

Medicare Severity Diagnosis Related Groups MS DRG

Nutrition Comorbid Conditions

**CMS DRG
APR DRG
MS DRG
P. O. A**



**R A C
AHRQ
PQRI
P 4 P**

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Public Reporting and Pay-for-Performance Industry / Environment Scan

“MY PATIENTS ARE SICKER THAN THE OTHERS”

- ❑ **PROFILING**
 - Reputation
 - Severity of Illness
 - Mortality Profile
- ❑ Consumer Driven Market
- ❑ **REPORT CARDS**
 - Rating tools state/national
- ❑ **QUALITY MEASURES - AHRQ**
 - Physician
 - Hospital
- ❑ E/M Doctor’s Reimbursement
- ❑ Hospital Reimbursement

❑ Joke:



DOCUMENTATION MUST SHOW: SEVERITY of ILLNESS

PROFILING BY:

- ❑ Federal & State Agencies
- ❑ Joint Commission
- ❑ CMS & Insurances
- ❑ PRO / QIO
- ❑ Hospitals / Employers

- ❑ General Public **INTERNET**

- ❑ **PAY 4 PERFORMANCE**

- ❑ **FIVE STAR HOSPITAL/Physician**



“IT IS MORE THAN P4P IT IS PART OF A MOVEMENT IT IS CALL FOR ACTION”

Trent Haywood, MD, JD -CMS

“IT WOULD ACCOUNT FOR 30% OF THE PAYMENT FROM FEDERAL PROGRAMS”

Mark McClellan, CMS Administrator

PRINCIPAL DIAGNOSIS

The condition/conditions established after study to be chiefly responsible for occasioning the admission of the patient to inpatient hospital care”

- ❑ At the time of discharge, if DX is uncertain:
- ❑ "possible/probable/questionable/likely"
 - diagnostic workup
 - initial therapeutic approach
 - arrangements for further workup or observation

PDX

SDX

SECONDARY DIAGNOSES

All conditions that coexist at the time of admission and/or that develop subsequently and require:

- ❑ Clinical evaluation and/or
- ❑ Therapeutic treatment and/or
- ❑ Diagnostic procedures and/or
- ❑ Extended length of hospital stay (≥1 day) and/or
- ❑ Require increased nursing care and/or monitoring

POSSIBLE/PROBABLE / QUESTIONABLE/LIKELY"

- *diagnostic workup
- *initial therapeutic approach
- *arrangements for further workup or observation

MEDICARE SEVERITY DIAGNOSES RELATED GROUPS

MS DRG

The Severity of Illness

based on the presence of:



MCC = Major Comorbid Condition
CC = Comorbid Condition
Other sec. DXs

MS-DRG - Established by :

- Principal Diagnosis,
- Comorbid/Complications
- Principal Procedure

MCC & CC LIST
DX Impacting MS DRG

- Hospital payments/ Medicare

745 MS DRG

- relative weight
= severity/resources
- w/o CC or MCC
- w/ CC and/or MCC

CASE MIX INDEX - CMI

The mean (average) of relative weight for a group of patients reflecting resource utilization

- DRG-APR-DRG (All Patient Refined) = **SOI & ROM**
 - Severity Of Illness and Risk Of Mortality
 - All DX documented

APR DRG – measuring SOI & ROM

	PRINCIPAL DIAGNOSIS: CAD	
	CASE 1	CASE 2
Secondary Diagnosis PPX-CABG SPX-Cardiac Cath.	HX Chronic Obstructive Pulmonary Disease – symptoms/TX Hx of Atrial Fibrillation Dyspnea, hypoxia post surgery Prealb 9 Pulm. Edema, Cardiomegaly Diuretics, Hx of CHF /CHF exacerbation	Chronic Obstructive Pulmonary Disease - Exacerbation Atrial Fibrillation <i>Pulmonary Insufficiency</i> Acidosis Malnutrition <i>Acute systolic HF</i> (and Chronic) Prolonged Mechanical Ventilation (respiratory failure)
Medicare DRG	548 CABG w/Cath w/o MCC RW.... Diff. in \$ for hospital	548 CABG w/Cath. w/ MCC RW.....
APR-DRG	190 CABG w/Cath	191 CABG w/Cath.
APR-DRG Severity of Illness	2 Moderate	4 Extreme
APR-DRG Risk of Mortality	1 Minor	4 Extreme
Medicare Relative DRG Weight	RW 4.644	RW 4.644 RW 6.123
APR-DRG Relative Weight	2.7930	3.7052
National Mortality Rate (APR-DRG Adjusted)	0.04%	32.02%

**2007 RATINGS
STROKE**

Inhospital Mortality (Survival)

St Vincent's Hospital		BEST
Baptist Medical Center		AS EXPECTED
St Luke's Hospital		AS EXPECTED
Memorial Hospital		POOR
BMC Beaches		AS EXPECTED
Shands Hospital		AS EXPECTED

Inhospital +1 month Mortality (Recovery +30)



Inhospital +6 month Mortality (Recovery +180)



MEDICARE SEVERITY DIAGNOSES RELATED GROUPS

How the specific documentation could influence the CMI:

MS DRG

CMI FORMULA = $\frac{\text{Sum of all Patients' DRGs RW}}{\text{\# inpatient patients}}$

FINANCIAL VIABILITY

Case	RW	#cases	RW	#cases	RW
Cocaine relate	0.58			2	1.16
GERD	0.68			3	2.04
Chest pain	0.55	6	3.3	1	.55
PN w/o CC	0.74	9	6.66	2	1.48
PN w/ CC	1.02	10	10.2	4	4.08
PN w/ MCC	1.46	2	2.92	6	8.76
C.PN w/o CC	1.04	3	3.12	1	1.04
C.PN w/ CC	1.49	3	4.47	7	10.43
C.PN w/MCC	2.04	1	2.04	5	10.2
Resp. Failure	1.37	1	1.37	4	5.48
		35	34.06	35	45.22

- Monitored by
 - *hospital finance services
 - *CMS/OIG
 - *Insurance Companies
- For 1.0 - Medicare Blend Rate

\$ 8,000

- Other Insurances paying DRG
- List w/ MS DRG payers

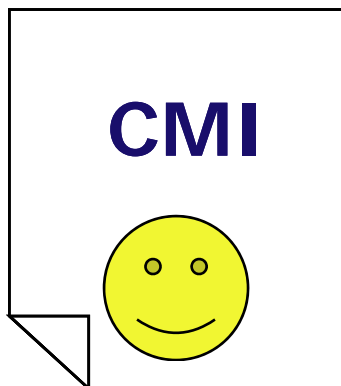
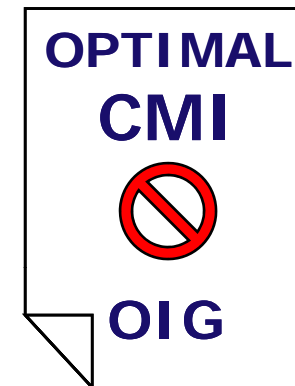
$$34.06 / 35 = 0.97$$

$$45.22 / 35 = 1.29$$

COMPREHENSIVE DOCUMENTATION



- ❑ Continuity /Support of patient care
- ❑ Accurate coding = QUALITY DATA
- ❑ Credentialing, certification, licensure
- ❑ Sets insurance premiums



- ❑ *Maintains Physicians participation to Managed Care*
- ❑ Legal issues - "the more, the better"
- ❑ Optimal reimbursement
- ❑ Benchmark

Types of Malnutrition

- ❑ Overnutrition
- ❑ Secondary malnutrition
- ❑ Micronutrient malnutrition --
- ❑ Protein Calorie malnutrition --

A. Overnutrition

- ❑ Too many calories leading to obesity, diabetes, hypertension and cardiovascular disease
- ❑ "Transition diets" now a consideration of WHO due to increase worldwide in chronic disease due to dietary change

B. Secondary Malnutrition causative conditions

- ❑ Loss of appetite (anorexia, etc), cancer
- ❑ Alteration of normal metabolism
 - during infection/fever
 - HIV/AIDS
 - Terminal diseases
- ❑ Prevention of nutrient absorption
 - Diarrheal infection causing changes in GI epithelium – Crohn, etc
- ❑ Diversion of nutrients to parasitic agents themselves
 - Hookworms, tapeworms, worms, malaria

Key Study – Physical signs

Fatigue
Muscle soreness
Irritability
Hunger pains
Lack of
 Ambition
 Self-discipline
 Poor concentration
Often moody and depressed
Less able to laugh heartily
Less able to tolerate heat
Heart rate decreased
Muscle tone decreased

Role of calories

- Involuntary use:
 - breathing
 - blood circulation
 - digestion
 - maintaining muscle tone
 - body temperature
- Physical activity
- Mental activity
- Fighting disease - immunity
- Growth



Role of protein

- For building cells that make up muscles, membranes, cartilage and hair
- Carrying oxygen
- Nutrient transport
- Antibodies
- Enzymes needed for most chemical reactions in the body

What happens to people when they have inadequate amounts of food and nutrients?

- **Metabolic changes**
- **Physiologic changes**
- **Psychological changes**

Major Restructure of Comorbid Conditions

Metabolic Disorders

MCC & CC LIST
Sec.DX Impacting MS DRG

Non-CC

Malnutrition of moderate disease (non -CC)
Malnutrition of mild disease (non -CC)

CC

- **Protein-calorie malnutrition (CC)**
 - Malnutrition (unspecified)
- **Malnutrition (calorie) (CC)**
 - Dystrophy due to malnutrition
- **Arrested development w/ protein calorie malnutrition**
(Nutritional dwarfism, Physical retard due to malnutrition)

MCC

- **Kwashiorkor**
Changes in skin and hair pigment, edema, retarded growth, pathologic liver changes
- **Nutritional marasmus**
- **Nutritional atrophy**
- **Severe Calorie Deficiency**
- **Severe Malnutrition (NOS)**
- **Severe protein-calorie**
Nutritional edema w/o dyspigmentation

CLARIFICATION REQUIRED to ACCURATELY REFLECT:
SEVERITY OF ILLNESS & RISK OF MORTALITY

DOCUMENTATION CLARIFICATION
Clinical Documentation Initiative

MALNUTRITION SEVERE MALNUTRITION

Values Commonly Used to Grade the Severity of Malnutrition:

MEASURE	<u>Degrees of Malnutrition</u>		SEVERE
	mild	moderate	
NORMAL WT	85% - 90%	75% - 85%	< 75%
BMI	18 – 18.9	16 – 17.9	< 16
SERUM ALBUMIN	3.1 – 3.4	2.4 – 3.0	< 2.4
PREALBUMIN	11-15	6-10	≤ 5

BMI FORMULA
Weight in Pounds x703
Height in inches²

DOCUMENT the BMI:

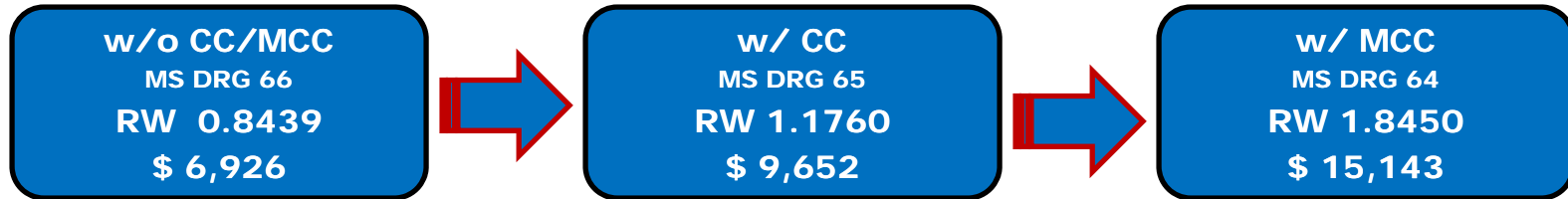
BMI	Weight Status
< 18.5	Underweight
18.5-24.9	Normal
25 – 29.5	Overweight
> 30	Obese
≥ 40	Morbid Obesity




Risk Factors for Malnutrition: Terminal illness, ESRD, ESLD, AIDS, COPD, underlying infections, chronic debilitating diseases, difficulty swallowing or chewing, weight loss, depression, chronic N&V, diarrhea, , etc.

**THIS IS NOT A PART OF MEDICAL RECORD
PLEASE REMOVE BEFORE SCANNING**

BLEND RATE = 8,000

INTRACRANIAL HEMORRHAGE OR CEREBRAL INFRACTION



PDX	Cerebral Infarction/ Stroke / Intracerebral hemorrhage		
Case I SDX	Left side weakness	Hemiplegia/hemiparesis/D/C	
Case II SDX	MRI – perivascular edema Left shift	MRI – perivascular edema, repeat MRI-Left shift	Cerebral edema
Case III SDX	Albumin 2.3 Pre albumin 5  BMI not calculated Orders: nutrition consult Treatment / Nutrition / weight the patient	Protein calorie malnutrition (Malnutrition) <u>BMI <19 (from RD notes)</u> 	<u>Severe malnutrition</u> BMI <19 (from RD notes)
Case V SDX	Sacral Pressure Ulcer Stage II (poor documented) or unstageable		Sacral Pressure Ulcer Stage III, Not POA

Multiple sclerosis & cerebellar ataxia

MS DRG	w/o CC/MCC 60	w/CC 59	w/MCC 58
RW	0.8160	0.9226	1.2669
RMB	6,501	7,350	10,094
PDX	Multiple sclerosis exacerbation	Multiple sclerosis exacerbation	Multiple sclerosis exacerbation
SDX	Dysuria, UA – L. E. WBC ↑ C&S: E. Coli <i>Nutritional Supplement – prealb. 5</i>	T – 102, HR 120, WBC 19,000, Bandemia, BP 90/50 Blood Culture negative, BUN 50, Cr. 2.3, 2 Antibiotics <i>Urosepsis = UTI</i> <u>Malnutrition</u>	BP 90/50, RR 38, Hypoxia, Hypercapnia T 102, HR 120, WBC 19,000, Bandemia, B. Culture (-) 2AB <i>(Severe) Sepsis</i> <i>ARF (spell this out)</i> <u>Severe Malnutrition</u>



POA MUST BE DOCUMENTED BY THE PROVIDER

YES ---NO ---U ---W

"U" - Unclear documentation as to whether the condition was
POA
(should not be routinely assigned/used only in very
limited circumstances)

"W" decision of the provider -- it cannot be clinically determined

Reasonably Preventable through the
application of
EVIDENCE-BASED guidelines
Avoidable complications



Issues related to:

- ** inconsistent
- ** missing
- ** conflicting
- ** unclear



Clarify before billing!!!

Beginning October 1, 2008, CMS cannot assign a case to a higher MS DRG based on the occurrence of one of these conditions, if the condition was acquired during hospitalization

Applies from October 1, 2008

HOSPITAL ACQUIRED CONDITIONS

Secondary Diagnosis
NOT Present On
Admission

MS DRG if CC or
MCC
is
the only CC or MCC
NEVER EVENTS

- **Object left in surgery (CC)**
- **Air embolism (MCC)**
- **Blood incompatibility (CC)**
- **Surgical Site infection/ortho device (CC) * Infection and inflammatory reaction due to orthopedic devices/implant/graft OR Other postoperative infections**

WITH

Procedure: -Spinal Fusion and Refusion

-Arthroplasty: Shoulder and Elbow

-Bariatric surgery PDX - Morbid Obesity and Postop. Infection

PX: Lap/open Gastroenterostomy or gastric restrictive PX


- **Catheter associated urinary tract infections (CC)**
- **Pressure ulcers stage III, IV (MCC) – the rest – not CC/MCC**
- **Vascular catheter associated infections –Central Venous Catheter (CC)**
- **Mediastinitis post coronary artery bypass graft (MCC)**
- **Falls & Trauma, Burns, Fractures, Dislocations (CC or MCC)**
- **Deep Vein Thrombosis or Embolism / Pulmonary Embolism / Pulmonary infarction (MCC)**

Procedure: Total/Partial Hip and Knee Replacement,

- **Manifestation of poor glycemic control: Ketoacidosis (MCC),**
 - **Coma: hyperosmolar (MCC),**
 - **hypoglycemic (CC)**

Nervous systems neoplasm

BLEND RATE = 8,000

MS DRG	MS.DRG 55 w/o MCC	MS.DRG 54 w/MCC
RW	1.1213	1.4228
RMB	8,934	11,336
PDX	Brain Neoplasm Metastatic to liver, bone	Brain Neoplasm Metastatic to liver, bone
SDX	<p>T – 102, HR 120, WBC 19,000, Bandemia, BP 90/50, UA-C&S – E. coli Blood Culture negative, BUN 50, Cr. 2.3, 2 Antibiotics</p> <p>Malnutrition – pre.alb. 5 </p> <p>Wound Care Notes: sacral pressure ulcer, stage III</p>	<p>BP 90/50, RR 38, Hypoxia, Hypercapnia T 102, HR 120, WBC 19,000, Bandemia, B. Culture (-) 2AB Urosepsis = <u>UTI</u></p> <p><u>Severe Malnutrition</u></p> <p><u>No mention by the doctor, or just Wound Care referral</u></p>

RENAL FAILURE

BLEND RATE = 8,000

<p>PDX: ESRD & HTN Creatinine 3.4 (baseline 2.4) HTN –uncontrolled</p> <p>RD consult Low Protein, low albumin, prealb. 7,supplement</p>	<p>w/o CC/MCC 684</p>	<p>0.9835</p>	<p>7,836</p>
<p>PDX: ESRD & HTN Creatinine 3.4 (baseline 2.4) HTN –uncontrolled</p> <p>Malnutrition</p>	<p>w/ CC 683</p>	<p>1.1942</p>	<p>9,515</p>
<p>PDX: ESRD & HTN Creatinine 3.4 (baseline 2.4) HTN –uncontrolled</p> <p>Severe Malnutrition</p>	<p>w/ MCC 682</p>	<p>1.4664</p>	<p>11,684</p>

Chronic Obstructive Pulmonary Disease



BLEND RATE = 8,000

PDX	COPD Exacerbation		
Case I SDX	RR=28, Dyspnea, CO ₂ 70, O ₂ 65, BIPAP X-Ray abnormal, order a CT Scan _____	COPD Exacerbation RR=28, Dyspnea, CO ₂ 60, O ₂ 65, BIPAP <u>Chronic Resp. Failure</u> <u>CT Scan: Atelectasis</u>	COPD Exacerbation RR=28, Dyspnea, CO ₂ 60, O ₂ 65, BIPAP Post adm: acute respiratory Failure _____
Case II SDX	Dementia, confusion, hallucinations _____	<u>Senile Dementia with Delirium</u> _____	
Case III SDX	Nutritional support ES.COPD Order prealb. _____	Malnutrition BMI <18 _____	<u>Severe malnutrition</u> _____
Case IV SDX	HX HIV (CD4 180) HIV/AIDS Hx PN, PCP		<u>AIDS</u> (CD4 180) _____