

# Clinical Documentation Improvement

## Measures, Models, and Multi-facilities

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**22nd Annual Midas+ User Symposium**



# Objectives

- Compare and contrast Clinical Documentation Improvement (CDI) program goals, reporting structures, staffing models and Midas+ support of the CDI process.
- Define a report to measure productivity for the Clinical Documentation Specialist (CDS) and monitor Return on Investment (ROI) specific to a CDI program.
- Review the challenges of a multi-facility site that incorporates different reporting structures and staffing models; discover how they were able to retain CDI documentation in Midas+ and how they demonstrate the program's value.

# History of the Medicare Inpatient Prospective Payment System (IPPS)

- 1983 Medicare inpatient claims paid based on CMS-DRGs
  - appropriate reimbursement for services rendered
  - accurate reflection of expected cost of treatment
- 2007 Medicare Severity DRGs (MS-DRG)
  - considers severity of illness and resource consumption
- 2008 Present on Admission (POA)
  - distinguishes conditions that are present on admission vs. those that were acquired while in the hospital

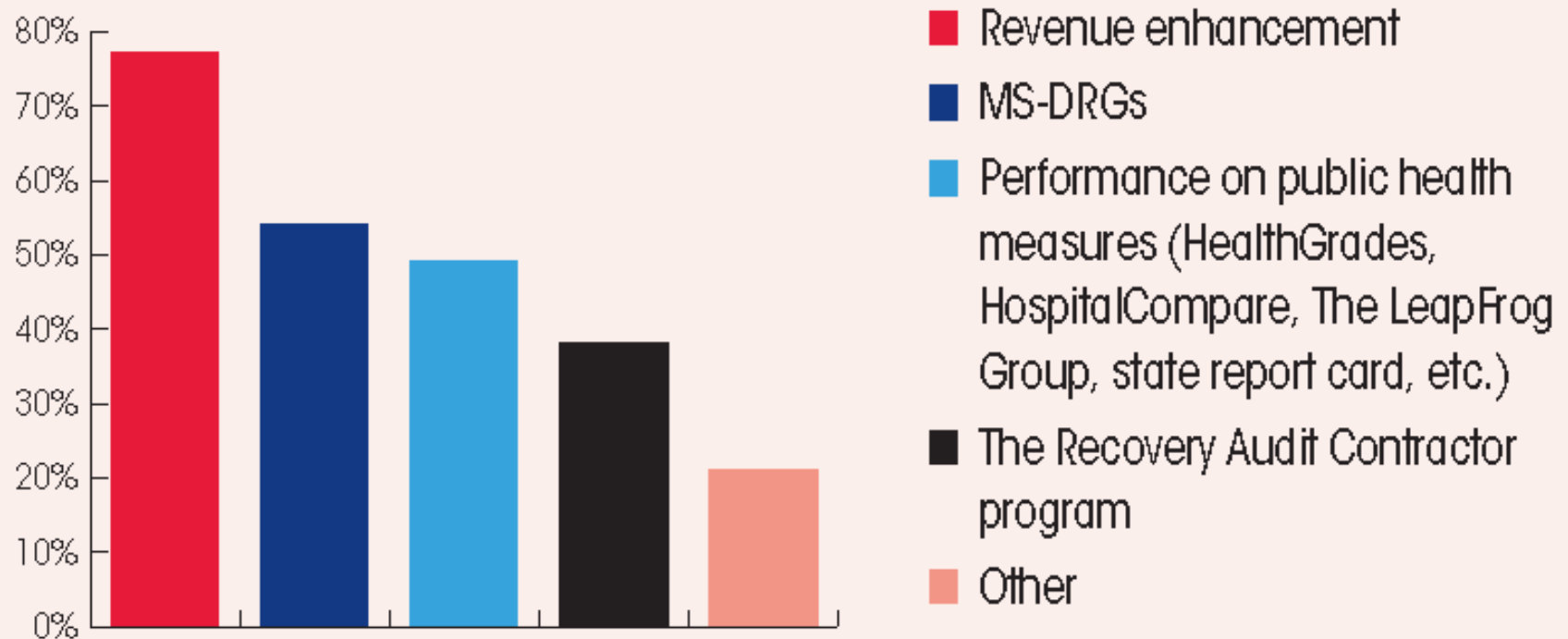
# IPPS Proposed Rule (FY 2014)

- Hospitals will see a net increase of 0.8% in payments. Some MS-DRG weights increased, while others decreased. Review the relative-weight change tables included in the proposed rule.
- Facilities still face a negative 0.8% recoupment adjustment under the Documentation and Coding Adjustment, and CMS expects to make similar adjustments in FY 2015, 2016, and 2017 in order to recover the full \$11 billion mandated in the American Taxpayer Relief Act of 2012.
  - *“Any 'improvement' in a facility's case mix index with clinical documentation and coding integrity is a truer reflection of their patient's actual resource intensity in contrast to the 'under-documentation' that occurred prior to MS-DRGs.”*
  - *“Even so, I believe that hospitals and physicians, as well as the entire healthcare delivery system, benefits in their partnership to consistently define, diagnose, and document conditions and treatments as to deploy clinically congruent ICD-9-CM codes essential to MS-DRGs and in their preparation for ICD-10-CM's impact as well.”*

James S. Kennedy, MD, CCS, CDIP, managing director of FTI Healthcare

4/26/13

# Why hospitals implement CDI



*Source: HCPro's January 2011 Clinical Documentation Improvement program survey.*

# Structure for Success



# 5 Attributes of a Formal CDI Program

1. Staffed appropriately
2. Primary focus on accurate DRG capture
3. Focus chart reviews on all prospective payers
4. Develop robust tracking capability to insure accuracy and accountability
5. Bolster query compliance with physician education with clear goals and expectations

*Egan, M (2011)*

# CDI Program Objectives

- 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
- Facilitate communication between physicians and other members of the healthcare team
- Provide education
- Improve documentation to reflect quality and outcome scores
- Improve coders' clinical knowledge



# CDI Impact – Direct & Indirect

- Compliance with patient safety initiatives
- Profession (e.g., physician) reimbursement
- ICD-9 & ICD-10 diagnosis & procedure code assignment
- DRG assignment
- Severity of illness & risk of mortality scores
- CMS quality measures (core measures) reporting accuracy
- Facility efficiencies, value, & quality outcomes in the delivery of healthcare
- Medical necessity of appropriate level of care (e.g. OBS or IP)
- Physician & hospital profiles of publically reported data
- Claims data used in CMS initiatives: readmission reduction & VBP program

# CDI Program Priorities

- CC/MCC capture & DRG optimization
- Focused reviews (e.g. Service lines; Target DRGs)
- Overall Case Mix Index (CMI) improvement
- Severity of Illness (SOI) / Risk of Mortality (ROM) improvement
- Quality measures collection

# Set Reasonable Goals

- All DRG payers
- 80% of Major Disease populations
- 30-35 charts reviewed per reviewer per day
  - 25% with queries, and
  - 85-90% with Physician response
- Improve CMI by .15
- Improve documentation to reflect quality & outcome scores
- *Start small.....*

# CDI Staffing Models

## Staff

- Case Managers
- Coders
- Quality Data Abstractors
- Clinical Documentation Specialists
- Advanced Practice Nurses
- Physicians

## Departments

- Health Information Management
- Case Management
- Quality
- Compliance



# CDI Staffing

## Determine staffing needs (basic):

$$\frac{\text{\# of hrs worked / year / CDS}}{\text{time to perform average review}}$$

## Formula to determine Full-Time Equivalents (FTE):

$$\frac{\text{\# reviewable pts admitted in fiscal yr} \times \text{\# of hrs to perform average review}}{\text{total number of CDI work hours}}$$

## Use of time studies

ACDIS – CDI Roadmap

# CDI Case Selection

## **Payers**

- Medicare
- Medicaid
- All payers

## **Service Line**

- Cardiology
- Oncology
- Surgery

## **Diagnoses/Procedures**

- Cardiac Interventions
- Excisional Debridement
- Heart Failure
- Renal Failure
- UTI / Sepsis
- COPD

## **Physician**

## **Unit Based**

*...and others*

# Measuring Productivity

*Recommendation:*

*Individualize and base these measures on your department's structure and goals*

## **Variables affecting productivity:**

- Experience level of staff - (specialization vs. rotate)
- Additional staff responsibilities - (PI, CM)
- Type of Medical Record – (Electronic, Paper, Hybrid)
- Available Software – (Encoder, CDI system)
- Query process – (Paper, integrated with EMR)
- Provider relationships

# CDI Collaboration

## **Health Information Management / Coding**

- Ensure record provides complete & accurate clinical picture for coding
- Analyze audit data
- Work in collaboration with ICD-10 implementation
- Participate in joint education: IPPS / *Coding Clinic*

## **Case Management / UR**

- Provide working DRG, GMLOS, anticipated discharge date
- Assist with establishment of medical necessity

## **Compliance/Denials/RAC**

- Assist with internal reviews of RAC findings
- Monitoring process for MS-DRGs that are high risk for payment errors



# CDI Collaboration *(continued)*

## **Providers**

- Educate importance of documentation
- Educate ICD-9 vs CPT procedure codes & impact on core measures
- Round to help translate clinical findings
- Educate impact of documentation related to hospital & physician quality scorecards

## **Quality / Patient Safety / Nursing**

- Assist with requirements of VBP
- Capture accurate expected mortality and/or acuity
- Alert healthcare team to quality of care issues
- Ensure correct assignment of POA indicators
- Assist accurate reporting of AHRQ Patient Safety Indicators (PSI)

# Documentation Criteria

Criteria for High Quality Clinical Documentation	Description
Legibility	Required by all government and regulatory agencies
Completeness	Abnormal test results without documentation for clinical significance (Joint Commission requirement)
Clarity	Vague or ambiguous documentation, especially in the case of a symptom principal diagnosis (e.g. Chest pain vs. GERD; Syncope vs. Dehydration)
Consistency	Disagreement between two or more treating physicians without obvious resolution of the conflicting documentation upon discharge
Precision	Nonspecific diagnosis documented, more specific diagnosis appears to be supported (e.g. anemia vs. acute or chronic blood loss anemia)
Reliability	Treatment provided without documentation of condition being treated (e.g. Lasix given but no CHF documented; KCL administered but no hypokalemia documented).

Russo, R (2010) CDI Achieving Excellence

# The Documentation Difference

## Initial Documentation

- Abdominal hysterectomy
- Age 72
- Weight 92 lbs
- *Anorexic*
- MS-DRG 743
  - Uterine & Adnexa Proc for Non-Malignancy w/o CC GMLOS 1.8
- RW 0.9079 = **\$4393**

## Final Documentation

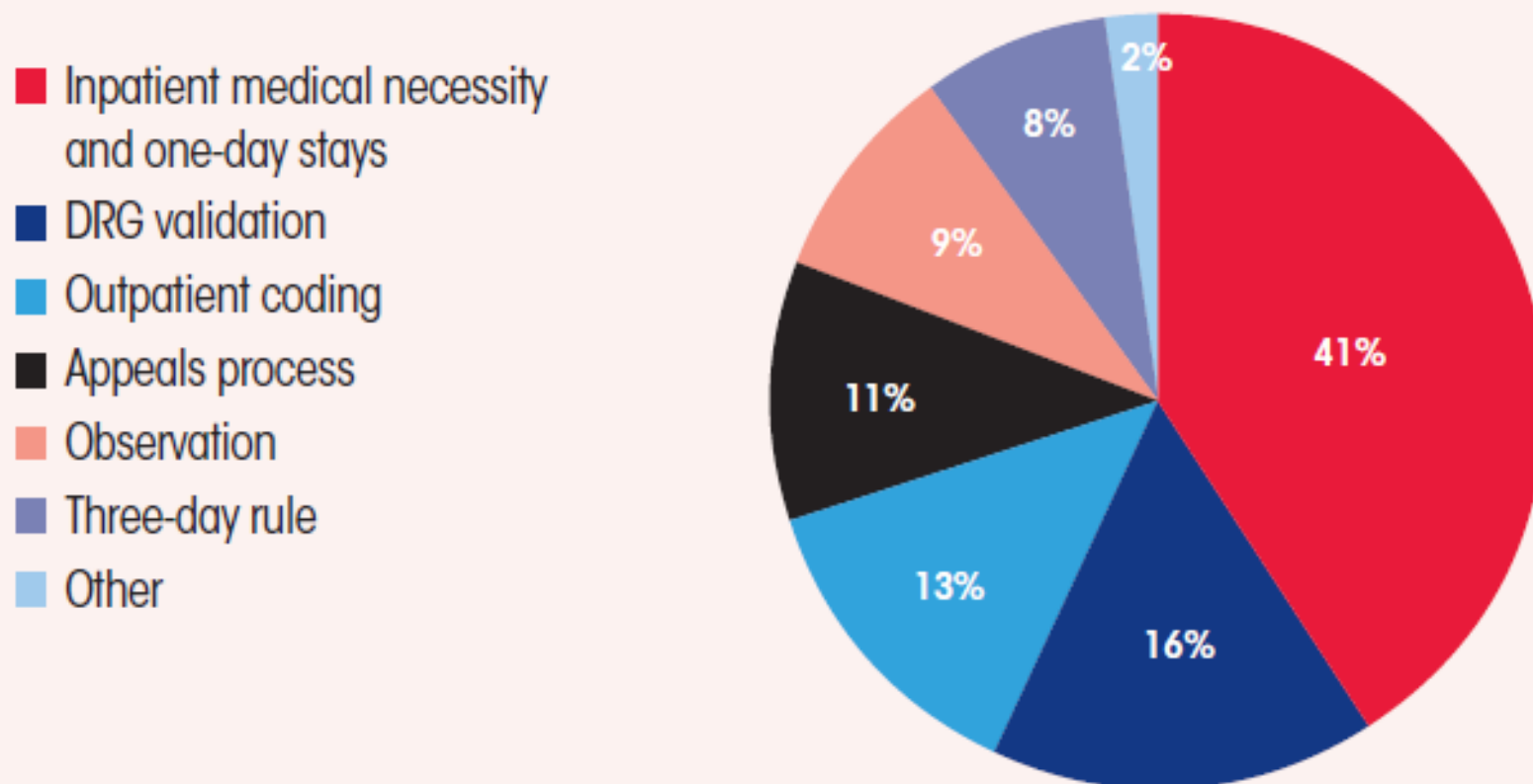
- Abdominal hysterectomy
- Age 72
- Weight 92 lbs
- *Body Mass Index less than 19*
- MS-DRG 742
  - Uterine & Adnexa Proc for Non-Malignancy w/ CC/MCC GMLOS 3.2
- RW 1.3883 = **\$7219**

# CDI Program & Revenue Cycle

- Case Mix Index (CMI)
- Management of Recovery Audit Contractors (RAC)
- Quality Standards & Readmissions
- ICD-10

# CDI & RAC

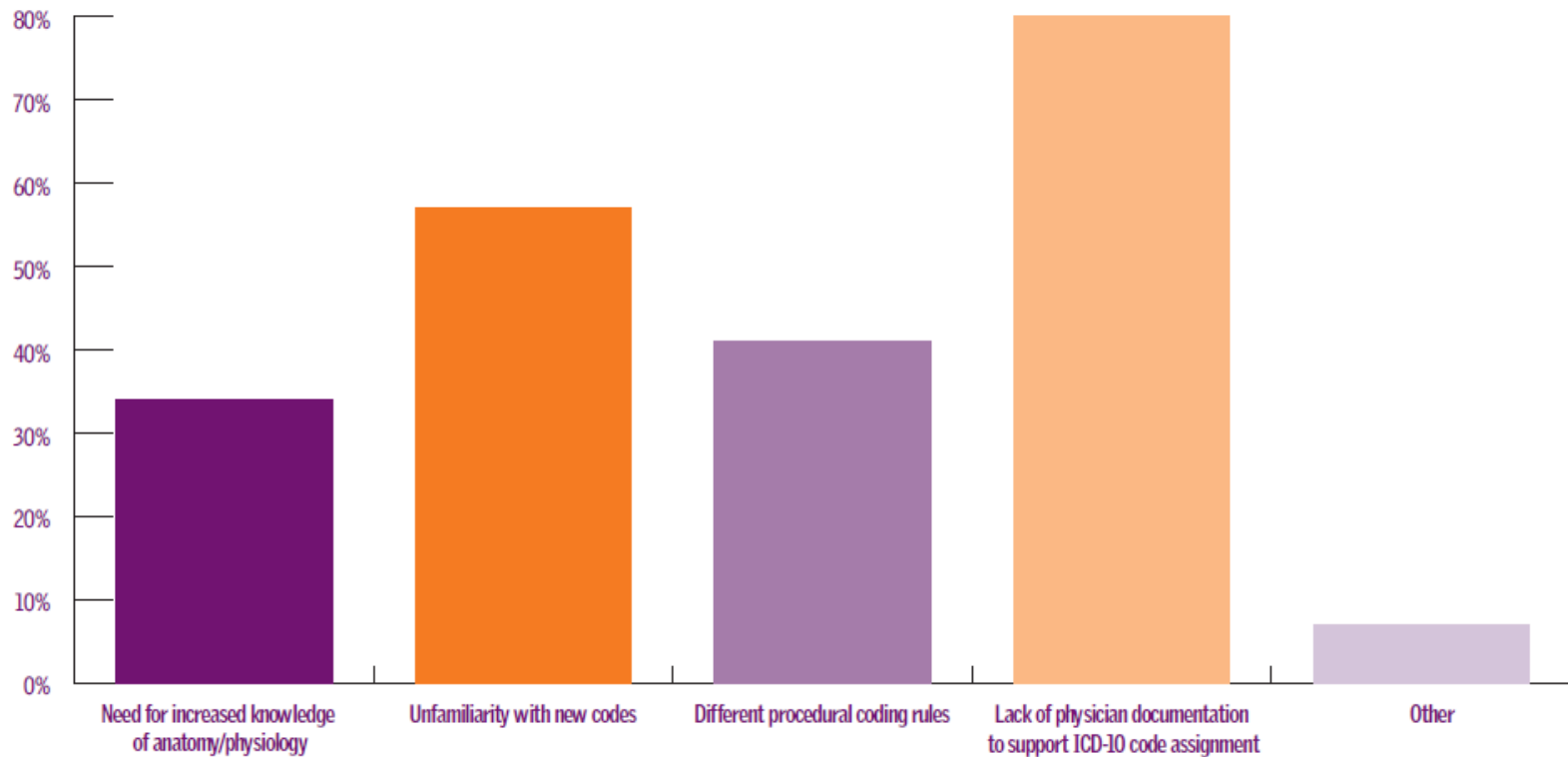
Figure 3: RAC preparation focus areas



Source: HCPro's RAC Preparedness Benchmarking Report, December 2010.

# CDI & ICD-10

**Figure 10: What is your biggest worry about ICD-10? (check all that apply)**



ACDIS CDI Prep for ICD-10 Survey

# CDI & ICD-10 *(continued)*

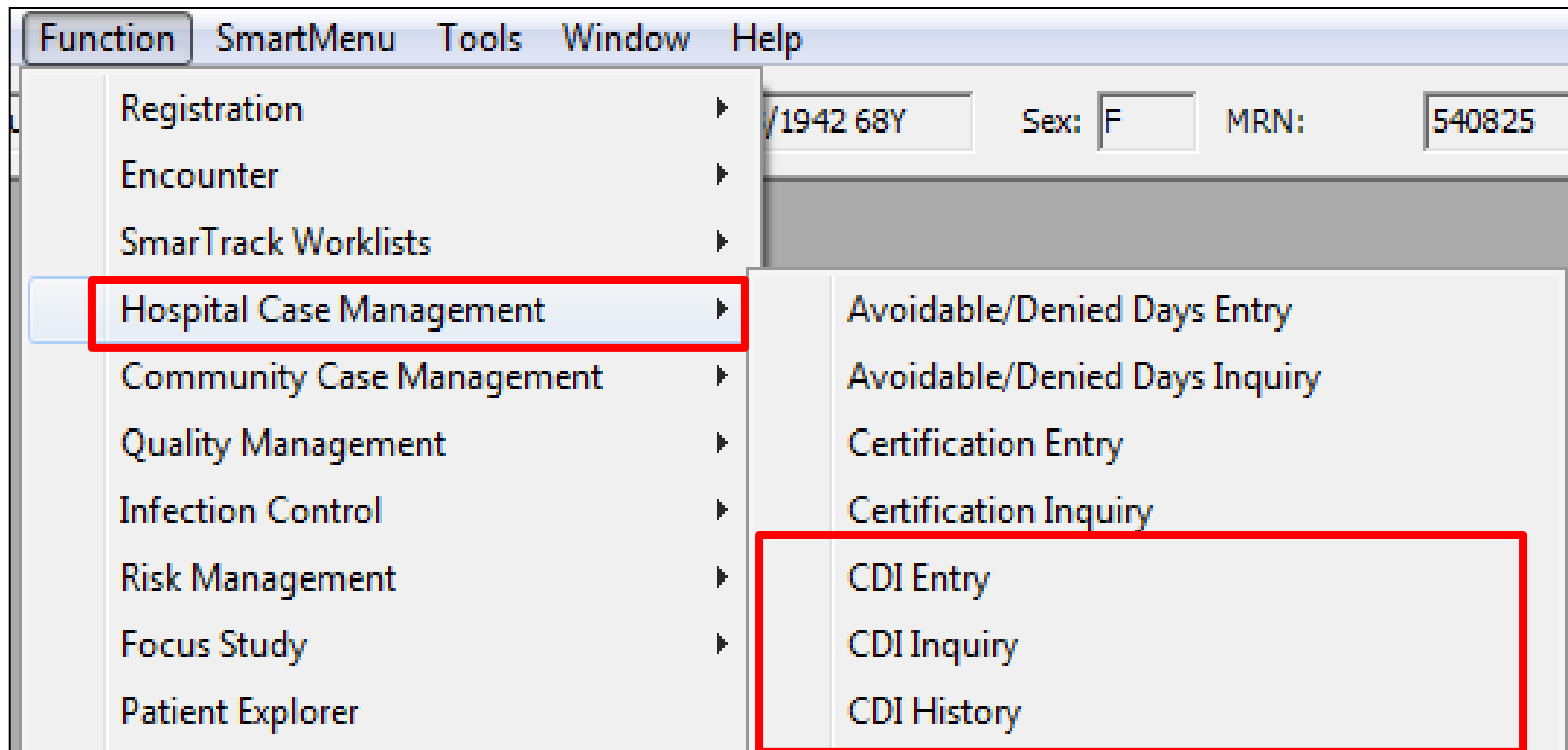
- Providers have limited understanding of how ICD-10s will affect them
- Impact will vary by specialty
  - ↑ for Orthopedics & Emergency Department
  - ↓ for Family Practice & Radiology
- Bottom Line - one size does not fit all for ICD-10 implementation
- Focus efforts on documentation improvement according to the needs of your organization
- Midas+ is ready! – install in your Test environment now!
- See Clients Only Website for current strategy

# Ensuring Continued Success

- Involve the CDI team in medical necessity reviews
- Develop a CDI / Case Management collaborative process
- Expand CDI efforts into the outpatient setting
- Ensure CDI reviews of discharged weekend short-stay records
- Invest in continuing education



# Midas+ and CDI



# Using Midas+ Care Management

## **Efficient Computerized Workflow**

- Automated Case Assignments
  - Complex rules-based logic
- Electronic Worklists
- Query Tracking
- ROI Data Capture
- Data Analysis & Reporting



# CDI Site Parameters

- HCM CDI – Days Prior to Ignore
- HCM CDI – Days to Initial Review
- HCM CDI – Delete Discharge Reviews
- HCM CDI – Move up Future Pending Reviews on Discharge
- HCM CDI – Pending Review Assignment Permanent
- HCM CDI – Retain Future Review Date after Transfer
- HCM CDI – Retain Pending 1<sup>st</sup> Review on Discharge

# Worklist Build

## **Step 1:**

Define the CDI staff work assignment rules

- HCM-STAFF ASSIGNMENT RULES Dictionary # 172

The screenshot displays the 'Worklist Build' interface. On the left, there is a form with the following fields:

- Name:** Payer-Enc Type-Location-Room
- Code:** 3
- Field 1:** Principal Payer
- Field 2:** Encounter Type
- Field 3:** Location
- Field 4:** ?

An 'Available Fields' dialog box is open in the foreground. It contains a search area with 'Begins With: ?' and 'And Contains:'. Below this is a list of fields to select from:

Description
Admission Source
Admitting Physician
Admitting Physician:Default Service
Admitting Physician:Default Specialty
Admitting Physician:Group
Admitting Room
Admitting Service
Admitting Status
Attending Physician
Attending Physician:Default Service
Attending Physician:Default Specialty
Attending Physician:Group
Primary Care Physician:Group
Principal Payer:Type
Referral Source
Secondary Payer

The 'Admission Source' field is currently selected in the list. The dialog box also includes 'Lookup', 'OK', 'Cancel', 'Prev', and 'Next' buttons.

# Worklist Build *(continued)*

Facility		
▶	MIDAS General Hospital	
	MIDAS Medical Center	
*		

Assignment Rules - MIDAS General Hospital		
Rule	Active	Priority
▶ Ref Source, Loc, Enc Type	<input checked="" type="checkbox"/>	1
Prin Payer, Adm Service, Enc Type	<input checked="" type="checkbox"/>	2
*	<input type="checkbox"/>	

Facility		
	MIDAS General Hospital	
▶	MIDAS Medical Center	
*		

Assignment Rules - MIDAS Medical Center		
Rule	Active	Priority
▶ Payer-Enc Type-Location-Room	<input checked="" type="checkbox"/>	1
*	<input type="checkbox"/>	

## **Step 2:**

Assign, prioritize and activate rules per facility in CDI Staff Work Assignment Definition

# Worklist Build *(continued)*

## Step 3:

Assign Rules to staff  
in CDI Staff Work Assignment

Facility

- ▶ MIDAS General Hospital
- MIDAS Medical Center
- \*

Rules - MIDAS General Hospital

Rule	Active	Priority	Assignment
▶ Prin Payer, Adm Service, Enc Type	<input checked="" type="checkbox"/>	2	+
Ref Source, Loc, Enc Type	<input checked="" type="checkbox"/>	1	
*	<input type="checkbox"/>		

Employee Name: Barnes,Liz Employee No.: EMB

Rule: Prin Payer, Adm Service, Enc Type Active: Yes

Facility: MIDAS General Hospital

Principal Payer

- ▶ AARP
- Aetna Life and Casualty
- Aetna-PPO, HMO, or MC

Admitting Service - AARP

- ▶ Family Practice
- Medicine
- Pediatrics

Encounter Type - AARP - Family Practice

- ▶ Inpatient
- \*

Assigned To: Barnes,Liz

Location:

Patient	Location	Room	Type	Status	Next Review
Gold,Monica	2200 East	127-1	I		
HCMCDIRewiew:HCMCDIRewiew*				PENDING	
Takahashi,Ida	3100 East	16301	O		
HCMCDIRewiew:HCMCDIRewiew\$*					
Saathoff,Cecilia	3300 East	233	I		
HCMCDIRewiew:HCMCDIRewiew*					
Tabar,Gerry	3300 West	41701	I		
HCMCDIRewiew:HCMCDIRewiew*					
Sabalos,Daniel	3700 West	41102	I		
HCMCDIRewiew:HCMCDIRewiew\$*					

# CDI Worklist – Display Options

CDI-Goal DRG	<input checked="" type="checkbox"/>
CDI-Init DRG	<input checked="" type="checkbox"/>
CDI-Query Resp	<input checked="" type="checkbox"/>
CDI-Query Subject	<input checked="" type="checkbox"/>
CDI-Query Type	<input checked="" type="checkbox"/>
CDI-Work DRG	<input checked="" type="checkbox"/>

Patient	Status	Next Review	Admit Date	Location	CDI-Init DRG	CDI-Work DRG	CDI-Goal DRG	CDI-Query Subject
Riggins, Rebecca	(Discharged)		2/1/2011	3700 East				
<i>HCMCDIRewiew:HCMCDIRewiew</i>	COMPLETE	5/4/2013			313 CHEST PAIN	179 RESPIRATORY	178 RESPIRATORY	
Peacock, Norbert	(Discharged)		1/27/2011	3100 East				
<i>HCMCDIRewiew:HCMCDIRewiew\$</i>	COMPLETE				292 HEART FAILU	292 HEART FAILU	292 HEART FAILU	

# Document CDIS Findings

General	Queries	Comments	Outcomes	Payers	Episode User Fields	Series User Fields
<b>Review Date:</b> 4/21/2011		<b>Review By:</b> Barnes,Liz				
<b>Current LOS:</b> 232		<b>Review Location:</b> 3300 West				
<b>DRG Information</b>						
	<b>DRG</b>	<b>Weight</b>	<b>GLOS</b>	<b>ALOS</b>		
<b>Initial:</b>	293 HEART FAILURE & SHOCK W/O CC/MC	0.694	2.9	3.4		
<b>Working:</b>	292 HEART FAILURE & SHOCK W CC	0.974	3.9	4.7		
<b>Goal:</b>	291 HEART FAILURE & SHOCK W MCC	1.4609	5.0	6.4		
<b>Diagnosis</b>						
	<b>Diagnosis</b>	<b>Date</b>	<b>Present On Admission</b>	<b>Status</b>	<b>CC</b>	
	428.9 Heart failure NOS	9/1/2010	Present on Admission	principle-con		
	425.7 Metabolic cardiomyopathy	9/1/2010	Clinically Undetermined	probable	CC	
▶	250.1 DIABETES W KETOACIDOSIS	9/2/2010	Clinically Undetermined	pending	MCC	
*						
<b>Procedure</b>						
	<b>Procedure</b>	<b>Provider</b>	<b>Date</b>	<b>Status</b>		
	37.23 Rt/left heart card cath	Becker,William	9/3/2010	confirmed		
*						

## DRG Information

**Initial:** Based on documentation present in MR at time of review, the reason the patient came to the hospital

**Working:** Based on review of all information available in the MR at time of review, including lab results and other documentation that must be interpreted by the physician to be considered for coding.

**Goal:** Anticipated Final DRG based on clinical expertise and outstanding queries agreement

**Diagnosis:** Principle and secondary diagnoses are entered to document the assessment and critical thinking that led to the capture of the initial, working and goal DRGs.

**Procedure:** Capture procedures confirmed in the chart and procedures with outstanding queries



# Generate Queries & Document Query Responses

General
Queries
Comments
Outcomes
Payers
Episode User Fields
Series User Fields

Query Date	Provider	Reviewer	Type	Subject	Response	Resp. Date
1/19/2011	Xeri,Patrick	Bradford,Martha	verbal conversation	General	agreed and document	1/19/2011
*						

Details for 1/19/2011 verbal conversation  
Responding Provider: Xeri,Patrick  
Notes: Due to complications, n

Save

Save & Print

Documents

Files

MIDAS Medical Center  
Clinical Documentation Improvement  
General Query

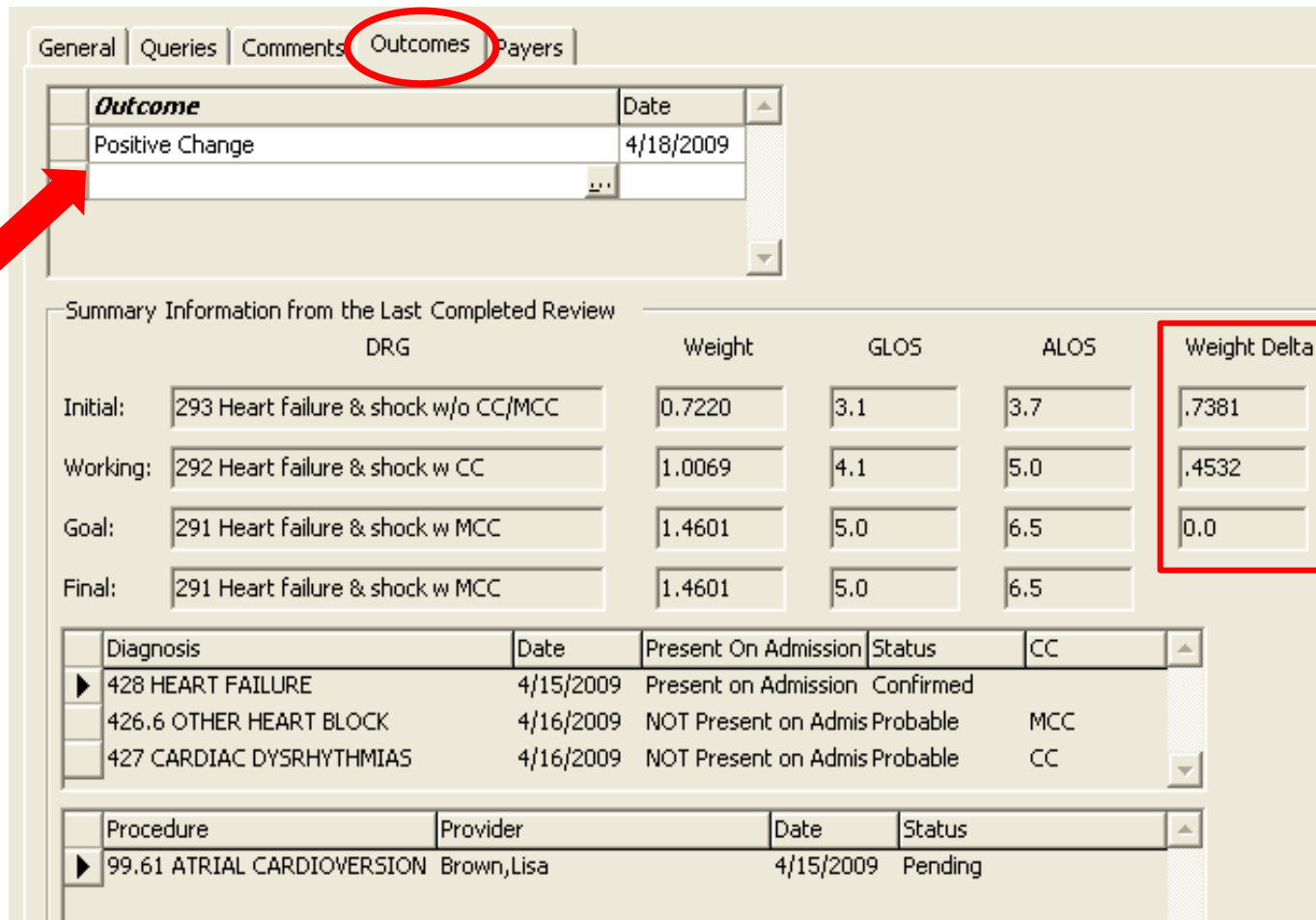
January 19, 2011  
  
Dear Dr. Xeri,  
  
In responding to this clarification request, please exercise your independent professional judgment. The fact that a question is asked does not imply that any particular answer is desired or expected. Thank you in advance for clarifying this issue.  
  
*Martha Bradford, RN*  
Case Manager

Documents Generated

Total Documents: 1

Document	DisplayFields	Send Method	Generated	By	More...
General CDI Query	Clin Doc Impr Quer Query Provider Prov	Email	5/3/2013	Dietz,Patty	

# Document Overall Outcomes



General | Queries | Comments | **Outcomes** | Payers

Outcome	Date
Positive Change	4/18/2009

Summary Information from the Last Completed Review

	DRG	Weight	GLOS	ALOS	Weight Delta
Initial:	293 Heart failure & shock w/o CC/MCC	0.7220	3.1	3.7	.7381
Working:	292 Heart failure & shock w CC	1.0069	4.1	5.0	.4532
Goal:	291 Heart failure & shock w MCC	1.4601	5.0	6.5	0.0
Final:	291 Heart failure & shock w MCC	1.4601	5.0	6.5	

Diagnosis	Date	Present On Admission	Status	CC
428 HEART FAILURE	4/15/2009	Present on Admission	Confirmed	
426.6 OTHER HEART BLOCK	4/16/2009	NOT Present on Admis	Probable	MCC
427 CARDIAC DYSRHYTHMIAS	4/16/2009	NOT Present on Admis	Probable	CC

Procedure	Provider	Date	Status
99.61 ATRIAL CARDIOVERSION	Brown,Lisa	4/15/2009	Pending

**Weight Delta** calculates difference between Relative Weight Initial, Working and Goal DRG assignments compared to Final DRG

# Reporting



# ROI Metrics

- Overall CC Capture Rate
  - *Medical & Surgical*
- Query Volume
  - *Response Rate*
  - *Agreement Rate*
- Denial Rate
- Case Mix Index
- Review Volume
- Review Frequency
- DRG Match Rate
- Days in Accounts Receivable (AR)

# Quantifying ROI

To compute the dollars gained as a result of CDI interventions, one practice is to multiply the difference between the initial DRG and the coded DRG Relative Weights by the hospital reimbursement rate.

To do this in Midas+, build a computed field at the CDI Series User Field level. The Weight should be the hospital's Medicare Base Rate – this example uses \$5000.

**Name:** HCM CDI SERIES USER FIELDS      Draft: ☐      Display Deactivated Items: ☐

Fields | Rules | Form

Field Name	Response Type	Active	Mandatory	Member Of
Alternate Working DRG	SELECT MULTIPLE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
Reimbursement Capture (Initial to Final)	COMPUTED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
▶ Reimbursement Capture (Working to Final)	COMPUTED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
*		<input type="checkbox"/>	<input type="checkbox"/>	

Details for Reimbursement Capture (Working to Final)

Computed | Instructions | Prompt | Layout

Field	Weight
▶ HCM CDI:Working Weight Delta	5000
*	

# SmarTrack Indicator Profiles

CDI REVIEWS BY REVIEW LOCATION	27800	31920	59720
3100 East	11120	12768	23888
3100 West	8340	9576	17916
3300 East	8340	9576	17916
TOTAL ENCOUNTERS WITH QUERIES	20400	24320	44720
RATE OF ENCOUNTERS WITH QUERIES GENERATED	60%	64%	62%
TOTAL NUMBER OF QUERIES	31250	33450	64700
TOTAL NUMBER OF QUERY RESPONSES	29688	28433	58121
RATE OF QUERY RESPONSES	95.0%	85.0%	89.8%
TOTAL NUMBER OF QUERIES IN AGREEMENT AND DOCUMENTED	11875	14049	25924
TOTAL NUMBER OF QUERIES DISAGREED	1335	2002	3337
RATE OF QUERY AGREEMENT	40.0%	42.1%	41.6%
CDI REVIEWS OUTCOMES - FINAL DRG MATCHED GOAL DRG	9730	23940	33670
CASE MIX INDEX (CPMS/DV)	1.55	1.68	1.61
DAYS IN AR (Manual)	57	42	50
TOTAL NUMBER OF DENIALS	125	152	277

# SmarTrack Indicator Profiles *(continued)*

CDI REVIEWS OUTCOMES - ADDTL COMORBID RETROSPECTIVELY	1390	1277	2667
CDI REVIEWS OUTCOMES - DISCREP IN POA ID BY CODER	556	638	1194
CDI REVIEWS OUTCOMES - POSITIVE FINANCIAL IMPACT	11120	17556	28676
CDI REVIEWS OUTCOMES QUESTIONABLE QUERY	2780	957	3737
CDI TOTAL COMORBID CONDITIONS IDENTIFIED BY CDI SPECIALIST	19838	42675	62513
DISEASES/DISORDERS OF THE CIRCULATORY SYSTEM	5560	6384	11944
CDI TOTAL DIAGNOSES POA	18904	28728	47632
DISEASES/DISORDERS OF THE CIRCULATORY SYSTEM	3780	5746	9526

# Other indicators...

## **Volume**

- Initial reviews
- Follow up reviews

## **Statistics**

- Total population
- Physician rates
  - Queries
  - Responses
  - Agreement
  - Disagreement
  - No responses

## **Outcome Analysis**

- Count by Outcome Type
  - Coder to reviewer
  - Coding correction
  - Goal DRG met
  - Higher reimbursement
  - Increased severity
  - No change



# Quantifying Results

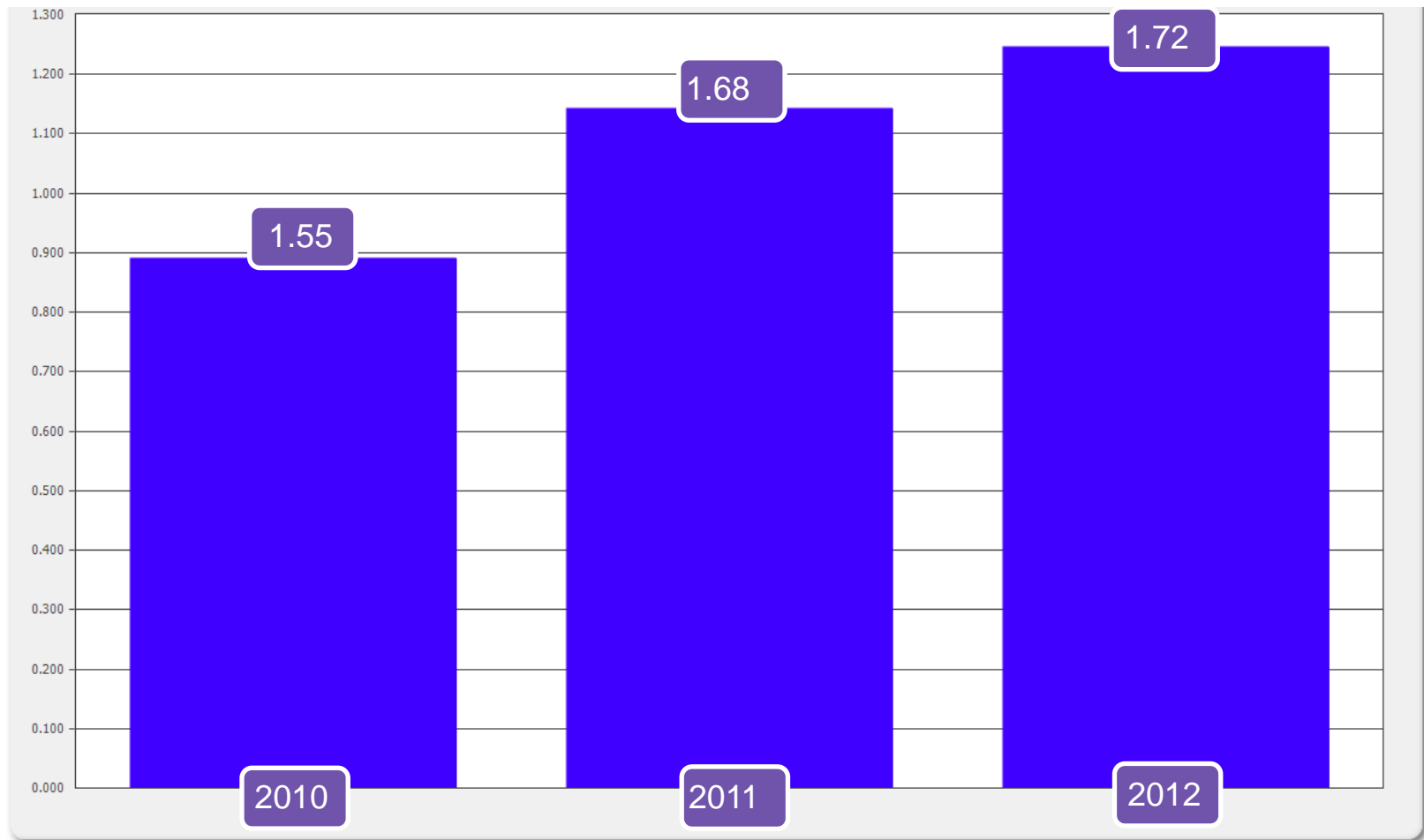
## CDI- Financial Impact for Positive DRG Changes

Account #	PT Name	Admit Date	D/C Date	Principal Payer	Final DRG	Final DRG Weight	Working DRG	Working DRG Weight	Working DRG Weight Delta	Financial Weight Impact
3492040329	Gold, Monica	05/21/2009	04/21/2011	Partners Health Plans	466	4.5431	468	2.4500	2.0931	\$11,011.53
87452123	Jones, Catherine	10/27/2010	04/20/2011	Partners Health Plans	216	10.0943	217	6.9900	3.1043	\$16,331.32
240110591	Smith, Alicia	03/28/2011	03/30/2011	Medicaid	308	1.2188	309	0.8207	0.3981	\$2,094.35
P-14777	Smith, Alicia	02/05/2011	04/28/2011	Medicare, Part B Only	683	1.0523	684	0.6746	0.3777	\$1,987.03
P-12214	Smith, Ana	04/21/2011	04/28/2011		391	1.0958	392	0.6921	0.4037	\$2,123.81
240088982	Thomas, Albert	03/04/2011	03/07/2011	Partners Health Plans	682	1.6413	684	0.7305	0.9108	\$4,791.60
03452312	Thompson, Ben	04/14/2008	04/19/2011	Blue Cross	291	1.4609	292	1.0069	0.4540	\$2,388.44

Total Weight Diff:

**\$40,728.08**

# Case Mix Index Trending



Capturing higher acuity reflected in CMI

# DataVision: Coding Analysis

Amy Memorial Hospital  
SmartReport for Top 5 Measures for Q4-2012

Show All Measures

Performance <span>25th/75th</span>	Safety
<b>Opportunities for Improvement:</b> 5th/95th percentile ? <ol style="list-style-type: none"> <li>1. PCI - % Readmit within 30 Days</li> <li>2. PCI - % Readmit within 14 Days</li> <li>3. <b>Knee Replacement, Total - % Returned to O.R. (x2)</b></li> <li>4. SCIP-Inf-10i - Surgery patients w/periop temperature mgmt-Oth Maj Surg</li> <li>5. Hip Replacement, Total - % Returned to O.R.</li> </ol>	<b>Rare Event Occurrences:</b> ? <ol style="list-style-type: none"> <li>1. TURP Surgery - Mortality Rate</li> <li>2. Transfusion Reactions, All Types - Per 1000 ACA</li> </ol>
<b>Special Cause Signals:</b> ? <ol style="list-style-type: none"> <li>1. Emergency Department - % Length of Stay 6 Hours or More</li> <li>2. Emergency Department - % Discharged to Outside Acute Care</li> <li>3. Inpatients - Arithmetic Mean Length of Stay</li> <li>4. Inpatients - Mortality Rate</li> <li>5. Acute Care - Arithmetic Mean Length of Stay</li> </ol>	<b>Complications of Care:</b> ? <ol style="list-style-type: none"> <li>1. <b>Iatrogenic Pneumothorax with Venous Cath - Per 1000 Inpatients</b></li> <li>2. Iatrogenic Pneumothorax with Venous Cath - Per 1000 ACA</li> <li>3. Adult Postop physiologic and metabolic derangement /1000</li> <li>4. Iatrogenic Pneumothorax - Per 1000 ACA</li> <li>5. Transplanted Organ Complications - Per 1000 ACA</li> </ol>
<b>Areas of Exemplary Performance:</b> 5th/95th percentile ? <ol style="list-style-type: none"> <li>1. SCIP-Inf-6 - Appropriate hair removal (TJC ID# 14685) (x4)</li> <li>2. SCIP/SIP-Inf-2a - Antibiotic selection-Overall (TJC ID# 14666) (x4)</li> <li>3. SCIP-Inf-9 - Urinary catheter removed POD 1 or POD 2 (TJC ID# 14687) (x3)</li> <li>4. AMI1 - Aspirin at arrival (TJC ID# 14229) (x4)</li> <li>5. AMI5 - Beta blocker prescribed at discharge (TJC ID# 14232) (x4)</li> </ol>	<div> <b>MS-DRG Coding Analysis</b> <span>25th/75th</span> </div> <b>DRG Clusters Trending Toward Higher Weighted DRGs:</b> 5th/95th percentile ? <ol style="list-style-type: none"> <li>1. MS-DRG 189/(189+190+191+192)</li> <li>2. MS-DRG 189/(189+190+191+192) Age &gt; 64</li> <li>3. MS-DRG 193/(193+194+195) - w MCC</li> <li>4. MS-DRG 193/(193+194+195) - w MCC Age &gt; 64</li> <li>5. MS-DRG 480/(480+481+482) - w MCC</li> </ol> <b>DRG Clusters Trending Toward Lower Weighted DRGs:</b> 5th/95th percentile ? <p>No measures qualify.</p>

## CODING

*Illustration by  
David Harbaugh*



*"Doctor, may I suggest you document to a much greater degree of specificity? My coding skill is beginning to atrophy."*

# Multi-facility CDI Management



# Ohio State University

## Wexner Medical Center

Research ■ Education ■ Patient Care

### College of Medicine & Office of Health Sciences

#### Clinical Departments

- School of Biomedical Science
- School of Allied Medical Professions
- Centers, Programs, & Institutes

### Faculty Group Practice & Specialty Care Network

#### Departmental LLCs:

- Medical
- Surgical
- Primary Care
- Hospital Based

### OSU Health System & Hospitals

University Hospital (619)  
James Cancer Hospital (209)  
University Hospital East (192)  
OSU Harding Hospital (73)  
Ross Heart Hospital(150)  
Primary Care Network  
Specialty Care Network



Every Day  
is an  
Opportunity!

4,000 Ambulatory Visits

300 Emergency Department Visits

150 Discharges (200 on Fridays)

120 Surgeries



# National Recognition





# CDI Program Goals

Focus is an accurate, complete chart from admission to discharge

*“It’s not just about the revenue or the DRG, but Severity of Illness and Risk of Mortality for rankings.”*

# CDI Structure – UH / Ross / East

- **East**

- Program started 2004
- Based out of Medical Information Management (MIM)

- **UH/ Ross**

- Began in the Ross with a focus on Cardiology 2004
- Full expansion into UH completed in December 2012
- Much transition with this group
  - Began in MIM
  - Moved to Utilization Management and became a shared role
  - Returned to MIM

# CDI Structure – UH/Ross/East *(continued)*

Reports to Assistant Director, MIM

Accountable to Medication Documentation Steering Committee and an Operational Improvement Team

Assignments are service-based

- 13 staff
  - All but 1 are RNs
- 2 to 7 services per staff

NOTE: Current staffing does not account for coverage of ill or vacation time

# CDI Structure – UH/Ross/East *(continued)*

## Initial Proposal (benchmark)

- 1 CDS per 2,500 discharges

ROI was calculated by looking at the Revenue Opportunity in moving CC/MCC capture rate to top quartile performance

- University Health Consortium
- Medicare Only

# CDI Structure – The James

Based out of Case Management

Reports to Manager of Case Managers

- Accountable to Utilization Management Committee

Program began 2010

Assignments are service-based

- 3 staff
  - All RNs
- 8 to 10 services
- Not all patients on all services
  - Surgery-focused
  - Large procedures and co-morbidities
  - Outliers

# CDI Structure – The James *(continued)*

## Proposed Staffing Model

Estimated review of 25 – 35 charts per day

- New admissions should account for 15-20
- Follow-up reviews every other day

Services that are largest driver of CMI and revenue were included in building the model

# Work from Home Program

## Eligibility

- Work on-site for minimum 6 months
- Meet all productivity/quality standards, including annual review score
- Not involved corrective action process

## Guidelines

- Limited to 1 scheduled day per week
  - May not occur during a week with a Holiday or other Vacation Time
- Must have appropriate internet access at home
  - Laptop and remote access provided by department for use
- Scheduled flex hours may occur during WFH time with prior approval
- Productivity/Quality standards reviewed monthly

# *Keep the Basics the Same*





# Midas+ Process

## CDI Staff Work assignments

## Additional User-defined Worklists

- Pending Queries
- Outliers – The James only
  - All cases that meet outlier criteria are referred via worklist back to CDI to review for potential CC/MCC

Cases are reviewed every other day

Facility			▲
East Hospital			
James Hospital			
▶ Ross Heart Hospital			▼

Assignment Rules - Ross Heart Hospital			▲
Rule	Active	Priority	
▶ EPIC Service/Encounter Type	<input checked="" type="checkbox"/>	1	
Service/Location/Enc Type	<input type="checkbox"/>	2	
Adm Service / Enc Type	<input type="checkbox"/>	3	
*	<input type="checkbox"/>		

# Reporting - ReporTrack

## **User Report Processing**

- Detail reports
  - Facility, User, Service
- Used for:
  - Staff Audits
  - Frequency of working DRG changes
  - Specifics on Working/Final DRG match
  - Query subject details

# Examples

## Detail Report – Working DRG Changes and Query Subject

	A	B	C	D	E	F	G	H	I	J	K
1	MRN	Account Number	Admit Date	Disch Date	Review Date	Reviewed By	Svc	Working DRG	Query Date	Query Subject	Response
2			2/10/2013	2/15/2013	2/11/2013		ME1	690	2/15/2013	Acute Blood Loss Anemia	Disagreed
3			2/10/2013	2/15/2013	2/12/2013		ME1	690	2/14/2013	Atelectasis	Noted in Record
4			2/10/2013	2/15/2013	2/13/2013		ME1	689	2/12/2013	Encephalopathy	Provider Agreed and Documented - Mcc dAdded
5			2/10/2013	2/15/2013	2/14/2013		ME1	689	2/14/2012	Pleural Effusion	Noted in Record
6			2/10/2013	2/15/2013	2/15/2013		ME1	689			
7			2/10/2013	2/15/2013	2/18/2013		ME1	689			

## Review Report – Working/Final DRG match

	A	B	C	D	E	F	G	H	I	J	K	L
1	MRN	Admit Date	Disch Date	Review Date	Reviewed By	Service	Principal Payer	Initial DRG	Working DRG	Goal DRG	Final DRG	CDI_COMMENTS_COL
2		1/20/2013	2/1/2013	2/1/2013		ME1	MEDICARE A & B		853		853	---1/25/2013 1250 by Staff Jones--- Lower extremity bone debridement/hardware removal 1/23/13, changed DRG to 853
3		2/18/2013	2/25/2013	2/26/2013		ME1	MMO	603	617		617	---2/19/2013 1444 by Staff Smith---  DM 2--W/ NEUROPATHY CELLULITIS FOR TOE AMPUTATION 2/21

# Reporting - Profiles

## **Multiple Profiles**

- Program Management
  - By Reviewer and Service
- Physician
  - Provider profile for Query Response Rate
- Used for:
  - Counts and Rates
  - Staff Feedback
  - Physician Feedback
  - Unofficial CMI monitoring

# Sample CDI Review Profile

Indicator	Sep 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Total
Total Admissions With CDI Review Completed	1906	2170	1823	2230	3041	2839	12160
Total Admissions Inpatient	4723	5132	4917	4865	5156	4741	29534
% Admissions With CDI Review Completed	40.36	42.28	37.08	45.84	58.98	59.88	41.17
# CDI Reviews Completed	5897	6555	5044	6483	9218	8624	41821
Avg # of CDI Reviews per Admit	3.09	3.02	2.77	2.91	3.03	3.04	3.44
# of Admissions with CDI Queries	481	492	377	553	952	872	3727
% CDI Query Rate	25.24	22.67	20.68	24.80	31.31	30.72	30.65
# CDI Queries w/ Response	566	865	561	779	1530	1406	5707
# of CDI Queries	722	1013	635	888	1777	1644	6679
% CDI Provider Query Response	78.39	85.39	88.35	87.73	86.10	85.52	85.45
# CDI Queries Pending	26	28	16	9	27	75	181
% Queries Pending	3.60	2.76	2.52	1.01	1.52	4.56	2.71
# CDI Queries No Response	130	120	58	100	220	163	791
% Queries No Response	18.01	11.85	9.13	11.26	12.38	9.91	11.84
# CDI Queries in Agreement & Documented	408	508	395	616	1151	1081	4159
% Queries in Agreement and Documented	56.51	50.15	62.20	69.37	64.77	65.75	62.27
# CDI Queries in Agreement But Not Documented	25	97	38	47	79	57	343
% Queries in Agreement but Not Documented	3.46	9.58	5.98	5.29	4.45	3.47	5.14
# CDI Queries Disagreed	97	169	84	115	287	265	1017
% Queries in Disagreed	13.43	16.68	13.23	12.95	16.15	16.12	15.23
# CDI Queries Noted in Record	61	188	82	48	92	60	531
% Queries Noted in Record	8.45	18.56	12.91	5.41	5.18	3.65	7.95

# Sample CDI Review Profile *(continued)*

# of Working = Final DRG MDC	1451	1668	1468	1791	2422	1942	9291
% Working DRG MDC Match	76.13	76.87	80.53	80.31	79.64	68.40	76.41
# Discharges W CC	996	1015	991	1029	1018	952	6001
# Discharges for Capture Rate Denominator	3840	3764	3708	3788	3745	3468	22313
CC Capture Rate	25.94	26.97	26.73	27.16	27.18	27.45	26.89
# Discharges W MCC	1004	1077	1124	1163	1194	1043	6605
# Discharges for Capture Rate Denominator	3840	3764	3708	3788	3745	3468	22313
MCC Capture Rate	26.15	28.61	30.31	30.70	31.88	30.07	29.60
# Discharges W CC MCC and CC/MCC	2000	2092	2115	2192	2212	1995	12606
# Discharges for Capture Rate Denominator	3840	3764	3708	3788	3745	3468	22313
CC MCC and CC/MCC Capture Rate	52.08	55.58	57.04	57.87	59.07	57.53	56.50
# Discharges W/O CC MCC or CC/MCC	1840	1672	1593	1596	1533	1473	9707
Sum of Final DRG Relative Weights	7744.0791	8297.6922	8379.5875	8399.8893	8454.0404	7668.7307	48944.0192
Number of Inpatient Discharges	4824	4984	4950	5006	4997	4771	29532
Average CMI	1.6053	1.6649	1.6928	1.6780	1.6918	1.6074	1.6573

# Provider Profile

## **UH/Ross/East Only**

- Request was driven out of an Operational Improvement Team
- Target Response Rate: 93%
- Individual Physician results are provided to
  - Department Chairs
  - Senior Management
  - Finance Administration

# Sample CDI Provider Profile

Indicator	Sep 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Total
# CDI Queries w/ Response	566	865	561	779	1530	1406	5707
# of CDI Queries	722	1013	635	888	1777	1644	6679
% CDI Provider Query Response	78.39	85.39	88.35	87.73	86.10	85.52	85.45

Provider: [REDACTED]
 Sort By: Name

Default Service: Internal Medicine-Cardiovascular
 Default Specialty: Cardiovascular Medicine

Indicator	Sep 2012	Oct 2012	Nov 2012	Dec 2012	Jan 2013	Feb 2013	Total
# CDI Queries w/ Response	3	24	11	0	10	15	63
# of CDI Queries	4	24	11	0	10	15	64
% CDI Provider Query Response	75	100	100		100	100	98.44



# Challenges

## **Documentation Standardization**

- Difference in use of “Noted in Record” response type
  - Now standard

## **Patient Location**

- Patients from The James bedded in a physical location of UH
  - Unable to use “Assigned To” metrics

# Challenges *(continued)*

## Managing Shared Location Patients

- All Surgical ICU patients are in one location
  - Required a Location work assignment
  - Both teams use the shared list to identify patients
- All Medical ICU patients are in one location
  - James MICU patients are not covered at this time
  - UH staff have to delete the initial work assignment review for patients from The James

# Keeping CDI in Midas+

- EMR upgrade allowed for CDI Documentation
- Documentation of all functions/reports requested for transition planning
- List would be provided with a demo of functionality

# Keeping CDI in Midas+ – The List

- Demo of module and ability to create fields
- Current reporting
  - Ad Hoc Reports
  - CDI Profile
  - Pending Requests
- Moving Working DRG
  - Interface
  - Double Documentation
- Worklists
  - Initial cases for review
  - Pending queries to follow
  - Notification of positive micro cultures
  - Outlier case referrals for review
- Use of Statit

# Keeping CDI in Midas+ *(continued)*

## **Key Points that made our case:**

- Ability to use Worklists to drive workflow & communication
- System flexibility
- Proven comprehensive reporting
- Future plans that could be executed with current version

# Future Plans

## **Coder Access into Midas+**

- This was initially provided at go-live but not used
- Currently being piloted
- Much pushback about coders being in two systems and meeting productivity

## **Clinical Integration**

- Utilize Lab interface to worklist positive cultures to CDI

## **Statit Use**

- Move key metrics into a Statit scorecard

## **Relationship with Case Management**

- Continuously developing
- UH/Ross CM leadership meets every other month with CDI leadership

# Conclusions

- CDI Programs have increased in numbers since release of MS-DRG
- Formal CDI Programs ensure adequate staff to maintain accuracy and completeness of electronic health record
- Engaging stakeholders and recruiting the right champion and CDI staff are crucial components
- Midas+ CM allows clients to customize according to institutional processes
- Key metrics, data capture, and reporting ensure communication and process advancement

# Thank you for attending.

## Questions?

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