Clinical Documentation Improvement (CDI): The Secret to Painting a Clinical Masterpiece

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Speakers

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Disclosures

Drs. Clarke, Lo, Sanderson, and Snyder have no disclosures…we readily share our opinion free of charge to anyone who will stop and listen.

Objectives

- Understand Clinical Documentation Improvement is and how it impacts DRG assignments, Case Mix Index (CMI), Length of Stay (LOS), facility reimbursement, and professional E&M coding/billing.
- Explain why CDI is important to Pediatric Hospital Medicine providers and institutions.
- Learn how to efficiently incorporate CDI concepts into a busy hospitalist practice to paint a more complete picture of patient care.

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Polling Question

Who is in the audience?

- Division Chief/Department Head
- Practicing Hospitalist
- Fellow/Resident
- CDI Physician Leader
- Other

https://api.cvent.com/polling/v1/api/polls/sp8vkb5n

Polling Question

Do you have a CDI Program at your Institution?

- Yes
- No
- Unsure

https://api.cvent.com/polling/v1/api/polls/spc7vyk

Polling Question

What do you think about documentation?

- It is all I can think about. In fact, I sleep with my ICD-10 manual.
- It is necessary, but I do not think much about it.
- I hate it. There is no reason to even bother with it.

https://api.cvent.com/polling/v1/api/polls/spc1dd8a

Polling Question

How many ICD codes are in ICD-9 and now ICD-10 ?

- 4,000 and 55,000
- 8,000 and 90,000
- 12,000 and 125,000
- 16,000 and 155,000

https://api.cvent.com/polling/v1/api/polls/spauhkkn

ICD Codes

- The standard diagnostic tool for epidemiology, health management and clinical purposes
- ICD codes are the basis of healthcare payment systems
  - Also used to classify mortality data
- Coders must follow the rule of the *Official Guidelines for Coding and Reporting*

Hospital vs. Professional Billing

Hospital Fee

Hospital billing → Facility charge

- **Represents resources/services utilized by the facility**
  - **Pharmacy, Radiology, Clinical (RT, RN, etc.), Lab, Bed Assignment (ICU, Med/Surg, Rehab, etc.), etc.**
- **Hospital coders read through the medical record and assign diagnoses**
  - **If a diagnosis isn't documented then it cannot be included on the bill = Lost revenue**

Professional Fee

Professional billing → Attending physician charge

- **Represents the skills and training of a medical professional and services performed that day**
- **Attending assign diagnoses when they enter the charge**

Polling Question

Does your hospital use DRG payment systems?

- Yes
- No
- Unsure

https://api.cvent.com/polling/v1/api/polls/spdszi5q

DRG Payment Systems

- DRG - Diagnostic Related Group
  - A system to classify hospital cases into one of a group
  - Based on ICD-10 Diagnostic and Procedure Codes
- MS-DRG (Medical Severity / Medicare)
- APR-DRG (All Patient Refined / AHCCCS)

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MS-DRG

- **CC – Complication, Co-morbidity** (CMS list 94 pages)
- **MCC – Major Complication, Co-morbidly** (CMS list 52 pages)
  - Base DRG without CC or MCC
  - Base DRG with CC
  - Base DRG with MCC

APR-DRG

- **SOI – Severity of Illness**
  - "How sick is this patient?"
  - Minor (1), Moderate (2), Major (3), Extreme (4)
- **ROM – Risk of Mortality**
  - "How likely is this patient to die in the hospital?"
  - Minor (1), Moderate (2), Major (3), Extreme (4)

Polling Question

Which DRG system is used in Pediatrics?

- MS-DRG
- APR-DRG
- Neither
- Both

https://api.cvent.com/polling/v1/api/polls/spa1ksc0

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The Aim of CDI

What CDI Does	What CDI Does Not Do
• Bridges the gap between clinician and coder language	▪ Challenge the clinician's medical judgment
• Helps clinicians synthesize information from various parts of the chart	▪ Make a coder out of the clinician
• Works to ensure that billing is supported by documentation	▪ Made a clinician out of the coder
	▪ Does not require more time to document accurately
	▪ Does not alter, but enhances, documentation

Impact of CDI

Direct Impact to the Your Division	Indirect Impact to Your Division
• Patient safety	• DRG assignment
• Provider communication	• SOI/ROM assignment
• Accurate provider: patient ratios	• Facility Reimbursement
• LOS	• Quality Reporting
• CMI	◦ CMI
• E&M coding/RVU	◦ USNWR
	◦ National databases for tracking M&M

What parts of the medical record can be used to capture diagnoses.

Can be used for coding

- ✓ ED Physician Notes
- ✓ History and Physical
- ✓ Progress Notes
- ✓ Consultation
- ✓ MD Orders*
- ✓ Discharge Summary
- ✓ Operative Note/ Procedure Note
- ✓ CDI Query

Cannot be used for coding

- x Nursing Notes
- x Pathology Report
- x Lab Results
- x Radiology Reports
- x Physical Therapy/ Wound Care
- x Dietitian Consult

Only the documentation of a treating provider can be used for hospital coding.

Clinical Examples

We are going to present some clinical examples.

We want to you to think about the most accurate diagnosis you can provide in each case.

Polling Questions.

Polling Question

45 day old with laryngotracheomalacia and FTT. FTT thought to be related to poor feeding. Plan for laryngoscopy and speech therapy consult. Nutrition note states patient with weight for height z score of -3.2

What is the best additional diagnosis you as the physician should document in the chart:

1. Malnutrition
2. Mild Malnutrition
3. Mod Malnutrition
4. Severe Malnutrition

https://api.cvent.com/polling/v1/api/polls/sp1qtshw

Malnutrition Severity

Z Score	Mild	Moderate	Severe
Weight for Height	-1 to -1.9	-2 to -2.9	-3 or lower
BMI for Age	-1 to -1.9	-2 to -2.9	-3 or lower
Height for Age	n/a	-2 to -2.9	-3 or lower

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Impact

	Before Query	After Query
MS-DRG Assignment	DRG 130 MAJOR HEAD & NECK PROCEDURES W/O CC/MCC	DRG 129 MAJOR HEAD & NECK PROCEDURES W CC/MCC
2015 GMLOS	2.2 days	3.8 days
Relative Weight	1.26	2.33
Reimbursement		↑ 64%

Polling Question

2yo ex-30 week preemie presents with fever, tachycardia, poor urine output, dehydration. CBC with WBC 31 with 59% PMN and 25% bands. Given IVF bolus x 3 and maintenance IVF. Ucx and BCx reported back + GNR. Pt placed on IV rocephin.

What is the best additional diagnosis you as the physician should document in the chart:

1. E.coli pyelonephritis
2. E. coli bacteremia
3. E. coli sepsis due to pyelonephritis
4. E.coli urosepsis

https://api.cvent.com/polling/v1/api/polls/sp-wt9tbi

SEPSIS

- SIRS related to infection is not a code-able diagnosis in ICD-10
- Consider sepsis when appropriate
  - Signs and symptoms include fever, tachycardia, poor cap refill, poor urine output, need for multiple fluid boluses
  - Does not require the presence of hypotension
  - Does not require a positive culture (can be culture negative sepsis)
- In ICD-10, the codes for "urosepsis" were deleted
  - Reverts to UTI if used in documentation
  - Use pyelonephritis and sepsis instead

Impact

	Before Query	After Query
MS-DRG Assignment	690 KIDNEY & URINARY TRACT INFECTIONS W/O MCC	872 SEPTICEMIA OR SEVERE SEPSIS W/O MV 96+ HOURS W/O MCC
2015 GMLOS	3.0 days	4.9 days
Relative Weight	0.78	1.05
Reimbursement		↑ 33%

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Polling Question

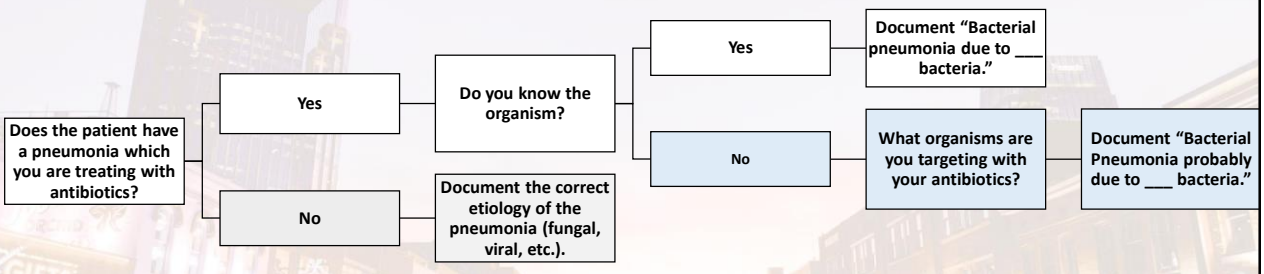
4yo with lissencephaly, DD, hypotonia, h/o aspiration, other multiple medical issues—who presents with fever, tachypnea. CXR with RLL infiltrate. Started on unasyn for evidence of aspiration pneumonia.

What is the best additional diagnosis you as the physician should document in the chart:

1. Pneumonia
2. Bacterial pneumonia
3. Aspiration pneumonia
4. Community acquired pneumonia

https://api.cvent.com/polling/v1/api/polls/sp-4i6wu8

Pneumonia Specificity



Bacterial Coverage Examples

Ampicillin = CAP or S. Pneumonia	Unasyn = Anaerobic bacteria	Zosyn/Cefepime = Pseudomonas bacteria	Vancomycin = MRSA

Unclear diagnoses at admission

- In the outpatient world, a suspected diagnosis cannot be coded.
- However, in the inpatient world coders can assign codes to suspected diagnoses….if one of the following terms is used.
  - Suspected
  - Probable
  - Likely
  - Treating for

Impact

	Before Query	After Query
MS-DRG Assignment	193 SIMPLE PNEUMONIA & PLEURISY W MCC	177 RESPIRATORY INFECTIONS & INFLAMMATIONS W MCC
2015 GMLOS	2.2 days	3.8 days
Relative Weight	1.45	1.95
Reimbursement		↑ 67%

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Polling question

3yo with Goldenhar, seizures, trach/GT, DD—presents with resp distress. RN notes state "patient with quadriplegia…bilateral upper and lower extremity severely impaired."

What is the best additional diagnosis you as the physician should document in the chart:

1. Developmental Delay
2. Paraplegia
3. Quadriplegia
4. Hemiplegia

https://api.cvent.com/polling/v1/api/polls/sp9bw562

What parts of the medical record can be used to capture diagnoses.

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Impact

	Before Query	After Query
APR-DRG Assignment	144 Resp signs/sxs/minor dx	144 Resp signs/sxs/minor dx
SOI/ROM	**3/1**	**4/3**
2014 PHIS LOS	3.7 days	6.0 days
Relative Weight	0.78	1.50
Reimbursement		↑ 90%

Polling Question

1yo with spina bifida and related clinical problems who is on home bipap—presents with acute viral illness found to be rhino/entero positive and requiring increased respiratory support on trilogy ventilator during the day and night.

What is the best additional diagnosis you as the physician should document in the chart:

1. Respiratory Distress
2. Acute respiratory failure
3. Chronic respiratory failure
4. Acute on chronic respiratory failure

https://api.cvent.com/polling/v1/api/polls/sp-5fdgm

Level of Respiratory Support

- If a patient needs **positive pressure ventilation** (bipap, cpap, intubated), he is in **respiratory failure.**
- Initiation of positive pressure ventilation (PPV) is **acute** respiratory failure.
- Home PPV is **chronic** respiratory failure.
- Escalation in support in patients with chronic respiratory failure is **acute on chronic** respiratory failure.

Impact

	Before Query	After Query
APR-DRG Assignment	138 Bronchiolitis and RSV Pneumonia	138 Bronchiolitis and RSV Pneumonia
SOI/ROM	**3/2**	**4/3**
2014 PHIS LOS	5.0 days	9.0 days
Relative Weight	0.82	2.01
Reimbursement		↑145%

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Polling Question

2yo ex 25 week preemie with CLD presented with feeding intolerance. Additional documentation states “born at 25 weeks, intubated for 1 month in NICU, remained in NICU for total 151 days.” “On home budesonide BID, albuterol Q4 prn.”

What is the best additional diagnosis you as the physician should document in the chart:

1. Chronic Lung Disease (CLD)
2. Broncho-pulmonary Dysplasia (BPD)
3. Respiratory Distress
4. Respiratory Failure

https://api.cvent.com/polling/v1/api/polls/sp-ieerj0

BPD/CLD

Use **BPD (bronchopulmonary dysplasia)**

instead of CLD (chronic lung disease)

for prematurity related lung disease

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Impact

	Before Query	After Query
APR-DRG Assignment	421 Malnutrition/FTT/Other	421 Malnutrition/FTT/Other
SOI/ROM	**2/1**	**3/1**
2014 PHIS LOS	4.6 days	5.7 days
Relative Weight	0.53	0.85
Reimbursement		↑ 108%

Polling Question

9 mo. with AML on COG. Admitted for induction chemotherapy. Lab findings include:

WBC	Hgb/Hct	Plt
1.0	8.0/22.7	57

What is the best additional diagnosis you as the physician should document in the chart:

1. Anemia
2. Thrombocytopenia
3. Pancytopenia
4. Pancytopenia due to chemotherapy

https://api.cvent.com/polling/v1/api/polls/spbxjkgh

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Impact

	Before Query	After Query
MS-DRG Assignment	838 CHEMO W ACUTE LEUKEMIA AS SDX W CC OR HIGH DOSE CHEMO AGENT	DRG 837 CHEMO W ACUTE LEUKEMIA AS SDX OR W HIGH DOSE CHEMO AGENT W MCC
2015 GMLOS	6.8 days	16.3 days
Relative Weight	2.79	6.46
Reimbursement		↑ 121%

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Polling Question

13yo with b-cell deficiency and recently diagnosed Ewing's sarcoma L iliac crest undergoing induction. Receives routine IVIG infusions. On bactrim prophylaxis as well as nystatin and biotene.

What is the best additional diagnosis you as the physician should document in the chart:

1. Immune compromised
2. Immune deficiency
3. Immune suppression

https://api.cvent.com/polling/v1/api/polls/spypillo

Impact

	Before Query	After Query
MS-DRG Assignment	544 Pathologic Fracture & Musc & Conn Tissue Malignancy without CC/MCC	543 Pathologic Fracture & Musc & Conn Tissue Malignancy with CC
2015 GMLOS LOS	2.8 days	4.1 days
Relative Weight	0.79	1.22
Reimbursement		↑ 43%

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Polling Question

12yo male with perforated appendicitis who represented 2 weeks later with fever, feeding intolerance, and abdominal pain. CT abdomen showed fluid collection in the RLQ. Pt was placed on IV ceftriaxone and flagyl, made NPO, and placed on TPN/IL.

What is the best additional diagnosis you as the physician should document in the chart:

1. Peritonitis
2. Peritoneal abscess
3. Complication of appendicitis

https://api.cvent.com/polling/v1/api/polls/sp-rtjp8t

Impact

	Before Query	After Query
MS-DRG Assignment	395 (Other dig sys wo CC/MCC)	393 (Other dig sys w MCC)
2015 GMLOS	2.3 days	3.3 days
Relative Weight	0.7	1.6
Reimbursement		↑ 142%

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Polling Question

12yo well female who underwent elective posterior spinal fusion for adolescent idiopathic scoliosis.

Date	6/6/16 (pre-op)	6/8/16	6/9/16
Hgb	13.0	9.6	9.8
Hct	43.5	31.1	31.7

What is the best additional diagnosis you as the physician should document in the chart:

1. Anemia
2. Acute blood loss anemia
3. Chronic blood loss anemia
4. Post-op blood loss anemia

https://api.cvent.com/polling/v1/api/polls/sp-n9nzb8

Impact

	Before Query	After Query
MS-DRG Assignment	458 (Spinal Fus wo CC/MCC)	457 (Spinal Fus w CC)
2015 GMLOS	3.4 days	5.5 days
Relative Weight	5.3	7.1
Reimbursement		↑ 34%

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Polling Question

14yo female with AVM and large posterior fossa hemorrhage s/p emergent EVD placement for decompression and duraplasty. The diagnoses of AVM and hemorrhage were documented by the physician.

What is the best additional diagnosis you as the physician should document in the chart:

1. Brain Compression
2. Mass Effect
3. Midline Shift

https://api.cvent.com/polling/v1/api/polls/sp-9qf2wq

Impact

	Before Query	After Query
APR-DRG Assignment	021 Craniotomy except for Trauma	021 Craniotomy except for Trauma
SOI/ROM	**3/3**	**4/3**
2014 PHIS LOS	13.1 days	31.3 days
Relative Weight	4.02	7.48
Reimbursement		↑ 86%

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High Impact Tips—instead of…consider

- SIRS physiology on pressors
  - Septic shock
- Received 20ml/kg NS in the ED
  - Hypovolemia, hypotension
- FTT
  - Malnutrition – severity important!
- Ex-26 weeker with chronic lung disease
  - BPD
- Started on CPAP for resp support
  - Acute respiratory failure
- 3 cell lines down
  - Pancytopenia (add "due to chemo" if applicable)
- Hct decreased by 5% & rec'd 250ml PRBCs in OR
  - Acute blood loss anemia
- Bipap dependent, trach/vent dependent
  - Chronic respiratory failure
- Home oxygen 24 hours per day
  - Chronic respiratory failure
- Urosepsis
  - Sepsis due to Pyelonephritis
- Midline Shift/Mass Effect
  - Brain Compression
- Evidence of
  - Probable, Likely, Treating for, Suspected

MOST IMPORTANTLY, do NOT document diagnoses that don't actually exist

- Urosepsis (no longer exists in ICD-10)
- Sepsis/SIRS physiology (a physiologic state of being, not a diagnosis)
- Asthmonia
- Asthmolitis
- Kawashocki

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I don't have time to document more.

It's not quantity, it's quality….but if you're counting

Not preferred	Word count	Preferred	Word count
Trach/vent dependent	3	Chronic respiratory failure	3
Low potassium	2	Hypokalemia	1
Low Hct, EBL 500ml	4	Acute blood loss anemia	4
Global developmental delay	3	Intellectual disability	2
Wheelchair bound	2	Spastic quadriplegia	2
Gastrostomy tube dependent	3	Oropharyngeal dysphagia	2
MRI with mass effect	4	Cerebral compression	2
Failure to thrive	3	__(level)__ malnutrition	2
3 cells line down on COG	6	Pancytopenia due to chemo	4
Developmental Delay	2	Intellectual disability	2

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Nobody reads my notes anyway.

- Patients deserve a medical record that accurately reflects the care they receive
- Physicians and hospitals deserve credit for taking care of very ill patients
- Hospitals deserve to be reimbursed for the care they provide
- Researchers using administrative databases rely on accurate diagnoses from hospital bills
- Hospital mortality rates, penalties for readmission rates, and penalties for hospital acquired conditions are all affected by the diagnoses documented

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Really, though, isn't it just about the hospital making money?

Really, though, isn't it just about the hospital making money?

- No, of course not!
- And yes, of course!

- Non-reimbursable services:
  - Child life specialists
  - Security
  - Sitters (1:1)
  - Chaplaincy
  - Social work/Case Management
  - Nutrition
  - Interpreters
  - Charity cases
  - Pet therapy
  - Speech Therapy/Occ Therapy/PT
  - Other Ancillary Services

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Intended Change

- Awareness of the impact of clinical documentation
- Modification in documentation style to include accurate clinical terms
- Become Champions of CDI for Residents/Fellows/Your Division

"Paint the picture of your patient with words so the coder can paint the same picture with codes."

Robert Gold, MD

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Thank you!

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