

Risk Adjustment Coding

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What is Risk Adjustment?

- ▶ An actuarial tool used to predict health care cost
- ▶ A process involving diagnosis reporting to measure a patient's health status
- ▶ Diagnosis codes are used to adjust potential risks
- ▶ Risk Adjustment is a method to evaluate and measure all patients on a equal scale - levels the playing field
- ▶ Other factors (age, race, socioeconomic status, gender)
- ▶ Used to forecast trends and future needs of patients
- ▶ Predictive Analysis - review of current and past medical conditions to predict future costs
- ▶ Affects payment and quality

Risk Adjustment Models

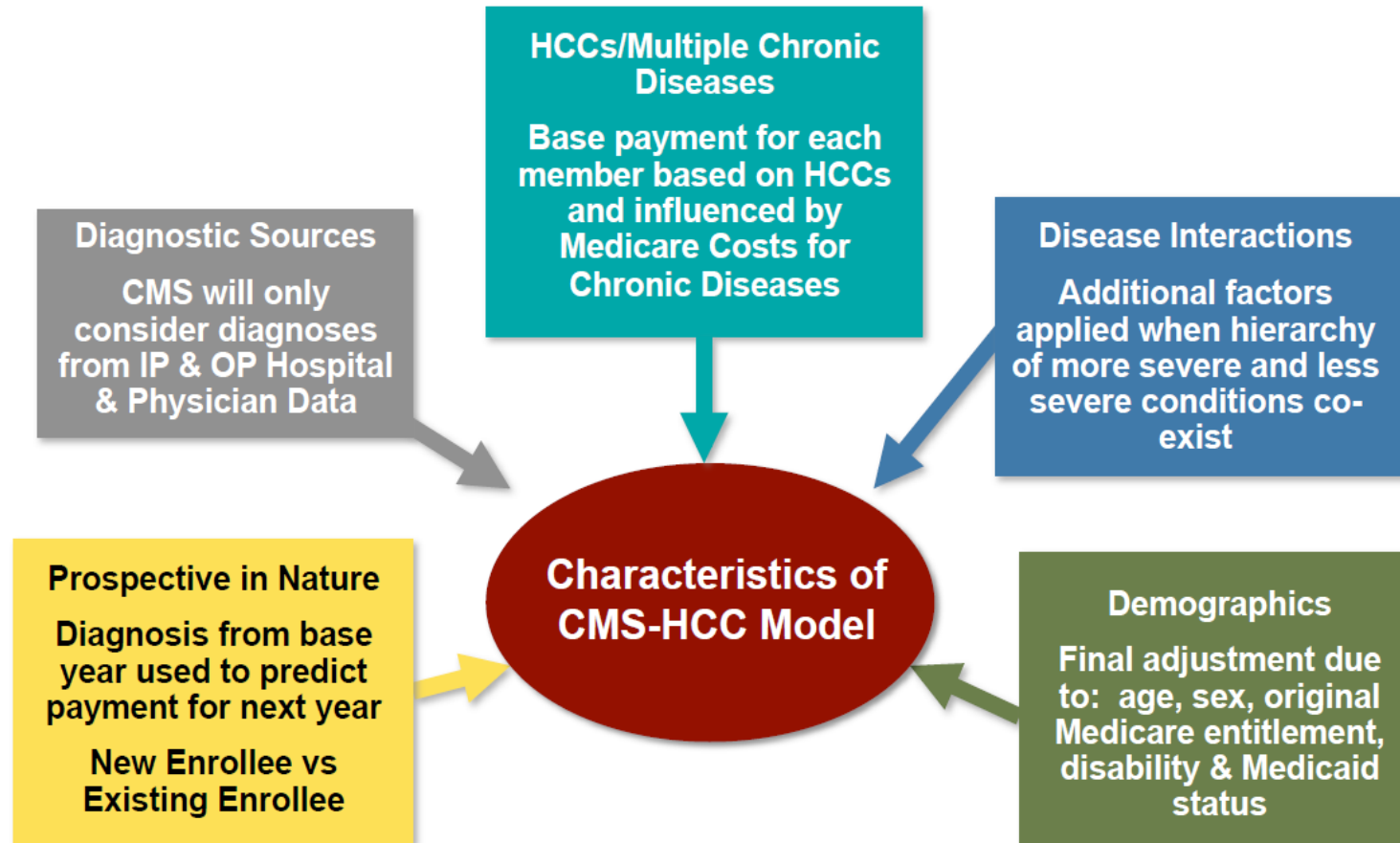
- ▶ CDPS - Chronic Illness and Disability Payment System (Medicaid)
- ▶ HCC - Hierarchical Co-Existing Conditions (Medicare)
- ▶ Health and Human Services HCC Model (ACA)
- ▶ DRG - Diagnosis Related Groups - Inpatient
- ▶ ACG - Adjusted Clinical Groups - Outpatient

Medicare HCC Model

- ▶ Hierarchies or groups of conditions
- ▶ A value is assigned to each diagnosis in the model called a risk adjustment factor (RAF)
- ▶ Not all diagnosis codes carry a value
- ▶ Trump list
- ▶ Approved Provider list (face to face encounters)
- ▶ 79 HCC Categories

HCC Risk Adjustment 101

Risk Adjustment 101 *Characteristics of CMS-HCC Model*



Medicaid CDPS Model

- ▶ 18 Major disease categories
- ▶ Hierarchies - trumped diagnoses
- ▶ Level of risk - very high, medium, low, extra low
- ▶ Personal history of, family history
- ▶ Similar coding rules as those of HCCs
- ▶ Capture all current diagnoses and all known statuses

Timing of risk adjustment calculation

- ▶ Retrospective
 - ▶ Past claims adjusted to show actual experience
- ▶ Concurrent
 - ▶ Benchmarking model, outcome is already known - current time period, used to change payment arrangements, more accurate than prospective
- ▶ Prospective
 - ▶ Current claims (diagnoses) used to predict the future

Predictive Modeling Quality of Care

- ▶ Definition of predictive modeling - An analytical review of know data elements to establish a hypothesis related to the future health care needs of a patient with varying certainty
- ▶ Predictive modeling software
- ▶ CMS Star Ratings
- ▶ HEDIS
- ▶ Case management, Disease management, Utilization management

Predictive Analysis software tool

DSTHS RiskAnalyzer[®]

RA High Risk Members

ACG Risk Adjusted

Reporting Period: 01/01/2013 to 12/31/2013

Restricted View: No

osp = All, Pharmacy Cost Band = All, Total Cost Band = All, Chronic Condition Count = All, Age = All, Frailty Flag = All, Risk Poor Coord
ty High Rx Cost = All, # Unique MDs = All, Include MEDCs = All, Include EDC = All, Exclude MEDCs = All, Exclude EDC = No All,
duct Type = All, Group = All, Total \$ Predicted = All, Total RX Gaps = All, # ER Services = All, # Inpatient Admissions = All, RX Ingredient

Age	Sex	Member Months	RRS Current	RRS Predicted	Prob	Total \$ Current	Total \$ Predicted	Total \$ Cost Impact	RX \$ Current	RX \$ Predicted	Hosdom	Chronic Condition Count	# of Unique MDs	RX Ingrid Count
68	F	12	2.58	5.61	0.77	192,913	189,095	--	13,397	15,221	3	23	14	46
86	M	12	0.66	5.20	0.65	150,725	175,422	++	12,656	12,798	0	12	8	26
77	F	12	2.58	4.51	0.57	259,995	152,216	-	7,058	7,104	2	23	15	31
71	M	12	2.58	4.49	0.49	178,831	151,458	-	6,365	7,215	4	17	10	40
84	F	12	2.58	4.20	0.46	197,285	153,671	-	1,945	1,156	3	13	7	40
76	F	12	2.58	3.98	0.42	150,449	145,846	-	12,383	9,700	2	14	8	46
87	M	12	2.58	3.64	0.38	148,434	122,608		5,208	3,293	2	14	8	26
70	M	12	2.58	3.49	0.35	124,742	117,702		7,876	12,309	5	12	6	27
74	F	12	0.66	3.46	0.32	27,948	116,615		10,698	12,518	1	10	6	35
68	F	12	2.58	3.45	0.31	110,082	116,250		16,087	14,442	2	16	13	41
79	M	6	2.58	3.37	0.29	143,310	113,587		1,844	3,082	4	14	6	15
77	F	12	2.58	3.35	0.27	239,591	112,877		2,011	2,084	0	11	7	28
93	M	12	2.58	3.32	0.25	114,071	121,658		7,508	6,972	2	10	9	14
86	F	12	1.15	3.14	0.24	169,480	105,854		9,219	7,932	1	8	4	15
82	F	12	2.58	3.06	0.23	161,131	103,057		13,340	12,792	1	9	9	43
71	M	6	2.58	2.95	0.22	159,915	107,953		671	948	0	13	7	9
74	F	12	1.45	2.93	0.21	117,712	98,775		21,206	29,086	2	12	7	31
75	F	12	1.45	2.64	0.20	128,859	96,750		7,961	6,482	1	14	13	26
69	F	12	1.45	2.64	0.20	94,588	88,949		24,661	30,413	2	14	9	37
77	M	12	1.45	2.64	0.19	51,478	88,937		6,249	8,892	1	13	10	35
83	M	3	2.58	2.60	0.18	120,865	87,799		1,733	3,208	2	13	4	27
78	F	12	2.58	2.52	0.18	68,270	85,089		9,153	11,605	1	13	9	34
82	F	12	2.58	2.49	0.17	122,791	84,070		8,670	7,843	1	16	17	37
91	F	9	2.58	2.44	0.17	134,536	82,447		538	1,531	2	9	3	14
86	F	12	1.45	2.42	0.16	57,246	81,640		19,981	30,734	1	9	8	34
75	F	12	2.58	2.39	0.16	137,815	87,434		8,126	4,951	2	11	7	29
95	F	10	2.58	2.37	0.15	124,668	80,046		3,569	2,999	0	12	6	34
72	F	12	1.15	2.37	0.15	141,623	79,924		7,782	9,314	1	6	11	22
85	F	9	2.58	2.37	0.15	74,718	86,755		16,890	10,016	5	16	11	29

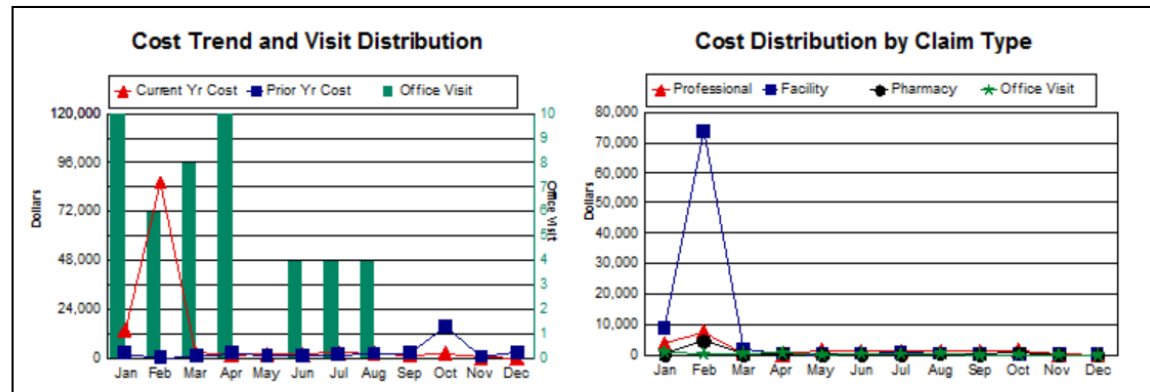
Predictive Analysis software tool

[Claims](#)
[Eligibility](#)
[Gaps in Care - 1](#)
[Pharmacy Adherence](#)
[Clinical Values](#)
[EDCs - 35](#)
[Rx-MGs - 11](#)

Identifying Information			
Sex	M	Product	MEDICARE
Age	93	Product Type	MR
Member Months	12	Parent_Group	MEDIP
Assigned PCP	110163300 - GRAND ITASCA CLINIC	Child_Group	MEDI
Assigned PCP Specialty	GP	Benefit_Package	MDNW
Imputed PCP	155458200 - L FLORIDA PHYSICIANS OF CENTRAL FLORIDA	RA_Code	0275
Imputed PCP Specialty	GP	Primary_Clinic	_Unassigned_

Risk and Utilization			
Risk		Special Markers	Utilization
RUB	5	Chronic Condition Count	10
RRS - Current	11.10	HosDom	2
RRS - Predicted	24.87	Frailty Flag	Y
Prob Hosp - 6 month	0.31	Tobacco Use	N
Prob Hosp - 12 month	0.42	Substance Abuse	N
		Ambulatory Visits	26
		Inpatient Admissions	2
		30-Day Readmits	0
		ER Services	0
		Dialysis Services	N
		Nursing Services	Y
		MH Services	N
		# Unique MDs	9
		Coord Risk	Medium
		Ingredient Count	14

Condition Markers					
Active Cancer	ICD	COPD	NP	Hypertension	TRT
Anxiety	NP	Depression	NP	Ischemic Heart Dz	TRT
Bipolar Disorder	NP	Diabetes	ICD	Migraines	NP
CHF	Rx	Disorder Lipid Metab	TRT	Parkinson's Disease	NP
Chronic Renal Failure	ICD	HIV	NP	Peptic Ulcer Disease	NP
				Persistent Asthma	NP
				Rheumatoid Arthritis	NP
				Schizophrenia	NP
				Severe Pain	NP
				Transplant	NP



Cost Analysis		RX Cost \$	
Total Cost \$		Actual Rx Cost	7,507.51
Actual Allowed Total	115,611.63	Predicted Rx	24,920.84
Actual Paid Total	36,077.95	Probability Rx Cost Outlier	99%
Predicted Total	198,565.66	Probability Rx Cost Outlier Prior	19%
Probability Total Cost Outlier	95%	Rx Cost Band	96-97%
Probability Total Cost Outlier Prior	45%		
Total Cost Band	98-99%		

Predictive Analysis software tool

High Impact EDCS	
Major EDC	EDC
HEM Hematologic	HEM07 Hemophilia, coagulation disorder
MAL Malignancies	MAL13 Malignant neoplasms, pancreas
REN Renal	REN01 Chronic renal failure
TOX Toxic Effects and Adverse Events	TOX04 Complications of mechanical devices
Moderate Impact EDCS	
Major EDC	EDC
CAR Cardiovascular	CAR03 Ischemic heart disease (excluding acute myocardial infarction)
CAR Cardiovascular	CAR06 Cardiac valve disorders
CAR Cardiovascular	CAR09 Cardiac arrhythmia
CAR Cardiovascular	CAR14 Hypertension, w/o major complications
END Endocrine	END07 Type 2 diabetes, w/ complication
GAS Gastrointestinal/Hepatic	GAS05 Chronic liver disease
GSU General Surgery	GSU14 Gastrointestinal obstruction/perforation
MUS Musculoskeletal	MUS14 Low back pain
Low Impact EDCS	
Major EDC	EDC
ADM Administrative	ADM02 Surgical aftercare
ADM Administrative	ADM05 Administrative concerns and non-specific laboratory abnormalities
CAR Cardiovascular	CAR11 Disorders of lipid metabolism
END Endocrine	END05 Other endocrine disorders
EYE Eye	EYE05 Refractive errors
GAS Gastrointestinal/Hepatic	GAS08 Gastroesophageal reflux
GSI General Signs and Symptoms	GSI05 Nausea, vomiting
GSU General Surgery	GSU03 Benign and unspecified neoplasm
GSU General Surgery	GSU05 External abdominal hernias, hydroceles
GSU General Surgery	GSU09 Nonfungal infections of skin and subcutaneous tissue
GSU General Surgery	GSU10 Abdominal pain
GTC Genetic	GTC02 Inherited metabolic disorders
GUR Genito-urinary	GUR06 Urinary symptoms
GUR Genito-urinary	GUR08 Urinary tract infections
GUR Genito-urinary	GUR12 Genito-urinary disorders, other
MUS Musculoskeletal	MUS01 Musculoskeletal signs and symptoms
MUS Musculoskeletal	MUS13 Cervical pain syndromes
MUS Musculoskeletal	MUS17 Musculoskeletal disorders, other
NUT Nutrition	NUT04 Nutritional disorders, other
REN Renal	REN05 Renal disorders, other
RHU Rheumatologic	RHU02 Gout
SKN Skin	SKN11 Dermatophytoses
SKN Skin	SKN16 Diseases of nail

Risk Adjustment and Financials

- ▶ Health plans are funded based on Risk Adjustment Factors
- ▶ Under coding leads to underpayment and loss of revenue
- ▶ Over coding leads to audit risk and compliance actions
- ▶ Example taken from AAPC:

HCC Financial Differences in Coding Specificity

No Conditions Coded (Demographics Only)		Some Conditions Coded (Claims Data Only)		All Conditions Coded (Chart Review by Certified Coder)	
76 year-old female	.468	76 year-old female	.468	76 year-old female	.468
Medicaid Eligible	.177	Medicaid Eligible	.177	Medicaid Eligible	.177
DM Not Coded		DM (no manifestations)	.118	DM with Vascular Manifestations	.368
Vascular Disease not coded		Vascular Disease without complication	.299	Vascular Disease with complication	.41
CHF not coded		CHF not coded		CHF coded	.368
No interaction		No interaction		+ Disease Interaction bonus RAF (DM + CHF)	.182
Patient Total RAF	.645	Patient Total RAF	1.062	Patient Total RAF	1.973
PMPM Payment for Care	\$452	PMPM Payment for Care	\$743	PMPM Payment for Care	\$1,381
Yearly Reserve for Care	\$ 5,418	Yearly Reserve for Care	\$8,921	Yearly Reserve for Care	\$16,573

Audit risk and compliance

- ▶ CMS conducts RADV audits to verify the accuracy of diagnosis codes submitted
 - ▶ Medical record must support the diagnosis codes
 - ▶ Provider signature must be valid
 - ▶ Provider credentials are reviewed (MD, DO, PA, NP, LCSW,OT, PT, etc)

Prospective assessments

- ▶ In-home annual wellness visit
 - ▶ Completed by MD, PA, or NP
 - ▶ Data shared with PCP and care coordinator
 - ▶ Gap closure

Diagnosis Documentation & Coding

- ▶ Report all diagnosis codes that are part of the MDM for each visit
- ▶ Cause and effect needs to be documented in order to be coded
- ▶ Rule out diagnosis codes do not count for risk adjustment (except in-patient)
- ▶ Previously treated, no longer existing diagnoses are not coded
- ▶ Evidence of Treatment (TAMPER) to code condition
 - ▶ Treatment
 - ▶ Assessment
 - ▶ Monitoring or Medicate
 - ▶ Plan
 - ▶ Evaluate
 - ▶ Referral

Coding from medical record

- ▶ Coding diagnoses from Review of Systems
 - ▶ Do not code patient stated conditions without provider verification
- ▶ Coding diagnoses from Exam
 - ▶ Valid diagnoses as recorded by provider in this section shall be coded
- ▶ Coding diagnoses from Assessment and Plan
 - ▶ Generally these diagnoses should always be coded unless they are historical
- ▶ Past medical history
 - ▶ Current vs history must be clear
 - ▶ When codes are historical in nature - code history of...
 - ▶ If a condition no longer exists it is not coded

Code for all diagnoses

- ▶ Coders may sometimes confuse diagnosis reporting with the selection of E&M level
- ▶ When choosing the E&M level, diagnosis codes should only be counted toward the level of service when they are documented as to how they were evaluated or addressed
- ▶ ICD coding guidelines instruct coders to include all comorbidities for each encounter

ICD-10 Guidelines

ICD-10-CM: Section IV. Diagnostic Coding and Reporting Guidelines for Outpatient Services

G. ICD-10-CM code for the diagnosis, condition, problem, or other reason for encounter/visit

List first the ICD-10-CM code for the diagnosis, condition, problem, or other reason for encounter/visit shown in the medical record to be chiefly responsible for the services provided. **List additional codes that describe any coexisting conditions.** In some cases the first-listed diagnosis may be a symptom when a diagnosis has not been established (confirmed) by the physician. (ICD-10-CM, 2013 Draft)

J. Code all documented conditions that coexist

Code all documented conditions that coexist at the time of the encounter/ visit and require or affect patient care treatment or management. Do not code conditions that were previously treated and no longer exist. However, history codes (categories Z80-Z87) may be used as secondary codes if the historical condition or family history has an impact on current care or influences treatment

Diagnosis specificity

- ▶ Documentation must be specific
- ▶ Code to the highest specificity possible at all times
- ▶ Comorbidities - cause and effect must be clearly documented to be coded
- ▶ Modifying factors should be clearly documented
- ▶ Chronic vs Acute
 - ▶ Commonly under diagnosed conditions
 - ▶ Hypertension
 - ▶ Diabetes

Health status codes

- ▶ Certain health status codes are very important to assess, document and code at least annually using the highest level of specificity
 - ▶ Patients undergoing dialysis (V45.11)
 - ▶ Lower limb amputation status (V49.7X)
 - ▶ Asymptomatic HIV status (V08)
 - ▶ Ostomy (specific site) (V44.X)

Commonly coded diagnoses in Risk Adjustment Models

- ▶ Basic concepts and diseases
 - ▶ Related progression and comorbidities
 - ▶ Understand clinical documentation more clearly

Oncology reminders

- ▶ Malignancies should only be documented when patient has evidence of current disease. If the disease has been eradicated through surgical intervention, radiation or chemotherapy code the history of code
 - ▶ Patients who do not receive definitive treatment should still be coded as active disease
 - ▶ Patients who have successfully completed treatment should be coded with a history of code

Stroke coding

- ▶ A stroke (CVA) is an acute event, it should not be coded as active for an extended period of time
- ▶ Once the patient is discharged, it should be coded as a history of CVA with or without residual effects
 - ▶ Residual effects should be coded every time they are assessed
 - ▶ Hemiparesis must be documented as due to CVA to be coded as such
 - ▶ Potential for guidelines to change with ICD10
 - ▶ Use additional codes to identify the presence of
 - ▶ Alcohol abuse, dependence
 - ▶ Tobacco use
 - ▶ Hypertension

Angina

- ▶ Angina
 - ▶ Chronic Condition, may or may not be related to MI
 - ▶ Notice how documented, NOS, unstable, etc.
 - ▶ New ICD 10 combination codes
 - ▶ Use additional codes to identify related factors:
 - ▶ History of tobacco smoke
 - ▶ Tobacco dependence
 - ▶ Tobacco use

Artificial openings

- ▶ Important status factor and should be coded on every appropriate encounter
 - ▶ Affects patient care decisions
 - ▶ Risk for infection
 - ▶ Requires additional monitoring
 - ▶ Ensure the opening is still current as they may be temporary

Amputations

- ▶ Amputations must be coded at least annually
 - ▶ If not coded, no credit is given in risk adjustment

BMI and Obesity

- ▶ BMI reading may be reported by any clinician
- ▶ BMI codes should never be primary diagnosis
- ▶ BMI measures in pediatrics (2-20) are based on a percentile
- ▶ Coders should only code the BMI when documented in the chart, do not calculate
- ▶ Obesity must be reported by treating provider not by other clinicians
 - ▶ Morbid obesity is risk adjusted

Chronic Kidney Disease (CKD)

- ▶ Decrease in function of the kidneys
 - ▶ Increased risk for people with hypertension, diabetes; possibly also hereditary
 - ▶ Coders may not assign a diagnosis or staging based on review of lab data
 - ▶ Treating provider must document the diagnosis with which of 6 stages
 - ▶ If provider documentation is between stages (i.e. I-II, coder should choose lower stage)
 - ▶ If documentation uses mild, moderate or severe coders may assign appropriate stage
- ▶ Code for dialysis when appropriate

Congestive Heart Failure

- ▶ CHF - heart cannot pump enough blood (damaged weakened heart muscle)
 - ▶ Acute, chronic, acute on chronic or unspecified
 - ▶ Systolic, diastolic or unspecified
 - ▶ Use additional codes:
 - ▶ Heart failure due to hypertension
 - ▶ Heart failure following surgery
 - ▶ Heart failure due to hypertension with CKD

Chronic Obstructive Pulmonary Disease (COPD)

- ▶ Often referred to as COPD, emphysema, chronic bronchitis, obstructive asthma
- ▶ Permanent condition usually progressively worsens
- ▶ Document and code patients receiving oxygen therapy
- ▶ Acute on Chronic
 - ▶ Acute exacerbation
- ▶ Code related factors:
 - ▶ Exposure to environmental smoke
 - ▶ Tobacco use
 - ▶ Tobacco dependence

Diabetes

- ▶ Type 1 - body does not make insulin
- ▶ Type 2 - body does not make enough insulin or unable to use body made insulin
- ▶ Most common disease under documented and often miscoded
- ▶ Complications must clearly be stated with cause and effect (except gangrene)
 - ▶ Diabetes with neuropathy
 - ▶ Diabetes and neuropathy (cannot be assumed to be related)
- ▶ Code all known manifestations as a separate code
- ▶ ICD10 does away with controlled versus uncontrolled

Asthma

- ▶ Inflammatory disease of the airways
 - ▶ Intrinsic or extrinsic (ICD10 does away with this)
 - ▶ Obstructive (COPD)
 - ▶ Comorbidity (allergy, etc)
- ▶ 5th digit identifies (unspecified, exacerbation, etc)
- ▶ Code related factors:
 - ▶ Exposure to environmental smoke
 - ▶ Tobacco use
 - ▶ Tobacco dependence

Hypertension

- ▶ Chronic elevated blood pressure, making the heart work harder than normal
 - ▶ < 140/90 controlled
 - ▶ Primary or secondary
 - ▶ Other complications, stroke, MI, heart failure, peripheral arterial disease, CKD
 - ▶ Benign, malignant, unspecified is no longer coded with ICD10
- ▶ Hypertensive heart disease
 - ▶ cause and effect documented (combo code used)
 - ▶ Cause and effect not documented (code conditions separately)

Myocardial Infarction (MI)

- ▶ Heart Attack
 - ▶ Diagnosis of Old MI is important for risk adjustment models, as it carries implications for ongoing monitoring and treatment
 - ▶ May be listed on past problem list
- ▶ New ICD 10 guidelines: MI is considered current \leq 4 weeks old
- ▶ Use additional codes to identify:
 - ▶ History of tobacco use
 - ▶ Tobacco dependence

Dementia

- ▶ Dementia is a serious loss in the overall cognitive ability beyond normal aging expectations
- ▶ Under age 65 determined early onset
- ▶ Code first the underlying physiological condition if appropriate
- ▶ With or without behavioral disturbances

Hepatitis

- ▶ Inflammation of the liver
 - ▶ Acute vs chronic
 - ▶ Hepatitis A, B, C, D, E
 - ▶ Hepatitis C and new treatment regimen (Sovaldi/Harvoni)

Challenges with provider coding

- ▶ Providers have not been trained in coding
- ▶ Providers are unaware of coding guidelines
- ▶ In many environments, providers have no incentive to code and submit ALL diagnosis codes
- ▶ Time constraints
- ▶ Errors are rarely corrected

Itasca Medical Care (IMCare) specific risk adjustment scenarios

- ▶ In-Network At-Risk providers
 - ▶ 100% share in the gain or loss of profits
 - ▶ Accurate coding affects provider payments and settlement outcomes

Conclusion

- ▶ Accurate risk adjustment coding will continue to increase in importance; if you'd like further information or to request a coding education session for your facility, please contact me:

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