CDI—Clinical Documentation Improvement (Impact on quality, revenue development and recovery)

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OBJECTIVES

• Transition from manual documentation to Electronic Clinical Documentation

• What is Clinical Documentation

• Impact of clinical documentation on patient care provided

• Why clinical documentation has poor quality?

• Criteria for high quality clinical documentation.

• Impact of clinical documentation on reimbursement

• Why we should have clinical documentation improvement programs
WHAT IS CLINICAL DOCUMENTATION?

- Clinical Documentation is any manual or electronic notation or recording made by a physician or other healthcare clinician related to patient’s medical condition or treatment.

- Clinical Documentation is the foundation of every patient health record.

- Healthcare organizations are the core, medical representatives for their patient’s protected health information.
IMPACT OF CLINICAL DOCUMENTATION ON PATIENT CARE PROVIDED

• Clinical Documentation reflects the quality of care, severity of illness, and treatment provided for each patient the organization treats.

• Conducting quality review of the documentation.

• Proper documentation of patients’ progress during their stay in the hospital led to better pain management, and improved communication of clinical information between team members at end-of-shift hand-overs.
WHY CLINICAL DOCUMENTATION HAS POOR QUALITY?

- Researchers and the peer reviewed academic literature reveals the lack of adequate documentation and identified the following reasons for poor quality clinical documentation:

1. Medical school and residency programs don’t teach clinical documentation practices.

2. Physician’s clinical documentation importance is not priority for the healthcare organizations and the information in the inpatient setting is complex.

3. Multiple providers are needed when there are longer patient stays, resulting in additional clinical documentation with increased inconsistency between provider documentation.

4. Unstructured and inconsistent processes for recording and collection of information are prevalent. (Cascio et al. 2005; Novitsky et al. 2005)
High-quality clinical documentation is essential and important although it needs to be enhanced and improved within the healthcare communities.

Seven criteria for high quality clinical documentation required to be in all entries in the patient record are:
1. Legible
Clear enough to be read and easily deciphered
CRITERIA FOR HIGH QUALITY CLINICAL DOCUMENTATION

2. Reliable

Trustworthy, safe, and yielding the same result when repeated.
CRITERIA FOR HIGH QUALITY CLINICAL DOCUMENTATION

3. Precise
Accurate, exact, strictly defined
CRITERIA FOR HIGH QUALITY CLINICAL DOCUMENTATION

4. Complete
Has the maximum content; thorough
CRITERIA FOR HIGH QUALITY CLINICAL DOCUMENTATION

5. Consistent
Not contradictory
6. Clear
Unambiguous, intelligible, not vague
7. Timely

• At the time of service
• Essential for the best treatment of the patient
HOW DRG IS DETERMINED

• Principle diagnosis
• Surgical procedure
• Limited number of CCs (Complications / Comorbidities)
WHY WE SHOULD HAVE CLINICAL DOCUMENTATION IMPROVEMENT PROGRAMS

- Clinical Documentation Improvement (CDI) is a process used in a variety of settings by employees who review clinical documentation and provide feedback to physicians regarding ambiguous information. The feedback is designed to fill in gaps in documentation so that clear and concise information is available for code assignment, quality measures, and overall patient care.

- Improve Clinical Documentation to reflect patient acuity through Clinical Documentation review where case coordinators review patient’s clinical documentation for completeness, and ensure appropriateness of the DRG assigned which reflects severity of illness.
Strong Documentation Program

- Improved Patient Outcomes / Care
- More Appropriate Reimbursement
- Accurate Capture of Risk of Mortality
- Greater Documentation Specificity in Chart
- More Accurate DRG Assignment
- Improved Quality Scores and Report Cards
- Improved & Increased Compliance
- Accurate Capture of Severity/Acuity
EXAMPLES OF CLINICAL DOCUMENTATION IMPROVEMENT

**Chief Complaint:** Inferior STEMI/RCA jeopardy

**Procedure:**

Inferior STEMI, complicated by multi-hospital cardiac arrest 3 times (asysty and PCI) in a 59-year-old diabetic hypertensive dyslipidemic patient admitted with a history of ischemic heart disease treated by PCI twice times in 2014.

Cardiogenic shock was previously reported and was refused by the patient.

Patient presented with a history of diabetes and 3 months of hemodynamic instability.

**Cereography:**

Right: normal approach FF
Right: no crazy

LAD 1B and 2B:
LM of a good size with distal critical lesion towards the occlusion of the LAD and LCX.
LAD of a good size proximally with 10-30% stenotic lesion that the anastomosis proximal and distal LAD in a distal position joining the mid and distal secondary LAD, which is occluded.
TMO with collateral Rentrop 4.
LCX non-dominant artery at a good size giving 2 small branches with short critical stenosis 90% lesion at the distal LAX with small diffusely diseased distal artery.
Patient dead in the proximal LAD.
RIMA of a good size with some dilatation and septal diastolic at rest.
RCA of a good size with a small distal lesion.
RCA ostial lesion with severe critical lesion extending from the mid RCA to the mid PDA giving the RVL.
Occlusion of the mid part of the stent in the PDA.
MIM 1 collateral branch to the septal Rentrop 3.
10% eccentric long, irregular, non-calcified lesion extending at the proximal and mid RCA.

**Distal RCA Intact**

Stenosis thoracic lesion occlusion angioplasty:

Tirofiban was added to the cath lab 0.15 mg/kg:

**Procedural success:**

Successfully passing the 4.0 F QC with access to the lesion by the PDA.

**Failure to pass:**

Failure to pass the 2.0 mm X 15 mm balloon.

**Success to pass:**

Successfully passing the 1.5 mm X 10 mm balloon. At 1 atm/2 atm at 18 atm proximally.

Passing 2.0 mm X 15 mm at 1 atm distally at 15 atm proximally.

Then passing 2.5 mm X 15 mm at 2 atm to 20 atm proximally.

**Good result with no complications:**

Contrast 180 ml.

**Blood loss 200 ml.**

**Conclusion and recommendations:**

Uncomplicated intracoronary PCI in the distal RCA and proximal PDA in a context of inferior STEMI complicated by multi-hospital cardiac arrest 3 times (asysty and PCI) in a 59-year-old diabetic hypertensive dyslipidemic heavy smoker man with a history of ischemic heart disease treated by PCI twice times in 2014.

Trips to severe disease including distal LAD and proximal LAD with restenosis, intarstent in a 59-year-old diabetic: SC will discuss for CABG.

Patient refused surgery previously and preferred PCI.

CABG: for at least 10 minutes or until surgery is continued.

Tirofiban initiation for 1 day.

Subjective:

- Patient states he is well
- No fever
- No cough
- Eating and drinking well
- Ambulating well

**Hemodynamics:**

44-year-old patient, known to have diabetes on insulin and OHA.

Released from AHIMA hospital as a case of confirmed Pseudomonas Trom.

Two sputum AFE smears were positive and CT chest done there showed no fluid appearance in RLL.

Patient was working in Saudi Arabia and came to UAE 2 years back.

**Health Status:**

**Allergies:**

- Alkali Excessive (Selected)
- NSAIDs

**Medications:**

- Oral:
  - Ethamazole: 1200 mg, 3 tab. PO. Daily, PO.
  - Laminosim (10 mg): 3 tab. PO. Daily, Bedtime.
  - Sodium acetate (30omaly): 0.05 mg, 3 tab. PO. Daily, Bedtime.
  - Sulfinameth (300 mg): 3 tab. PO. Daily, Bedtime.
  - Levarter: 15 mg, 0.6 tab. PO. Daily, Bedtime.
  - Phenolphthaline: 3.2 mg, 3 tab. PO. Daily, Bedtime.
  - Vitamin B12 (10 mg): 1 tab. PO. Daily, Bedtime.

**Objective:**

**VS/Measurements:**

**Vital Signs:**

Temperature: 35.9°C
Respiratory Rate: 15/min
Systolic Blood Pressure: 141 mmHg
Diastolic Blood Pressure: 99/54 mmHg
Pulse: 75 bpm
Blood Pressure: Normal
Blood Glucose: Normal
Neurological Status: Normal

**General:**

Alert and oriented. No acute stress.
Horton: Normal

**Respiratory:**

Lungs are clear to auscultation. Respirations are equal. Breath sounds are equal. Symmetrical chest wall expansion.

**Cardiovascular:**

Normal rate.

**Gastrointestinal:**

Soft, non-tender, non-branched.
EXAMPLES OF CLINICAL DOCUMENTATION IMPROVEMENT

Patient brought report of CT brain with without contrast - from other facility dated 11/5/2011:
- Fluid in left sphenoid sinus with air fluid level and minimal fluid in left sphenoid sinus; gross and mild left nasal cavity.
- Mild thickening of left orbital septum bilaterally (L>R)
- Bilateral nasal septal deviation.

Other tests done in the other facility:
- Beta 2 transferrin done in the private hospital - taken from the left nostril, fluid is positive suggestive of CSF and glucose was measured in 4.5 mg/dL
- MRI brain was recommended but not done as patient was claustrophobic.

Admitted with CSF Rhinorrhoea and no Previous meningitis due to vague symptoms although clinically she was asymptomatic but lab showed mild leukocytosis and elevated CRP.

Received 1 day of acyclovir; oxacillin 2g BD IV; IVF; piperacillin/tazobactam for headache and otorrhoea initially C/V prophylaxis

LF done by NP and CSF analysis ruled out meningitis.

Acyclovir stopped and otorrhoea decreased to 1 g ED and continued IVF

Headphones received, CTM decreased.

For transfer to Cleveland clinic, Abduhelik to be admitted under the department of Neurosurgery for repair to CSF leak.

Hospital Course

Details
Reasons for admission: CSF leak following from left nostril
Principal diagnosis: CSF leak from nose (ICD-10-CM: E99.0, Discharge, Medical).
Secondary diagnosis: (comorbidity) Unspecified (ICD-10-CM: E72.33, Discharge, Medical), Sphenoid sinusitis (ICD-10-CM: E66.0, Discharge, Medical), CSF leak from nose (ICD-10-CM: E99.0, Discharge, Medical), Diabetes (ICD-10-CM: E58.2, Discharge, Medical), Fever (ICD-10-CM: R69.9, Discharge, Medical), Acute headache (ICD-10-CM: R51.0, Discharge, Medical).

Operation and procedures:
Lumbar puncture on 10/23/2011 at 31 Years.
Comments:
16/20/2017 21:10 - Barcena, Donna Goya
auto-populated form documented surgical case.

Medical treatment provided
as above
Medications: Med List

Discharge Information
Admitted: 10/19/2011
Discharged: 10/22/2011
Attending physician: Alatri, Ejadi

Histories
30 years old female came to ER complaining of Clear fluid leakage from the left nostril once 20 days in/0f but mostly at night or w/ movement and post ocular change.

Past was unremarkable, no previous history of sinusitis or preceding URI or strenuous physical activity, she felt she had fever for one but it was subjective and self limiting.

Associated with episodes of mild headache mostly at night, started 2 weeks ago and less severe and continued once every and had subjective fever that resolved on its own and fatigue.

No contact with anyone who had flu but it was during the time and didn’t affect the condition.

Had investigations done twice in a hospital in Dubai, had analysis of the left sphenoid CT scan without and without contrast.

Age: 30 years
Sex: Female
DOB: 5/11/1986
Associated diagnosis: CSF leak from nose; Leukocytosis; Dehydration; Nasal & earling; Fever; Acute headache.

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IMPACT OF CLINICAL DOCUMENTATION ON REIMBURSEMENT

“Patient has altered mental status, abnormal liver function, and treatment with lactulose”

Evidence suggests that this patient has hepatic encephalopathy? Do you agree?

“Yes”

CDI SPECIALIST

CODING

Hepatic Encephalopathy

Accurate MS-DRG SOI/ROM

PAID
### Hospital Course

**Details**

**Reason(s) for admission:** DVT.

**Principal diagnosis:** Cauda equina syndrome (ICD-10-CM G93.4, Working, Medical).

**Secondary diagnosis (comorbidities):** Recurrent, UTI (ICD-10-CM N39.3, Working, Medical).

**Operations and procedures:** N/A (not applicable).

**Medical treatment provided:** reviewed

**Medications:** Medica List

**Medication List**

**Active Medications**

- **Ordered**
  - amoxicillin: 500 mg, 1 tab, PO, TID, 14 day.
  - betamethasone-cinofipivate: See instructions, FR, q12h, 2 ea.
  - calcium carbonate: See instructions, PO, DID, 120 ea.
  - enoxaparin: 300 mg, 1 ml, Subcut, FID.
  - famciclovir: 100 mg, 1 tab, PO, BID.
  - famotidine: 200 mg, 2 cap, PO, FID.
  - famotidine: 200 mg, 2 cap, PO, FID.
  - famotidine: 200 mg, 2 cap, PO, FID.

- **Suspended**
  - acetaminophen: See instructions, 2 tab, PO TID, 3 day(s).
  - amoxicillin: 500 mg, PO, BID.
  - calcium carbonate: 600 mg, PO, BID, dose based on elemental calcium.
  - cholecalciferol: 1000 UI, PO, Daily, mL.
  - cholecalciferol: 1000 UI, PO, Daily, mL.
  - diclofenac topical: See instructions, TCP EID 7 day(s).

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### Before comprehensive documentation

**Diagnosis**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>G93.4</td>
<td>Cauda equina syndrome</td>
</tr>
<tr>
<td>M91.36</td>
<td>Fracture of lumbar region</td>
</tr>
<tr>
<td>N31.0</td>
<td>Joint, transplant, site not specified</td>
</tr>
<tr>
<td>N13.9</td>
<td>Chronic kidney disease, unspecified</td>
</tr>
<tr>
<td>C64.3</td>
<td>Malignant neoplasm of unspecified kidney, except renal pelvis</td>
</tr>
<tr>
<td>Z90.5</td>
<td>Acquired absence of kidney</td>
</tr>
<tr>
<td>Z98.718</td>
<td>Personal history of other venous thrombosis and embolism</td>
</tr>
<tr>
<td>Z79.31</td>
<td>Long term (current) use of anticoagulants</td>
</tr>
<tr>
<td>Z03.3</td>
<td>Family history of diabetes mellitus</td>
</tr>
<tr>
<td>Z03.49</td>
<td>Family history of ischemic heart disease and other diseases of circulatory system</td>
</tr>
<tr>
<td>Z98.39</td>
<td>Other specific postprocedural states</td>
</tr>
</tbody>
</table>

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**Procedure (s)**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Description</th>
<th>Physician</th>
<th>Date</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>99234</td>
<td>EYE LEFT 1 SEVERITY</td>
<td>Almas, Moh</td>
<td>24/01/2017</td>
<td>CPT4</td>
</tr>
<tr>
<td>99221</td>
<td>1ST HOSPITAL CARE PD 30 MIN</td>
<td>Mohamed, A.</td>
<td>25/01/2017</td>
<td>CPT4</td>
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<tr>
<td>99228</td>
<td>Hospital discharge day manager</td>
<td>Ali, Rad</td>
<td>28/01/2017</td>
<td>CPT4</td>
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</tbody>
</table>

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IMPACT OF CLINICAL DOCUMENTATION ON REIMBURSEMENT

Details

Admission

- A 45 year old male known case of:
  - DM 1 on metformin-sitagliptin 100 mg/10 mg BID
  - HTN on an LOP: 5 mg
  - Chronic liver disease secondary to Hepatitis C treated
  - Splenomegaly
  - Renal colic
  - Hx of sudden drop in Hgb in Feb 2017 required blood transfusion, so scope done at that time.

Transferred from Qahria Hospital after he presented with melena and drop in Hgb around 2.3 gm.

He was transfused one unit of PRBC and started on ceftriaxone empirically.

Patient was transferred to Mifaq for endoscopy. EGD was done on 7th June and revealed 4 bands of esophageal varices siq 6 banding and gastric varices with signs of recent bleeding siq glue.

Had a clean base antral ulcer and severe duodennitis with healed duodenal ulcer.

Patient received 4 days of tetracyclines and was continued on PPI BID.

Had no signs of upper G I bleed and no retained stable.

Had a spike of temperature for which antibiotics were upgraded to meropenem. Cultures showed no growth, however had evidence of UTI on urine analysis.

Today seer with attending consultant.
Topplesing soft diet.
Hgb stable at 99.
No signs of upper GI bleed and afebrile.

Stable for discharge in:
- PPI BID
- Protonix 20 mg BID. To stop home antacid.
- Ciprofloxacin 400 mg BID for UTI for 5 days.
- Insulin glargine 13 units. To stop oral hypoglycemics.

Patient needs repeat endoscopy in 4 weeks time since he will be traveling to his home country; advice to do a repeat cec prior travel.

If Hgb stable at 9gm/dl then can travel if drops then might need repeat EGD. Advised to get the EGD in Egypt if he travels.

To follow up with GI in 2 months after arrival to UAE.

Principal diagnosis: BOV (bleeding esophageal varices) (ICD-10-CM I86.01, Discharge, Medical), Bleeding gastric varices (ICD-10-CM I86.4, Discharge, Medical), Acute gastric ulcer (ICD-10-CM K25.3, Discharge, Medical)


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IMPACT OF CLINICAL DOCUMENTATION ON REIMBURSEMENT

• To improve the Clinical Documentation quality Case Management team along with the coding team has been conducting presentations to different specialties which showed good improvement in some of them.

• **70%** the improvement in the documentation in plastic surgery specialty.

• More than **80%** Improvement in specialties like Internal Medicine, Cardiology, Neonatology and General surgery.
IMPACT OF CLINICAL DOCUMENTATION ON REIMBURSEMENT

Denial Amount/Rate 2016

Denial Amount/Rate 2017
• Accurate documentation of patient encounters is the foundation for telling the patient’s story, appropriate reimbursement, and quality reporting.

• Better documentation can have a significant positive impact on the quality measures of Severity of Illness (SOI) and Risk of Mortality (ROM).

• Organizations need to develop and comply with comprehensive internal reporting policies and procedures that are consistent with official coding rules and guidelines, reimbursement regulations and policies, and prohibit documentation practices that misrepresent the patient’s medical conditions and treatment provided.

• CDI programs may also have the collateral benefit of improving quality of care rendered.

• Physicians must be taught the concepts of CDI in order to understand the return on investment of the program and the benefits to them.
CONCLUSION

• If you didn’t document it, it wasn’t done,…or

• If it isn’t documented, it did not happen,…or

• Just because it wasn’t documented, doesn’t mean it didn’t happen.

• If it is documented, it’s important to ask “is it also correct?”
References

- http://bok.ahima.org/doc?oid=106669#.WeHpBpAUmAV
- http://library.ahima.org/doc?oid=101609#.WeOgpZAUmAV
"If your actions inspire others to dream more, learn more, do more and become more, you are a leader." -- John Quincy Adams

THANK YOU

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ANY QUESTIONS...
Thank You!