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

- Strong Administrative Support
- Consistent Provider Participation
- Defined Program Processes
- Concurrent Analysis & Clarification
- Retrospective Analysis & Clarification

CDI Program 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):

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

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

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

Russo, R (2010) CDI Achieving Excellence
## The Documentation Difference

<table>
<thead>
<tr>
<th>Initial Documentation</th>
<th>Final Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Abdominal hysterectomy</td>
<td>• Abdominal hysterectomy</td>
</tr>
<tr>
<td>• Age 72</td>
<td>• Age 72</td>
</tr>
<tr>
<td>• Weight 92 lbs</td>
<td>• Weight 92 lbs</td>
</tr>
<tr>
<td>• Anorexic</td>
<td>• Body Mass Index less than 19</td>
</tr>
<tr>
<td>• MS-DRG 743</td>
<td>• MS-DRG 742</td>
</tr>
<tr>
<td>• Uterine &amp; Adnexa Proc for Non-Malignancy w/o CC GMLOS 1.8</td>
<td>• Uterine &amp; Adnexa Proc for Non-Malignancy w/ CC/MCC GMLOS 3.2</td>
</tr>
<tr>
<td>• RW 0.9079 = $4393</td>
<td>• RW 1.3883 = $7219</td>
</tr>
</tbody>
</table>

**2013 Midas+ User Symposium**
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

- Inpatient medical necessity and one-day stays: 41%
- DRG validation: 16%
- Outpatient coding: 13%
- Appeals process: 11%
- Observation: 9%
- Three-day rule: 8%
- Other: 2%

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

- Need for increased knowledge of anatomy/physiology
- Unfamiliarity with new codes
- Different procedural coding rules
- Lack of physician documentation to support ICD-10 code assignment

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 1st Review on Discharge
Step 1: Define the CDI staff work assignment rules

- HCM-STAFF ASSIGNMENT RULES Dictionary # 172
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
CDI Worklist – Display Options

<table>
<thead>
<tr>
<th>CDI-Goal DRG</th>
<th>CDI-Init DRG</th>
<th>CDI-Query Resp</th>
<th>CDI-Query Subject</th>
<th>CDI-Query Type</th>
<th>CDI-Work DRG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient</th>
<th>Status</th>
<th>Next Review</th>
<th>Admit Date</th>
<th>Location</th>
<th>CDI Init DRG</th>
<th>CDI-Work DRG</th>
<th>CDI-Goal DRG</th>
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<tbody>
<tr>
<td>Riggins, Rebecca</td>
<td>(Discharged)</td>
<td>2/1/2011</td>
<td>3700 East</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCMCDIReview: HCMCDIReview</td>
<td>COMPLETE</td>
<td>5/4/2013</td>
<td>313 CHEST PAIN</td>
<td>179 RESPIRATORY</td>
<td>178 RESPIRATORY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peacock, Norbert</td>
<td>(Discharged)</td>
<td>1/27/2011</td>
<td>3100 East</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HCMCDIReview: HCMCDIReview$</td>
<td>COMPLETE</td>
<td></td>
<td>292 HEART FAILU</td>
<td>292 HEART FAILU</td>
<td>292 HEART FAILU</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Document CDIS Findings

**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

**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
Generate Queries & Document Query Responses

Details for 1/19/2011
Verbal conversation
Responding Provider: Xeri, Patrick
Notes: Due to complications, need for clarification.

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

Total Documents: 1

Document: General CDI Query
Display Fields: Clin Doc Impr Quer Query Provider Prox
Send Method: Email
Generated: 5/3/2013
By: Dietz, Patty
## Document Overall Outcomes

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

<table>
<thead>
<tr>
<th>DRG</th>
<th>Weight</th>
<th>GLOS</th>
<th>ALOS</th>
<th>Weight Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial: 293 Heart failure &amp; shock w/o CC/MCC</td>
<td>0.7220</td>
<td>3.1</td>
<td>3.7</td>
<td>0.7381</td>
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<tr>
<td>Working: 292 Heart failure &amp; shock w CC</td>
<td>1.0069</td>
<td>4.1</td>
<td>5.0</td>
<td>0.4532</td>
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<tr>
<td>Goal: 291 Heart failure &amp; shock w MCC</td>
<td>1.4601</td>
<td>5.0</td>
<td>6.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Final: 291 Heart failure &amp; shock w MCC</td>
<td>1.4601</td>
<td>5.0</td>
<td>6.5</td>
<td>0.0</td>
</tr>
</tbody>
</table>

### General Information

- **Outcome**: Positive Change
- **Date**: 4/18/2009

### Summary Information from the Last Completed Review

- **Diagnosis**
  - 428 HEART FAILURE
  - 426.6 OTHER HEART BLOCK
  - 427 CARDIAC DYSRHYTHMIAS

- **Procedure**
  - 99.61 ATRIAL CARDIOVERSION

### Dates

- **4/15/2009**: Present on Admission Confirmed
- **4/16/2009**: NOT Present on Admis Probable

### Status

- **Confirmed
- **MCC
- **CC

### Other Information

- **Provider**: Brown, Lisa
- **Date**: 4/15/2009
- **Status**: Pending
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.
# SmarTrack Indicator Profiles

<table>
<thead>
<tr>
<th>CDI Reviews by Review Location</th>
<th>27800</th>
<th>31920</th>
<th>59720</th>
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</thead>
<tbody>
<tr>
<td>3100 East</td>
<td>11120</td>
<td>12768</td>
<td>23888</td>
</tr>
<tr>
<td>3100 West</td>
<td>8340</td>
<td>9576</td>
<td>17916</td>
</tr>
<tr>
<td>3300 East</td>
<td>8340</td>
<td>9576</td>
<td>17916</td>
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</table>

<table>
<thead>
<tr>
<th>Total Encounters with Queries</th>
<th>20400</th>
<th>24320</th>
<th>44720</th>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Rate of Encounters with Queries Generated</th>
<th>60%</th>
<th>64%</th>
<th>62%</th>
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</table>

<table>
<thead>
<tr>
<th>Total Number of Queries</th>
<th>31250</th>
<th>33450</th>
<th>64700</th>
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<table>
<thead>
<tr>
<th>Total Number of Query Responses</th>
<th>29688</th>
<th>28433</th>
<th>58121</th>
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</table>

<table>
<thead>
<tr>
<th>Rate of Query Responses</th>
<th>95.0%</th>
<th>85.0%</th>
<th>89.8%</th>
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</table>

<table>
<thead>
<tr>
<th>Total Number of Queries in Agreement and Documented</th>
<th>11875</th>
<th>14049</th>
<th>25924</th>
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<table>
<thead>
<tr>
<th>Total Number of Queries Disagreed</th>
<th>1335</th>
<th>2002</th>
<th>3337</th>
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</table>

<table>
<thead>
<tr>
<th>Rate of Query Agreement</th>
<th>40.0%</th>
<th>42.1%</th>
<th>41.6%</th>
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</table>

<table>
<thead>
<tr>
<th>CDI Reviews Outcomes - Final DRG Matched Goal DRG</th>
<th>9730</th>
<th>23940</th>
<th>33670</th>
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</table>

<table>
<thead>
<tr>
<th>Case Mix Index (CPMS/DV)</th>
<th>1.55</th>
<th>1.68</th>
<th>1.61</th>
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</table>

<table>
<thead>
<tr>
<th>Days in AR (Manual)</th>
<th>57</th>
<th>42</th>
<th>50</th>
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</table>

<table>
<thead>
<tr>
<th>Total Number of Denials</th>
<th>125</th>
<th>152</th>
<th>277</th>
</tr>
</thead>
</table>

2013 Midas+ User Symposium
### SmarTrack Indicator Profiles (continued)

<table>
<thead>
<tr>
<th>Category</th>
<th>Value 1</th>
<th>Value 2</th>
<th>Value 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDI REVIEWS OUTCOMES - ADDTL COMORBID RETROSPECTIVELY</td>
<td>1390</td>
<td>1277</td>
<td>2667</td>
</tr>
<tr>
<td>CDI REVIEWS OUTCOMES - DISCREP IN POA ID BY CODER</td>
<td>556</td>
<td>638</td>
<td>1194</td>
</tr>
<tr>
<td>CDI REVIEWS OUTCOMES - POSITIVE FINANCIAL IMPACT</td>
<td>11120</td>
<td>17556</td>
<td>28676</td>
</tr>
<tr>
<td>CDI REVIEWS OUTCOMES QUESTIONABLE QUERY</td>
<td>2780</td>
<td>957</td>
<td>3737</td>
</tr>
<tr>
<td>CDI TOTAL COMORBID CONDITIONS IDENTIFIED BY CDI SPECIALIST</td>
<td>19838</td>
<td>42675</td>
<td>62513</td>
</tr>
<tr>
<td>DISEASES/DISORDERS OF THE CIRCULATORY SYSTEM</td>
<td>5560</td>
<td>6384</td>
<td>11944</td>
</tr>
<tr>
<td>CDI TOTAL DIAGNOSES POA</td>
<td>18904</td>
<td>28728</td>
<td>47632</td>
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<tr>
<td>DISEASES/DISORDERS OF THE CIRCULATORY SYSTEM</td>
<td>3780</td>
<td>5746</td>
<td>9526</td>
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</tbody>
</table>
Other indicators...

<table>
<thead>
<tr>
<th>Volume</th>
<th>Outcome Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Initial reviews</td>
<td>• Count by Outcome Type</td>
</tr>
<tr>
<td>• Follow up reviews</td>
<td>• Coder to reviewer</td>
</tr>
</tbody>
</table>

Statistics

| • Total population            | • Coding correction                  |
| • Physician rates             | • Goal DRG met                        |
| • Queries                    | • Higher reimbursement                |
| • Responses                  | • Increased severity                 |
| • Agreement                  | • No change                           |
| • Disagreement               |                                       |
| • No responses                |                                       |
Quantifying Results

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

Total Weight Diff: $40,728.08
Case Mix Index Trending

Capturing higher acuity reflected in CMI
DataVision: Coding Analysis

Performance

Opportunities for Improvement: 5th/95th percentile

1. PCI - % Readmit within 30 Days
2. PCI - % Readmit within 14 Days
3. Knee Replacement, Total - % Returned to O.R. (x2)
4. SCIP-Inf-10i - Surgery patients w/periop temperature mgmt-Oth Maj Surg
5. Hip Replacement, Total - % Returned to O.R.

Special Cause Signals:

1. Emergency Department - % Length of Stay 6 Hours or More
2. Emergency Department - % Discharged to Outside Acute Care
3. Inpatients - Arithmetic Mean Length of Stay
4. Inpatients - Mortality Rate
5. Acute Care - Arithmetic Mean Length of Stay

Areas of Exemplary Performance: 5th/95th percentile

1. SCIP-Inf-6 - Appropriate hair removal (TJC ID# 14685) (x4)
2. SCIP/SIP-Inf-2a - Antibiotic selection-Overall (TJC ID# 14666) (x4)
3. SCIP-Inf-9 - Urinary catheter removed POD 1 or POD 2 (TJC ID# 14687) (x3)
4. AMIIV - Aspirin at arrival (TJC ID# 14229) (x4)
5. AMI5 - Beta blocker prescribed at discharge (TJC ID# 14232) (x4)

Safety

Rare Event Occurrences:

1. TURP Surgery - Mortality Rate
2. Transfusion Reactions, All Types - Per 1000 ACA

Complications of Care:

1. Iatrogenic Pneumothorax with Venous Cath - Per 1000 Inpatients
2. Iatrogenic Pneumothorax with Venous Cath - Per 1000 ACA
3. Adult Postop physiologic and metabolic derangement /1000
4. Iatrogenic Pneumothorax - Per 1000 ACA
5. Transplanted Organ Complications - Per 1000 ACA

MS-DRG Coding Analysis

DRG Clusters Trending Toward Higher Weighted DRGs: 5th/95th percentile

1. MS-DRG 189/(189+190+191+192)
2. MS-DRG 189/(189+190+191+192) Age > 64
3. MS-DRG 193/(193+194+195) - w MCC
4. MS-DRG 193/(193+194+195) - w MCC Age > 64
5. MS-DRG 480/(480+481+482) - w MCC

DRG Clusters Trending Toward Lower Weighted DRGs: 5th/95th percentile

No measures qualify.
“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
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

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>MRN</td>
<td>Account Number</td>
<td>Admit Date</td>
<td>Disch Date</td>
<td>Review Date</td>
<td>Reviewed By</td>
<td>Svc</td>
<td>Working DRG</td>
<td>Query Date</td>
<td>Query Subject</td>
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<td>3</td>
<td>2/10/2013</td>
<td>2/15/2013</td>
<td>2/12/2013</td>
<td>ME1 590</td>
<td>2/14/2013</td>
<td>Atelectasis</td>
<td>Noted in Record</td>
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<td>4</td>
<td>2/10/2013</td>
<td>2/15/2013</td>
<td>2/13/2013</td>
<td>ME1 589</td>
<td>2/12/2013</td>
<td>Encephalopathy</td>
<td>Provider Agreed and Documented - Mcc dAdded</td>
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<td>2/18/2013</td>
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Review Report – Working/Final DRG match

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<tr>
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<td>MRN</td>
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<td>Disch Date</td>
<td>Review Date</td>
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<td>Principal Payer</td>
<td>Initial DRG</td>
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<td>2/25/2013</td>
<td>2/26/2013</td>
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<td>MMO</td>
<td>603</td>
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</table>

CDL COMMENTS COL

1/25/2013 1250 by Staff Jones—Lower extremity bone
dredgment/hardware removal
1/23/13, changed DRG to 853

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

<table>
<thead>
<tr>
<th></th>
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<td>Total Admissions With CDI Review Completed</td>
<td>1906</td>
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<td>1823</td>
<td>2230</td>
<td>3041</td>
<td>2839</td>
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<tr>
<td>Total Admissions Inpatient</td>
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<td>5132</td>
<td>4917</td>
<td>4865</td>
<td>5156</td>
<td>4741</td>
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<tr>
<td>% Admissions With CDI Review Completed</td>
<td>40.36</td>
<td>42.28</td>
<td>37.08</td>
<td>45.84</td>
<td>58.98</td>
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<td>6555</td>
<td>5044</td>
<td>6483</td>
<td>9218</td>
<td>8624</td>
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<td>Avg # of CDI Reviews per Admit</td>
<td>3.09</td>
<td>3.02</td>
<td>2.77</td>
<td>2.91</td>
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<td>492</td>
<td>377</td>
<td>553</td>
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<td>% CDI Query Rate</td>
<td>25.24</td>
<td>22.67</td>
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<td>31.31</td>
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<td># CDI Queries w/ Response</td>
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<td>865</td>
<td>561</td>
<td>779</td>
<td>1530</td>
<td>1406</td>
<td>5707</td>
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<tr>
<td># of CDI Queries</td>
<td>722</td>
<td>1013</td>
<td>635</td>
<td>888</td>
<td>1777</td>
<td>1644</td>
<td>6679</td>
</tr>
<tr>
<td>% CDI Provider Query Response</td>
<td>78.39</td>
<td>85.39</td>
<td>88.35</td>
<td>87.73</td>
<td>86.10</td>
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<td>85.45</td>
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<td># CDI Queries Pending</td>
<td>26</td>
<td>28</td>
<td>16</td>
<td>9</td>
<td>27</td>
<td>75</td>
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<td>% Queries Pending</td>
<td>3.60</td>
<td>2.76</td>
<td>2.52</td>
<td>1.01</td>
<td>1.52</td>
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<td># CDI Queries No Response</td>
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<td>120</td>
<td>58</td>
<td>100</td>
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<td>791</td>
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<tr>
<td>% Queries No Response</td>
<td>18.01</td>
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<td>12.38</td>
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<td># CDI Queries in Agreement &amp; Documented</td>
<td>408</td>
<td>508</td>
<td>395</td>
<td>616</td>
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<td>% Queries in Agreement and Documented</td>
<td>56.51</td>
<td>50.15</td>
<td>62.20</td>
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<td>64.77</td>
<td>65.75</td>
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<tr>
<td># CDI Queries in Agreement But Not Documented</td>
<td>25</td>
<td>97</td>
<td>38</td>
<td>47</td>
<td>79</td>
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<td>343</td>
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<tr>
<td>% Queries in Agreement but Not Documented</td>
<td>3.46</td>
<td>9.58</td>
<td>5.98</td>
<td>5.29</td>
<td>4.45</td>
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<td># CDI Queries Disagreed</td>
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<td>169</td>
<td>84</td>
<td>115</td>
<td>287</td>
<td>265</td>
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<td>% Queries in Disagreed</td>
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<td>16.68</td>
<td>13.23</td>
<td>12.95</td>
<td>16.15</td>
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<td># CDI Queries Noted in Record</td>
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<td>188</td>
<td>82</td>
<td>48</td>
<td>92</td>
<td>60</td>
<td>531</td>
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<tr>
<td>% Queries Noted in Record</td>
<td>8.45</td>
<td>18.56</td>
<td>12.91</td>
<td>5.41</td>
<td>5.18</td>
<td>3.65</td>
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Sample CDI Review Profile (continued)

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<th>2422</th>
<th>1942</th>
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<td># of Working = Final DRG MDC</td>
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<td>% Working DRG MDC Match</td>
<td>76.13</td>
<td>76.87</td>
<td>80.53</td>
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<td>79.64</td>
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<td># Discharges W CC</td>
<td>996</td>
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<td>991</td>
<td>1029</td>
<td>1018</td>
<td>952</td>
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<tr>
<td># Discharges for Capture Rate Denominator</td>
<td>3840</td>
<td>3764</td>
<td>3708</td>
<td>3788</td>
<td>3745</td>
<td>3468</td>
<td>22313</td>
</tr>
<tr>
<td>CC Capture Rate</td>
<td>25.94</td>
<td>26.97</td>
<td>26.73</td>
<td>27.16</td>
<td>27.18</td>
<td>27.45</td>
<td>26.89</td>
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<td># Discharges W MCC</td>
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<td>1077</td>
<td>1124</td>
<td>1163</td>
<td>1194</td>
<td>1043</td>
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<td># Discharges for Capture Rate Denominator</td>
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<td>3764</td>
<td>3708</td>
<td>3788</td>
<td>3745</td>
<td>3468</td>
<td>22313</td>
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<tr>
<td>MCC Capture Rate</td>
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<td># Discharges W CC MCC and CC/MCC</td>
<td>2000</td>
<td>2092</td>
<td>2115</td>
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<td>1995</td>
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<td>3708</td>
<td>3788</td>
<td>3745</td>
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<td>22313</td>
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<td>CC MCC and CC/MCC Capture Rate</td>
<td>52.08</td>
<td>55.58</td>
<td>57.04</td>
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<tr>
<td>Sum of Final DRG Relative Weights</td>
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<td>5006</td>
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<tr>
<td>Average CMI</td>
<td>1.6053</td>
<td>1.6649</td>
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<td>1.6780</td>
<td>1.6918</td>
<td>1.6074</td>
<td>1.6573</td>
</tr>
</tbody>
</table>
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

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<thead>
<tr>
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<tbody>
<tr>
<td># CDI Queries w/ Response</td>
<td>566</td>
<td>865</td>
<td>561</td>
<td>779</td>
<td>1530</td>
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<td># of CDI Queries</td>
<td>722</td>
<td>1013</td>
<td>635</td>
<td>888</td>
<td>1777</td>
<td>1644</td>
<td>6679</td>
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<td>% CDI Provider Query Response</td>
<td>78.39</td>
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<td>88.35</td>
<td>87.73</td>
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<td>Internal Medicine-Cardiovascular</td>
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<table>
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<td>11</td>
<td>0</td>
<td>10</td>
<td>15</td>
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<tr>
<td># of CDI Queries</td>
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<td>11</td>
<td>0</td>
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<td>% CDI Provider Query Response</td>
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<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>98.44</td>
</tr>
</tbody>
</table>
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
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
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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