps them avoid repeating the same documentation error that necessitated the query.

An uncharted course to encourage physicians to get involved in the CDI program is having a CDI professional round with the physicians and be available to assist the physicians in real time with their documentation. This should be done in a way that doesn't interfere with patient care.

## Engagement Strategies

Having strong physician engagement is crucial to the success of a CDI program. Finding ways to promote engagement can be challenging for programs. When developing an engagement plan, the first steps are to identify the current level of engagement and the impact CDI has on the physician. The level of engagement will vary by organization depending on the age and the engagement plan of the CDI program.

There are four levels of engagement frequently seen by physicians:

1. Apprehension
2. Interest
3. Understanding
4. Commitment

The first level, apprehension, is frequently seen in new CDI programs. Typically, medical schools do not include a lot of information regarding documentation requirements within the curriculum. Therefore, physicians develop their own documentation style when they begin their practice. At the interest stage of engagement the physician has developed some curiosity in learning more about the CDI program. They do not fully understand the impact at this point but have begun answering more of their queries. When physicians begin to understand the impact of their documentation, they are more approachable and are asking questions during CDI education. At full commitment, the physician is actively focusing on providing high-quality documentation and asking questions to the CDI team before or as they document. See [Appendix C](#) to review the engagement levels along with their frequently seen associated metric characteristics.

After the engagement level has been determined, it is time to develop the engagement strategies. There are four basic strategic methods used to promote physician engagement:

1. Awareness
2. Education
3. Reward
4. Accountability

The awareness method is a process of making physicians aware of the CDI program's existence and purpose. The second method is education, which is explained in greater detail in the previous section. Education can be modified by facility and physician depending on the needs of each group. The next method is developing a reward system to be utilized when a physician's documentation is recognized as high-quality clinical documentation. If the physician has been educated and continues to resist CDI efforts, an accountability system may need to be developed. Physician leaders should be included in the process of developing accountability plans to ensure the CDI goals are realistic for the physicians' current workflow. Reward and accountability programs will vary by organization depending on the expectations of each program. See [Appendix D](#) to review some possible engagement strategies for each method.

Medical staff leader involvement is also an important component of physician engagement. All professionals look to their leaders for guidance and understanding. Physicians are no different; they will look to their medical leaders for education and guidance when accepting CDI initiatives. Medical staff leaders are crucial to supporting an accepting theme for the physician groups. If the leader doesn't accept these initiatives, why should the physician? Medical staff leaders can be helpful in providing education to physicians as well. Hot topics may be sent to the leaders to review during medical staff meetings.

Physicians tend to have a higher regard and respect for education that is delivered by their peers. Finding ways to engage physicians and making them part of the CDI program will foster a team atmosphere and promote a successful CDI program.

## Metrics to Measure Physician Engagement

The goal for any CDI program is to have an almost query-free program, where physicians are very accurate in their documentation, ensuring that the true severity of illness of their patients is reflected in their documentation.

The focus on physician documentation cannot be overstated because the documentation is the lifeline to coding, which determines reimbursement, as well as the reporting of diagnoses required for quality measures.

“The focus of most CDI programs is on improving the quality of clinical documentation regardless of its impact on revenue. Arguably, the most vital role of a CDI program is facilitating an accurate representation of healthcare services through complete and accurate reporting of diagnoses and procedures... Improving the accuracy of clinical documentation can reduce compliance risks, minimize a healthcare facility’s vulnerability during external audits, and provide insight into legal quality of care issues.”<sup>[1]</sup>

The following are various ways to measure the level of a physician’s engagement in the CDI program:

- Increase coding accuracy with a reduction in the number of queries needed to clarify documentation prior to coding. This will lead to better and more accurate reporting on the quality metrics which are reflected by the hospital and physician profile ranking.
- An increase in physician engagement in the CDI program can also be reflected in the query response rate and the number of queries that were responded to with positive responses that will improve the quality of coding and reflect an accurate severity of illness of the patients.
- A reduction in post discharge queries is an indicator that the physicians are either concurrently responding to their queries or documenting accurately as a result of being trained in improved clinical documentation.
- The case mix index (CMI) is a way to measure how well physicians are in sync with the CDI program and CDI training given to them. The CMI is an indicator of the CC, MCC, SOI, and ROM capture rate which drives the DRG. A low CMI can be reflective of poor documentation on the part of the physicians—especially with an increased mortality rate, meaning that accurate severity of illness is not being captured through physician documentation.
- With CMS moving toward using quality of care as an assessment of physician or hospital profile, a higher hospital acquired condition rate, for instance, may indicate that the physicians are not specific in the present on admission documentation, thus inaccurately reporting wrong metrics in quality of care.

## Notes

[1] Hess, Pamela. “[Rise of the Super Coder: HIM Professionals in Clinical Documentation Improvement](#).” himagine solutions website.

[2] Maimone, Carol. “Quality Queries for Quality ICD-10-PCS Codes.” *Journal of AHIMA* 87, no. 6 (June 2016): 50-52.

[3] Rushlau, Katherine. “[Q&A: Query rate metrics](#).” ACDIS Blog. August 12, 2015.

[4] Towers, Adele L. “Clinical Documentation Improvement—A Physician Perspective: Insider Tips for Getting Physician Participation in CDI Programs.” *Journal of AHIMA* 84, no. 7 (July 2013): 34-41.

[5] DeVault, Kathryn; Sharon Easterling; and Kim Huey. “Role of Coding and Documentation in the Quality Payment Program.” *Journal of AHIMA* 88, no. 1 (January 2017): 52-55.

[6] Ibid.

[7] Ibid.

[8] Butler, Mary. "Querying through the Chaos: How to Get Docs' Attention Amidst the Digital Healthcare Haze." *Journal of AHIMA* 87, no. 7 (July 2016): 20-25.

[9] Horn, Kelli; Adrienne Younger; and Trevor Snow. "Improving Coding and Documentation Quality Through Real-Time Collaboration: Nurses and Coding Professionals Team Up to Tackle Documentation Issues." *Journal of AHIMA* 87, no. 8 (August 2016): 32-34.

[10] Dunlay, Shannon M. et al. "Medical Records and Quality of Care in Acute Coronary Syndromes: Results from CRUSADE." *Archives of Internal Medicine* 168, no. 15 (2008).

[11] Executive Health Resources. "[Insights and Best Practices for Clinical Documentation Improvement Programs](#)."

## References

Bentley, Doreen V. "[Audits, education, and collaboration are key to reducing query rates](#)." *Briefings on Coding Compliance Strategies*. HCPro website. January 1, 2016.

Hess, Pamela. *Clinical Documentation Improvement: Principles and Practice*. Chicago, IL: AHIMA Press, 2015.

---

## Appendix A: Seven Characteristics of High Quality Clinical Documentation

The following list encompasses the seven characteristics of high quality clinical documentation.

1. **Legibility** of clinical documentation is required by all government and regulatory agencies.
2. **Reliability** of clinical documentation of the treatment provided impacts quality of patient care. Treatment provided without documentation of condition being treated impacts the outcome of patient care.
3. **Precision** of clinical documentation tells the patient's and episode of care story accurately. More specific diagnoses and improved documentation leads to better data and improved research.
4. **Completeness** of clinical documentation such as abnormal test results without documentation of the clinical significance which is required by the Joint Commission.
5. **Consistency** of clinical documentation of diagnoses and treatment impacts continuation of patient care. For example, disagreement between two or more treating physicians without obvious resolution of the conflicting documentation upon discharge will delay billing and reimbursement as well as impact the quality of patient data.
6. **Clarity** of clinical documentation of signs and symptoms, vague or ambiguous documentation—especially in the case of acute versus chronic and present on admission conditions—impact assignment of principal diagnosis, secondary diagnoses, and hospital-acquired conditions (HACs).
7. **Timeliness** of clinical documentation guidelines set by the facility, Centers for Medicare and Medicaid Services, state government, Joint Commission, and other regulatory agencies need to be followed. Regulatory changes have forced physicians to take a closer look at clinical documentation. Accountable care organizations and bundled payments, for example, incentivize efficient and effective care, requiring physicians to document as specifically and completely as possible.<sup>1</sup>

## Note

1. Bonner, Dari and Karen M. Fancher. "[Expanding CDI to Physician Practices: Five Documentation Vulnerabilities to Address in 2016](#)." *Journal of AHIMA* 87, no. 5 (May 2016): 22-25.

## Reference

Hess, Pamela. *Clinical Documentation Improvement: Principles and Practice*. Chicago, IL: AHIMA Press, 2015.

---

## Appendix B: CDI Important for Accurate Quality Scores

The Physician Quality Reporting System (PQRS) and “meaningful use” Electronic Health Record (EHR) Incentive Program have been requiring physicians to provide better documentation.<sup>1</sup> The Medicare Access and CHIP Reauthorization Act (MACRA) program began in 2015 and will continue beyond 2021. MACRA replaces the current Sustainable Growth Rate (SGR) methodology, streamlining multiple quality reporting programs and creating a Quality Payment Program (QPP). This new framework will reward healthcare providers for giving better care, and it will combine existing quality reporting programs, including “meaningful use,” into one new system. The MACRA QPP includes the Merit-based Incentive Payment System (MIPS), which combines the Physician Quality Reporting System (PQRS), the Value-based Modifier (VM), and the Medicare “meaningful use” EHR Incentive Program into four new performance categories on which provider quality will be measured. Data collection for the four MIPS categories starts in 2017, and this data will begin to impact provider reimbursement in 2019. The data needed for all four categories can be only obtained through a well-documented episode of patient care.<sup>2</sup>

CMS’ new MIPS will become a significant regulatory driver behind physician practice clinical documentation improvement (CDI). The MIPS will consolidate the PQRS, value-based payment modifier (VBPM), and “meaningful use” incentive program, and use data collected during 2017 to determine potential payment adjustments in 2019. Payment adjustments will be determined based on a MIPS composite score that is partially driven by the coding of hierarchical condition categories (HCC), making HCC capture vital in the practice setting.<sup>1</sup> Negative payment adjustments will be distributed depending on whether a provider’s composite score falls below a set performance threshold: four percent in 2018, five percent in 2019, seven percent in 2020, and nine percent in 2021 through 2023. Above-par performance will allow a physician to earn a bonus as high as 12 percent in 2018 and 27 percent by 2021.

This potential negative impact on finances due to poor clinical documentation is expected to lead physician practices to establish outpatient CDI programs.<sup>3</sup> These changes and the associated interest in outpatient CDI programs will incentivize physicians to be more interested and responsive to CDI programs, as CDI will no longer only be tied to hospital payment.

### Notes

1. Bonner, Dari and Karen M. Fancher. “[Expanding CDI to Physician Practices: Five Documentation Vulnerabilities to Address in 2016.](#)” *Journal of AHIMA* 87, no. 5 (May 2016): 22-25.
2. DeVault, Kathryn, Sharon Easterling and Kim Huey. “[Role of Coding and Documentation in the Quality Payment Program.](#)” *Journal of AHIMA* 88, no. 1 (January 2017): 52-55.
3. Bonner, Dari and Karen M. Fancher. “Expanding CDI to Physician Practices: Five Documentation Vulnerabilities to Address in 2016.”

## Appendix C: Levels of Physician Engagement with CDI, with Associated Characteristics

Level of Engagement	Characteristics
Apprehension	<u>Metrics:</u>  Query response rate < 70 percent Query rate > 45 percent  <u>CDI Reviewer:</u>  Query for low hanging fruit (Complications and Comorbidities (CCs) and Major Complications and Comorbidities (MCCs))
Interest	<u>Metrics:</u>

	<p>Query response rate 70-80 percent Query rate between 35-45 percent</p> <p><u>CDI Reviewer:</u></p> <p>Query for more in-depth specificity (Severity of Illness (SOI) and Risk of Mortality(ROM))</p>
<b>Understanding</b>	<p><u>Metrics:</u></p> <p>Query response rate 80-90 percent Query rate between 25-35 percent</p> <p><u>CDI Reviewer:</u></p> <p>In addition to CC, MCC, SOI, and ROM, accurate quality scores may be added to the reviews including hospital-acquired conditions (HAC), Patient Safety Indicators (PSIs), Core Measures, etc.</p>
<b>Commitment</b>	<p><u>Metrics:</u></p> <p>Query response rate 90-100 percent. Query rate &lt; 25 percent</p> <p><u>CDI Reviewer:</u></p> <p>Query for all documentation opportunities to support the highest level of specificity. This may also include external causes. At this point the CDI program may look at expanding beyond the inpatient CDI program to incorporate outpatient settings.</p>

## Appendix D: Strategies for Physician Engagement with CDI

Type of Strategy	Engagement Strategies
<b>Awareness</b>	<ul style="list-style-type: none"> <li>• Flyers</li> <li>• Computer screens</li> <li>• Newsletters</li> <li>• Blogs</li> <li>• Bulletin boards</li> <li>• Posters</li> <li>• Hospital announcements</li> <li>• Survey</li> </ul>
<b>Education</b>	<ul style="list-style-type: none"> <li>• Peer-to-peer</li> <li>• Staff meetings</li> <li>• One-on-one</li> <li>• Tip sheets</li> <li>• Flashcards</li> <li>• Blogs</li> <li>• Newsletters</li> <li>• Webinars</li> </ul>



	<ul style="list-style-type: none"> <li>• CDI Academies</li> <li>• Conferences</li> </ul>
<b>Reward System</b>	<ul style="list-style-type: none"> <li>• Documenter of the week/month announcements</li> <li>• Pizza party</li> <li>• Meal pass</li> <li>• Gift cards</li> <li>• Goody baskets</li> </ul>
<b>Accountability</b>	<ul style="list-style-type: none"> <li>• Counseling</li> <li>• Write up</li> <li>• Deficiency lists</li> <li>• Loss of privileges</li> </ul>

## Prepared By

Tammy Combs, RN, MSN, CDIP, CCS, CCDS

Melanie Endicott, MBA/HCM, RHIA, CHDA, CDIP, CCS, CCS-P, FAHIMA

Marina Kravtsova, RHIA, RN, CDIP, CCS

Chinedum Mogbo, MD, RHIA, CDIP, CCDS, CCS

Nilgun C. Sezginis, MPH, RHIA, CCS-P

## Acknowledgements

Sue Bowman, MJ, RHIA, CCS

Patty Buttner, RHIA, CDIP, CHDA, CPHI, CCS

Lesley Kadlec, MA, RHIA, CHDA

Donna J. Rugg, RHIT, CDIP, CCS

Donna D. Wilson, RHIA, CCS, CCDS

### Article citation:

Combs, Tammy; Endicott, Melanie. "Impact of Physician Engagement on Clinical Documentation Improvement Programs (AHIMA Practice Brief)" *Journal of AHIMA* 88, no.7 (July 2017): 42.

Driving the Power of Knowledge

Copyright 2022 by The American Health Information Management Association. All Rights Reserved.