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Healthcare Financial Management Association – Southern California

Implementation of MS-DRGs

November 20, 2008

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Agenda

- MS-DRGs – Background
- MS-DRG and CMS DRG System Variances
- MS-DRGs – Financial Impact
- FY 2009 Medicare Final IPPS Rule
- Case Study
- Present on Admission (POA) Indicator Reporting
- MS-DRG Implementation Strategies, Tools and Impact Monitoring

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Medicare Severity Diagnosis Related Groups (MS-DRGs)

Background

Background

- **March 2005 MedPAC Report[1] to Congress**
  - Call to refine DRG system to better recognize severity of illness among patients
- **Interim DRG changes in FY06 and FY07**
  - Adopted severity-related cardiac DRGs in FY06
  - Added 20 new DRGs and modified 32 other DRGs in FY07 to improve recognition of severity of illness
- **Prior to FY 07, relative weights determined based on hospital charges**
  - Generally believed that current charges bear little relation to cost
  - FY 07 IPPS Final Rule – CMS revised DRG weights to be based on hospital costs, rather than charges
- **New DRG classification system implemented in FY08**
  - Medicare Severity DRGs (MS-DRGs)- three tiered severity levels
  - Continue transition from charge-based to cost-based reimbursement
  - Quality Data Collection needs to be integrated

[1]Report to the Congress: Physician-Owned Specialty Hospitals," MedPAC, March 2005

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MS-DRG Roll Out

- MS-DRGs implemented 10/1/2007 created significant modifications to the prior DRG system
  - Retains base structure
  - Refines certain components, e.g. tiering
  - Intended “to better recognize severity of illness and resource use based on case complexity.”
  - System addresses key considerations
    - *Monotonicity*: average costs for DRGs should increase as their severity level increases
    - *Complexity*: hospital resource use that is not related to/ explained by secondary diagnoses, eg. costly devices
  - Redistributes payment via changes in DRG weighting and tiering

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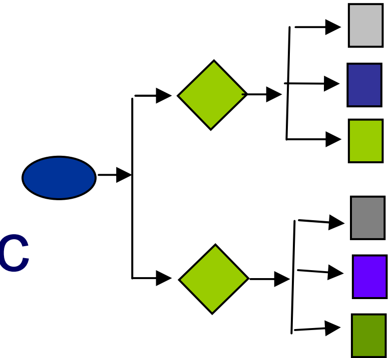
MS-DRG Logic



- MS DRGs v25 uses
  - Same mapping scheme for diagnoses
  - Principal Dx determines major diagnostic category (MDC) as first mapping point
  - Logic then divides base DRGs into surgical and medical case types
  - Secondary diagnoses subdivide base DRGs potentially into one of three tiers of severity based on secondary diagnoses
    - Secondary Dxs = Complications and Comorbidities
- Total number of DRGs increased from 538 to 745

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DRG System Comparisons

Element	CMS DRG System	MS-DRG System
Number of MDCs	25	25
Number of base DRGs	379	335
Total number of DRGs	538	745
Number DRGs <500 discharges	97 (18%)	38 (5.2%)
Number of CC/severity subclasses	2	3
CC subclassess/ Wt. distribution for Severity	Without CC With CC	Without CC With CC With MCC
Based on principal diagnosis (Dx)	Yes	Yes
Age, sex, discharge status impacts	Yes	No Age
Multiple CCs recognized	No	No
Logic of CC subdivision	Presence/absence	Presence/absence
CC exclusion list	Yes	Yes

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MS-DRGs

Each Base DRG was subdivided into subgroups:

Subgroups	# of Base DRGs	# of MS-DRGs
No Subgroups	53	53
Three Subgroups 1) w/MCC 2) w/CC 3) without CC	152	456
Two Subgroups 1) w/MCC or CC 2) without CC	43	86
Two Subgroups 1) w/MCC 2) CC or non-CC	63	126
Subtotals	311	721
MDCs 14 & 15 (Obstetrics & Newborn DRGs not updated)	22	22
Error DRGs	2	2
Totals	**335**	**745**

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FY 2008 MS-DRG Structural Impacts

- Some DRGs split into two or three subgroups with weight redistribution based on severity of secondary diagnoses

FY2007 CMS DRG			FY2008 MS-DRG		
DRG	Description	Weight	DRG	Description	Weight
88	Chronic Obstructive Pulmonary Disease	0.8878	190	Chronic obstructive pulmonary disease **w MCC**	**1.1138**
			191	Chronic obstructive pulmonary disease **w CC**	**0.9405**
			192	Chronic obstructive pulmonary disease **w/o CC/MCC**	**0.8145**

- Some DRGS Collapsed to one subgroup

CMS DRG	Wt	CMS DRG Description	MS DRG	Wt	MS DRG Descriptions
141	0.7633	SYNCOPE & COLLAPSE W CC	312	.7197	SYNCOPE & COLLAPSE
142	0.6012	SYNCOPE & COLLAPSE W/O CC			

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Complication/Comorbidity List

- Legacy CC List (CMS v24) included 3,326 diagnosis codes
- Revised MS-DRG CC list (v25) includes 2,583 diagnosis codes
  - Significant acute diseases
  - Acute exacerbations of chronic diseases
  - Advanced or end stage chronic diseases
  - Chronic diseases associated with extensive debility
- Percent of patients with at least one CC
  - Legacy CC list: 77.66%
  - Revised MS-DRG CC list: 40.34%

Source: MedPAR Data for FY 2006 Updated through March 2007

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Complication/Comorbidity List Challenges

- Although overall number of CCs less, many different from legacy list
- Almost 1,600 secondary diagnosis codes are designated as MCCs.
- Variances between MCC and CC diagnoses not always intuitive, training of HIM coders on nuances of CC vs MCC distinctions key to coding accuracy and thus compliance and appropriate reimbursement

DX Code	MCC Diagnosis	DX Code	CC Diagnosis
486	Pneumonia, Organism unspecifed	517.1	Rheumatic Pneumonia
585.6	End Stage Renal Disease	403.01	Hypertensive Chronic Kidney Disease, malignant with chronic kidney disease stage V or end stage renal disease
780.01	Coma	854.06	Intracranial Injury of Other and Unspecificed nature, with Loss of Consciousness of Unspecified Duration, without mention of open intracranial wound

Source: Centers for Medicare & Medicaid Services 42 CFR Parts 411, 412, 413, and 489. CMS-1533-CN2 Tables 6I and 6J, August, 2007

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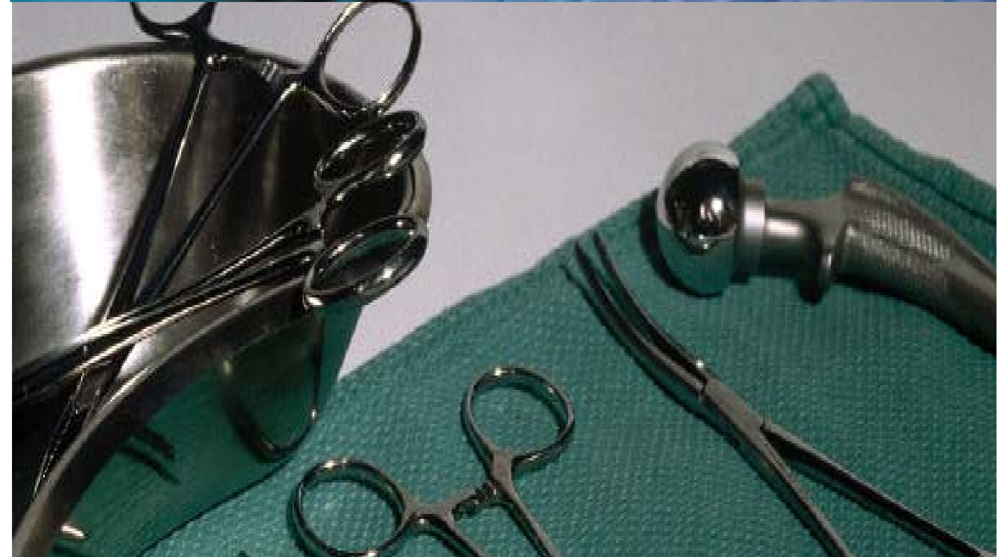
Medicare Severity Diagnosis Related Groups (MS-DRGs)

Financial Impact



Refinement of the DRG Relative Weight Calculation

- Background:
  - Prior to FY 07 relative weights determined based on hospital charges
  - FY 2007 IPPS Final Rule – CMS revised DRG weights to be based on hospital costs, rather than charges
  - Intent is to improve accuracy of Medicare payment as charges bear little relation to cost (lower markups on routine services than for ancillary services)
  - Implemented cost-based weighting methodology
  - 13 national cost center categories
  - 3-year transition period
  - Various concerns raised through public comments
    - Charge compression
    - Cost report data outdated, not consistent
    - CMS engaged RTI to study issues

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Refinement of the DRG Relative Weight Calculation

- FY 08 IPPS Final Rule:
  - CMS adopted RTI recommendations to add two more cost centers for Emergency Room & Blood & Blood Products (13 to 15). CMS did not adopt recommendations to further expand departments utilizing regression-based estimates
  - Cost report changes will be forthcoming to incorporate further refinements for improving accuracy and consistency
- FY 09 will be the last year in the transition to cost based weights:
  - FY 08: two-thirds cost-based and one-third charge-based weights (50/50 blend of CMS DRGs and MS DRGs
  - FY 09: 100% cost-based weights (100% MS-DRGs)
- Primary Impact: Services with more ancillary services (Surgery/Cardiology) will be receive lower payments

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Refinement of the DRG Relative Weight Calculation

DRGS with most significant increase in relative weight resulting from cost-based refinements

CMS DRG	MS-DRG	Description	Type	Charge Weight	Cost Weight	Change	% Chg.
508	934	Full thickness burn w/o skin graft or inhal inj	MED	1.2416	1.4403	0.1987	16.0%
128	**295**	**Deep vein thrombophlebitis w/o CC/MCC**	**MED**	**0.5561**	**0.6312**	**0.0751**	**13.5%**
507	929	Full thickness burn w skin graft or inhal inj w/o CC/MCC	SURG	1.6566	1.8764	0.2198	13.3%
271	594	Skin ulcers w/o CC/MCC	MED	0.6588	0.7453	0.0865	13.1%
506	928	Full thickness burn w skin graft or inhal inj w CC/MCC	SURG	4.3263	4.8854	0.5591	12.9%
510	935	Non-extensive burns	MED	1.0748	1.2035	0.1287	12.0%
271	593	Skin ulcers w CC	MED	0.9901	1.0970	0.1069	10.8%
278	603	Cellulitis w/o MCC	MED	0.7250	0.7959	0.0709	9.8%
066	151	Epistaxis w/o MCC	MED	0.5432	0.5954	0.0522	9.6%
466	950	Aftercare w/o CC/MCC	MED	0.4818	0.5278	0.0460	9.5%

(based on % change in DRG weight)

DRGS with most significant decrease in relative weight resulting from cost-based refinements

CMS DRG	MS-DRG	Description	Type	Charge Weight	Cost Weight	Change	% Chg.
556	249	Perc cardiovasc proc w non-drug-eluting stent w/o MCC	SURG	1.9682	1.6664	(0.3018)	-15.3%
344	716	Other male reproductive system O.R. proc for malignancy w/o CC/MCC	SURG	1.1049	0.9519	(0.1530)	-13.8%
125	**287**	**Circulatory disorders except AMI, w card cath w/o MCC**	**MED**	**1.1986**	**1.0335**	**(0.1651)**	**-13.8%**
518	251	Perc cardiovasc proc w/o coronary artery stent or AMI w/o MCC	SURG	1.8269	1.5787	(0.2482)	-13.6%
558	247	Perc cardiovasc proc w drug-eluting stent w/o MCC	SURG	2.2493	1.9578	(0.2915)	-13.0%
410	847	Chemotherapy w/o acute leukemia as secondary diagnosis w CC	MED	1.0682	0.9376	(0.1306)	-12.2%
129	**297**	**Cardiac arrest, unexplained w CC**	**MED**	**0.7726**	**0.6921**	**(0.0805)**	**-10.4%**
560	96	Bacterial & tuberculous infections of nervous system w/o CC/MCC	MED	2.0509	1.8422	(0.2087)	-10.2%
555	240	Perc cardiovasc proc w non-drug-eluting stent w MCC or 4+ ves/stents	SURG	3.1473	2.0577	(0.2090)	-9.2%
143	**313**	**Chest pain**	**MED**	**0.5813**	**0.5327**	**(0.0486)**	**-8.4%**

Other changes:

CMS DRG	MS-DRG	Description	Type	Charge Weight	Cost Weight	Change	% Chg.
495	7	Lung transplant	SURG	8.8738	8.1641	(0.7097)	-8.0%
106	231	Coronary bypass w PTCA w MCC	SURG	8.2562	7.7296	(0.5266)	-6.4%
512	8	Simultaneous pancreas/kidney transplant	SURG	5.4637	5.0275	(0.4362)	-8.0%
106	232	Coronary bypass w PTCA w/o MCC	SURG	5.9739	5.5569	(0.4170)	-7.0%
480	5	Liver transplant w MCC or intestinal transplant	SURG	11.9581	11.5422	(0.4159)	-3.5%

(based on % change in DRG weight)

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Refinement of the DRG Relative Weight Calculation

Example DRG Weight Calculations for FY 2008

1. CMS DRG 127 Heart Failure & Shock - MS-DRG 293 Heart Failure & Shock w/o CC/MCC

Version	DRG	Type	Weight	Blend	Weight	CMS/MS Blend	Total
CMS V24 charge weights	127	MED	1.0167	1/3	0.3389		
CMS V24 cost weights	127	MED	1.0512	2/3	0.7008		
					1.0397	50%	0.5199
MS V25 charge weights	293	MED	0.7002	1/3	0.2334		
MS V25 cost weights	293	MED	0.7198	2/3	0.4799		
					0.7133	50%	0.3566
FY 2008 Relative Weight DRG 293 - Heart Failure & Shock w/o CC/MCC							**0.8765**

2. CMS DRG 127 Heart Failure & Shock - MS-DRG 292 Heart Failure & Shock w CC

Version	DRG	Type	Weight	Blend	Weight	CMS/MS Blend	Total
CMS V24 charge weights	127	MED	1.0167	1/3	0.3389		
CMS V24 cost weights	127	MED	1.0512	2/3	0.7008		
					1.0397	50%	0.5199
MS V25 charge weights	292	MED	0.964	1/3	0.3213		
MS V25 cost weights	292	MED	0.9985	2/3	0.6657		
					0.9870	50%	0.4935
FY 2008 Relative Weight DRG 292 - Heart Failure & Shock w/ CC							**1.0134**

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MS-DRG Case Mix Impact

- Behavioral Off set— CMS believes Case-Mix Index (CMI) will increase as a result of improvements in clinical documentation and coding that will increase case mix:
- 4.2% reduction in standardized amount (documentation and coding adjustment) to be applied over 3 years:
  - (0.6%) adjustment to IPPS standardized amounts for FY08 (revised 9/29/07)
  - (1.8%) projected adjustment in FY09 and FY10 is now expected to be less
    - (0.9%) in FY 2009
  - CMS has indicated that they will consider revising planned FY09 and FY10 adjustments further if information suggests that the projected CMI increase is either too high or too low

*CMS-1390-P , Medicare Program; Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2009 Rates

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Other Impacts Related to Changes to DRG Classification System

- Outlier Threshold:
  - The increase in the number of DRGs from 538 to 745, and the change from CMS to MS-DRGs will better recognize complexity and severity of illness.
  - Cases that are currently high-cost outlier cases under CMS DRG system could potentially be paid as non outlier cases under MS-DRGs
    - Example: DRG 127:
      - FY 07 weight of 1.0282
      - FY 08 weight of .8765 , 1.0134, or 1.2585
  - FY 08 outlier threshold decreases from $24,485 in FY 07 to $22,185 (revised 9/29/07)
    - FY 2009 Final Rule: $21,025*

* Centers for Medicare & Medicaid Services, 42 CFR Parts 411, 412, 413, 422, and 489 CMS-1390-P Medicare Program; "Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2009 Rates; pg.697. Published August 19, 2008.

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Other Impacts Related to Changes to DRG Classification System

- Postacute Care Transfer Policy – hospitals paid transfer payment rather than full DRG:
  - 3 criteria for DRG to meet transfer rules – unchanged
  - Change in DRG classification system – number of discharges to postacute care must equal or exceed 55th percentile for all DRGs
  - CMS recalculated 55th percentile thresholds to determine which MS-DRGs would be subject to transfer rules
    - For FY 07, 190 of 538 (35%) CMS DRGs subject to transfer policy
    - For FY 08, 273 of 745 (36%) MS-DRGs subject to transfer policy
    - Each MS-DRG that shares a base DRG qualifies for transfer payment rule, if one DRG qualifies

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Overall Impact Analysis

TABLE II. IMPACT ANALYSIS OF CHANGES FOR FY 2008 OPERATING PROPOSPECTIVE PAYMENT SYSTEM (PAYMENTS PER CASE)

	Number of Hospitals	Average FY 2007 Payment Per Case	Average FY 2008 Payment Per Case	All FY 2008 Changes
All hospitals	3,534	$8,875	$9,205	3.7%
By Geographic Location:				
Urban hospitals	2,539	$9,283	$9,642	3.9%
Large urban areas	1,406	$9,697	$10,117	4.3%
Other ubran areas	1,133	$8,784	$9,072	3.3%
Rural hospitals	995	$6,550	$6,709	2.4%
Bed Size (Urban):				
0-99 beds	630	$7,093	$7,250	2.2%
100-199 beds	851	$7,858	$8,138	3.6%
200-299 beds	480	$8,723	$9,051	3.8%
300-499 beds	411	$9,722	$10,131	4.2%
500 or more beds	167	$11,695	$12,178	4.1%
Teaching Status:				
Non-teaching	2,480	$7,474	$7,722	3.3%
Fewer than 100 Residents	815	$8,982	$9,321	3.8%
100 or more Residents	239	$12,934	$13,498	4.4%
Specialty Hospitals				
Cardiac Specialty Hospitals	22	$10,707	$10,796	0.8%

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FY 09 Hospital IPPS Final Rule

Significant Changes

Audit.Tax.Consulting.Financial Advisory.

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2009 Hospital IPPS Final Rule*

- Published in Federal Register August 19, 2008, 651 pages
- Over 1,100 comments were received timely
- Significant proposed policy changes include:
  - MS-DRG Documentation and Coding Adjustment
  - Refinement of the MS-DRG Relative Weight Calculation
  - Proposed changes to the Hospital Wage Index
  - Evaluation of MS-DRGs under the Postacute Care Transfer Policy for FY 2009
  - Financial relationships between hospitals and physicians

* Centers for Medicare & Medicaid Services, 42 CFR Parts 411, 412, 413, 422, and 489 CMS-1390-P Medicare Program; “Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2009 Rates; Changes to Disclosure of Physician Ownership in Hospitals and Physician Self-Referral Rules; Collection of Information Regarding Financial Relationships Between Hospitals and Physicians”, Published August 19, 2008.

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MS-DRG Documentation & Coding Adjustment

- Public Law 110-90 requires a documentation and coding adjustment of -0.9 percent instead of the -1.8 percent previously required
  - Combined with the -0.6 percent adjustment from FY 2008, this has a cumulative impact of -1.5 percent
- Public Law 110-90 also provides for payment adjustments in FYs 2010 through 2012 based upon a retrospective evaluation of claims data
- CMS plans to measure case-mix changes based on analyzing shifts among base DRGs, which are the result of changes in principal diagnoses, as well as shifts within the base DRGs, which are the result of changes in secondary diagnoses

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2009 Final Rule MS-DRG Changes

- Limited changes in 2009 MS-DRGs
  - CMS made two changes to MS-DRG descriptions for MS-DRGs 245, 870, 871, and 872.
    1. Subdivision of MS-DRG 245 AICD Lead and Generator Pxs to create a new MS-DRG for the implantation and replacement of the AICD leads from the implantation and replacement of AICD pulse generators:
       - MS-DRG 245 (AICD generator procedures): to include procedure codes 37.96, 37.98, and 00.54
       - MS-DRG 265 (AICD lead procedures): to include procedure codes 37.95, 37.97, and 00.52
       - Significant costs differences between the leads and the generators.

MS-DRG Name/ Specific Procedures	#Cases	% Per Px	Avg Cost	ALOS
AICD Lead/Generator Implant/ Replacement	5546	100%	$62,631	3.3 days
AICD Lead Implant/ Replacement	1894	34%	$42,896	3.4 days
AICD Defib Generator Implant/ Replacement	3652	66%	$72,866	3.2 days

DEPARTMENT OF HEALTH AND HUMAN SERVICES Centers for Medicare & Medicaid Services 42 CFR Parts 411, 412, 413, 422, and 489 CMS-1390-P Medicare Program; **Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2009 Rates, pp 65**

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2009 Final Rule MS-DRG Changes

- Limited changes in 2009 MS-DRGs
  - CMS made two changes to MS-DRG descriptions

    2. CMS inserted the words “or severe sepsis” after “Septicemia” in the titles of the following MS-DRGs that were effective October 1, 2007

    - 3 DRGs recognize severity of illness among patients treated with mechanical ventilation ≥4days and diagnosed with conditions including septicemia, severe sepsis, septic shock, and systemic inflammatory response syndrome (SIRS)
    - Revising the titles to incorporate “severe sepsis” would better assist in the recognition and identification of this disease, which could lead to better clinical outcomes and quality improvement efforts
    - Diagnosis codes for severe sepsis (diagnosis code 995.92) and septic shock (diagnosis code 785.52) are currently already assigned to these three MS-DRGs

Legacy MS-DRG Description	Proposed MS-DRG Description Revisions
MS-DRG 870 (Septicemia with Mechanical Ventilation 96+ Hours)	MS-DRG 870 (Septicemia *or Severe Sepsis* with Mechanical Ventilation 96+ Hours)
MS-DRG 871 (Septicemia without Mechanical Ventilation 96+ Hours with MCC)	MS-DRG 871 (Septicemia or *Severe Sepsis* without Mechanical Ventilation 96+ Hours with MCC)
MS-DRG 872 (Septicemia without Mechanical Ventilation 96+ Hours without MCC)	MS-DRG 872 (Septicemia or *Severe Sepsis* without Mechanical Ventilation 96+ Hours without MCC)

DEPARTMENT OF HEALTH AND HUMAN SERVICES Centers for Medicare & Medicaid Services 42 CFR Parts 411, 412, 413, 422, and 489 CMS-1390-P Medicare Program; **Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2009 Rates, pp 185**

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2009 Final Rule MS-DRG Changes

- Limited changes to the Medicare Code Editor (MCE)
  - Medicare Code Editor (MCE) is a software program that detects and reports errors in the coding of Medicare claims data.
  - 2009 Changes
    - **List of Unacceptable Principal Diagnoses**, removes diagnosis code: V62.84 (Suicidal ideation)
    - **Diagnoses Allowed for Males Only Edit**, adds four diagnoses: 603.0 (Encysted hydrocele), CMS-1390-P 190 603.1 (Infected hydrocele), 603.8 (Other specified types of hydrocele), and 603.9 (Hydrocele,unspecified)
    - **Limited Coverage Edit,** removes procedure code 37.52 (Implantation of internal biventricular heart replacement system) from the MCE "Non-Covered Procedure" edit and to assign it to the "Limited Coverage" edit with the requirement that ICD-9-CM diagnosis code V70.7 (Examination of participant in clinical trial) also be present on the claim.
    - **Surgical Hierarchies,** reordering of surgical procedures from most resource-intensive to least resource-intensive resulting in revision of MDC 5 hierarchy (Diseases and Disorders of the Circulatory System) by placing MS-DRG 245 (AICD Generator Pxs) above proposed new MS-DRG 265 (AICD Lead Pxs).
    - **CC Exclusions List**, 196 additions and more than double that number deletions from the list noted in Tables 6G and 6H (diagnoses when present as a secondary condition, not considered a substantial complication or comorbidity since do not cause an increase in the length of stay by at least 1 day in at least 75 percent of patients)

DEPARTMENT OF HEALTH AND HUMAN SERVICES Centers for Medicare & Medicaid Services 42 CFR Parts 411, 412, 413, 422, and 489 CMS-1390-P Medicare Program; **Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2009 Rates, pp 77- 78**

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2009 Final Rule MS-DRG Changes

- Limited changes to the CC/ MCC Lists
  - Proposed 2009 Changes included in Tables 6I.1, 6I.2, 6J.1, and 6J.2
    - Table 6I.1 Additions to MCC List: 16
    - Table 6I.2 Deletions to MCC List: 9
    - Table 6J.1 Additions to CC List : 92
    - Table 6J.2 Deletions to CC List : 8
  - Beginning with discharges on or after October 1, 2008, the diagnoses will not be recognized by the GROUPER as valid CCs/ MCCs for principal diagnoses.

DEPARTMENT OF HEALTH AND HUMAN SERVICES Centers for Medicare & Medicaid Services 42 CFR Parts 411, 412, 413, 422, and 489 CMS-1390-P Medicare Program; **Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2009 Rates, pp 79** – 81.

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Refinement of the MS-DRG Relative Weights

- Driven by concerns regarding bias in the relative weights due to charge compression
  - *The practice of applying a higher percentage charge markup over costs to lower cost items and a lower percentage markup to higher cost items*
- When a single cost-to-charge (CCR) is applied to items with a wide range of costs, charge compression occurs and can impact the relative weights
- CMS awarded a contract to RTI to evaluate this issue
  - Findings included there was inconsistent matching of charges in the Medicare cost reports with corresponding MedPAR claims as well as inconsistent reporting of costs and charges among hospitals, with medical supplies being a consistent problem area
  - Recommendations included improving hospital cost reporting instructions as well as adding new cost centers to the Medicare cost report

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Refining the Medicare Cost Report

- Hospital associations have launched an educational campaign to encourage consistent groupings of cost centers on the cost report
- Based on findings from the RTI study that separate cost centers for medical devices and implants would result in CCRs that were on average 17 points higher than for other medical supplies
- CMS is proposing that hospitals report items in the device cost center if they meet the following criteria:
  - The device has received FDA approval or clearance
  - The device is reasonable & necessary for diagnosis or treatment
  - The device is an integral and subordinate part of the service
  - The device is not any of the following: Equipment for which depreciation applies, a material or supply furnished incident to a service, used to replace human skin or does not remain in the patient when the patient is released from the hospital

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No Changes to Postacute Transfer Policy

- Under the Postacute Transfer Policy, cases are paid as transfers if home health services were provided within 3 days after the date of discharge
- CMS has been receiving reports that some providers discharge patients prior to the geometric length of stay but intentionally delay home health services beyond 3 days after the date of discharge to avoid the postacute care transfer payment
- CMS had proposed to revise this policy to extend the timeframe to within 7 days of discharge, but did not adopt this proposal in the final rule
- CMS is not proposing to make any changes to the criteria by which an MS-DRG would qualify for inclusion in the postacute transfer policy, but does continue to evaluate whether any new or revised MS-DRGs qualify

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Physician Disclosure & Financial Relationships

- Disclosure requirements revised to reflect that a physician-owned hospital is defined as a participating hospital in which a physician, or an immediate family member of a physician, has an ownership interest
  - Exception for when no referring physician owners
- CMS proposed 2 alternatives to address Stark "Stand in the Shoes" provisions with respect to academic medical centers and integrated delivery systems – Neither of these were adopted in the Final Rule
  - Exception if the compensation satisfies the requirements for bona fide employment, personal service arrangement or FMV
  - Establish new exception covering mission support payments
- CMS proposing to send the Disclosure of Financial Relationships Report (DFRR) to 500 hospitals
  - Failure to timely submit certified response may result in CMPs

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Case Study

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MS-DRG Case Study- 190, 191, 192 COPD w/Heart Failure

Patient admitted with exacerbation of chronic obstructive pulmonary disease (COPD) with heart failure as the only complication/ comorbidity. The type of heart failure that a patient has will affect payment under MS-DRGs.

CMS DRG 88
COPD
0.8878
$4577

MS-DRG Level	Description
DRG 190 **Wt: 1.1138** **$5742**	• **COPD with MCC** • This is the correct DRG assignment if the patient had acute (or acute-on-chronic) heart failure which is an MCC.
DRG 191 **Wt: 0.9405** **$4847**	• **COPD with CC** • This is the DRG assigned if documentation indicated the patient had chronic, but not acute, heart failure.
DRG 192 **Wt: 0.8145** **$4199**	• **COPD w/o CC/MCC** • This is the DRG that would have been assigned if “heart failure” or “CHF” was the only documentation located related to heart failure.

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CC/MCC List — Heart Failure Codes Not Included/ Included

- These codes do not indicate an acute exacerbation of Congestive Heart Failure (CHF)
  - Are included in the revised CC but not MCC, list.

ICD-9	Description
428.1	Left heart failure
428.20	Unspecified systolic heart failure
428.22	Chronic systolic heart failure
428.30	Unspecified diastolic heart failure
428.32	Chronic diastolic heart failure
428.40	Unspecified combined systolic and diastolic heart failure
428.42	Chronic combined systolic and diastolic heart failure

- These codes indicate an acute exacerbation of Congestive Heart Failure (CHF)
  - Are included in the revised MCC list.

ICD-9	Description
428.21	Acute systolic heart failure
428.23	Acute diastolic heart failure
428.31	Acute diastolic heart failure
428.33	Acute on chronic diastolic heart failure
428.41	Acute combined systolic and diastolic heart failure
428.43	Acute on chronic combined systolic and diastolic heart failure

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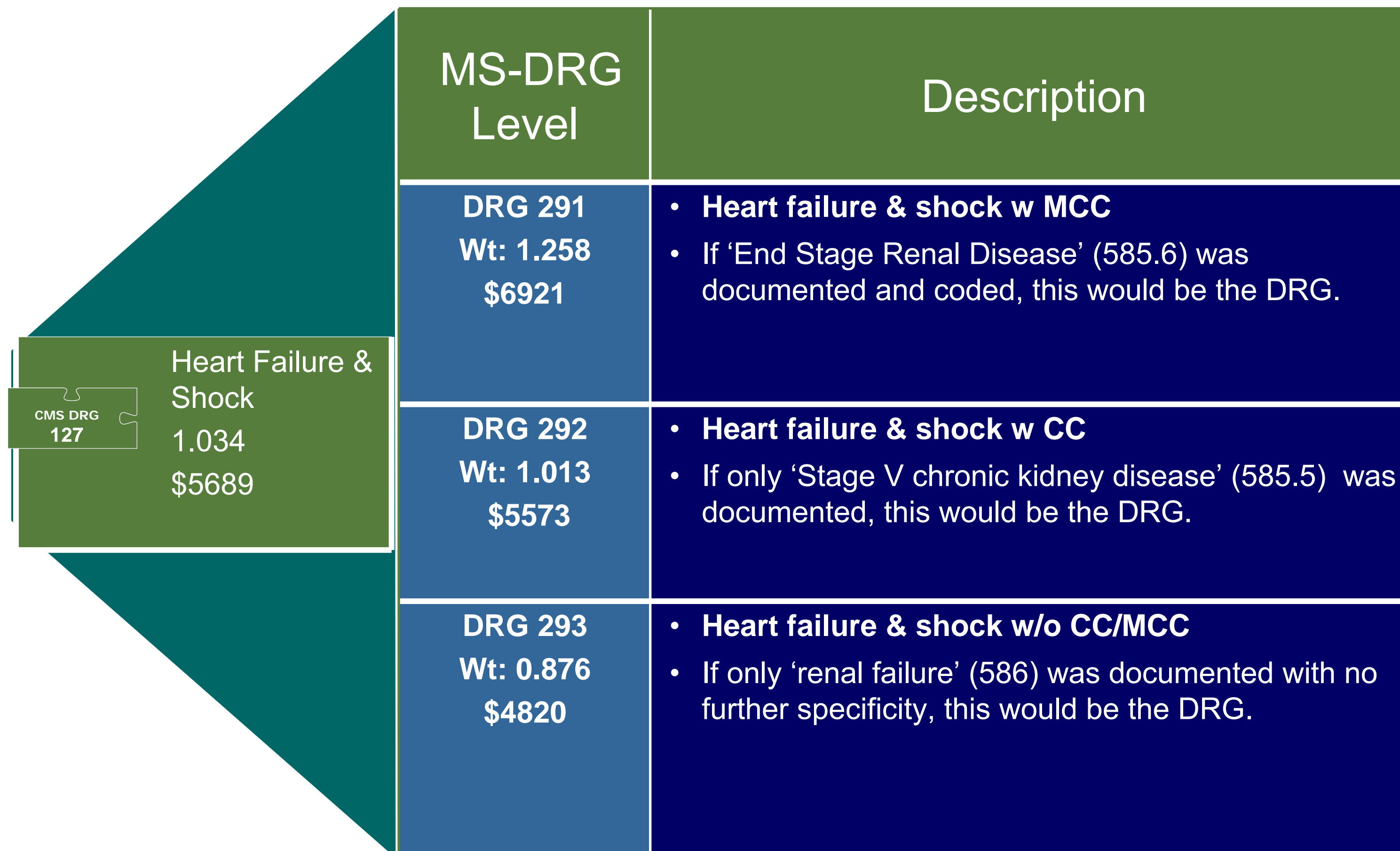
MS-DRG Case Study- 291, 292, 293 Heart Failure & Shock

Example B: Patient admitted with heart failure as Principal Diagnosis. Documentation indicated the patient had renal failure but no other MCC or CC.



MS-DRG Level	Description
DRG 291 Wt: 1.258 $6921	• **Heart failure & shock w MCC** • If 'End Stage Renal Disease' (585.6) was documented and coded, this would be the DRG.
DRG 292 Wt: 1.013 $5573	• **Heart failure & shock w CC** • If only 'Stage V chronic kidney disease' (585.5) was documented, this would be the DRG.
DRG 293 Wt: 0.876 $4820	• **Heart failure & shock w/o CC/MCC** • If only 'renal failure' (586) was documented with no further specificity, this would be the DRG.

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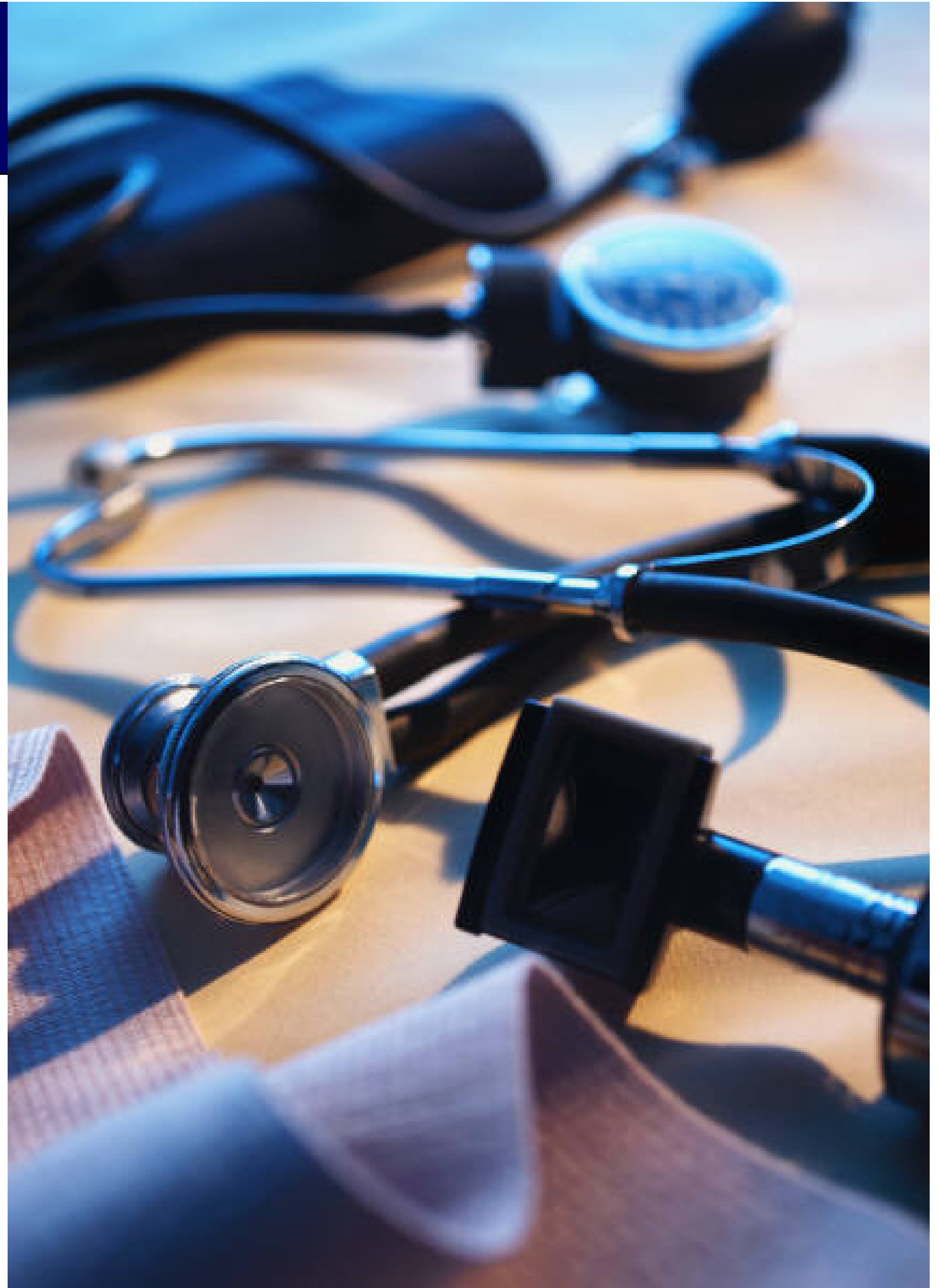
Present On Admission Indicator (POA)



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Present on Admission (POA) Indicator

- POA was implemented with MS-DRGs adding another degree of complexity to MS-DRG implementation
- CMS is required to reduce payment in cases where patients have a hospital-acquired infection or condition that would reassign them from a lower paying to a higher paying DRG.
- Hospitals must identify and report “Present on Admission” (POA) indicators for Medicare claims effective 10/1/2007.
- The POA indicator is applied to both principal and secondary diagnoses. The Secretary of Health and Human Services is required to select ***at least two*** conditions that are:
  - High in cost, volume or both
  - Assigned to a higher paying DRG when present as a secondary diagnosis
  - Reasonably preventable through application of evidence-based guidelines for Medicare hospital inpatients

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Hospital Acquired Conditions (HACs)

"The CMS 8"

Initial HACs Planned for Implementation

"Never" or Serious Reportable Events

1. **Object left in surgery**
2. **Air Embolism**
3. **Blood incompatibility**
4. **Catheter-Associated Urinary Tract Infection**
5. **Stage III/ IV Pressure Ulcers**
6. **Vascular Catheter-Associated Infection**
7. **Surgical Site Infection – Mediastinitis after Coronary Artery Bypass Graft Surgery (CABG)**
8. **Hospital-Acquired Injuries/ Falls and Trauma**
   - Fractures, Dislocations, Intracranial Injuries, Crushing Injuries, Burns

* Centers for Medicare & Medicaid Services, 42 CFR Parts 411, 412, 413, 422, and 489 CMS-1390-P Medicare Program; "Proposed Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2009 Rates; Proposed Changes to Disclosure of Physician Ownership in Hospitals and Physician Self-Referral Rules; Proposed Collection of Information Regarding Financial Relationships Between Hospitals and Physicians", Published April 30, 2008.

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Hospital Acquired Condition Candidates

HACs Proposed for Public comment, Potential for FY 2009 Implementation

1. **Surgical Site Infections Following Elective Procedures**
   - Total Knee Replacement
   - Laparoscopic Gastric Bypass and Gastroenterostomy
   - Varicose Vein Ligation and Stripping)
2. **Legionnaires' Disease**
3. **Glycemic Control**
   - Diabetic Ketoacidosis
   - Nonketotic Hyperosmolar Coma
   - Diabetic coma
   - Hypoglycemic Coma
4. **Iatrogenic Pneumothorax**
5. **Delirium**
6. **Ventilator Associated Pneumonia**
7. **Deep Vein Thrombosis (DVT)/Pulmonary Embolism (PE)**
8. **Staphylococcus Aureus Septicemia/ Methicillin resistant Staphylococcus Aureus**
9. **Clostridium Difficile-Associated Disease**

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Hospital Acquired Condition Candidates

Additional HACs Proposed by FY2009 Proposed Rule Commenters

- Surgical site infection following device procedures
- Failure to rescue
- Death or disability associated with drugs, devices, or biologics
- Events on the NQF's list of Serious Reportable Adverse Events, not previously addressed by the HAC payment provision
- Dehydration
- Malnutrition
- Water-borne pathogens, not previously addressed by the HAC payment provision.

7 More Conditions Proposed

* Centers for Medicare & Medicaid Services, 42 CFR Parts 411, 412, 413, 422, and 489 [CMS-1390-F]; [CMS-1531-IFC1]; [CMS-1531-IFC2] [CMS-1385-F4] RIN 0938-AP15; RIN 0938-AO35; RIN 0938-AO65 Medicare Program; Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2009 Rates; Payments for Graduate Medical Education in Certain Emergency Situations; Changes to Disclosure of Physician Ownership in Hospitals and Physician Self-Referral Rules; Updates to the Long-Term Care Prospective Payment System; Updates to Certain IPPS-Excluded Hospitals; and Collection of Information Regarding Financial Relationships Between Hospitals. [FR Doc. 2008-17914 Filed 07/31/2008 at 4:30 pm; Publication Date: 08/19/2008 pp. 233-234.]

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Final FY2009 Hospital Acquired Conditions*

	FY 2009 Hospital Acquired Conditions (HAC) CC/MCC	(ICD-9-CM Codes)
1	Foreign Object Retained After Surgery	998.4 (CC) 998.7 (CC)
2	Air Embolism	999.1 (MCC)
3	Blood Incompatibility	999.6 (CC)
4	Pressure Ulcer Stages III & IV	707.23 (MCC) 707.24 (MCC)
5	Falls and Trauma:	Codes within these ranges on the CC/MCC list: 800-829 830-839 850-854 925-929 940-949 991-994
6	Catheter-Associated Urinary Tract Infection (UTI)	996.64 (CC) Also excludes the following from acting as a CC/MCC 112.2 (CC) 590.10 (CC) 590.11 (MCC) 590.2 (MCC) 590.3 (CC) 590.80 (CC) 590.81 (CC) 595.0 (CC) 597.0 (CC) 599.0 (CC)

"CMS 8" Expanded to 12 Final HACs

* Centers for Medicare & Medicaid Services, 42 CFR Parts 411, 412, 413, 422, and 489 [CMS-1390-F]; [CMS-1531-IFC1]; [CMS-1531-IFC2] [CMS-1385-F4] RIN 0938-AP15; RIN 0938-AO35; RIN 0938-AO65 Medicare Program; Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2009 Rates; Payments for Graduate Medical Education in Certain Emergency Situations; Changes to Disclosure of Physician Ownership in Hospitals and Physician Self-Referral Rules; Updates to the Long-Term Care Prospective Payment System; Updates to Certain IPPS-Excluded Hospitals; and Collection of Information Regarding Financial Relationships Between Hospitals. [FR Doc. 2008-17914 Filed 07/31/2008 at 4:30 pm; Publication Date: 08/19/2008 pp.239 – 240.]

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Final FY2009 Hospital Acquired Conditions

	FY 2009 Hospital Acquired Conditions (HAC) CC/MCC	(ICD-9-CM Codes)
7	Vascular Catheter-Associated Infection	999.31 (CC)
8	Manifestations of Poor Glycemic Control	250.10-250.13 (MCC) 250.20-250.23 (MCC) 251.0 (CC) 249.10-249.11 (MCC) 249.20-249.21 (MCC)
9	Surgical Site Infection, Mediastinitis, Following Coronary Artery Bypass Graft (CABG) And one of the following procedure codes	519.2 (MCC) 36.10–36.19
10	Surgical Site Infection Following Certain Orthopedic Procedures And one of the following procedure codes:	996.67 (CC) 998.59 (CC) 81.01-81.08, 81.23-81.24. 81.31-81.83 81.83, 81.85
11	Surgical Site Infection Following Bariatric Surgery for Obesity And one of the following procedure codes:	Principal Diagnosis – 278.01 998.59 (CC) 44.38, 44.39, 44.95
12	Deep Vein Thrombosis and Pulmonary Embolism Following Certain Orthopedic Procedures And one of the following procedure codes:	415.11 (MCC) 415.19 (MCC) 453.40-453.42 (MCC) 00.85-00.87, 81.51-81.52, or 81.54

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New Diagnosis Codes for HAC Identification

HAC	Specific ICD-9 Codes
Foreign object left in surgery	(CC) 998.4 Adhesions, obstruction, perforation due to foreign body accidentally left during a procedure
	(CC) 998.7 Acute reaction to foreign substance accidentally left during a procedure.
Air embolism	(MCC) 999.1 Air embolism following infusion, perfusion or transfusion (excludes due to implanted device 996.7 or traumatic-post surgery or trauma 958.0.
Blood incompatibility	(CC) 999.6 ABO incompatibility reaction - incompatible blood transfusion.
Catheter-associated urinary tract infection	Catheter-associated urinary tract infections require the use of two or more ICD-9-CM codes to clearly identify the conditions. 996.64 Infection and inflammatory reaction due to internal prosthetic device, implant and graft. An additional code must be used
Decubitus ulcers	New Codes: 707.23 Stage III decubitus ulcer - Decubitus [pressure] ulcer with full thickness skin loss involving damage or necrosis of subcutaneous tissue and 707.24 Stage IV decubitus ulcer - Decubitus [pressure] ulcer with necrosis of soft tissues throu
Vascular catheter-associated infection	Previously vascular catheter-associated infection did not have unique code. It was coded with infections associated with all vascular devices, implants, and grafts. A new code 999.31 (Infection due to central venous catheter) became effective October 1, 2
Surgical site infection –mediastinitis after CABG	(MCC) 519.2 Mediastinitis with coronary bypass codes 36.10-36.19.
Falls –specific trauma codes	CC/MCC in code ranges 800-829, 830-839, 850-854, 925-929, 940-949, 991-994.

New Codes for 2009

Source: Federal Register / Vol. 73, No. 84 / Wednesday, April 30, 2008 / IPPS Proposed Rule

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Hospital Acquired Conditions (HACs)

- In FY 2009, proposed impact of HACs on DRG payment amounts will vary depending upon the DRG pair or triplet set and DRG weights within the set. Payment will default to a lower payment, e.g. "No CC" DRG payment in the set.

MS-DRG Assignment* (Examples below with CC/MCC indicate a single secondary diagnosis only)	**Present on Admission** (Status of Secondary Diagnosis)	**Average Payment** (Based on 50th percentile)	**Payment Variance**
Principal Diagnosis • Intracranial hemorrhage or cerebral infarction (stroke) without CC/MCC - MS-DRG 066	–	$5,347.98	
Principal Diagnosis • Intracranial hemorrhage or cerebral infarction (stroke) with CC - MS-DRG 065 Example Secondary Diagnosis • Dislocation of patella-open due to a fall (code 836.4 (CC))	Y	$6,177.43	
Principal Diagnosis • Intracranial hemorrhage or cerebral infarction (stroke) with CC - MS-DRG 065 Example Secondary Diagnosis • Dislocation of patella-open due to a fall (code 836.4 (CC))	N	$5,347.98	($829.45)
Principal Diagnosis • Intracranial hemorrhage or cerebral infarction (stroke) with MCC - MS-DRG 064 Example Secondary Diagnosis • Stage III pressure ulcer (code 707.23 (MCC))	Y	$8,030.28	
Principal Diagnosis • Intracranial hemorrhage or cerebral infarction (stroke) with MCC - MS-DRG 064 Example Secondary Diagnosis • Stage III pressure ulcer (code 707.23 (MCC))	N	$5,347.98	($2,682.30)

* Centers for Medicare & Medicaid Services, 42 CFR Parts 411, 412, 413, 422, and 489 CMS-1390-P Medicare Program; "Proposed Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 2009 Rates; Proposed Changes to Disclosure of Physician Ownership in Hospitals and Physician Self-Referral Rules; Proposed Collection of Information Regarding Financial Relationships Between Hospitals and Physicians", Published April 30, 2008.

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Post MS-DRG/ POA Implementation Monitoring

Identify
Financial Impacts and
Potential Compliance
Issues

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MS DRG Transition Strategies

- Various strategies for MS DRG Pre-Implementation executed by acute care hospitals
  - Multidisciplinary task forces assembled to focus on people, process and technology implementation challenges: PFS/ Billing, HIM/ Medical Records, Case Management/ Nursing, IT, Managed Care
  - Training clinical and HIM staff
  - Impact studies to anticipate CMI/ revenue fluctuations
  - Determining which payors adopt Medicare V25 grouper
- Challenges encountered pre 10/1/2007
  - Maintaining current operational/ revenue cycle metrics while investing in preparations for new system.
  - Cross-walking the "old" to the "new" not seamless.
  - Vendor preparedness/ responsiveness not optimal across the board

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MS DRG Transition Strategies

- Post 10/1/2007 Transition Strategies
  - MS-DRG Task Force implementation efforts refocused
  - Planning for new managed care contract negotiations and the second wave of transition to MS-DRGs
  - Process and Tool Refinements in Key Departments
  - Auditing, monitoring, and continued training
    - CDE/CDI program effectiveness to support DRG/ accurate reimbursement and to support quality data collection and reporting
    - Focus on new DRG pairs and triplets and POA coding accuracy
    - CMI and Financial/ Revenue Cycle Metric Re-setting
  - Reporting
    - Greater need for aggregate “report carding” across hospital departments to manage metrics and issues timely

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Primary Goals, Challenges and Strategies

Goals	Key Challenges	Mitigation Strategies
Clinical Documentation Excellence	■ Complete and Accurate Clinical Documentation of Services Rendered to Patients ■ Consistent Documentation Practices for all Physician specialties ■ Increased Clinician Understanding of the Link between Clinical Documentation and Intensity of Service and Severity of Illness ■ Process Redesign in departments where collaboration and synergies may need to be established or enhanced	■ Balance work already completed by hospital facility; augment program with industry best practices ■ Leverage input from physicians, case management and HIM for consensus building ■ Develop strong, agreed upon governance structure to drive CDI program decisions ■ Incorporate the level of technical, clinical, and business workflow change required to support program roll out across all clinical departments ■ Provide tool sets and reference materials for training activities and tracking improvements
Coding and DRG Assignment Compliance Legitimate Reimbursement Optimization	■ Accurate Coding, DRG Assignment and Reimbursement ■ Coding Productivity ■ Efficient /Effective Physician Query Process ■ Present on Admission (POA) Indicator Accuracy ■ Understand CMI Variance Drivers	■ Coding and MD query process assessment, gap identification, including HIM Coder/ CDS resource management needs ■ Implement streamlined process re-design; Incorporate CMS, AHIMA and state standards and regulations in CDI program process improvements ■ Consider and incorporate change management techniques to support any proposed process re-design within key stake holder groups ■ Identify financial implications of process changes (optimal participation and non compliance) that impact reimbursement and Case Mix

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Clinical Documentation Improvement Goals, Challenges and Strategies

Goals	Key Challenges	Mitigation Strategies
Robust, dynamic CDI Training and Education Program	■ Physician CDI program buy-in; Specialty-specific applicability; broad coverage ■ CDI Team Building; Learning MS-DRG related content and learning to work as a team. Coordination of roles and responsibilities between physicians, CM/ CDS nurses, and HIM professionals ■ Communicate ongoing relevancy of CDI program;	■ Physician Champions leading by example; supporting peers ■ Consider incentives, publicizing overall program benefits/ ROI and specialty-specific contributions ■ Hybrid training programs: formal program with written content, interactive case study discussions; Sound byte learning reinforcement; "walking rounds" and "trading places" component of training for nurses and coders. ■ Develop broad range of actual facility case studies with demonstrative CMI and reimbursement variances; Map to MDCs; Planned periodic refresh of case studies.
CDI Tool Set that Supports all Stakeholders Needs	■ Tailored yet standardized tools to create consistency ■ Meeting tool needs of different Stakeholders –Physicians –Nurses/ CDS –HIM professional coders –Executives/ Financial management ■ Cost Effectiveness/ ability to update	■ Standardized templates/ formats with customized content; ■ Electronic/ technology based vs Paper tool preferences ■ Customization of tools for stakeholders –Training Manual modules –Physician Rounding Cards –MS DRG Assignment Guide –Physician Query Templates –Tracking Databases ■ Engage organizational tool users to suggest tool refinements/ assist tool owners in updating to extent possible

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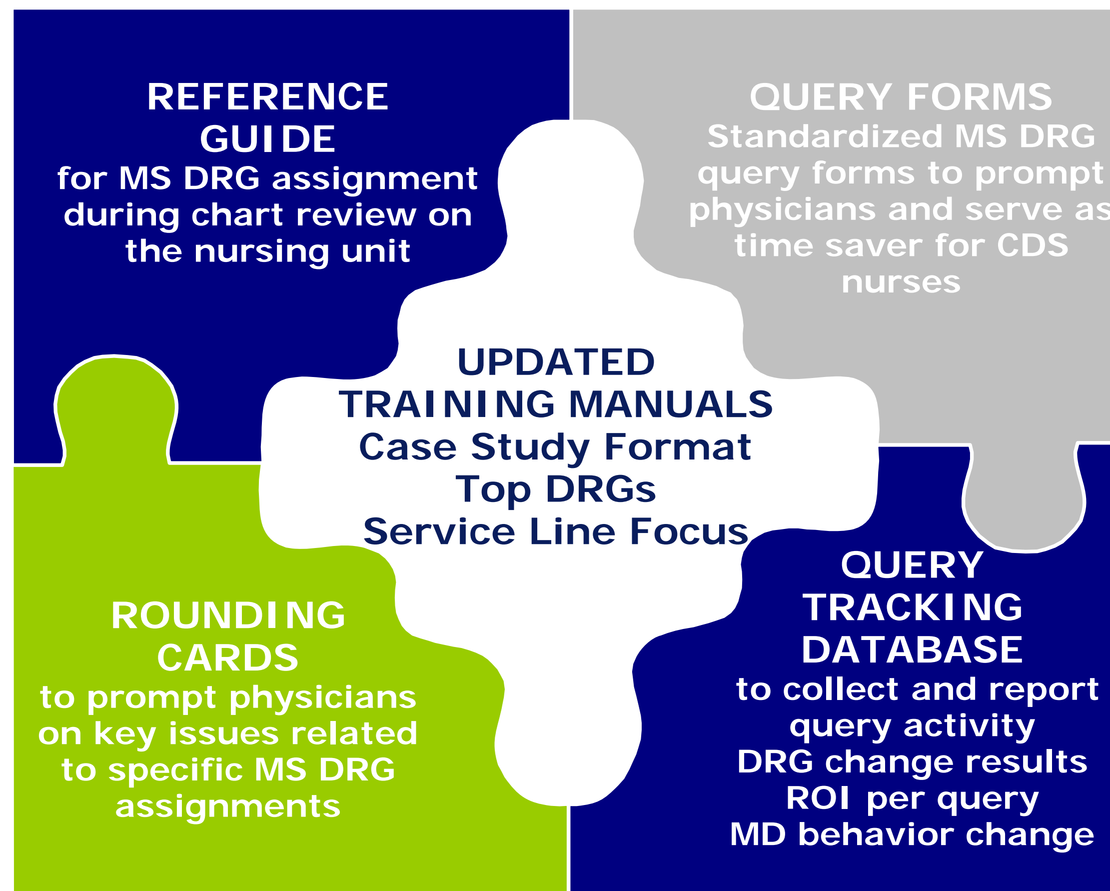
Evaluate Tools to Support CDI/Coding

MS DRG tools

- Support an efficient CDI process
- Support Compliance to Regulatory Guidelines



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What's in Your MS-DRG/ POA Tool Kit?

- Benchmarking/ Modeling
- Data Tracking and Trending
- Assess, Refresh, Add Tools

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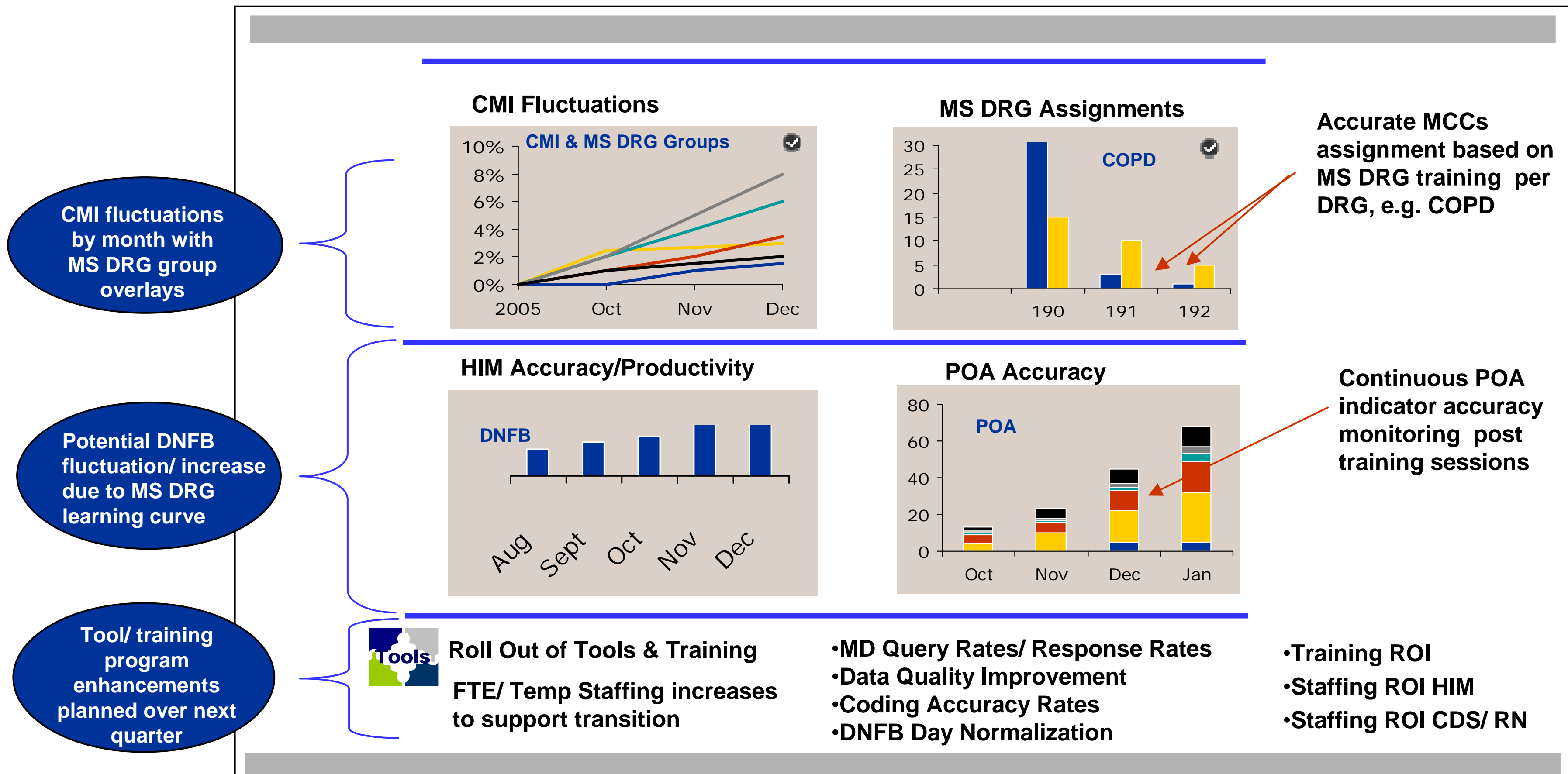
Sample MS DRG Implementation Report Card



Exact report card format should be determined by the facility based on program specific compliance and CDI program goals and objectives

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Managed Care Contracting Goals, Challenges and Strategies

Goals	Key Challenges	Mitigation Strategies
Maintain Favorable Managed Care Contracts/ Reimbursement	▪ Anticipating payor adoption of "Never" event payment policies in next contract year ▪ Negotiating favorable phase-in of new "Never Event" contract terms/ addendums	▪ Consider/ model potential financial impacts of "CMS Like" payment policy ▪ Apply methodology to current non-DRG based contracts
		▪ Understand that payors are collecting and monitoring POA Indicator trends, preparing for negotiations ▪ Monitor and understand your own data and root cause explanations
	▪ Monitoring payments for accuracy post implementation of MS-DRG based and "Never Event" contract terms	▪ Ensure staff are using payment analysis software/ tools appropriate to changing MS-DRG vs legacy DRG contract terms ▪ Consider currrent and proposed CMS HACs, potential clinical scenarios and prepare "grey area" questions to pose and discuss payment policy impacts during contract negotiations
	▪ Soliciting physician support in reducing "never" events and in documenting incidents of potential pre-admission conditions with potential to be considered HACs	▪ Educate physicians on managed care trend toward adopting "CMS Like" payment policy of reduced payment for "Never" events and instances of other payors initiating similar reduced payment policies for professional/ physician services.
		▪ Consider Managed Care "Futurist" perspectives on continued, progressive vertical integration of healthcare systems and concept of global reimbursement for inpatient care

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