DISSERTATION REPORT

(1ST MARCH- 30TH APRIL)

STUDY ON CLINICAL DOCUMENTATION IMPROVEMENT & ROLE OF INFORMATION TECHNOLOGY IN DOCUMENTING CLINICAL RECORDS OF THE PATIENT

SUBMITTED BY - NAVRUTI RAINA

Internship Training

At Deloitte

Study on Clinical Documentation Improvement & Role of IT in Documenting clinical records of the patient.

By

Name –Navruti Raina

Enroll No. PG/13/038

Under the guidance of Mrs Kirti Udayai Post Graduate Diploma in Hospital and Health Management

2013-2015

International Institute of Health Management Research

New Delhi

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May 15, 2015

To Whom It May Concern

This is to certify that Ms. **Navruti Raina** was on a fixed term Internship from **February 09, 2015** to **May 15, 2015**. She has successfully completed her Internship in **Application Management Services**.

We wish you the very best in your future endeavors.

Yours truly,

For Deloitte Consulting India Pvt. Ltd.

GUNJAN MITTAL

Digitally signed by GUNJAN MITTAL
DN: c=IN, o=Personal, ou=CID - 3677500, postalCode=500019, st=Andhra Pradesh, serialNumber=6e5ec3e5b1437ab538c76bd3dda7880b45e0cc2b562d2f75d30e6b190976630, cn=GUNJAN MITTAL
Date: 2015.05.14 11:36:30 +05'30'

Authorized Signatory

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INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH, NEW DELHI

CERTIFICATE BY SCHOLAR

This is to certify that the dissertation titled "Clinical Documentation Improvement & Role of information technology in recording clinical records of the patient" and submitted By Navruti Raina, Enrollment No.PG/13/038 under the supervision of Mrs Kirti Udayai for award of Postgraduate Diploma in Hospital and Health Management of the Institute carried out during the period from 9-2-2015 to 15-5-2015 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

Signature

Certificate from Dissertation Advisory Committee

This is to certify that **Navruti Raina** a graduate student of the **Post- Graduate Diploma in Health and Hospital Management** has worked under our guidance and supervision. She is submitting this dissertation titled "**Study on Clinical Documentation Improvement and Role of Information Technology in documenting Clinical records of the Patients**" at "**Deloitte Consulting India Pvt. Ltd**" in partial fulfillment of the requirements for the award of the **Post-Graduate Diploma in Health and Hospital Management.**

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.

Kirti Udayai,
Assistant Professor, Assistant Dean
IIHMR, New Delhi

Deepika Sharma
Senior Consultant
Deloitte Consulting India Pvt. Ltd.

FEEDBACK FORM

Name of the Student: NAVRUTI RAINA

Dissertation Organisation: DELOITTE

Area of Dissertation: HEALTHCARE IT

Attendance: 100 %.

Objectives achieved: Clear demonstration of CDI workflows
Explained role of IT in CDI
Gave resolutions/Possible solution to make it better.

Deliverables:
1) Presentation of CDI improvement
2) Good understanding of IT w.r.t CDI

Strengths:
1) Excellent team player
2) Excellent communication skills
3) Thorough & Confident
4) Very Knowledgable

Suggestions for Improvement:
1) Learn US healthcare and terminologies & can articulate well

Signature of the Officer-in-Charge/ Organisation Mentor (Dissertation)

Deepika Sharma.

Date: 14-5-2015
Place: DELOITTE, BANGLORE

TO WHOM SO EVER IT MAY CONCERN

This is to certify that Navruti Raina student of Post Graduate Diploma in Hospital and Health Management (PGDHM) from International Institute of Health Management Research, New Delhi has undergone internship training at Deloitte from 9-2-2015 to 15-5-2015.

The Candidate has successfully carried out the study designated to him during internship training and his approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish him all success in all his future endeavors.

Dr. A.K. Agarwal
Dean Academics and Student Affairs
IIHMR, New Delhi

Mrs. Kirti Udayai
Assistant Dean & Assistant Professor
IIHMR, New Delhi

CERTIFICATE OF APPROVAL

The following dissertation titled **"Clinical Documentation Improvement & Role of Information Technology in documenting clinical records of the patient"** at **Deloitte** is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **Post Graduate Diploma in Health and Hospital Management** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name	Signature
S. V. Adhi	
Kirti Udayai	Kirti Udayai

ACKNOWLEDGEMENT

Hard work, Guidance and perseverance are the pre requisite for achieving success. Support from an enlightened source help us to proceed on the path to it.

I am thankful & obliged to Mr. Uday Kamat, Manager Deloitte US- India & Ms. Deepika Sharma, Senior Consultant Deloitte US- India for giving me an opportunity to work on this project & for their continuous support. I am also thankful to Mrs. Deepika Arora, Consultant for her guidance & perseverance during the course of my project.

I am thankful to Anirudh Saksena, Business Technology Analyst for providing me all the trainings & giving the best of his knowledge.

It has been my good fortune to be benefited by their knowledge, guidance and deep insight. To them, I tender my heartfelt regards.

I am highly indebted to my mentor Mrs. Kirti Udayai for her valuable guidance & motivation on various aspects to this project.

INTERNSHIP REPORT

ORGANIZATIONAL PROFILE

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DETAILS OF THE PROJECT

A clinical documentation improvement (CDI) program promotes clear, concise, complete, accurate and compliant documentation. This is accomplished through analysis and interpretation of the documentation done on health record of the patient to identify and rectify situations where documentation is insufficient to accurately support the patient's severity of illness and care, including specificity of principal diagnosis, associated comorbidities or complications, treatments and procedures. CDI (Clinical Documentation Improvement) staff will analyze data, formulate physician queries, track CDI program performance, and successfully communicate with physicians, administration & others as necessary.

Deloitte Consulting US- India is in contractual agreement with group of hospitals in U.S & the functional support is in the form of onsite as well as offshore team sitting in Deloitte, Bangalore.

KEY LEARNING

The summary of learning at Deloitte is mentioned below -:

- Functional Overview of EMR
- Knowledge of hospital workflow & its integration
- Root cause analysis of tickets

TABLE OF CONTENTS

ABBREVIATION

EHR - ELECTRONIC HEALTH RECORD

EMR – ELECTRONIC MEDICAL RECORD

CDI - CLINICAL DOCUMENTATION IMPROVEMENT

CMS- CENTERS FOR MEDICARE & MEDICLAID SERVICES

CMI - CASE MIX INDEX

DRG - DIAGNOSTIC RELATED GROUP

ACDIS – ASSOCIATION OF CLINICAL DOCUMENTATION IMPROVEMENT SPECIALIST

CCDS- CERTIFIED CLINICAL DOCUMENTATION SPECIALIST

POA- PRESENT ON ADMISSION

ICD- INTERNATIONAL CLASSIFICATION OF DISEASES

CDIP- CLINICAL DOCUMENTATION IMPROVEMENT PROGRAM

RN - REGISTERED NURSE

RHIA - REGISTERED HEALTH INFORMATION ADMINSTRATOR

SOI - SEVERITY OF ILLNESS

PART – 2 DISSERTATION REPORT

.ABSTRACT

The purpose of this study is to determine importance of a Clinical Documentation Improvement which has an impact to the patient's acuity scores in a healthcare organization. These acuity scores, in combination with other metrics, are utilized in public reporting of healthcare institutions. By portraying the most accurate clinical picture possible, healthcare organizations have the potential to bring in more revenue. Clinical Documentation Improvement (CDI) is the recognized process of improving healthcare records to ensure improved patient outcomes, data quality and accurate reimbursement. The profession was developed in response to the Centers for Medicare and Medicaid Services (CMS) Diagnostic-Related Group (DRG) system, and gained greater notice around 2007.

CDI professionals play the role as reviewers & coding quality coordinators, whose main objective is to review the accounts once coded & complete. (Coding is the conversion of clinical data into codes) .As many clinical coders don't have patient care backgrounds, and healthcare providers might not realize the importance of accurate documentation, the CDI professional serves to make the connection between these two groups. CDI professionals should be familiar with Medicare Severity DRGs (MS-DRG) ICD-9 to ICD-10 coding.

The Association of Clinical Documentation Improvement Specialists (ACDIS) is a provider of integrated information, education, training, and consulting products and services in healthcare regulation and compliance. ACDIS provides Certified Clinical Documentation Specialist (CCDS) certification, and a CDI boot camp. The Association for Integrity in Health Care Documentation (AIHCD) offers a C-CDI certification

INTRODUCTION

Clinical documentation in the health record is critical to the patient, the physician, and the healthcare organization. Acute care hospitals, in particular, have become more dependent on physician (provider) documentation in order to comply with the Centers for Medicare and Medicaid Services (CMS) regulations regarding quality and reimbursement. Clinical documentation improvement (CDI) programs began in the 1990s to assist physicians in their documentation efforts.

In October 2007 CMS implemented Medicare Severity Diagnosis Related Groups (MS-DRGs) for hospital inpatient prospective payment in order to better reflect the patient‘s severity of illness and expected risk of mortality. The patient‘s principal diagnosis and co-morbid conditions determine these two assessments; thus, the need for complete and accurate documentation takes on a more important role.

One year later, October 2008, CMS began to require a Present on Admission (POA) indicator for all coded diagnoses in order to identify conditions that are present when a patient is admitted from those that are acquired once in the hospital. Finally, the mechanism by which acute care hospitals receive Medicare reimbursement for patients under the Medicare Advantage or Part C payment Structure also relies heavily on documentation and coding for capturing patient conditions, which drives severity and reimbursement as well.

Improved clinical documentation will also improve outcomes data and assist in preparing the healthcare entity for a variety of future payment methodologies. It plays a part in compliance with

national core measures. Clinical documentation that is precise, thorough, and accurate can provide a defense for regulatory compliance reviews, including the Recovery Audit Contractor initiative and Medicaid Integrity Contractors program. With these regulatory and payment changes, acute care hospitals have started new documentation improvement programs or embellished their current documentation improvement practices and processes. Documentation is then translated into ICD-9-CM codes.

WHAT IS CLINICAL DOCUMENTATION IMPROVEMENT

A clinical documentation improvement (CDI) program promotes clear, concise, complete, accurate and compliant documentation.

Clinical documentation improvement is the recognized process of improving healthcare records to ensure –

- Improved patient outcome
- Data quality
- Accurate reimbursement
- Better revenue generation

Clinical documentation is at the core of every healthcare encounter, it must be complete, precise & reflect the full scope of care & services provided. The health record is the definitive & legal record of care provided to a patient, if the clinical documentation does not adequately, precisely reflect the

process & outcome of each patient encounter, the actual quality of care that was delivered will be seen as irrelevant. Assuring consistency in clinical documents that is accurate, specific, legible & timely is a key quality measure for any organization. The purpose of a CDI program is to initiate concurrent and appropriate patient records. The goal is to identify clinical indicators to ensure that the diagnoses and procedures are supported by ICD-9-CM codes. The method of clarification used by the CDI professional is often written queries in the health record. Verbal and electronic communications are also methods used to make contact with physicians and other providers. These efforts result in an improvement in documentation, coding, reimbursement, and severity of illness (SOI) and risk of mortality (ROM).

Current fiscal & accountability pressures on hospitals & other healthcare providers are resulting in increased reliance on coded data for decision making as a result an increased focus on the quality of the documentation in the health record. Best practice is “if it isn’t documented you can’t code it”. While documentation in the health record has always been critical to the patient, Physician & healthcare organization, hospital are paying an increasing amount of attention to the quality of the documentation & the resulting data that is coded, abstracted & submitted.

Robust, concise & complete documentation that reflects the delivery of high quality healthcare services, including a more accurate reflection of the complexity of patient & care provided to them.

Greater ability to focus on accountability and quality around patient outcome

IMPORTANCE & GOAL OF CLINICAL DOCUMENTATION IMPROVEMENT

The goals of clinical documentation are-:

- Improve documentation to ensure good quality of care
- Optimal reimbursement
- Correct Coding and DRG Assignment
- Improve patient outcomes
- Continuous coding education/training
- Physician education/training
- Capturing severity of illness
- Complications and co-morbidities

Identify and clarify missing, conflicting, or nonspecific physician documentation related to diagnoses and procedures, Support accurate diagnostic and procedural coding, DRG assignment, severity of illness, and expected risk of mortality, leading to appropriate reimbursement.

Promote health record completion during the patient‘s course of care &Improve communication between physicians and other members of the healthcare team. Provide education to improve documentation to reflect quality and outcome scores & improve coders ‘clinical knowledge

The CDI educational component must be supplemented and complemented by usable, efficient, compliant, and meaningful documentation tools that enhance physicians optimal patient care workflow. This concept must be part of the CDI equation to achieve success. Such a program will not only be effective, it will be cost-effective, because the documentation tools can also undergo continuous improvement to meet the sophisticated reporting needs being presented.

CDI programs may also provide new strategies, physician tips, and tools to move the program to success. Tracking the CDI program results is key to demonstrating that the goals of the program are being achieved. This will also provide insight into the data and patient care profiles.

CDI TEAM PROFESSIONALS

CDI– Team Composition

Composition of this facility's Clinical Documentation

Improvement Program's (CDIP) team includes Registered Health Information Administrators (RHIAs) and Registered Nurses (RNs). The knowledge that these two Groups of individuals possess provided a compliment to one another. The RHIA Credentialed staff have a background in coding making them able to assist the RNs with the coding knowledge; while the RNs can provide assistance with the in depth clinical Aspects of the medical diagnoses and treatments.

A comprehensive CDI program involves the following stakeholders from across the health organization system.

An engaged physician team including one physician, key physician leader, selected representatives from physician groups such as residents, hospitalists, consultant physician

Qualified CDI Specialist, typically professional who direct & manage daily & regular operations & process the program.

- Review clinical documentation & identity gaps & opportunities of improvement.
- Gather data & analyze performance metrics to focus CDI effort
- Develop tools & resources to support both coding staff & clinician

CODERS- the coder role in CDI program focuses on contribution to, advice on, the quality & content of Clinical documentation as it impacts their ability to accurately & comprehensively code

& abstract full set of diagnosis & procedures/ intervention. Coding staff contribute to & participate in delivery of physician education programs.

RATIONALE OF STUDY

The purpose of this study is to determine the implementation of a Clinical Documentation Improvement will provide an impact to the revenue generation of the hospital, more frequent CDI queries, more number of claim denials & acuity scores. These acuity scores, in combination with other metrics, are utilized in public reporting of healthcare institutions. By portraying the most Accurate clinical picture possible, healthcare organizations have the potential to increase their Case Mix Index which could also bring in more revenue.

At this time there is limited documentation available providing results benchmarking of Clinical Documentation Improvement Programs. The majority, if not all, of the literature explains the need to implement a program and how to structure and organize the efforts surrounding it. This study will look at the outcomes experienced at one facility. Upon completion of this study, it was determined that the implementation of Clinical Documentation Improvement Program provided an impact to the facility in terms of their revenue generation & claim denials.

RESEARCH OBJECTIVE

The Research objective for the study is as follows-

- To study how documentation impacts quality of care, financial planning, healthcare outcomes and appropriate reimbursement.

- To study the importance of clinical documentation

- To identify documentation improvement best practices.

- To identify the frequency of CDI Query by CDI nurses due to inappropriate documentation

- To identify Frequency of claim Denials due to inappropriate documentation

- Impact of improper documentation on revenue generation

- Impact of improper documentation on prognosis of the patients.

REVIEW OF LITERATURE

The goal for the literature review was to acquire specific evidence that would assist in the steps to provide sound evidentiary support to establish the importance of accurate and comprehensive clinical documentation so that the level of care provided is clearly evident in the medical record. In addition, searching for any literature that could measure accurate and comprehensive documentation of MS-DRGs. A literature search utilized multiple databases such as CINAHL, MEDLINE, Cochran to acquire recent evidence to support our goal to implement EHRs while maintaining clinical documentation excellence. The search was on the following keywords in each search engine and database*: medical severity diagnosis related groups, diagnosis related groups, provider documentation, electronic medical records, electronic health records,* and *electronic health records and case mix index*.

It was found that several studies that support accurate and comprehensive provider documentation of patient records to increase reimbursement and represent the quality of care delivered. Studies that developed strategies for successful EHRs adoption in the hospital setting and examined the importance of provider documentation of MS-DRGs that specifically relates to quality of care and the financial impact of provider documentation.

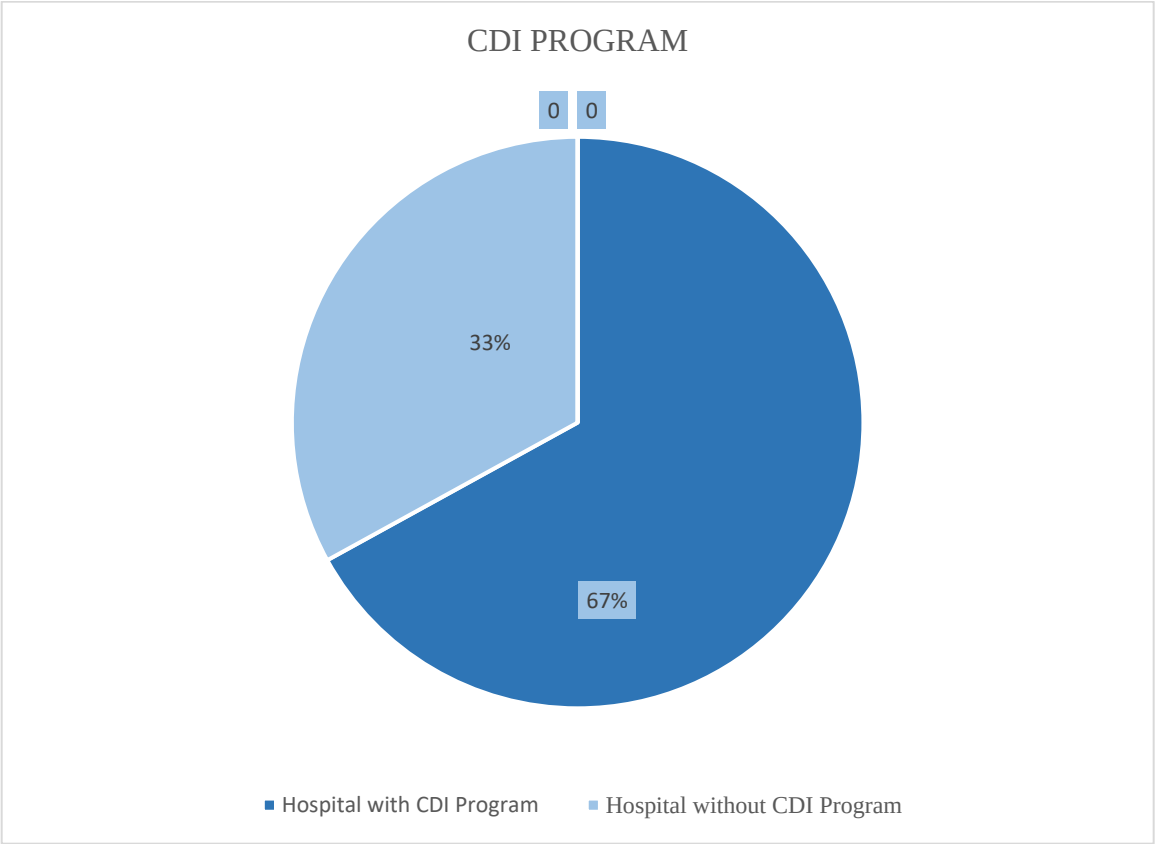
Several studies were found that support accurate and comprehensive provider documentation of CC (Complication & comorbidities) to increase reimbursement and represent the quality of care delivered.

Jha et al. (2009) illustrates that less than 2% of U.S. hospitals have a comprehensive EHRs system in use. The American Recovery and Reinvestment Act of 2009 states that U.S. health policy is aiming for 100% adoption of a comprehensive EHRs system by 2015.

The Institute of Medicine developed a list of functionalities that are needed to qualify as a comprehensive inpatient EHRs. In order to qualify as a comprehensive EHRs system, hospitals must incorporate physician and nursing components that include clinical documentation

CDI programs have become a necessity as hospitals struggle with increasing regulatory requirements and optimizing reimbursement under the MS-DRG system, which requires capturing severity of illness. Gone are the days where professionals only had to consider present on admission (POA), hospital acquired conditions (HACs), and capturing “CCs” and “MCCs.” Providers can no longer ask how much they do for patients, but also must ask how well they do it. They now have to look at the whole patient experience. As we move forward with Meaningful Use, the Accountable Care Act, ICD-10 and ongoing RAC initiatives, a CDI program should be a part of every organization’s “survival kit.”

According to the Advisory Board Financial Leadership Council, 67% of hospitals have initiated a CDI program, but are stifled by insufficient staff and inadequate tracking mechanisms. The remaining 33% have no CDI program in place.



67% of hospitals have initiated a CDI program, but are stifled by insufficient staff and inadequate tracking mechanisms.

The remaining 33% have no CDI program in place.

Healthcare policymakers and payers use coded data to make important decisions. CMS outlined their intentions for Implementing Value Driven Healthcare in the Traditional Medicare Fee-for-Service Program transforming the Medicare program from a passive payer of services into an active purchaser of higher quality, affordable care."4 Expanded programs are revamping how services are paid, moving Exponentially toward rewarding better value, outcomes, and innovations. Commercial payers are also increasingly adopting strategies that focus on physician documentation and coded data to support quality initiatives, payment methodologies, payer contracts, and preferred provider arrangements

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. A successful CDI program can have an impact on Centers for Medicare and Medicaid Services (CMS) quality measures, present on admission, pay-for-performance, value-based purchasing, data used for decision-making in healthcare reform, and other national reporting initiatives that require the specificity of clinical documentation

.

RESEARCH METHODOLOGY

The Research Design: Retrospective study

Sampling Technique: Convenient sampling

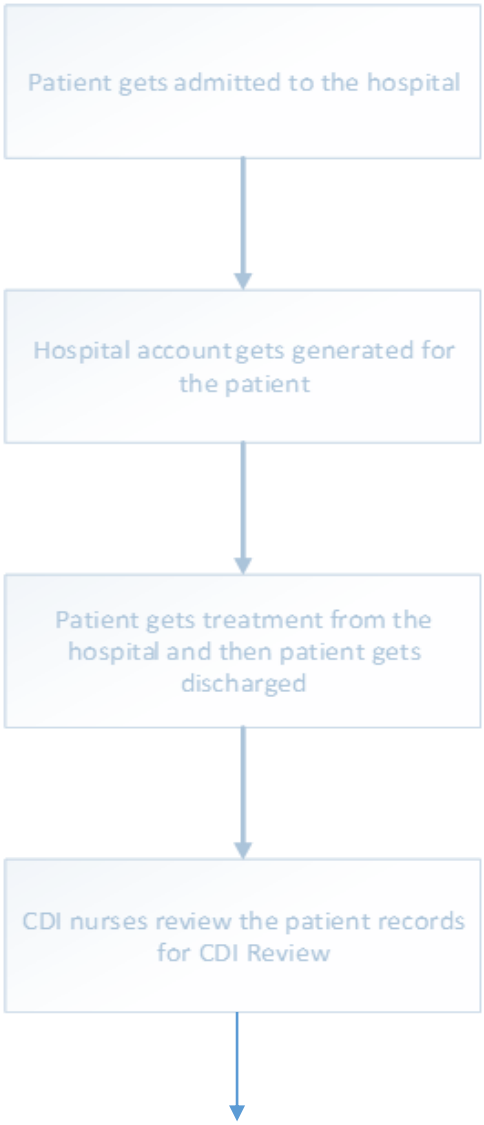
Sample Size: 100 Accounts

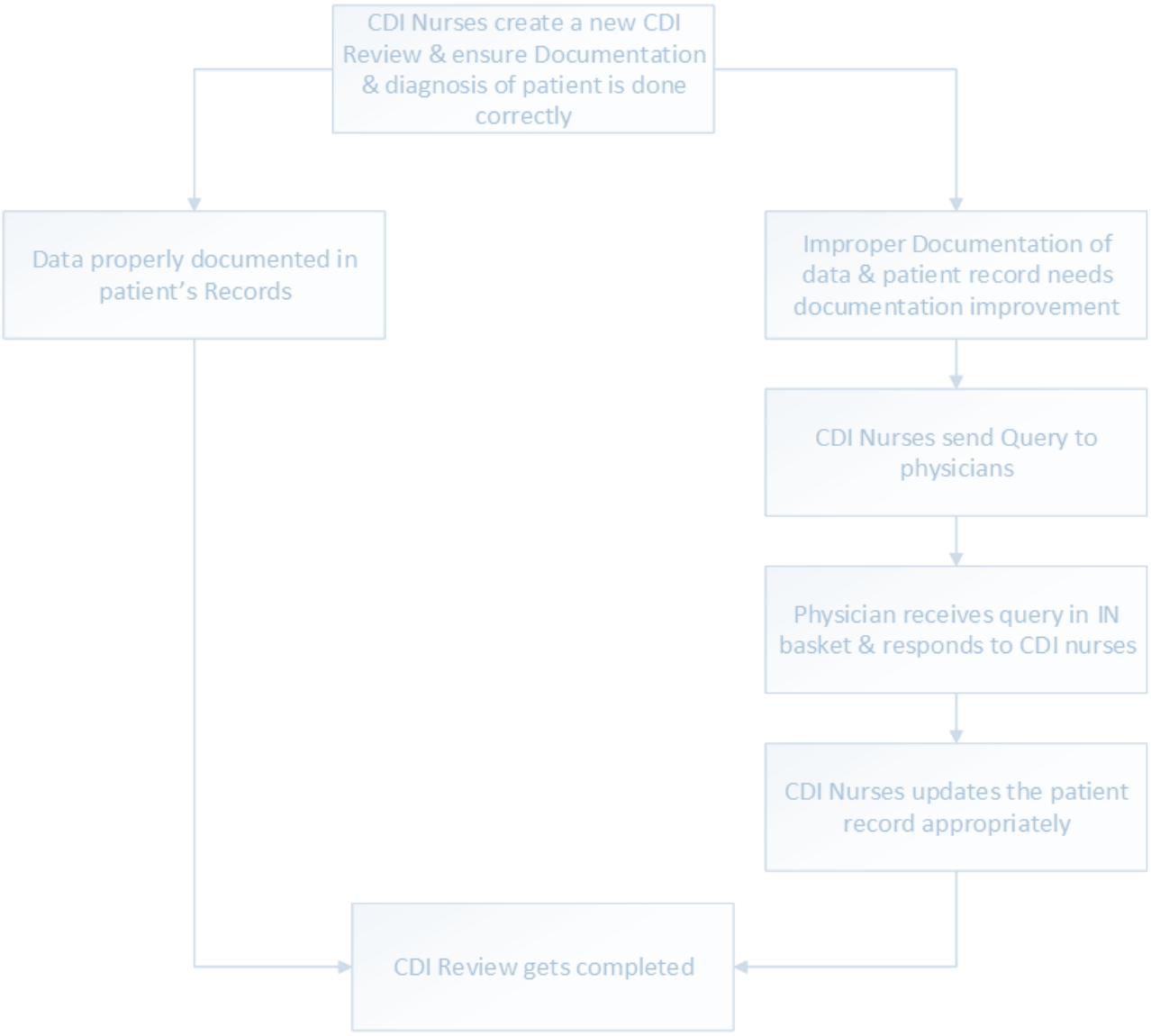
Study Area: Deloitte US- INDIA

Study Time: 2 months

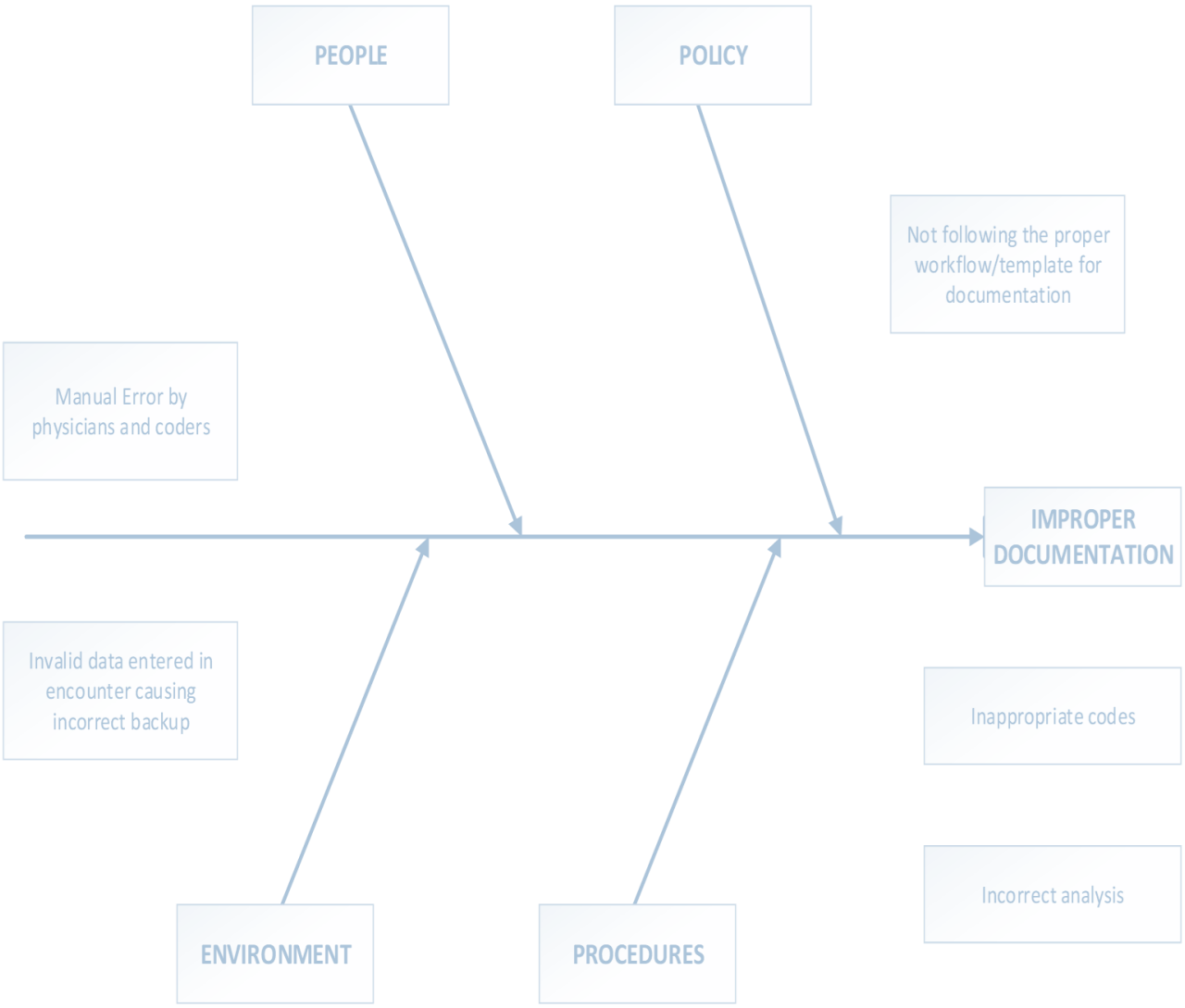
Tools of Data Collection: It's a retrospective study. Reports were on couple of accounts with CDI Query

CDI WORKFLOW




CDI Nurses create a new CDI Review & ensure Documentation & diagnosis of patient is done correctly
Data properly documented in patient's Records
Improper Documentation of data & patient record needs documentation improvement
CDI Nurses send Query to physicians
Physician receives query in IN basket & responds to CDI nurses
CDI Nurses updates the patient record appropriately
CDI Review gets completed

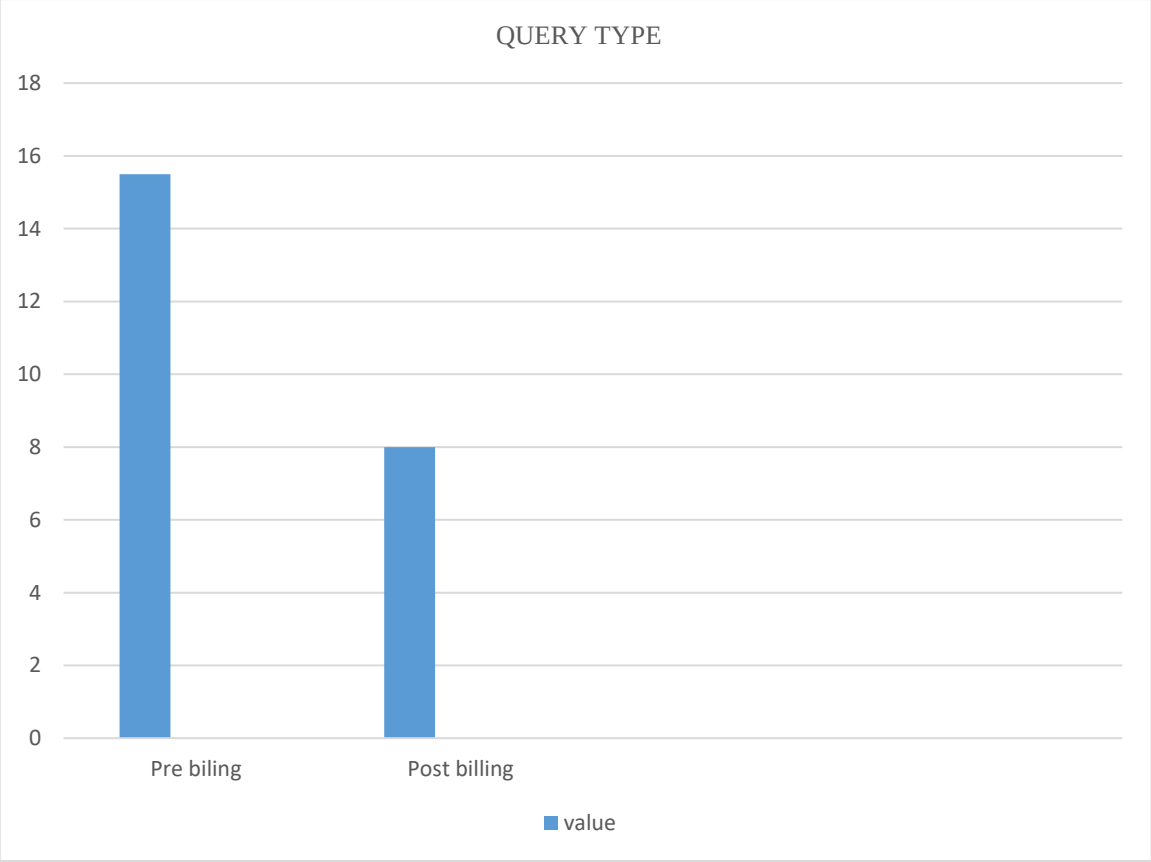
FISH BONE ANALYSIS



PARAMETERS ANALYZED

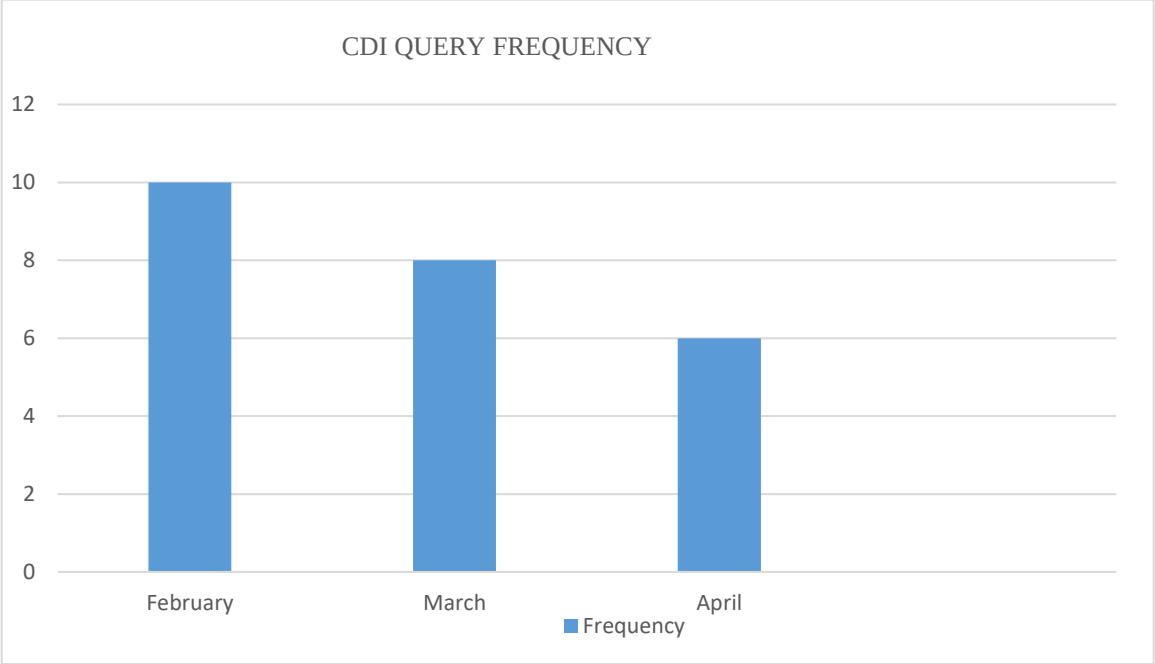
CDI QUERY TYPE – IT was analyzed on the accounts

- Pre billing (Before the bills sent to the guarantors)
- Post billing (After the bills sent to Guarantors



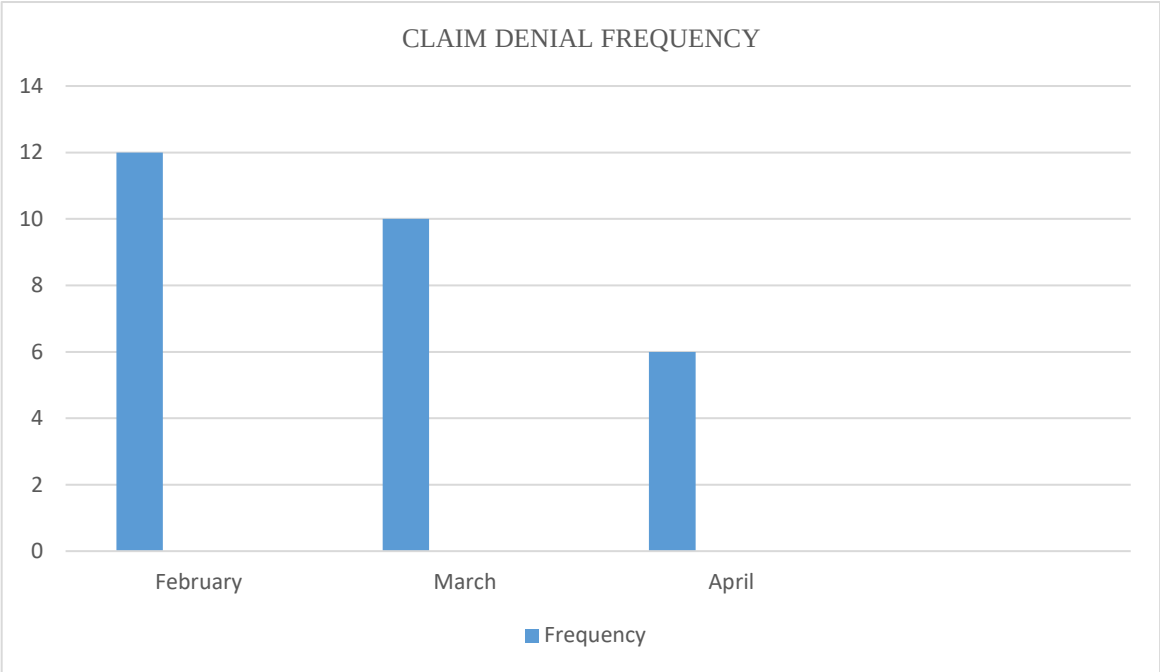
2) **PARAMETER ANALYZED**

CDI Query frequency in 3 months by CDI nurses to physician due to improper documentation of patient records.



3) **PARAMETER ANALYZED**

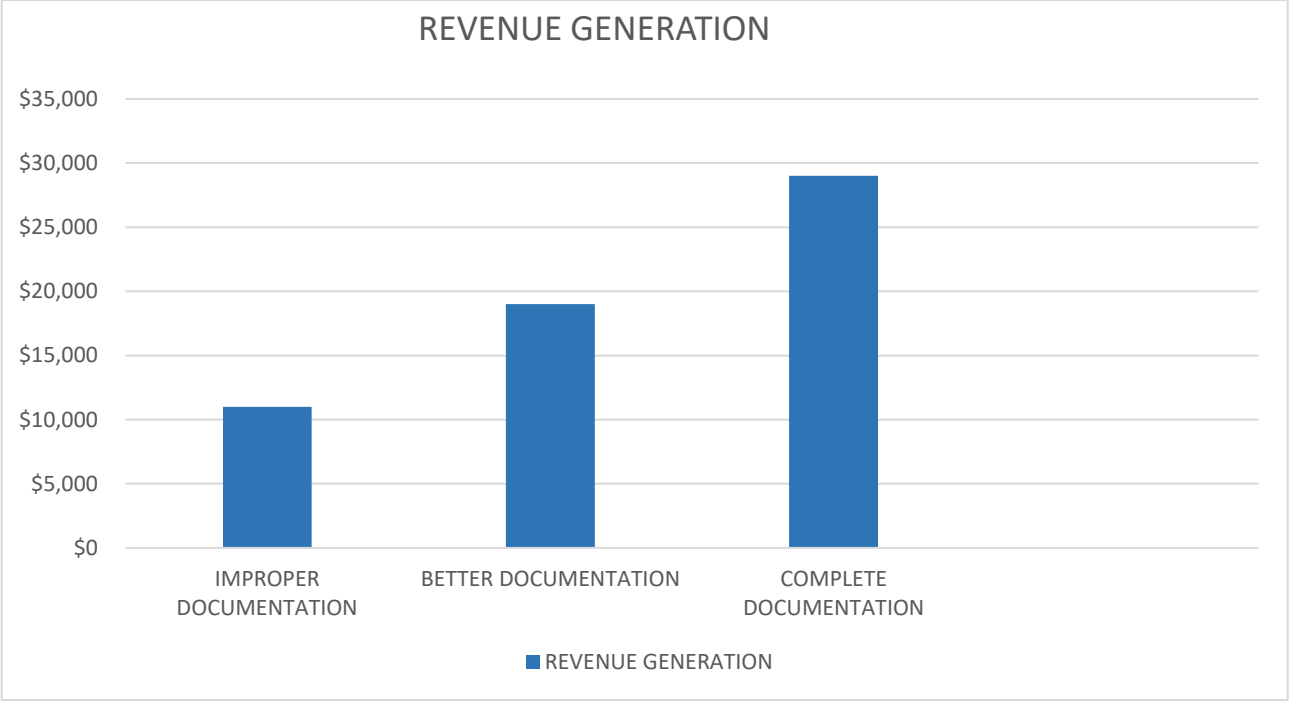
Claim denial frequency in the hospital after the bill sent to Guarantors.



4) **PARAMETER ANALYZED**

Improper documentation affecting the Revenue Generation.

INCOMPLETE DOCMENTATION	BETTER DOCUMENTION	COMPLETE DOCUMENTATION
• 70- year old cancer admitted hemi colectomy • No comorbid conditions	• 70 year old with colon cancer admitted for hemi colectomy • Pneumonia, Post admission, organism unspecified	• 70 year old with colon cancer admitted for hem colectomy • Pneumonia post admission due to streptococcus
POTENTIAL FUNDING IMPLICATION- $11,000	POTENTIAL FUNDING IMPLICATION- $19,000	POTENTIAL FUNDING IMPLICATION- $29,000

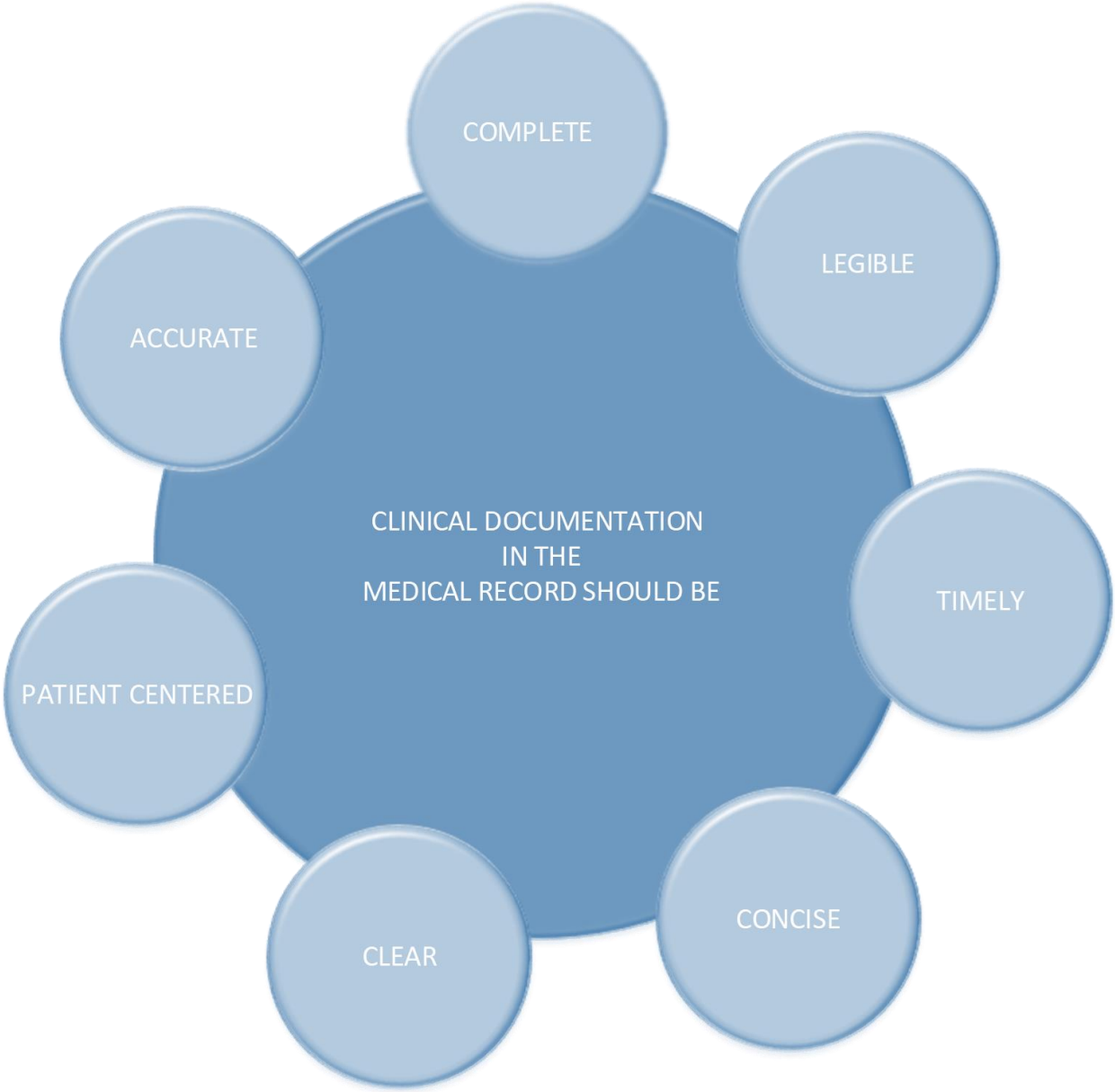


RESULT & DISCUSSION

Analysis was done on a couple of accounts which determine the importance of clinical documentaion improvement. As lack of proper documentation in patient accounts leads to more of CDI Queries from CDI nurses to physicians, prognosis of the patient, more of claim denials from the guarantors & therefore affecting the revenue generation of the hospital.

CDI is at the heart of many organizations' efforts to address their challenges associated with improving patient outcomes, smoothing clinical workflows, enhancing financial performance and streamlining compliance. Electronic health records (EHRs) certainly are playing a key role in the industry's efforts to improve outcomes and quality of healthcare, but many healthcare Executives have strong concerns about EHRs' ability to provide the proper quality of Patient documentation necessary.

An effective CDI program focuses on establishing a dialogue between the Clinical Documentation Improvement Specialist and the clinician as part of their clinical thought process as they work within their EHR to document patient care. One of the biggest motivators for adopting CDI solutions is the proven, demonstrable improvement in Case Mix Index, resulting in Increased revenues and the best possible utilization of high-value specialists. CDI solutions also are a critical link in ensuring full and timelier reimbursements from insurers and other payers, as well as avoiding costly penalties of Non-compliance. Also, by using CDI to establish the severity of illnesses and Risk of mortality, it ensures the development of risk-adjusted outcome profiles And appropriate payments for hospitals and physicians


COMPLETE
LEGIBLE
TIMELY
CONCISE
CLEAR
PATIENT CENTERED
ACCURATE
CLINICAL DOCUMENTATION
IN THE
MEDICAL RECORD SHOULD BE

CHALLENGES

The greatest challenge of a CDI program physician's education is prerequisite. Training and education should be tailored to specific services such as cardiology and gastroenterology, as each specialty has specific documentation requirements.

Trainers should emphasize how documentation will benefit physician performance profiles and reimbursement for their complete services. Additionally, appropriate hospital reimbursement provides increased resources for their hospital services. Physician education is never ending—especially in a teaching environment where attending physicians change services often and residents rotate through services.

A second challenge is hiring the right individual in the CDI position. There is no magic credential or license for this individual. The ideal candidate may come from various backgrounds, in particular a coder, nursing, and physician.

The CDI professional should have an excellent clinical background, strong oral and written communication skills, and basic knowledge of coding guidelines and conventions. These skills will empower them to provide a clinically succinct physician query and also be recognized as a member of the healthcare team. The CDI professional should understand the ethics and compliance issues surrounding the physician query process.

A third challenge is bridging the potential gap between the CDI professional and hospital coding staff. The CDI professional is a new player to the team, being brought in to communicate with physicians on documentation improvement issues. In the past this has been a function performed by the coding staff, most often retrospectively and less effectively (thus the need for a CDI program). Both the CDI professional and the hospital coders should be encouraged to recognize each other‘s skill sets and work as partners to accomplish the goal of solid documentation in support of the most specific code selection. Pairing coders with a CDI professional is helpful in

Enhancing their operational synergies and their interaction is a continually redefined

RECOMMENDATIONS

The technological solution

The primary purpose of clinical documentation is to accurately reflect the condition of the patient and the services provided and to serve as a means of communication amongst all clinical providers. Lack of accurate and complete documentation can result in the use of nonspecific and general codes, which can impact data integrity and reimbursement and present potential compliance risks for any organization. One of the major benefits of an integrated CDI offering is to provide a concurrent, intuitive documentation clarification process to minimize negative impact on downstream coding activities. And technology can allow a review of documentation concurrently and ensure that the physician is being as precise as possible when capturing severity of illness and the acuity of the patient's condition.

What is needed is an enterprise-wide automated workflow solution with Natural Language Comprehension supporting multiple roles within the organization, driving automation and accelerating data transformation for improved financial and clinical outcomes.

There are several components to this enterprise-wide solution:

- **Workflow technology –** Ensures that the right work gets to the right people at the right time.

- **Natural Language Comprehension –** The NLC engine is a form of artificial intelligence that reads the documentation, gains a contextual understanding and then gives us direction on what

other data points we may need. It provides a better utilization of information. This supports multiple roles within the organization focused on transforming data for financial results, clinical outcomes and third-party reporting.

- **Voice-to-text conversion –** This technology consolidates and transforms data, ensuring that the patients' data is captured and shows what the clinician intended. This provides a patient-centric view of data, not just episode-specific but able to look across different centers of care for the patient.

PHYSICIAN EDUCATION

To ensure a successful CDI Program, Physician involvement & support is critical to the acceptance & delivery of the program from its inception. Strong collaboration & evidence leadership between physician & CDI program staff including coders will ensure the lomg term success of the program.

Some key activities as a part of Delivery / physician / clinical education & include –

- Establish a CDI taskforce or committee including physicians as an integral members,
- Engage physician in the development of tools & Resources that can be used to assist both coder staff & physicians

ENGAGEMENT OF CDI SPECIALIST

CDI Specialist plays an important role as CDI specialist have advanced knowledge about the codes to be put for a patient

PROPER DOCUMENTATION OF PATIENT RECORDS INCLUDING –

- Discharge Summary
- History & Physical
- Progress Notes
- Nursing Notes
- Operative Reports, if any
- Medication Record
- Flow Charts
- Lab & Radiology Reports
- Orders

All entries should be dated and authenticated by physician/provider & Documentation of each patient encounter, Date & Reason for the encounter, Appropriate H&P and prior diagnostic test results, Assessment and Plan of Care (discharge plan). These all parameters should be properly documented.

CONCLUSION

The role of CDI continues to evolve, driven by a focus on reimbursement, quality care and reporting. The successful CDI programs of the future will need to incorporate **people, processes and technology** to provide the specificity of documentation that will be required by ICD-10, Meaningful Use and other quality care initiatives. Organizations that improve clinical documentation by investing in CDI programs with training and process improvements that build a strong foundation and support best practices stand to gain significant improvement.

CDI is now a fundamental, strategic part of healthcare organizations' efforts to improve patient outcomes, enhance clinician adoption of advanced clinical documentation frameworks, ensure compliance and upgrade financial performance. Today's new CDI solutions are making it possible for organizations to use familiar technologies and workflow to drive clinician Acceptance, increase collaboration and ensure the availability of timely, accurate information to improve diagnosis and impact quality and patient care

Appendix A

Hospital Logo

Name
Address
Hospital ID#
Health Card #
Telephone (H) (W
DOB DD/MN/YY

Admission Date and Time:	Most Responsible Physician:
Family Physicians Information Name:	Phone: Fax:
Discharged Date: Signed Out Transferred Death Transferred to:	*Please bring this sheet with you to your next visit to the doctor/follow-up appointment/ER visit.*
Primary Diagnosis:	
Secondary Diagnoses:	
Discharge Medications:	
Key Investigational Results:	Treatment/Dressings:
Instructions on Discharge and Medical Follow-Up:	
Follow-Up arranged with: Date for follow-up:	Telephone #:
I have read and understand the above instructions. Signature: _____ Date: _____	MRP/Discharge Staff Signature: _____ Name/Credential: _____

Please bring this sheet with you to your next visit to the doctor/follow-up appointment/ER visit.

Appendix B: Policies and Procedures

Following are examples of six policies and procedures that may be used in established or new CDI programs. These are samples that can be used as is or adapted to reflect the specific needs of the healthcare organization.

Requesting Clinical Documentation Clarification

Purpose

To provide a standardized process of communicating with the medical staff and providers in order to achieve complete and accurate documentation. Appropriate clinical documentation clarification requests will improve the accuracy, integrity, and quality of patient information in the health record. Clinical documentation clarification requests are an established mechanism to clarify ambiguous, incomplete, unclear, or conflicting documentation in the health record.

Scope

These guidelines apply to all health records (inpatient and outpatient) and all personnel responsible for performing, supervising, or monitoring provider documentation.

Responsibility

It is the responsibility of the CDI professional to implement these guidelines. It is the responsibility of the individual to implement, enforce, update, and ensure compliance with these guidelines.

Definitions

CDI professional—an individual who reviews health records on a concurrent basis and aids the provider if opportunities to improve documentation are identified

Clarification—to make clear or easier to understand (e.g., a needed clinical interpretation of a given diagnosis or condition based on treatment, evaluation, monitoring, and/or services provided; a needed agreement of diagnoses by other non-physician members of the healthcare team; a needed diagnosis for conflicts between attending and consulting physicians)

Coding professional—an individual who translates the descriptions of diseases, injuries, and procedures into numeric or alphanumeric designations for reimbursement, morbidity, clinical care, research, and education

Concurrent—pre-discharge; patient is in-house

Provider—any qualified healthcare practitioner who is legally accountable for establishing the patient‘s diagnosis

Post billing—post-discharge after billing

Retrospective—post-discharge before billing

Specification—a detailed description (e.g., documentation to more accurately reflect the acuity, severity, and the occurrence of events to represent an accurate and complete description of the patient‘s clinical condition)

Procedure Overview/Background

Health record documentation is used for a multitude of purposes, including:

- Serving as a means of communication between the provider and the other members of the healthcare team providing care to the patient
- Serving as a basis for evaluating the adequacy and appropriateness of patient care
- Improving the quality and effectiveness of patient care
- Improving clinical decision making
- Monitoring resource utilization
- Providing data to support insurance claims/ensure equitable healthcare reimbursement Permitting valid clinical research, epidemiological studies, outcomes, and statistical analyses
- Assisting in protecting the legal interests of the patients, healthcare professionals, and healthcare facilities

It is imperative that health record documentation be complete, legible, accurate, and timely. If documentation in the health record appears ambiguous, incomplete, unclear, or conflicting, the provider will be asked to clarify the documentation.

TARGET DRG'S

Facility Name					ICD-10 Base Rate Reimbursed		Potential Reimbursement Impact ($)		
Description	MDC	Med/ Surg	No. of Claims	ICD-9 Base Rate Reimbursed	Min	Max	Min	Max	Average
All Cases			8,714	$69,766,783	$69,752,669	$70,833,574	-$14,114	$1,066,790	$526,338
major small & large bowel procedures	06	Surgical	84	$1,371,835	$1,309,037	$1,346,011	-$62,798	-$25,824	-$44,311
extensive o.r. procedure unrelated to principal diagnosis		Surgical	21	$435,617	$405,120	$405,120	-$30,497	-$30,497	-$30,497
revision of hip or knee replacement	08	Surgical	12	$232,707	$198,777	$233,244	-$33,929	$537	-$16,696
other infectious & parasitic diseases diagnoses	18	Medical	40	$381,189	$369,195	$369,195	-$11,994	-$11,994	-$11,994
other endocrine, nutria & metab o.r. proc	10	Surgical	14	$163,530	$149,557	$158,743	-$13,973	-$4,786	-$9,380
major cardiovascular procedures w mcc	05	Surgical	13	$274,776	$246,406	$288,272	-$28,370	$13,496	-$7,437
chronic obstructive pulmonary disease	04	Medical	207	$1,462,929	$1,456,486	$1,456,486	-$6,443	-$6,443	-$6,443
other skin, subcutaneous tissue & breast proc	09	Surgical	11	$100,469	$90,611	$100,505	-$9,858	$36	-$4,911
other digestive system diagnoses	06	Medical	50	$329,108	$327,139	$381,021	-$1,969	$51,913	$24,972
Diabetes	10	Medical	50	$365,017	$361,479	$425,114	-$3,538	$60,097	$28,280
Vag. del wo complicating dx	14	Medical	508	$1,811,137	$1,840,704	$1,840,704	$29,568	$29,568	$29,568
septicemia w/o mv 96+ hours	18	Medical	180	$2,379,717	$2,379,717	$2,455,583	$0	$75,866	$37,933
alcohol/drug abuse or dependence w/o rehabilitation Therapy	20	Medical	277	$1,428,873	$1,466,893	$1,466,893	$38,020	$38,020	$38,020
. hemorrhage	06	Medical	138	$1,067,669	$1,067,669	$1,150,737	$0	$83,068	$41,534
Cellulitis	09	Medical	253	$1,526,475	$1,505,676	$1,651,100	-$20,798	$124,625	$51,914

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