

THE IMPACT OF CLINICAL DOCUMENTATION IMPROVEMENT SPECIALISTS IN THE
CRITICAL CARE UNIT

by

Rachael Lattanzio

MARIE ELENA BARRY, DNP, Faculty Mentor and Chair

JOYCELYN D'ANTONIO, DNP, Committee Member

JOSEPH AKIF, MSN, Preceptor

Patrick Robinson, PhD, Dean, School of Nursing and Health Sciences

A DNP Project Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Nursing Practice

For submission to AHIMA

Capella University

June 2017

ACKNOWLEDGEMENTS

I would like to thank my Mentor, Dr. Marie-Elena Barry for her unwavering support, her keen eye for detail, and her relentless encouragement, of which helped me to persevere in moments of struggle and doubt. In the year and half of working together, she became more than a mentor to me, but a friend. I was blessed to have had the opportunity to meet such a wonderful woman in this journey of obtaining my Doctorate and hope our paths will continue to cross for years to come.

To my preceptor Mr. Joe Akif who was paramount in me obtaining my degree. If not for his provision, expertise, and support I would not have been able to complete this dissertation. Very few people in this world make those they work with better just by being present. I feel honored to have worked with such a man. His vision and dedication to health care is exemplary and one I hope to carry with me throughout my own career.

To my mother Lori Meacham, brother Christopher Meacham, and sister Kelsey Meacham...we are the strongest team I have ever known, and even though we are grown and apart, your strength still carries me through. I aspire to make the three of you proud in all I do. Thank you for being a constant support in my life.

To my beautiful daughter, Ella, you inspire me everyday to want to be the best person I can be. Your innocence and curiosity about this world are unparalleled and ensure me that you will move mountains in your lifetime. I hope that someday you find inspiration in me, much as I have found my inspiration in you. Thank you for choosing me to be your Mommy, and for teaching me more about life and love than any book or degree could ever do.

Lastly, to my husband Dr. Pierre-Jean Lattanzio, of whom I dedicate this dissertation. You have a beautifully poetic way of always making me feel like I am enough and perfect the way I

am, while still inspiring me to be more, do more, and accomplish more. I watch as you tackle life's challenges with poise and determination and I feel proud to have a front row seat to all your successes. I feel so blessed to share in my life with you. You are my soul mate, my very best friend, and my biggest source of motivation. It is without reservation that I acknowledge this doctorate was only obtained because of your love, encouragement, and support. My love for you knows no bounds and I am forever thankful for you. "Everything I do, I do it for you".

Abstract

Across the nation, hospitals are searching for a way to increase their case mix index (CMI), return on investment, and revenue from insurance companies. One of the most successful ways to enhance all three is by employing a clinical documentation improvement specialist (CDIS). Yet there are many factors that influence the success of a CDIS. This paper will follow the implementation and deduction of an eight-week CDI-program initiated in a critical care unit. The PICOT question posed is how does the implementation of a clinical documentation improvement specialist improve physician documentation and increase reimbursement in the critical care unit over an eight-week period? Through the methodical utilization of an access file to track and monitor queries, documentation inconsistencies, and trends, the CDI Specialist will be able to concurrently and positively impact the organization. *CONCLUSION:* Over an eight-week period the CDIS was able to ensure \$107,542.35 of which would not have been recuperated had the CDIS not been reviewing documentation for missing, inconsistent, or conflicting clinical documentation. Yet over this two-month time frame, the CMI was virtually unchanged. There are many things that inhibited the overall success of an increase in CMI, including administrative support, the participation of physicians with education and documentation, the *International Classification of Diseases- 10th edition (ICD-10)* coding guidelines, as well as the coders assigned to the organization, and time. The implementation of a CDI –program proved to benefit not only the organization financially, but improved quality improvement and physician documentation.

Key words: Clinical documentation improvement specialist, case mix index, physician documentation, and ICD-10.

The Impact of Clinical Documentation Improvement Specialists in the Critical Care Unit

Within the last few decades, insurance companies have begun to require further specificity and specific diagnostic terms in patient's charts to account for severity of illness, risk of mortality, and even reimbursement costs. It is for this reason that a new breed of nurses is being born, tasked at implementing clinical documentation improvement programs so hospitals and healthcare professionals can ensure they are getting paid for their services while also properly documenting the care they provide their patients. Higher standards and new regulations have hospitals across the country taking double, even triple looks at their current practice and policies. As private insurance companies deny payment and challenge hospitals and medical providers on medical necessity and diagnosis charges with the new ICD-10 guidelines, hospitals have been forced to put standards in place that can ensure maximum recuperation of reimbursement from these insurance companies.

To first understand and appreciate what a CDI specialist is and how they contribute to not only the health care professionals but also the organizations in which they work, it's important to understand where America currently is in terms of healthcare. According to Geissler and Dion (2015), healthcare is constantly changing and the introduction of the EHR systems, core measures, the "meaningful use" EHR incentive programs, value-based purchasing, and the ICD-10-CM/PCS code sets has bombarded the healthcare industry with challenges over recent years. Since the early 1990's, there has been an increase in federal regulations and accreditation agencies requiring healthcare organizations to report quality of care measures to agencies such as the Center for Medicare and Medicaid Services (CMS), the Joint Commission, and the National Committee for Quality Assurance (NCQA) (Chtourou, 2013, p.50). According to Chtourou (2013), since 2002, the Joint Commission and CMS implemented a requirement for hospitals to

collect and report data on standardized performance measures, known as core measures. All of these standards and requirements result in quality reporting and is a vital component to initiatives for financial incentives or penalties based on how a specific hospital compares to those quality improvement programs (Chtourou, 2013; Geissler & Dion, 2015). The relationship between documentation errors and inconsistencies amongst healthcare professionals is much more complicated and complex than most give credit to, as evidenced by mistrust in colleagues, lack of time, resources, computers, and the functionality for the EHR itself. As stated by Yeung et al. (2012), the lack of time, resources, and even computers can create disconnect amongst healthcare professionals. Too much trust allows for the copy/paste function to be excessively utilized, allowing for inappropriate and incorrect documentation to be carried over into another assessment. Retrospectively, mistrust leads the healthcare professionals to overly question and critique the clinical documentation of their colleagues, often creating conflicting information. According to Betbeze (2010), CDI Specialists can help healthcare professionals focus more on patient care and can alleviate some of the frustration and confusion healthcare providers feel when attempting to document appropriately.

In order to build a successful CDI-program, healthcare organizations must recruit CDI candidates who will prove beneficial to the organizations dynamics and meet eligibility criteria, such as work history, educational background, and certifications (Recruitment, Selection, and Orientation for CDI Specialist, 2013). According to Letourneau (2014), building a successful CDI program and hiring qualified candidates can prove challenging as you need either clinicians who are good at coding or coders with strong clinical knowledge. Improving clinical documentation should be a key area of focus for all healthcare facilities (Letourneau, 2014), and building successful CDI programs is critical in order to capture the quality measures required for

patient records documentation, medical coding rules, and assigning the appropriate working diagnosis (Beaty, 2005). Another important aspect to creating a successful CDI program is ensuring that the CDI Specialists have physician champions, who can help to communicate the importance of complete and concise documentation to the clinical team (Improving Clinical Documentation, 2014).

Problem Description

Until now, clinical documentation improvement specialists have not been utilized at this hospital organization. Through the implementation of a clinical documentation improvement specialist (CDIS), the hospital can ensure the clinical documentation supports the treatment, length of stay, and medical diagnosis of all patients admitted to the hospital, ensuring maximum reimbursement is obtained. With the implementation of a CDIS, the organization can plan for long-term financial stability and be assured that physicians are being educated and supported to document appropriately. The implementation of a CDIS will improve physician's documentation and will decrease denials from insurance companies and increase revenue. With the help of a CDIS and the successful implementation of a CDI-program, physicians at this organization can be ensured that they are getting the most out of their documentation and standing up to the regulations and expectations of governmental agencies and policies. Through clinical scholarship and analytical methods, evidence-based practice can be achieved.

The organization is a small, nonprofit, community hospital struggling to maintain its independence. It losses approximately \$500,000 a year on insurance audit denials from poor or incomplete clinical documentation. The amount of money being lost per year to insurance companies audits is negatively impacting the hospitals bottom line and inhibiting its ability to

maintain its independence in a market that is being overrun by bigger hospital corporations that can afford to put money into resources such as CDI-programs.

Available Knowledge

Published research literature was searched using electronic and journal databases (CINAHL, Journal of AHIMA, ACDIS, and Healthcare Financial Management Corporation). Key words used were: *clinical documentation improvement specialists, electronic health records, documentation inconsistencies, MS-DRG assignment, CDI Programs, and reimbursements efforts from CDI*. Years searched were 2001 to 2016. The literature review considered evidence related to the PICOT question; how does the implementation of a clinical documentation improvement specialist improve physician documentation and increase reimbursement in the critical care unit over an eight-week period? The literature review helped to narrow the focus on specific criteria and areas of improvement for answering the PICOT question posed. All literature was organized based on expert opinion, quality improvement data, and evidence-based practice guidelines.

The International Classification of Diseases revision 10 (ICD-10) was implemented across the United States in October of 2015, calling for higher standards in clinical documentation and coding specificity. Hospitals across the country are being forced to fight for every dollar they bill for and prove medical necessity through practitioner's clinical documentation. For example, as stated by Betbeze (2010), a physician may not be thinking about whether congestive heart failure is systolic or diastolic, but its important for clinical documentation and affects how hospitals can code a patient's chart. Failure to document in compliance with billing and coding standards will result in loss of revenue (Office of Inspector General, 2012). According to "Best Practices in the Arts and Sciences of Clinical Documentation

Improvement” (2015), the impact of a CDI program includes a more accurate depiction of patient severity and acuity as measured by case mix index, severity of illness, and risk of mortality scores, reduction in clinical denials for medical necessity, and improves clinical outcomes and overall optimal continuity of care for patients as a result of not only capturing all necessary diagnoses and procedures in reviewing clinical documentation, but through ensuring its ultimately reflected in the final code assignment for each patient. The first part of any successful program implementation requires intervention, methodology, analysis, and evaluation. This process may be reworked and reevaluated a number of times before a positive outcome is reached, but it takes understanding the process for success to occur.

Rationale

In evaluating the issue within clinical documentation, the Iowa model can prove effective in helping an organization come up with a systematic approach of finding solutions to the problem (Titler et al., 2001). With the help of CDI Specialists, health care providers and professionals can improve their clinical documentation to better reflect the specificity and acuity required for electronic health records to appropriately code for such classifications of disease while also decreasing documentation inconsistencies. As stated by “Recruitment, Selection, and Orientation for CDI Specialist” (2013), these efforts result in greater integrity of the documentation, coding, reimbursement, severity of illness, and risk of mortality classifications.

According to Titler et al. (2001), nurses have been using the Iowa model to identify knowledge and problem focused triggers in order to improve practice within their field for many years. It comes with no surprise that as the implementation of nursing technology and EHR has advanced, problem focused triggers that have sparked the concern and interest of nurses, practitioners, and administrators across America. As the expectation has changed in

documentation across the world, a new standard has been placed on healthcare professionals to accurately and consistently document diagnoses and care trends. Documentation errors and inconsistencies fall best under problem-focused triggers as it is considered a specific clinical problem and can easily be related to quality assessment and quality improvement, as well as data and risk management (Titler et al., 2001). Triggers for clinical documentation errors include the overuse of copy and paste, conflicting documentation in a patient's chart by different providers, and the mere lack of supporting documentation for medical necessity (Deyoung, VanderKooi, & Barletta, 2009).

The PICOT approach has proved successful in helping clinicians frame a basis for understanding and communication amongst common language and research discourse (Riva et al., 2012). When using the PICOT approach to help research and identify the significance and impact of Clinical Documentation Improvement Specialist, it is important to not only understand the benefit of the results, but also understand who will be affected. To better understand the importance of a theoretical framework in application to CDI one can start by asking a research question using the PICOT analysis.

Applying Lewin's change theory to the PICOT question is an effective way to evaluate the success of the clinical problem and its implications. Clinical Documentation Improvement Specialists can prove to be a resource to healthcare providers during the implementation of change in documentation within the medical profession. Because documentation improvement is an ongoing effort and will require training, retraining, and training again, the three phases of Lewin's change theory prove the most beneficial theoretical framework. The application of theory to any clinical problem can provide guidance and direction in areas that prove not as successful as planned. One of the most critical parts to this question in correlation with the

theoretical framework of change theory will be the driving force that opposes change. For some practitioners that may be educational barriers, yet for others it may be their lack of involvement in implementing the EHR. Understanding why individuals are opposing the necessary change can help counteract any negativity during the change initiation, making it easier to refreeze an acceptable behavior. According to Lewin, his theory was more successful when individuals were more involved in the change process itself, understanding that and knowing how to involve different practitioners to spark their interest in change is a critical element to this PICOT question and clinical problem (White & Dudley-Brown, 2012). As the healthcare field continues to change and technology remains on the rise, all healthcare organizations can benefit from CDI Specialists. CDI Specialists can have a positive effect not only on reimbursement within the hospital system, but help providers to understand the implications behind through, consistent, and concise documentation.

Specific Aims

Health care organizations are being forces to fight denials for payment from nearly all health insurance companies as a result of poor documentation (Letourneau, 2014). As stated by Letourneau (2014), as Medicare and Medicaid services increase its recovery audit contractors (RAC) efforts to correct what it considers to be overpayments, organizations must work to integrate its finance and clinical teams through the implementation of CDI programs if they are planning for long-term financial success. The mere fact that we are faced with this reality in today's healthcare requires change to happen. All medical professionals are required to document more, include further specificity, and elaborate on details once considered mundane. The correlation between successes of the clinical question is as heavily weighted on the driving and restraining forces as the change itself (White & Dudley-Brown, 2012).

The expected outcomes for this project are improved physician documentation and increased reimbursement. The outcomes to be measured will consist of two parts. The first part being the amount of queries that get sent to providers for lack of or inconsistent documentation. The second part will consist of the amount of financial reimbursement that will be collected as a result of the CDI Specialist. Because there was no CDI specialist or program prior to this, the benchmark data will be easily identifiable at zero. The author will be using an access file to keep track of the amount of charts that are audited, the amount of queries that are sent, and also the financial impact of those queries resulting in the capture of complications and comorbidities (CC's) and major complications and comorbidities (MCC's). In measuring these outcomes from a preliminary standpoint through a completed and successful CDI-program, the evidence should show that a CDI-program improves practitioner documentation, increases hospital revenue, and helps to bridge a gap between the provider and the diagnostic terms needed for proper coding. The programs success will be measured by the financial reimbursement as everything quantified will be as a result of the CDI-program, as there is no way to quantify queries prior to implementation.

Methods

Context

The organization is a non-profit community hospital in Pennsylvania. The CCU (critical care unit) is a 7-bed unit capable of providing care to those with the highest acuity for a hospital of its size. The aging community ensures that the patient population is never short on major complications and co-morbidities. The mixed diagnoses make treating and caring for these patients often complicated, but the advanced skill level of the nurses and practitioners leaves nothing to be desired. Their ability to handle the case mix of these patients is inspiring and

reassuring. The mix of practitioners within the CCU includes nurses, physicians, respiratory therapists, physician's assistance, and nurse practitioners. The admitting physicians are internal medicine trained hospitalists.

Despite their clinical abilities to care for the aging population in the CCU, the practitioners lack insight into how to properly clinically document. The EHR has proven to be a barrier for some who are reluctant to change from paper charting. For those who have embraced the EHR, the copy and paste function seems to be utilized with too much ease, creating conflicting and even ambiguous information as diagnoses are ruled in and out with the use of medical tests such as CT scans and stress tests. According to Giessler and Dion (2015), many CDI-programs are developed solely to capture documentation for reimbursement, yet their roles extend to so much more than that, including the complete and concurrent review of records and impact care acuity and quality.

Prior to November 2015, CDI specialists had not been utilized in the CCU. Reimbursement rates were down, clinical documentation was a failed effort, and healthcare providers were not able to code for the true severity of illness in which they were actively treating in their patients. With the intervention of CDI Specialists and the implementation of a CDI-program, an expected outcome would include fewer denials from insurance companies, increased financial reimbursement and recuperation, and a better understanding of clinical documentation by all healthcare providers working within the CCU, which in turn will positively impact the amount of documentation errors. The importance of collaboration by all healthcare providers and the CDI Specialists cannot be understated or taken lightly, as it will take a change in current culture practice to not only implement a successful CDI-program but maintain its success.

Interventions

The method of intervention to changing a bad habit of poor clinical documentation requires a practice change initiative and successful intervention. Creating a new CDI-program to oversee the day to day documentation of healthcare providers will not only reinforce good documentation, but will encourage providers to look more astutely at their patients severity of illness, risk of mortality, and quality of care indicators. According to Schifferdecker et al. (2015), for medical systems and particularly tax-exempt hospitals, new requirements include health assessments and implementation strategies to address identified health needs. Starting a new CDI-program in a CCU speaks to the methodology behind capturing the needed documentation improvement to create a culture of quality and success.

Study of the Interventions

The interventions during this project will not only be to create the position of a CDI specialist at the organization who will evaluate and uncover inconsistent, conflicting, or incomplete documentation so that physicians can be queried and improve their documentation, but also to create a CDI program that involves educating physicians in order to improve clinical documentation in the CCU and increase financial reimbursement through more efficient coding. The CDI-program will ensure that during the duration of the eight-weeks, while the project is piloted, a CDI Specialist will review all documentation and clinical evidence of CCU patients. Throughout that time, healthcare professionals will be queried on missing or inconsistent documentation to ensure that the highest quality of documentation and patient care is met. Key metrics and dashboards for reporting will be established by the CDI Specialist to include query rates, response rates, documentation review rates, and financial impact. Baseline data will be collected over the first week and every week there after, allowing for any trends to be identified.

According to Giessler and Dion (2015), A physician advisor is paramount to the success of CDI-program as they serve as an advocate, resource, educator, and liaison to the CDI Specialist. A CDI physician champion will be an internist who is familiar with the CCU and the healthcare providers giving direct care to the CCU patients. Through the successful collaboration of the CDI physician champion and CDI Specialist, barriers can be broken down and bridges crossed to ensure all providers are benefiting from the implementation of a CDI-program. According to Stavropoulou and Stroubouki (2014), mixed methods are appraised for their ability to integrate different concepts and theories and create complex and comprehensive evaluation designs. For this very reason, it is important with the implementation of a CDI-program as an intervention for documentation errors in the CCU, that multiple methods are used to ensure the intervention is successful, including not only the implementation of the CDI-program but development of new policies based on the success of the program and evaluation of the data collected.

Measures

Evaluating conflicting documentation and inconsistencies will be based on a thorough review of the patients chart, co-morbidities, and complications. When an error is found in documentation, a query will be sent to the provider so the physician can fix the incomplete or inconsistent documentation in the chart prior to the patient's discharge. This will ensure proper coding of the chart can take place and that there is enough clinical documentation to ensure proper payment from the insurance companies. Once enough queries take place and there are trends acknowledged, physicians could be educated on documentation strategies to help them better reflect the severity, acuity, and risk of mortality on each of their patients. The CDI Specialists roles have grown to include teaching documentation and billing guidelines, educating coding staff on clinical issues, evaluating peers for quality assurance, and even reviewing

medical records for compliance (Beaty, 2005, p. 365). The author will provide educational sessions for physicians and evaluate its effect through pre and post exams.

Program evaluation will be the primary design and method of ensuring a successful CDI-program has been developed. Through the use of excel spreadsheets and access files, each case that is reviewed will be tracked. Furthermore, if the chart requires a query, that too will be documented to establish trends in conflicting documentation and even specific practitioners who seem to struggle more than others with the clinical documentation process. Having a firm understanding of the baseline data will help in establishing how successful the CDI-program is or could become.

As previously stated, query rates, response rates, and documentation review rates will all be collected and analyzed throughout the programs duration. With the data collected and analyzed, interventions can be used to enhance the effect of the CDI-program. Interventions may include educational sessions for providers and one to one training for some individuals. According to Holly (2014), program evaluation is about continually improving a program or service. Collaboration and flexibility will be required for the success of a CDI-program to take place.

Analysis

Documentation inconsistencies have a ripple effect not only on accounts payable, but quality of care, and patient satisfaction. The problem of documentation inconsistencies is compounded by the fact that patients now have access to their electronic medical records. Errors in documentation are not only seen by other healthcare professionals, but by the patients themselves. The problem with clinical documentation inconsistencies is the confusion it creates and the legal ramifications it can cause. As the healthcare field finds itself at a parallel between

documentation improvement and technology, it is critical to improve current practice with documentation in order to reap the benefits of technological advancements. Identifying gaps in healthcare technology and clinical documentation, clinical workflows and environments can inform the design of more effective and advanced technologies (Yeung, et al., 2012). Clinical documentation improvement is an entire discipline focused on improving the clinical clarity of the electronic health record and decreases clinical ambiguity, while helping to clarify conflicting documentation between all health care providers (“Best Practices in the Art and Science of Clinical Documentation Improvement”, 2015).

Medication errors, misunderstandings, and patient care inefficiencies are also a result of the poor clinical documentation within the organization. Adverse drug events or medication errors are the leading cause of medical injuries in hospitalized patients and are primary the fault of documentation errors or lack of documentation (Deyoung, VanderKooi, & Barletta, 2009). Improvement of the current practice in healthcare and documentation today first requires the acknowledgement of the need for improvement. As stated by Butler (2015), the best and most effective way to prevent documentation errors is to recognize the most frequent kind of documentation errors, such as, mixed messages from physicians, misuse of copy and paste functions, incomplete or missing documentation, and misplaced documentation, and then putting procedures and policies in place to stop those errors.

In understanding the significance and clinical relevance of documentation inconsistencies, healthcare professionals are much more capable of improving the current practice to ultimately improve patient care and interprofessional collaboration. Documentation inconsistencies are proving more relevant and problematic in an age of meaningful use, Health Information Technology for Economic and Clinical Health Act (HITECH) incentive programs,

Healthcare Information Technology (HIT), and the EHR (Office of Inspector General, 2012). With this expectation comes the discovery of problem-focused triggers that require further research and quality utilization to improve current practices. Conflicting documentation, lack of documentation, and documentation inconsistencies not only have a negative impact on hospital and practitioner reimbursement, but also set hospitals and health care organizations up for failure and possible legal ramifications (Butler, 2015).

Ethical Considerations

Potential ethical considerations have been considered and do not exist for this project.

Results

Every query was tracked using an access file that has been created specifically for the CDI-program. Through this access file the author could evaluate what the query was, who the provider was that was queried, what the initial DRG was, what the DRG was after the practitioner answered their query, and in turn was able to quantify financially based off of cost weight assigned to those DRG's, how effective the CDI-program was. The financial data will sustain the PICOT in ensuring the severity of illness is being properly documented and therefore coded. Capturing conflicting or inaccurate documentation concurrently will ensure the hospital and provider are paid for their services and the patient is in turn being appropriately reflected in the chart. It was evident through tracking measures with the access file created that the implementation of a CDI-program was a success as it increased the hospitals revenue. Yet despite the increase in coding, the CMI was nearly unaffected. It can be theorized that a CDI-program must be active for at least a year or more before any changes in CMI can be attributed to the program implementation. Other limitations that could affect the lack of increase in CMI are the changed weights of the DRG's from ICD-9 to ICD-10.

Discussion

Summary

The most effective and time efficient way to improve current practice and decrease clinical documentation errors and inconsistencies is through the implementation of an effective CDI-program. Bridging the gap between clinical documentation and technology takes an effective team of individuals who are invested in improving patient care and core quality standards within the health care arena. All medical providers; nurses to respiratory therapists, doctors to allied health professionals, pharmacists to coders and HIM directors, all play a critical role in improving the current practice of documentation errors and inconsistencies to mirror a future of improved patient outcomes, clinical documentation, and interprofessional communication (Bowman, 2013). With an effective CDI-program and specialist in place, organizations can ensure all clinical documentation supports the level of acuity and medical treatment provided.

Interpretation

CDI Specialists have a direct positive effect on care coordination and process integration, improving patient care and also insuring the hospital is getting paid correctly for the severity of illness of patients based on documentation by helping the physicians and healthcare professionals use the diagnostic terms and the language of the coders rather than the clinical terms they are use to (Betbeze, 2010). In the same regard, a healthcare practitioner may document *Pneumocystis jiroveci*, but fail to mention the diagnosis of AIDS, which is directly related to the pneumonia, and greatly affects the coding and reimbursement for that patient's chart (Lo, 2014). With the clinical background of CDI Specialists, they can help practitioners improve their documentation to not only assist practitioners in reporting severity of illness, but also help healthcare

organizations meet and exceed quality measures to reap the financial reimbursements of that documentation. At the end of this project, the research and clinical work will have helped to develop a successful CDI-program that the hospital will continue to use to improve documentation, help providers navigate the electronic health record, and remain fiscally sound.

Limitations

Limitations of the study include staff's perceptions of receiving queries and their lack in participation. There are still some that find the query process intrusive or punitive, as if the CDI Specialist is telling the provider how to practice medicine (Lo, 2014), while others are simply unaware of how their documentation impacts coding and reimbursement, reporting, and even their reputation as a provider (Diop, 2015). According to Diop (2015), the current environment of change in healthcare presents a welcomed opportunity for CDI specialist to collaborate with members of the medical team and to instill the values of importance of clinical documentation improvement and accurately reflecting severity of illness, risk of mortality, and length of stay. Other limitations include administrative support, ICD-10 coding guidelines, the coders themselves (in house or outsourced) and their perceived investment in the organization, as well as the limitation of time.

Conclusions

Improving the accuracy of clinical documentation can reduce risks in compliance, which helps to minimize vulnerability of a healthcare organization during external audits, and also helps to provide insight into legal quality of care issues (Burgess et al., 2015). As stated by Diop (2015), having the right documentation allows providers to appropriately validate acuity, justify admissions, and meet core measures. Having a CDI Specialist in a healthcare setting can have a profound effect on healthcare professionals and documentation errors. As stated by Burgess et al. (2015), as technology changes the way documentation is captured through EHR's, the need for CDI Specialists is that much more evident.

Capturing complete and accurate data and information in every patient clinical chart through thorough documentation is crucial to being paid correctly for the services provided (Improving Clinical Documentation, 2014). As the healthcare industry continues to evolve, so will the roles and expectations of the CDI Specialist, but it is safe to assume that their worth will

only multiply as the need for accurate and thorough documentation remains a critical requirement for CMS metrics and financial reimbursement (Lo, 2014). As medical professionals dive into health care initiatives driven by EHR and clinical documentation performance, it is critical to embrace technology and understand the ways in which it will benefit and hinder evidence based care. In embracing and understanding the strengths and weaknesses of every aspect of patient care and quality measures, healthcare professionals can more effectively plan for the future in medicine and the advancements in technologies such as the EHR itself. Physicians, nurses, allied health providers, and all other health care professions are learning that their documentation and or lack of can greatly impact their ability to provide quality patient care. As this realization continues to take hold of healthcare organizations and their strategic plan for the future, documentation will become even more imperative for the success of the organization and all its stakeholders.

As the healthcare industry and technology forge a new path, clinical documentation will become the answer to providing safe and effective evidence based care throughout the world. Ensuring the success of that documentation is ensuring healthcare policy and reform, and providing a platform for all providers to effectively change the future of healthcare. The significance of documentation errors and inconsistencies in the healthcare field are enormous. The implications of poor clinical documentation range from ineffective patient care to decreased revenue within medical facilities around the world. The Office of Inspector General (2012) has even placed higher standards and expectations on evaluation and management services, stating that they will review the extent of potentially inappropriate payments and identify EHR documentation practices associated with documentation errors across services. The implication of this could result in services and funds being denied on inpatient care based on the provider's

level of documentation. Through understanding the most common and devastating clinical documentation errors, healthcare providers and organizations can begin to fix the problem and bridge the gap between documentation and technology. Hospitals around the United States are recognizing the increasing need for CDI Specialists and their roles in improving the documentation errors and inconsistencies with the EHR and traditional paper health records. As the documentation requirements become stricter, the increasing need for documentation improvement will only become more critical. Through improving documentation within the healthcare arena, all stakeholders will benefit and patient care and satisfaction will increase. CDI Specialists will help to improve current clinical documentation practice and decrease the amount of documentation errors and inconsistencies.

After the eight-week conclusion of the implementation of a CDIS, it was determined that although the physician documentation did improve, there were still a few physicians that were resistant to change and refused to participate in educational opportunities. Reimbursement increased by \$107,542.35 of which would not have been recuperated had the CDIS not been reviewing documentation for missing, inconsistent, or conflicting clinical documentation. There were many factors that influenced the full success of the program. These factors included administrative support, the participation of physicians with education and documentation, ICD-10 coding guidelines, and limitation of time.

References

- Bassett, M. (2013). CDI broadens its reach. *For The Record (Great Valley Publishing Company, Inc.)*, 25(1), 18-21.
- Beaty, L. (2005). A primer for understanding diagnosis-related groups and inpatient hospital reimbursement with nursing implications. *Critical Care Nursing Quarterly*, 28(4), 360-369.
- Best Practices in the Art and Science of Clinical Documentation Improvement. (2015). *Journal of American Health Information Management Association*, 86(7), 46-50.
- Betbeze, P. (2010). Big Bucks in Clinical Documentation. *HealthLeaders Magazine*, 13(6), 47.
- Bowman, S. (2013). Impact of electronic health record system on information integrity: Quality and safety implications. *Perspectives in Health Information Management*, 1-19.
Retrieved from: <http://perspectives.ahima.org/impact-of-electronic-health-record-systems-on-information-integrity-quality-and-safety-implications/#.VdDksUtfRuY>
- Burgess, S., Cooper, S., Endicott, M., Wallace, S., & Wiedemann, L. A. (2015). Measuring the value of the clinical documentation improvement practitioner (CDIP) credential...Practice guidelines for managing health information. *Journal of AHIMA*, 86(1), 52-55.
- Butler, M. (2015). Fixing a broken EHR. *Journal of AHIMA*, 86(3), 18-23.
- Butler, M. (2015). Preventing healthcare's top four documentation disasters. *Journal of American Health Information Management Association*, 86(7), 18-23.
- CDI specialists play vital role in capturing pay for performance measures. (2015). *Medical Records Briefing*, 30(5), 6-9.

- Chtourou, H. (2013). CDI programs used to improve quality reporting accuracy. *Journal of AHIMA*, 84(7), 50-51.
- DeYoung, J.L., VanderKooi, M.E., & Barletta, J.E. (2009). Effect of bar-code-assisted medication administration on medication error rates in an adult medical intensive care unit. *American Journal Of Health-System Pharmacy*, 66(12), 1110-1115.
doi:10.2146/ajhp080355
- Documentation Improvement Not Just About ICD-10. (2014). *Strategies for Health Care Compliance*, 18(2), 11-12
- Elevating Organizational Performance with Improved Documentation and Coding. (2015). *Healthcare Financial Management*, 69(6), 1-8.
- Geissler, K., & Dion, J. (2015). Reinvigorating your cdi program. *Journal Of AHIMA*, 86(7), 24-27.
- Gold, R. S. (2015). Conflicting documentation: The mechanisms of diagnosis inconsistency. *Briefings On Coding Compliance Strategies*, 18(5), 8-11.
- Holly, C. (2014). *Scholarly inquiry and the DNP capstone*. New York, NY: Springer.
- ICD-10 Moves Healthcare One Step Closer to Improved Documentation. (2015). *Journal of AHIMA*, 86(11), 62-63
- Improving Clinical Documentation. (2014). *HealthLeaders Magazine*, 17(9), 71.
- Kennedy, J. S. (2014). Let's be honest about ICD-10. *Medical Records Briefing*, 29(12), 13-14.
- Kittinger, B., Matejicka, A., & Mahabir, R., (2016). Surgical precision in clinical documentation connects patient safety, quality of care, and reimbursement. *Perspectives in Health Information Management*, 1(11).

- Kuhn, T., Basch, P., Barr, M., & Yackel, T. (2015). Clinical documentation in the 21st century: executive summary of a policy position paper from the American College of Physicians.. *Annals Of Internal Medicine*, 162(4), 301-303. doi:10.7326/M14-2128
- Letourneau, R. (2014). Driving down denials. *Healthleaders Magazine*, 17(7), 56-59.
- Lo, W. (2014). Document like this, not like that...CDI insights from the physician and CDI specialist perspective. *Journal Of AHIMA*, 85(7), 36-40.
- Macios, A. (2011). How to measure CDI effectiveness. *For The Record (Great Valley Publishing Company, Inc.)*, 23(9), 14-17.
- McBride, S., Delaney, J. M., & Tietze, M. (2012). Health information technology and nursing.. *AJN, American Journal of Nursing*, 112(8), 36–42.
- McGonigle, D., & Mastrian, K. G. (2015). *Nursing informatics and the foundation of knowledge* (3rd ed.). Burlington, MA: Jones and Bartlett.
- Monsen, K. A., Lytton, A. B., Ferrari, S., Halder, K. M., Radosevich, D. M., Kerr, M. J., & ... Brandt, J. K. (2011). Evaluating reliability of assessments in nursing documentation. *Journal Of Nursing Informatics*, 15(3). 10-10.
- Murphy, J. (2010). Nursing informatics: The intersection of nursing, computer, and information sciences. *Nursing Economic\$, 28(3)*, 204–207.
- Office of Inspector General (2012). I-14 work plan part 1 fiscal year 2011 Medicare part a and part b. Doi:04-10-00181; 04-10-00182
- Recruitment, Selection, and Orientation for CDI Specialists...practice guidelines for managing health information. (2013). *Journal of AHIMA*, 84(7), 58-62.
- Riva, J. J., Malik, K. M., Burnie, S. J., Endicott, A. R., & Busse, J. W. (2012). What is your research question? An introduction to the PICOT format for clinicians. *Journal Of The*

Canadian Chiropractic Association, 56(3), 167-171.

- Rosenbaum, B. P., Lorenz, R. R., Luther, R. B., Knowles-War, L., Kelly, D. L., & Weil, R. J. (2014). Improving and measuring inpatient documentation of medical care within the MS-DRG system: Education, Monitoring, and Normalized Case Mix Index. *Perspectives In Health Information Management*, 1-11.
- Schifferdecker, K., Bazos, D., Sutherland, K., Ayers LaFave, L., Ruggles, L., Fedrizzi, R., Hoebeke, J., (2016). A review of tools to assist hospitals in meeting community health assessment and implementation strategy requirements. *Journal of Healthcare Management*, 61(1), 44-57.
- Simpson, R. (2003). Information technology. Today's challenges shape tomorrow's technology, part 2. *Nursing Management*, 34(12), 40.
- Stavropoulou, A., & Stroubouki, T. (2014). Using the principles of realistic evaluation approach in nurse education. *Health Science Journal*, 8(4), 411-422.
- Sullivan, M. (2015). A fresh approach to clinical documentation excellence. *Medical Records Briefing*, 30(4), 14-16.
- Soares, M. M., Jacobs, K., Samaras, E. A., Real, S. D., Curtis, A. M., & Meunier, T. S. (2012). Recognizing nurse stakeholder dissonance as a critical determinant of patient safety in new healthcare information technologies. *Work*, 411904-1910. DOI: 10.3233/WOR-2012-0406-1904.
- Tellez, M. (2012). Nursing informatics education past, present, and future. *CIN: Computers, Informatics, Nursing*, 30(5), 229–233. DOI: 10.1097/NXN.0b013e3182569f42
- Titler, M. G., Kleiber, C., Steelman, V. J., Rakel, B. A., Budreau G., Everett, L. Q., . . . Goode, C. (2001). The Iowa model of evidence-based practice to promote quality care. *Critical Care*

Nursing Clinics of North America, 13(4), 497–509.

White, K. M., & Dudley-Brown, S. (2012). *Translation of evidence into nursing and health care practice*. New York, NY: Springer.

Yeung, M.S., Lapinsky, S.E., Granton, J.T., Doran, D.M. & Cafazzo, J.A. (2012). Examining nursing vital signs documentation workflow: barriers and opportunities in general internal medicine units. *Journal Of Clinical Nursing*, 21(7/8), 975-982. Doi:10.1111/j.1365-2702.2011.03937.x