Solving The Puzzle of Clinical Documentation Improvement

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Agenda

• What is CDI?
• Definitions
  – How does coding work
• ICD 9 – ICD 10-ICD 11??
• How does documentation help
• What is in it for physicians
• Conclusions
Medicine Under the Microscope

- Physician Profiling
- Resource utilization
- Length of stay
- Complications
- Present on Admission
- Mortality
- Quality Scores
- Fraud and abuse

CDI - What, How, Why?

- “The purpose … is to initiate concurrent and, as appropriate, retrospective reviews of inpatient health records for conflicting, incomplete, or nonspecific provider documentation. These reviews usually occur on the patient care units or can be conducted remotely …
- 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 … is often written queries in the health record. Verbal and electronic communications are also … 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) classifications.”

AHIMA in their Clinical Documentation Improvement Toolkit
How Does it Work?

- Proper Documentation leads to identification of diagnoses and procedures
- Recognition of diagnoses and procedures lead to ICD codes – **THE TRUE KEY**
- ICD codes lead to DRG assignment
- DRG assignment converted to “Severity Adjusted DRGs”
- Severity adjusted data leads to morbidity and mortality rates

ICD 9 to ICD 10

- Not intended to be an ICD 10 Education
- Starting 10/1/2015 (for now)
- Why – ICD 9 out of room
- ICD 10 is 22 years old
  - We will be the only country using it for reimbursement
- ICD 10 more complex
  - Diagnosis codes – ICD 9 17,000 -> ICD 10 68,000
  - Procedure codes – ICD 9 4,000 -> ICD 10 72,000
- Documentation will not change, it’s the same
Physician Documentation

• In General
  – Physician Documentation has deteriorated in the past 10 years
  – The greatest help in physician documentation is the electronic medical record (EMR)
  – The worst help in physician documentation is the electronic medical record (EMR)
  – Having gone from the “SOAP” note to a Problem List

CODERS MAY NOT!

• Assign codes from Lab results
• Draw conclusions that are not drawn by the MD
• Use up and down arrows
• Provide leading queries
Was It Present on Admission?

Patient safety indicators may give us a black eye if it’s not documented!

- **Ileus** from perforated bowel or from peritonitis – was it present on admission?
- **DVT** in patient from nursing home – was it present on admission?
- **Decubitus ulcer** – is it an ulcer - was it present on admission?
- **Atelectasis** in a morbidly obese patient – was it present on admission?

If we don’t document it, we get charged with it!

MAKE THE LINK CLEAR!

- Anemia **due to** chronic blood loss from cecal carcinoma
- Stage 4 CKD **due to** polycystic kidneys
- Syncope **due to** bradycardia as adverse effect of beta blockers
- Acute respiratory failure **due to** aspiration pneumonitis
- Hypotension **due to** septic shock
Setting The Stage

What the Auditors Expect
What Typically is Provided

Documentation Increases Quality of Care

“…The Way You Handle Data Determines The Way You Think”

“The structure of the data determines the quality of the output.”

Presented to Emory Medical Center – 1971
Dr Lawrence Weed Father of the SOAP Note
Physicians are a very sophisticated computer

Data → Output

Overview

Documentation is deteriorating for many reasons

EMR has been touted to be the best, yet the worst for improving documentation

Have gone from the “SOAP” note to the “Problem List”
EMR Challenges

- Designed by non-clinicians
- Rigidity in Customizable Abilities
- Cutting & Pasting “Copy-forward”
- Many times no areas for Free Text
- Typing
  - Dragon Voice Recognition

Why? What Else?

Docs Document for Other Docs
- Not Coders
- Not UM

Docs Assume Others Understand
- “MI” for Docs
- “MI” for Non-Clinicians

Do Not Document Acuity Well
- PNA w/ BNP 7,499
- NSTEMI, troponin 0.38
Better Documentation

Improving Quality of Care

- Pro-active, not retrospective
- Technologic prompts at point of care
- Integrated to improved quality initiatives
- Provide the right equipment at the bedside

http://www.psqh.com/januaryfebruary-2010/303-clinical-documentation-more-than-a-cumbersome-chore

Who Is Watching

CMS Physician Quality Reporting System (PQRS)

AHRQ-HealthcareIncentives

State Report Card on Transparency of Physician Quality Information

Medicare.gov | Physician Compare

The Official U.S. Government Site for Medicare
Important Chart Elements

ED Visit When Present
- Orders
- Certification

History & Physical
- Progress Notes
- Discharge Summary

Operative/Procedure Reports
- Consults
- Labs/Tests/EKG

History and Physical

1. Arguably one of the most important chart documents
2. Should be a stand-alone
   - The same regardless of LOC
3. Influential for preventing denials
   - Good for patient care
History and Physical

- CC
- HPI
- PMHx, SHx, ROS
- VS, PE
- Labs
- Tests, EKG, Xrays

Assessment/Plan

First Day and Everyday

So Why Not a “Problem List?”

Typically A/P = Problem List

- Difficult for Coding
- Does not connect concerns
- Does not connect risks

Treatment Progress

Copy & Paste
Medical Record Challenges

- Medical records are source oriented, not problem oriented

Keys to Physician Documentation

**Assessment/Plan Elements**

- **Suspects**
  - What Does the Physician Suspect?

- **Predictable Risks**
  - How predictable are the concerns?

- **Concerns**
  - High/Low Concerns

- **Intent**
  - Intent for treatment and 2 MN
### Assessment/Plan Elements

<table>
<thead>
<tr>
<th>Element</th>
<th>National 267 Charts</th>
<th>% Absent</th>
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</thead>
<tbody>
<tr>
<td>Suspects</td>
<td>215</td>
<td>19.5%</td>
</tr>
<tr>
<td>Concerns</td>
<td>143</td>
<td>46.4%</td>
</tr>
<tr>
<td>Risk</td>
<td>47</td>
<td>82.4%</td>
</tr>
<tr>
<td>Intent</td>
<td>202</td>
<td>24.3%</td>
</tr>
</tbody>
</table>

### Big Question

How Does One Put the Puzzle Together?

BECAUSE

- Suspects
- Predictable Risks
- Intent
- Concerns
Discharge Summary

H&P

DC Meds and Plan

Stable for DC

Hospital Course

Final Diagnosis

Paint the picture of the patient properly with WORDS

What you want…

may not be…

what you might get.

So the coder can paint the same picture with codes.
Conclusions

• Documentation is Key
• Why should physicians care?
  – Prevention of denials
  – Coding
  – Quality scores
    • SOI and ROM
  – Helps the patient
• Not just Medicare but all payers

THANK YOU.
Questions?

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APPENDIX – Basic Definitions and Case Studies
Basic Definitions

Brief Overview

- IPPS – Inpatient Prospective Payment System is a patient classification system that relates the types of patients a hospital treats (case mix) to the costs incurred (DRG-Diagnostic Related Group).
  - Payment for inpatient hospital services is made on the basis of a rate per discharge that varies according to the DRG to which a beneficiary’s stay is assigned.

Basic Definitions

- Medicare patient (discharge) is classified into a Diagnostic Related Group (DRG)
  - Principal Diagnosis (why the patient was admitted)
  - Major complications and Comorbidities or Complication/Comorbidity (MCCC/CCs)
  - Surgical procedures
  - Age
  - Gender
  - Discharge Disposition (routine, transferred or expired)
Basic Definitions

- DRGs and Severity
  - DRGs are used to evaluate quality of care that is expected
    - Clinically similar group
    - Analysis treatment
    - Related condition or demographics

- DRGs reflect utilization of services (the average # of resources required to treat the clinical group).
- DRGs determine the calculation for Relative Weight (RW) or resources consumed

Basic Definitions

- Relative Weight (RW): = An assigned weight (number/figure) to reflect the resource consumption associated with each DRG

- The higher the RW the higher the resources used to treat that diagnostic group therefore the reimbursement to the hospital will be higher.
Basic Definitions

- Assumption:
  - The > acuity and resources = > RW

- Hospital PPS (IP) payment is calculated:
  DRG RW X Base Rate (hospital specific) = Hospital payment for that DRG

Basic Definitions

- Each DRG has an official weight, that determines payment. A DRG with a relative weight of two (RW 2.0) is reimbursed twice as much as a DRG with a weight of one (RW 1.0)

- The mix of patients across all DRG’s for a specific hospital determines its case-mix index and the average DRG weight for these patients is the hospital's case-mix index (CMI).
Basic Definitions

- CMI = Sum of all DRG RW's divided by the number of cases/month/year
- Case Mix Index (CMI) more accurately reflects the type and severity of patients the hospital treats.

CMI is an important factor to a hospital and physicians

Key Factors to CMI

- Two major factors with PPS DRG’s and CMI:
  - Medical record documentation
  - Coding changes
- Changes in documentation and/or coding practices will affect the DRG assignment and the CMI
  - Example, more thorough documentation of secondary diagnoses provides greater opportunity for coding complications or comorbidities which could result in a higher weighted DRG assigned
72 year old male presents with chest pain, dizziness and high blood pressure. 

PMHX: CAD, HTN, DM, CVA 

BP 229/103    WBC count 16.5    Troponin 0.01 (WNL) 

EKG: sinus bradycardia, non-specific ST-T wave changes 

CXR: negative 

UA: not obtained 

Plan: serial cardiac enzymes, stress test, echocardiogram, IV Antibiotics, adjust BP meds, check urinalysis/culture 

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**Case Study: Chest Pain**

Attending Physician documented diagnosis as:

- Chest pain, Severe Hypertension, Dizziness, Leukocytosis 
- DRG: 313 Chest pain 
- RW: 0.5992 
- GMLOS: 1.8 
- Reimbursement: $3,870.26 
- SOI/ROM: 1/1 

BUT… with accurate documentation:

- “Malignant Hypertension” 
- DRG: 305 
- RW: 0.6176 
- GMLOS: 2.1 
- Reimbursement: $3,967.70 
- SOI/ROM: 1/1
Case Study: Chest Pain

- 74 year old woman who presented to the ER with substernal chest pain that occurred immediately after her hemodialysis session.
- History of Mitral Valve Replacement, ESRD on HD
- Vital Signs: BP 138/57, Pulse 108, Temperature 98.6, RR 20, O2 saturation of 93%
- Physical Examination: Coarse breath sounds and irregular heart rhythm
- Chest x-ray: vascular congestion
- Labs: BNP 297 (0-100), Troponin 0.01 (0-0.01)

Attending Physician documented diagnosis as: Chest Pain

- DRG: 313 Chest Pain
- RW: 0.5992
- SOI/ROM: 1/1
- GMLOS: 1.8
- Reimbursement: $3,870.26

BUT... with accurate documentation:

- Acute CHF, ESRD on HD
- DRG: 291 Heart failure w/ MCC
- RW: 1.5031
- SOI/ROM: 2/1
- GMLOS: 4.6
- Reimbursement: $8,657.50
Case Study: CVA

81 year old female presents with headache, dizziness and presyncope.
PMHX: atrial fibrillation on Coumadin, temporal artery aneurysm s/p repair, cirrhosis, CHF (EF 25%) and hypothyroidism
Stable vital signs
Physical exam: irregularly irregular heart rhythm
INR 1.69
Urinalysis: 10-20 WBC’s with 2+ leukocyte esterase
Head CT scan: small vessel ischemic disease
EKG: rate controlled atrial fibrillation
MRI brain report: small acute right occipital lobe infarct

<table>
<thead>
<tr>
<th>Attending Physician documented diagnosis as:</th>
<th>BUT… with accurate documentation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Headache, Syncope, Hx of CHF</td>
<td>• “Acute CVA”</td>
</tr>
<tr>
<td>• DRG: 103 Headaches w/o MCC</td>
<td>• DRG: 066 intracranial hemorrhage or cerebral infarction w/o CC or MCC</td>
</tr>
<tr>
<td>• RW: 0.6663</td>
<td>• RW: 0.7566</td>
</tr>
<tr>
<td>• GMLOS: 2.3</td>
<td>• GMLOS: 2.5</td>
</tr>
<tr>
<td>• SOI/ROM: 2/1</td>
<td>• SOI/ROM: 2/1</td>
</tr>
<tr>
<td>• Reimbursement: $4,225.64</td>
<td>• Reimbursement: $4,703.89</td>
</tr>
</tbody>
</table>

AND… with accurate documentation:
• “Acute CVA”
• “Chronic systolic heart failure”
• DRG: 065 intracranial hemorrhage or cerebral infarction w/ CC
• RW: 1.0776
• GMLOS: 3.5
• SOI/ROM: 2/2
• Reimbursement: $6,403.96
84 year old female presents with shortness of breath and worsening edema
PMHX: CHF, nephrectomy
Blood Pressure: 196/86
Physical examination: basilar crackles, 2+ leukocyte esterase, edema
Creatinine 1.38 (no baseline)
Plan: IV Lasix, echocardiogram

Attending Physician documented diagnosis as:

- CHF exacerbation, renal failure
- DRG: 293 Heart Failure w/o CC
- RW: 0.6723
- LOS: 2.6
- SOI/ROM: 1/2
- Reimbursement: $4,267.41

BUT... with accurate documentation:

- “Acute on chronic systolic heart failure”
- “Acute renal failure”
- DRG: 292 Heart Failure w/ CC
- RW: 0.9938
- LOS: 3.7
- SOI/ROM: 2/2
- Reimbursement: $5,960.14
Case Study: Hypertension

85 year old woman with history of hypertension, CAD s/p MI, and hypothyroidism complaining of severe headache. Had 1 episode of gross hematemesis.

BP 200/86
BUN: Creatinine Ratio 31.8
Urine Culture: E Coli > 100,000 CFU/mL
Orders Included: IV Levaquin and IV D5 ½ NS

Attending Physician documented diagnosis as:

• Headache, hypertension
• DRG: 103 Headaches w/o MCC
• RW: 0.6663
• GMLOS: 2.3
• SOI/ROM: 1/1
• Reimbursement: $4,225.64

BUT... with accurate documentation:

• Malignant Hypertension, headache
• DRG: 305 Hypertension w/o MCC
• RW: 0.6176
• GMLOS: 2.1
• SOI/ROM: 1/1
• Reimbursement: $3,967.00
Case Study Case: Hypoglycemia

- 92 year old woman with history of diabetes type II and hypothyroidism presented with weakness and confusion (per caregiver), found to have blood glucose level in 40s. (This was her second visit to the ED within 1 week with the same issue.)

- Vital Signs: BP 144/68, Pulse 88, RR 18, Temperature 99
- CXR: read in ED as possible infiltrate
- Blood glucose levels ranging from 30 to 234 during hospital stay
- Orders Included: IV Levaquin

Attending Physician documented diagnosis as:
- Recurrent Hypoglycemia (251.2), hip pain (719.45), possible left lower lobe infiltrate
- DRG: 641 Miscellaneous disorders of nutrition, metabolism/electrolytes w/o MCC
- RW: 0.6992
- GMLOS: 2.8
- SOI/ROM: 1/1
- Reimbursement: $4,399.88

BUT... with accurate documentation:
- “Community Acquired pneumonia” (486)
- “Uncontrolled Diabetes” (250.82)
- DRG: 637 Diabetes w/ MCC
- RW: 1.3888
- GMLOS: 4.2
- SOI/ROM: 2/2
- Reimbursement: $8,052.15
• 65 year old woman with history of hypertension, renal failure, diabetes, and scleroderma presented to the Emergency Department with hypoglycemia (Accu-Cheks at physician’s office were 52 and 44).

• BUN 31, Creatinine 2.4 (Baseline creatinine 1.86), GFR 20, CO2 17, hemoglobin 10

Attending Physician documented diagnosis as:
• Renal insufficiency, type II diabetes
• DRG: 700 Other kidney and urinary tract diagnoses w/o CC/MCC
• RW: 0.7026
• GMLOS: 2.6
• SOI/ROM: 1/1
• Reimbursement: $4,417.89

BUT… with accurate documentation:
• Type II diabetes
• Acute kidney injury with chronic kidney disease stage IV
• DRG: 638 Diabetes w/ CC
• RW: 0.8252
• GMLOS: 3
• SOI/ROM: 1/2
• Reimbursement: $5,067.20
Case Study: Urosepsis

- 67-year-old woman with one day of nausea, vomiting, and diarrhea
- HR 114, Temperature 100.8, BP 96/57
- WBC count 15.2
- Urinalysis revealed large leucocyte esterase

Attending Physician documented diagnosis as:

- Urosepsis
- DRG: 690 Kidney and urinary tract infections w/o MCC
- RW: 0.7693
- GMLOS 3.2
- SOI/ROM: 1/1
- Reimbursement: $3,243.26

BUT… with accurate documentation:

- “Urinary tract infection with sepsis”
- DRG: 689 Kidney and urinary tract infections w/ MCC
- RW: 1.13
- GMLOS 4.3
- SOI/ROM: 2/1
- Reimbursement: $3,480.27
Case Study: TIA

- 59-year-old woman presented with transient episode of difficulty finding words and dyspnea
- WBC count 22
- CXR revealed left lower lobe infiltrate
- No neurologic deficits on exam
- MRI brain-normal

Attending Physician documented diagnosis as:

- Pneumonia, word-finding difficulty
- DRG: 195 Simple pneumonia and pleurisy w/o CC or MCC
- RW: 0.6997
- GMLOS: 2.9
- SOI/ROM: 1/2
- Reimbursement: $3,252.63

BUT… with accurate documentation:

- Left lower lobe pneumonia, TIA
- DRG: 194 Simple pneumonia and pleurisy w/ CC
- RW: 0.9771
- GMLOS: 3.8
- SOI/ROM: 2/2
- LOS: $3,420.33
Case Study: Aspiration Pneumonia

- 78-year-old man from nursing home with a 2 day history of vomiting and dyspnea
- BP 148/76, Pulse 89, RR 22, Temp 98.4
- Physical Exam: Rales in lungs on exam
- WBC count 19.8
- CT scan of chest: “infectious or inflammatory pneumonia, aspiration pneumonia could have this appearance”

Attending Physician documented diagnosis as:

- Pneumonia, COPD
- DRG: 195 Simple pneumonia and pleurisy w/o CC/MCC
- RW: 0.6997
- SOI/ROM: 2/1
- GMLOS: 2.9
- Reimbursement: $3,252.63

BUT… with accurate documentation:

- DRG: 178 Respiratory infections and inflammations w/ CC
- RW: 1.3955
- SOI/ROM: 1/2
- GMLOS: 5.1
- Reimbursement: $3,595.47
Case Study: Upper Respiratory Infection

- 78 yo man presents with URI with rhinitis, productive cough
- Temperature: 102, BP: 96/52, O2 sat: 88%
- WBC count: 12.9
- Chest x-ray: Left lower lobe pneumonia
- ABG results: pO2: 57.4
- Blood culture: negative

Attending Physician documented diagnosis as:

- LLL Pneumonia
- DRG: 195
- RW: 0.6997
- SOI/ROM: 1/1
- GMLOS: 2.9
- Reimbursement: $4,402.53

BUT… with accurate documentation:

- Sepsis secondary to CAP with organism specified
- DRG: 192
- RW: Simple pneumonia and pleurisy with MCC
- SOI/ROM: 2/1
- GMLOS: 5
- Reimbursement: $8,402.74
Case Study: COPD

- 78 year old woman presents with complaints of increased shortness of breath and orthopnea
- Hx of COPD, CHF, CAD
- O2 sat 88% RA, BP 166/76
- Physical Exam: +JVD, crackles in lung bases, bilateral lower extremity edema
- BMI 41.96
- BNP 308 (0-100)
- CT chest: endstage emphysematous changes
- Echocardiogram wnl
- Meds: IV Lasix bid

Attending Physician documented diagnosis as:

- COPD, CHF
- DRG: 192 Chronic obstructive pulmonary disease w/o CC/MCC
- RW: 0.712
- SOI/ROM: 2/2
- GMLOS: 2.8
- Reimbursement: $3,390.33

BUT... with accurate documentation:

- acute COPD exacerbation, acute on chronic systolic CHF
- DRG: 190 Chronic obstructive pulmonary disease w/MCC
- RW: 1.1708
- SOI/ROM: 2/2
- GMLOS: 4.2
- Reimbursement: $3,649.60
Case Study: COPD

- 50 year old woman presented with a three day history of shortness of breath, intermittent chest fullness, and dizziness.
- Past medical history of COPD, HTN, smoker
- Vital signs included: BP 200/100, Pulse 86, RR 20
- Physical Examination: Bilateral rhonchi, regular heart rate and rhythm
- EKG: Normal Sinus Rhythm

Attending Physician documented diagnosis as: Chest pain, rule out MI, uncontrolled hypertension, bronchospasms (possible COPD)

- DRG: 313 Chest Pain
- RW: 0.5992
- SOI/ROM: 1/1
- GMLOS: 1.8
- Reimbursement: $3,870.26

BUT… with accurate documentation:

- Acute exacerbation of chronic obstructive pulmonary disease
- Malignant hypertension
- DRG: 191 COPD w/ CC
- RW: 0.9343
- SOI/ROM: 2/1
- GMLOS: 3.5
- Reimbursement: $5,645.01
Case Study: Headache

- 63 year old woman presents with right sided headache right sided facial pain, blurred vision, vomiting and dysuria
- BP: 191/93 mmHg Pulse 89 RR 18
- Height: 157.48/Weight: 76.20 (BMI: 30.7)
- Urinalysis: +nitrites, 3+ leukocyte esterase
- ESR: 56, WBC count 12.6, glucose 163, BUN 24, creatinine 1.9

Attending Physician documented diagnosis as:

- Headache, gastroenteritis, UTI
- DRG: 103 Headaches w/o MCC
- RW: 0.6663
- SOI/ROM: 2/1
- GMLOS: 2.3

BUT… with accurate documentation:

- Temporal arteritis, gastroenteritis, headache, acute UTI,
- DRG: 546 Connective tissue disorders w/CC
- RW: 1.1711
- SOI/ROM: 2/1
- GMLOS: 4
Case Study: Cellulitis

- Hx of IDDM
- 68 year old man with a history of diabetes presented with swelling and tenderness of the red proximal, anterior left calf
- BP 128/76, Pulse 90, RR 18, Temperature 99
- WBC count: 8, hemoglobin 13.2, Glucose: 391
- Bedside Incision and drainage performed
- Wound culture: positive for MRSA
- Treatment: IV Vancomycin

Attending Physician documented diagnosis as:
- Cellulitis/abscess left leg, diabetes controlled
- DRG: 603
- RW: 0.8402
- SOI/ROM: 1/1
- GMLOS: 3.6
- Reimbursement: $5,146.64

BUT… with accurate documentation:
- Cellulitis of the left lower extremity, MRSA infection, diabetes, Peripheral vascular disease
- DRG: 603
- RW: 0.8402
- SOI/ROM: 2/1
- GMLOS: 3.6
- Reimbursement: $5,146.64
Case Study: Cellulitis

- 65 year old female with cellulitis and lymphedema of the left leg, distal thigh swelling
- Hx of DM, HTN, chronic pain syndrome and Chronic Renal Failure
- Physical Exam: extensive left distal thigh swelling and redness
- WBC: 4.8, BUN 28, Creatinine 2.1 (baseline 1.8)
- Urinalysis with + leukocyte esterase, RBCs, WBCs and bacteria
- Attending Physician documented diagnosis as:
  - Cellulitis left leg, HTN, chronic pain syndrome

Attending Physician documented diagnosis as:
- Cellulitis left leg, HTN, chronic pain syndrome
- DRG: 603 Cellulitis w/o MCC
- RW: 0.8402
- SOI/ROM: 1/1
- GMLOS: 3.6
- Reimbursement: $5,146.64

BUT… with accurate documentation:
- Cellulitis left leg, Acute UTI, Chronic Renal Failure
- DRG: 683 Renal failure with CC
- RW: 0.9655
- SOI/ROM: 2/1
- GMLOS: 3.7
- Reimbursement: $5,810.26
Case Study: Lymphedema

- 77 year old female with history of recurrent lymphangitis secondary to prior diagnosis of breast cancer, post lumpectomy and radiation
- BP 104/54, Pulse 104, RR 16, Temperature 98.7
- Physical Examination: right upper arm erythema and edema
- WBC count 14.4, potassium 3
- ‘Positive blood culture’ documented by Attending Physician

Attending Physician documented diagnosis as:

- Lymphedema
- DRG: 607
- RW: 0.7043
- SOI/ROM: 1/1
- GMLOS: 2.8
- Reimbursement: $4,426.88

BUT... with accurate documentation:

- Cellulitis, Bacteremia
- DRG: 603
- RW: 0.8402
- SOI/ROM: 2/1
- GMLOS: 3.6
- Reimbursement: $5,146.64
Case Study: Syncope

- 83 year old patient presented to ED with sudden onset of dizziness, nausea, vomiting, chest discomfort and 3 days of intractable headache.
- ED documents history of atrial fibrillation, HTN, sinus bradycardia, hypercholesterolemia, breast cancer, and hypercholesterolemia.
- BP 198/102, P 84, Temperature 98.4.
- EKG: Sinus bradycardia with non-specific ST-T wave changes.
- Treatment: Lanoxin, verapamil, Lipitor, meloxicam, IV Levaquin, Protonix po, IV fluid, serial troponins (All negative).

Attending Physician documented diagnosis as:

- Pre-syncope, chest pain
- DRG: 312 Syncope and collapse
- RW: 0.7228
- SOI/ROM: 1/1
- GMLOS: 2.4
- Reimbursement: $4,524.88

BUT... with accurate documentation:

- Pre-syncope, Malignant hypertension, intractable headache, chest pain
- DRG: 312 Syncope and collapse
- RW: 0.7228
- SOI/ROM: 2/1
- GMLOS: 2.4
- Reimbursement: $4,524.88
Case Study: Urinary Obstruction

• 76 year old man presented with complaints of blood in urine after recent 3rd TURP for BPH
• Physical Exam: Gross blood with clots in urine
• Labs: WBC count 12.7, Neutrophils 88%, BUN 23, creatinine 1.9, glucose 424
• Orders: CBI until clear, Cipro, Percocet

Attending Physician documented diagnosis as:

• Hematuria
• DRG: 696 Kidney and urinary tract signs w/o MCC
• RW: 0.6615
• SOI/ROM: 1/1
• GMLOS: 2.5
• Reimbursement $4,200.21

BUT… with accurate documentation:

• Urinary retention due to obstruction
• Acute renal injury
• DRG: 699 Other kidney and urinary tract diagnoses w/CC
• RW: 0.989
• SOI/ROM: 2/2
• GMLOS: 3.5
• Reimbursement: $5,934.72
Case Study: UTI

- 85 year old gentleman with history of HTN, atrial fibrillation, hypotonic bladder, and chronic suprapubic catheter transferred from an outside hospital for evaluation of hematuria which did not resolve with irrigation in the ED. Manual bladder irrigation performed.

- Vital signs: BP 145/78, Pulse 84, RR 18, T 99.9 O2 sat 98%
- Physical Examination: Gross blood with clots in catheter bag, suprapubic tenderness.
- WBC count 14.6
- Urine Culture: 50-100K *E Coli*; >100K Gram negative bacilli
- Orders included: CBI, IVF, Bactrim

Attending Physician documented diagnosis as:

- Hematuria, UTI
- DRG: 690
- RW: 0.7693
- SOI/ROM: 2/1
- GMLOS: 3.2
- Reimbursement: $4,771.15

BUT... with accurate documentation:

- Urinary Tract Infection secondary to *E Coli*, and gram negative bacilli, hematuria
- DRG: 868 Other infectious and parasitic diseases w/ CC
- RW: 1.0775
- SOI/ROM: 2/2
- GMLOS: 4
- Reimbursement: $6,403.44
Case Study: Fever

• 87-year old man presented with sudden onset of fever of up to 102 degrees F and rigors.
• Past medical history included: Chronic lymphocytic leukemia
• Vital signs: BP 167/88, Pulse 88, T 101.8
• Physical Exam: rales in lungs
• WBC count 6.2, hemoglobin 9, hematocrit 29, Creatinine 1.9
• Chest x-ray: left lower lobe infiltrate versus atelectasis
• Treatment: IVF, transfusion of 1 unit PRBC, Zithromax, Ceftin

Attending Physician documented diagnosis as:

• Fever, anemia, renal insufficiency
• DRG: 864 Fever
• RW: 0.8441
• SOI/ROM: 1/1
• GMLOS: 2.9
• Reimbursement: $5,167.31

BUT… with accurate documentation:

• Pneumonia, Acute kidney injury, Anemia
• DRG: 194 Pneumonia and pleurisy w/ CC
• RW: 0.9771
• SOI/ROM: 2/2
• GMLOS: 3.8
• Reimbursement: $5,871.70
Case Study: Knee pain

- 92 year old female, lives alone, presented with weakness and left knee pain from a recent mechanical fall.
- History of atrial fibrillation controlled, on Coumadin
- Nurse documented full thickness tissue loss on coccyx, no obvious infection
- INR: 3.94, held coumadin briefly
- H&H: stable, ESR elevated
- EKG: ‘abnormal’ but similar to prior EKG
- Troponin: 3 sets negative

Attending Physician documented diagnosis as:

- Knee pain
- DRG: 556 Signs and symptoms of musculoskeletal system w/o MCC
- RW: 0.7066
- SOI/ROM: 1/1
- GMLOS: 2.6
- Reimbursement: $4,439.08

BUT… with accurate documentation:

- Knee pain, Decubitus Ulcer, Stage III
- DRG: 555 Signs and symptoms of musculoskeletal system w/ MCC
- RW: 1.1974
- SOI/ROM: 2/2
- GMLOS: 3.7
- Reimbursement: $7,038.46
Case Study: Altered Mental Status

- 63 year old woman who presented with acute onset of confusion and palpitations. She also reported lightheadedness and diaphoresis on standing.
- Hx: DM, HTN, GERD, Chronic Renal Insufficiency
- BP: 166/122, P: 94, RR 20, T 99.8
- Physical Exam: Normal heart sounds, Lungs clear, Abdomen soft, nontender.
- Labs: WBC count 14.8, troponins 0.01, 0.01, 0.00 (0.0-0.01)
- Urinalysis: Positive for WBCs, RBCs, bacteria
- CXR: No acute process

Attending Physician documented diagnosis as:

- Altered Mental Status
- DRG: 948
- RW: 0.6897
- SOI/ROM: 1/1
- GMLOS: 2.6
- Reimbursement: $4,349.56

BUT... with accurate documentation:

- UTI, altered mental status
- DRG: 690 Kidney and UTI w/o MCC
- RW: 0.7693
- SOI/ROM: 1/1
- GMLOS: 3.2
- Reimbursement: $4,771.15