Texas Association of Community Health Centers

www.tachc.org

NOVEMBER 15, 2013

9:00 AM

WEBINAR

Coding to Ensure Accurate Health Risk Scoring

JAMES L. HOLLY, MD

CHIEF EXECUTIVE OFFICER

SOUTHEAST TEXAS MEDICAL ASSOCIATES, LLP

WWW.JAMESLHOLLYMD.COM

CMS-HCC Risk Adjustment Model

- The CMS hierarchical condition categories (CMS-HCC) model, implemented in 2004, adjusts Medicare capitation payments to Medicare Advantage (MA) health care plans for the health expenditure risk of other enrollees.
- Its intended use is to pay plans appropriately for their expected relative costs.
- For example, MA plans that disproportionately enroll the healthy are paid less than they would have been if they had enrolled beneficiaries with the average risk profile.
- MA plans that care for the sickest patients are paid proportionately more than if they had enrolled beneficiaries with the average risk profile.

CMS-HCC Risk Adjustment Model

- Risk Adjustment is one of a set of techniques CMS implements to compensate MA plans and to protect beneficiary access to these plans.

- Other techniques include:
  1. Total Beneficiary Cost metric
  2. Discriminatory Cost-Sharing Assessments
  3. Per Member Per Month Actuarially Equivalent Cost Sharing Maximums
  4. Service Category Cost Sharing Standards
  5. Discriminatory Pattern Analysis

History of Risk Adjustment Models

Risk Adjustment Model	Time Frame	R2 Factor
Adjusted Average Per Capita Cost (AAPCC)	Pre-2000	0.0077
Principle Inpatient Diagnostic Cost Group (PIP-DCG)	2000 – 2003	0.0550
CMS – HCC	2004 – 2008	0.0997
CMS – HCC, Version 12, 2005 Recalibration	2009 – 2013	0.1091
CMS – HCC, Version 21, 2007 Recalibration	Proposed	0.1246

- AAPCC accounted for only 1% of the cost variation
- PIP-DCG (DXG) increased that to 5.5%
- CMS-HCC Version 12 increased that to 11%
- CMS-HCC Version 21 increased that to 12.5%

Contrasting AAPCC with CMS-HCC

- Historically, capitation payments to Medicare managed care plans were linked to Fee-For-Service expenditures by geographic areas, with payments set at 95% of an enrollee's county's Adjusted Average per Capita Cost (AAPCC).
- The AAPCC actuarial rate cells were defined by age, sex, Medicaid enrollment (indicating poverty), institutional status (for nursing home residents), and working aged status (for beneficiaries with employer-based insurance where Medicare is a secondary payer.)
- Separate county factors were calculated for the aged and non-aged (under 65 years) disabled.
- The AAPCC payment methodology explained only about 1 percent of the individual variation in expenditures for Medicare beneficiaries.

Contrasting AAPCC with CMS-HCC

- For beneficiaries with similar demographic profiles the AAPCC did not pay more for sicker people.
- This payment methodology was not appropriately compensating plans enrolling sicker beneficiaries or plans specializing in treating high-cost populations.
- Thus the Principle Inpatient Diagnostic Cost Group (PIP-DCG) was introduced in 2000. This increased the ability to predict cost differences to 5.5% from 1%. but because it was based on hospital admissions, it penalized plans which were successful in decreasing admissions, making it appear that patients were not sick because they had not been admitted to the hospital.
- In 2004, the CMS-HCC Model replaced the PIP-DCG.
- Its strength is its facility to be modified for improvements.

HCC Risk Value

Structure, Organization and Concepts of the

Hierarchical Condition Categories (HCC)

- Over 14,000 ICD-9 codes were organized into 805 diagnostic groups.
- These groups were further organized into 189 HCCs.
- Diseases within an HCC are related clinically and with respect to cost of care.
- 5,243 ICD-9 Codes, contained in 70 HCCs, were included in the CMS HCC/RxHCC list for additional payments.

Principles for HCC Risk Adjustment Model

1. Diagnostic categories should be clinically meaningful
2. Predict medical expenditures
3. Have adequate sample sizes to permit accurate and stable estimates of expenditures
4. Be used to characterize person's illness level within each disease process; effects of unrelated disease processes accumulate.
5. Encourage specific coding
6. Not reward coding proliferation

Principles for HCC Risk Adjustment Model

7. Not penalize providers for recording additional diagnoses
8. Classification System should be internally consistent (transitive)
9. Diagnostic classification should assign all ICD-9 codes (exhaustive classification)
10. Discretionary diagnostic categories should be excluded from payment models.

HCC Risk Value

- Each HCC is assigned a coefficient score.
- When the coefficients are added together they produce a coefficient aggregate.
- When the coefficient aggregate is modified by multiple other factors, they produce the Risk Adjustment Factor, which is used to determine the additional payment to the HMO.

HCC Risk Value

- For unrelated diseases, HCCs accumulate; for example, a male with heart disease, stroke and cancer has (at least) three separate HCCs coded and his predicted cost will reflect increments for all three problems.

- The CMS-HCC model also incorporates some interactive terms for conditions where the costs are more than additive; for example diabetes and CHF leads to higher expected costs than would be calculated by adding the separate increments.

HCC Risk Value Continued

- The CMS-HCC model also includes a set of disease-disabled status interactions; for example, a female who has cystic fibrosis and is disabled receives an incremental payment to account for her higher expected costs.
- The CMS-HCC model also relies on demographics which:
  1. Include 24 mutually exclusive Age-Sex cells (female, age 65-69)
  2. An indicator for at least one month of Medicaid is interacted with sex and either age or disabled status to differentiate predicted costs.
  3. An originally disabled indicator, interacted with sex and distinguish beneficiaries who are currently age 65 or older but where first entitled to Medicare before age 65 because of disability.

The Age-Sex, Medicaid and originally disabled categories add to each other and to the HCC diagnostic categories.

HCC Risk Value Continued

- Chronic Conditions Special Needs Plans

- Under the Medicare Modernization Act of 2003, Congress created a new type of MA plan focused on coordinating care for beneficiaries with special needs called a Special Needs Plan (SNP). Three types:
  1. Institutionalized (nursing home or nursing home certifiable)
  2. Dually eligible to both Medicaid and Medicare
  3. Severe or disabling chronic conditions

HCCs Have Value in three areas

There are three different circumstances where HCC scores are used for payment consideration:

1. **Medicare Advantage** where the gross payment to the HMO is increased as a result of the HCC scores. This payment is made to the HMO.
2. **Accountable Care Organizations** where the cost savings are calculated with the HCC predicted expenditure used to determine the savings. This payment is made to the ACO.
3. **Medical Home** where the per-member-per-month payment for patient-centric care is calculated based on the aggregate HCC score and the level of Medical Home accreditation, i.e., if the HCC aggregate score (called the Risk Adjusted Factor or RAF) is 2.0 or above and the PC-MH is a Tier III, the highest payment would be received by the practice.

General Concepts

- In 2007,RX HCC codes were added to the reimbursement for managing patients with other illnesses which while they did not rise to the level of complexity and cost-for-care, as the HCC diagnoses, they did qualify for a lower additional payment due to increased medication costs.
- The RxHCC designations cover many diagnoses not HCC.
- Almost all HCC diagnoses are also RxHCC codes, but NOT all RxHCCs are also HCCs.
- While HCCs have a greater value, there are so many more RxHCCs than HCCs, the total revenue from RxHCCs will typically exceed the total revenue from HCCs.

HCC vs. RxHCC

These are examples of diagnoses which are not HCC but are RxHCC codes:

- Hypertension is not an HCC (i.e., 401.1 or 401.9, etc.) but hypertension is an RxHCC.
- Osteoporosis, another common illness, is not a medical HCC but is an RxHCC.
- CAD in itself is not a medical HCC, but it is an RxHCC. Because CAD is a general term, it is imperative that if the patient has angina or an old MI, the chronic problem list should include angina or old MI as they are HCC diagnoses. (Note : in 2014 "old MI" is being dropped as an HCC.)

HCC Risk Value

HCCs are assigned diagnoses from any of five sources:

1. Principal hospital inpatient
2. Secondary hospital inpatient
3. Hospital out-patient
4. Physician , CFNP, PA outpatient whether primary or specialist.
5. Clinically trained non-physician (e.g., psychologist, podiatrist)

New Auditing Policy

New Auditing Policy Announced 2008

- CMS issued a new audit policy regarding HCCs. They have also announced a substantial change in what they will do when they find a problem with coding. In the past, any coding problems were fixed for just the specific codes that were in error in the audit – i.e. the exposure was minimal. Going forward the percent of error will be applied to the total HCC/RxHCC report.

New Auditing Policy

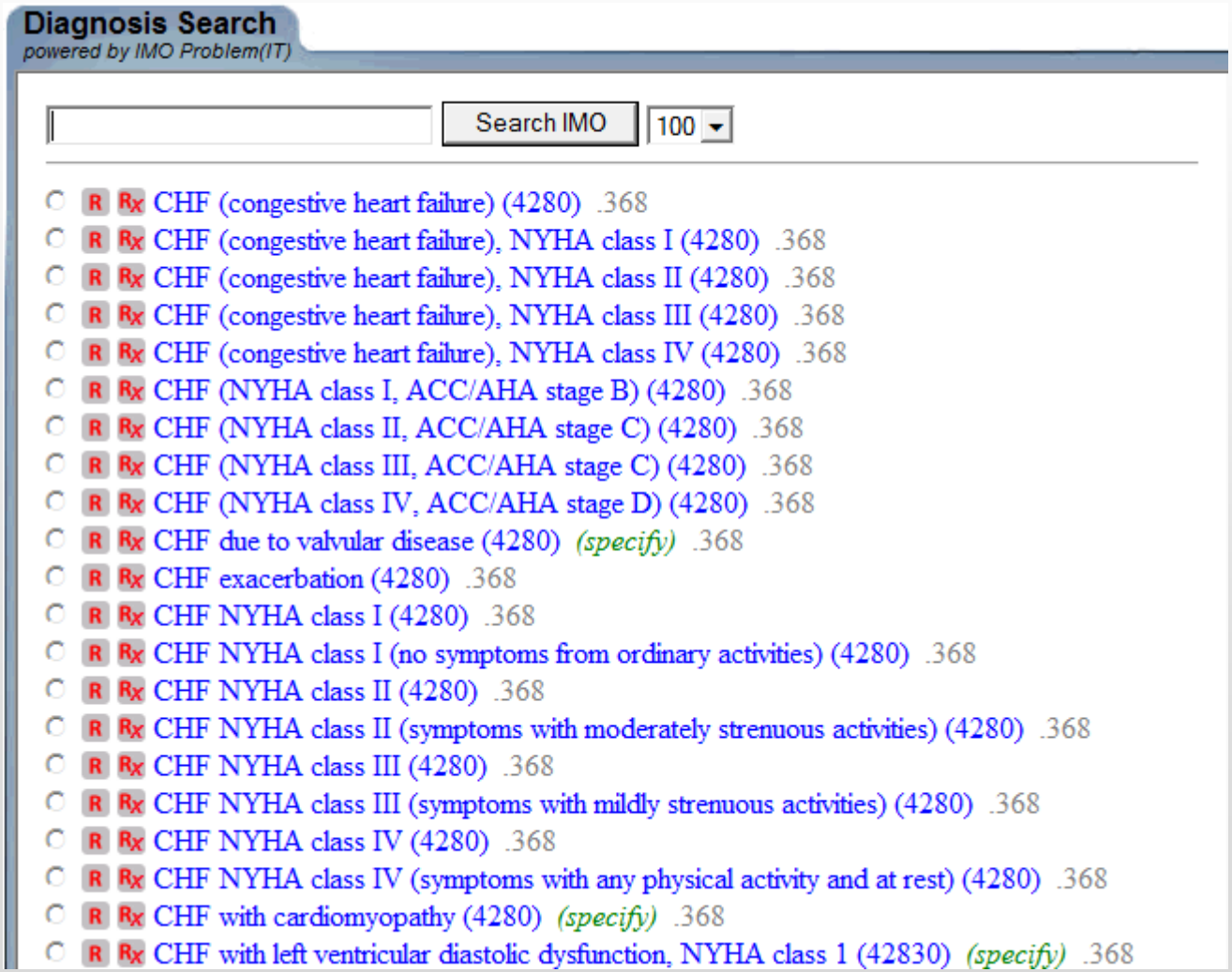
- The new procedure will assume they have audited an appropriate sample of codes and correct the entire payment amount by the sample error rate – i.e. extraordinary exposure. So a 5% error rate in the sample will result in a 5% reduction in premium – big.
- No one has seen detailed audit regulations yet. They may be having difficultly putting such a policy into place – but they strongly believe there is significant over coding going on across the industry – hence the reason for the new policy.

Requirements for identifying HCCs

The requirements for successfully benefiting from the HCC Risk program are:

1. You must have a robust ICD-9 code list which is intuitively accessible by healthcare providers in the context of a patient encounter.
2. You must have a means of identifying which codes are HCC, RxHCC, or both.

Robust ICD-9 Codes



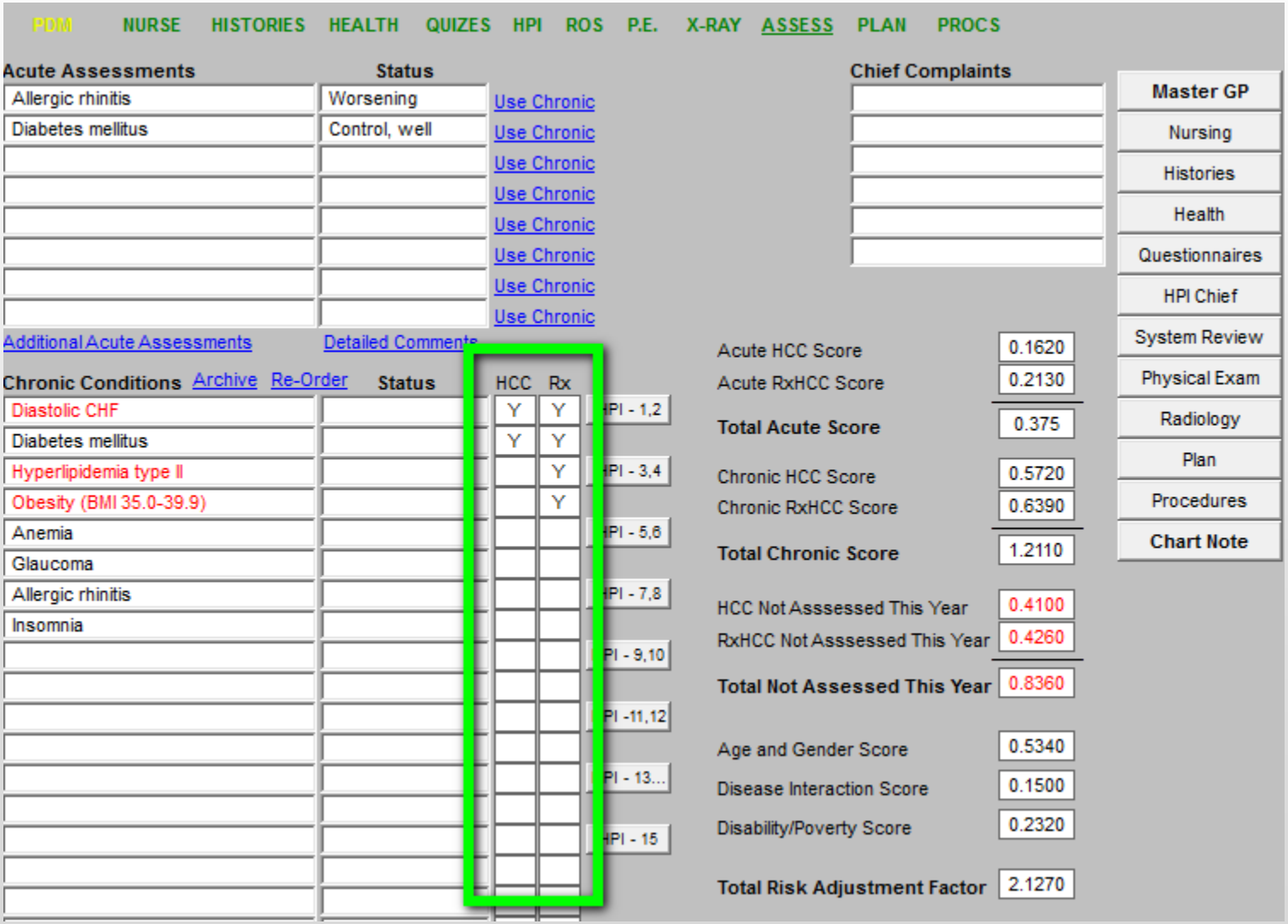
Requirements

- You must have a system which audits the validity of assigning those ICD-9 codes to a particular patient to avoid the potential for abuse in over-diagnosing patients for financial benefit.

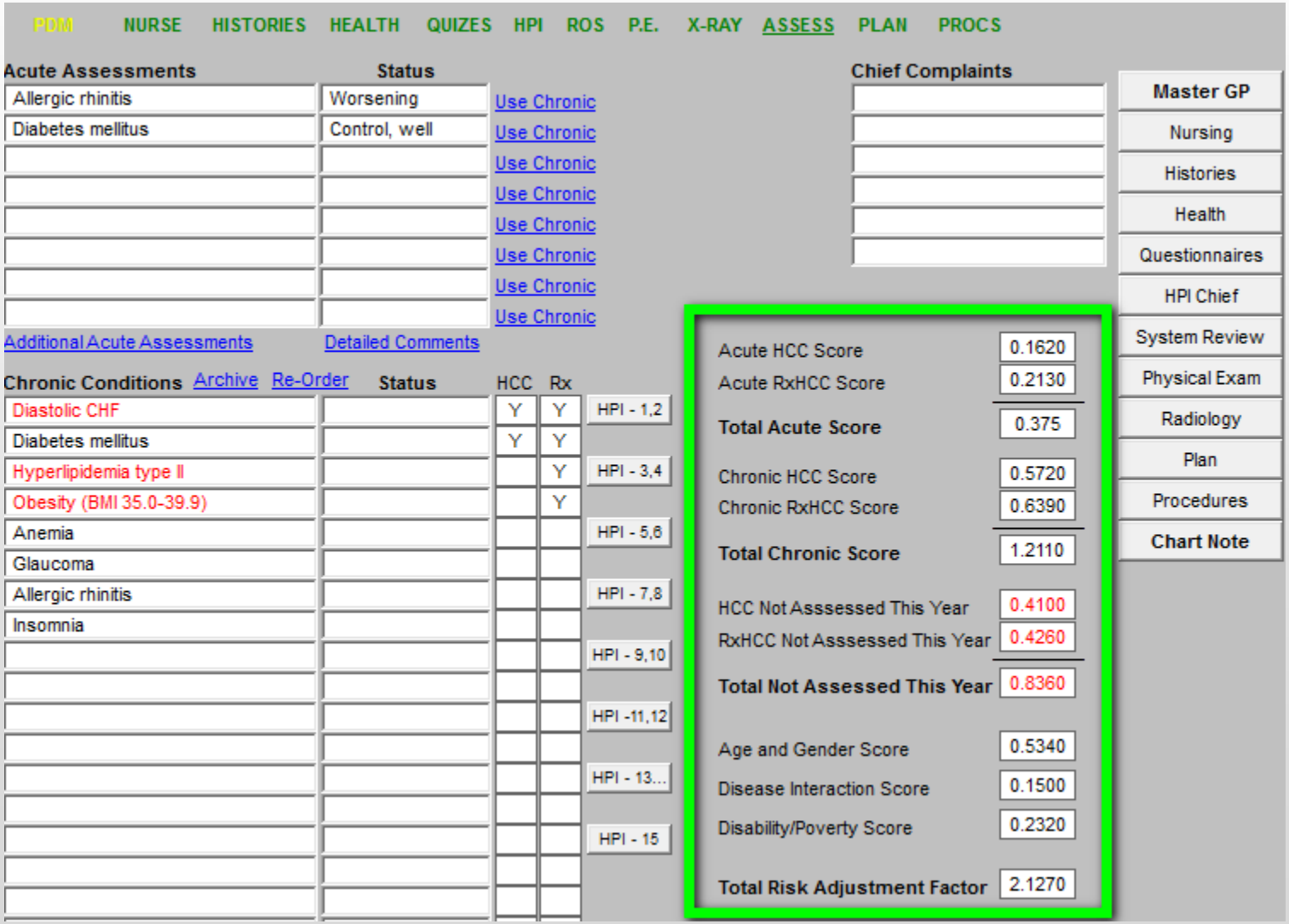
- You must have a means for aggregating this information for reporting to the health plan and by the health plan to CMS.

- You must have a means of evaluating each of the HCC and/or RxHCC diagnoses and documenting that evaluation.

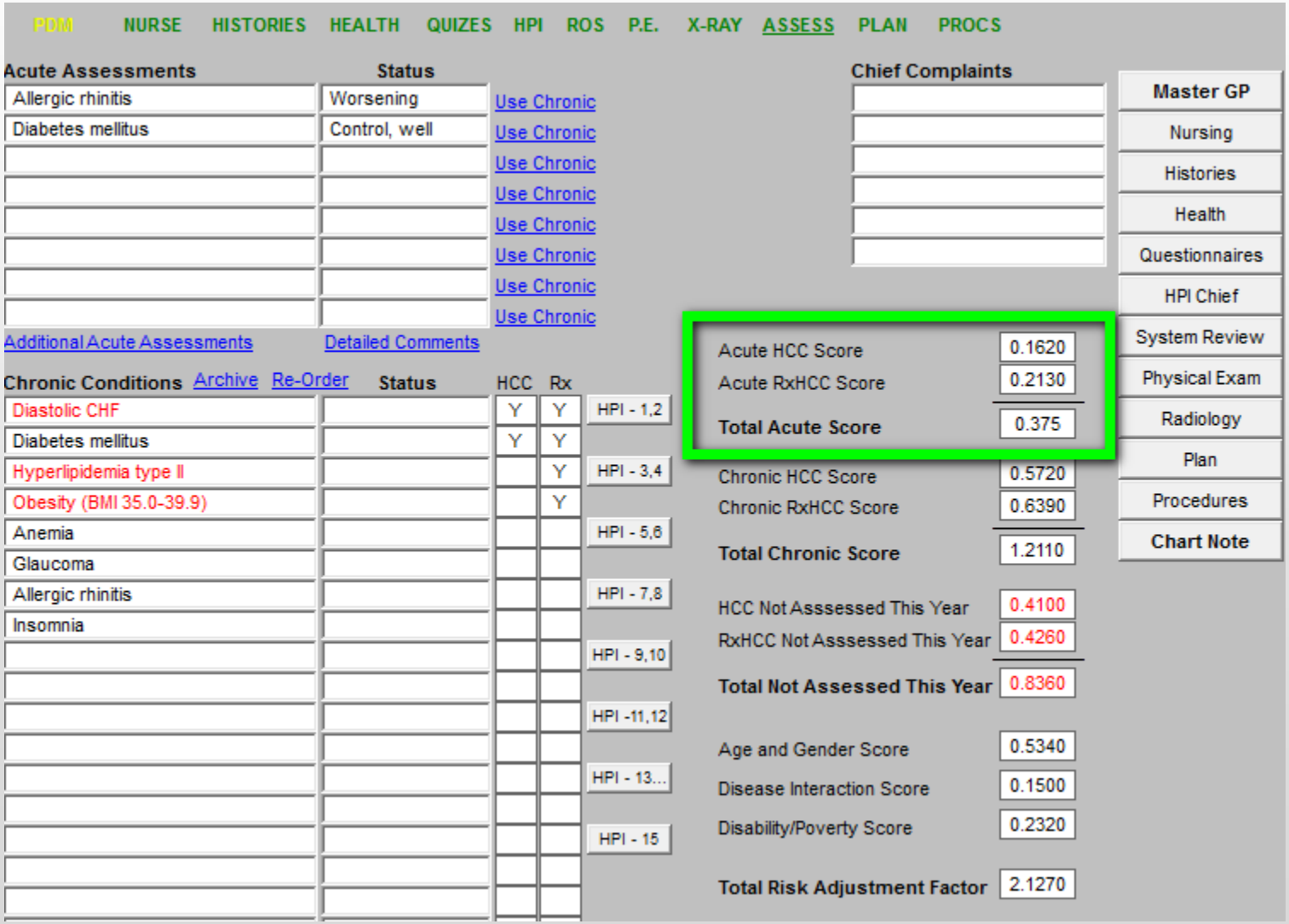
Robust ICD-9 Codes



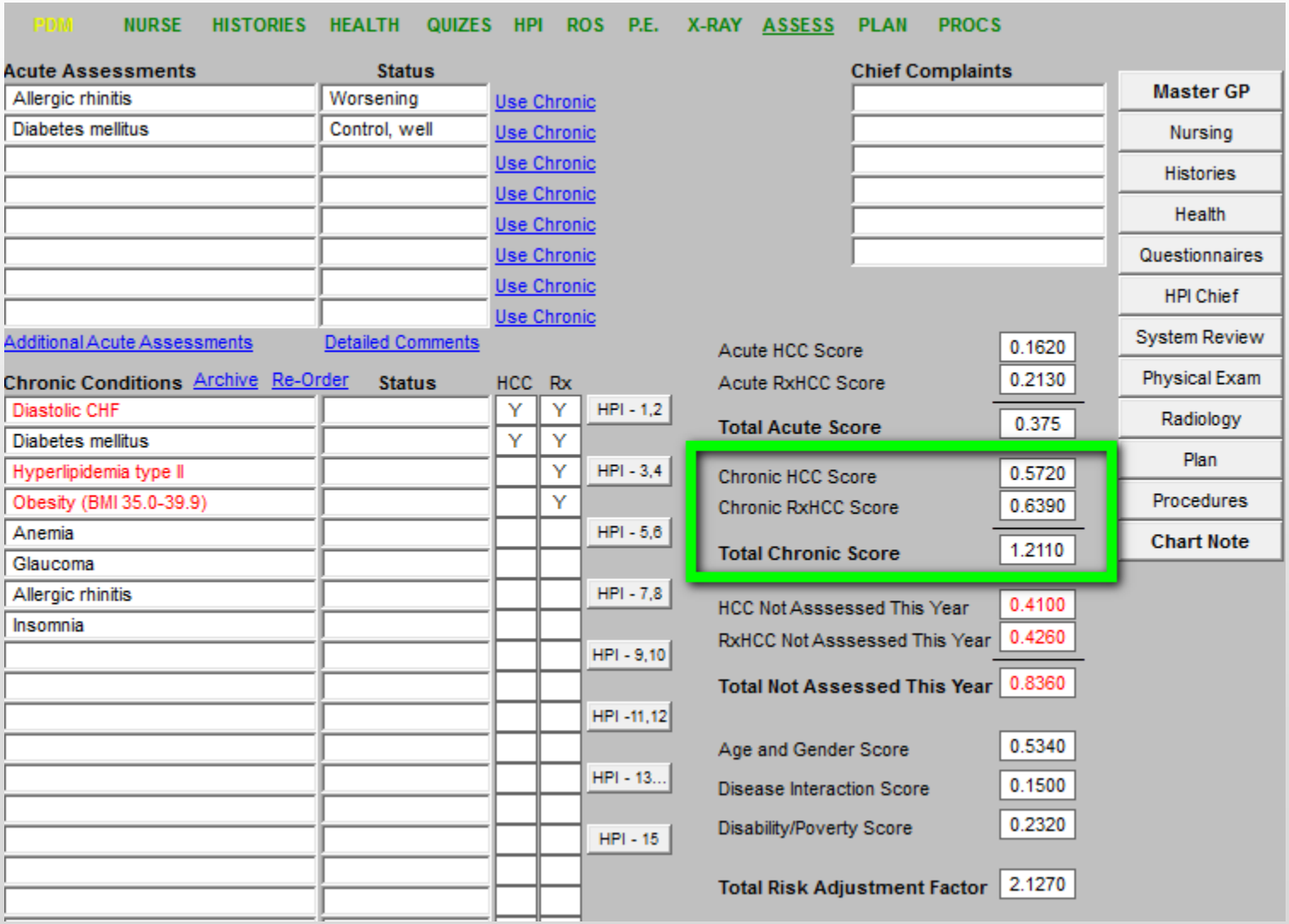
Robust ICD-9 Codes



Robust ICD-9 Codes



Robust ICD-9 Codes

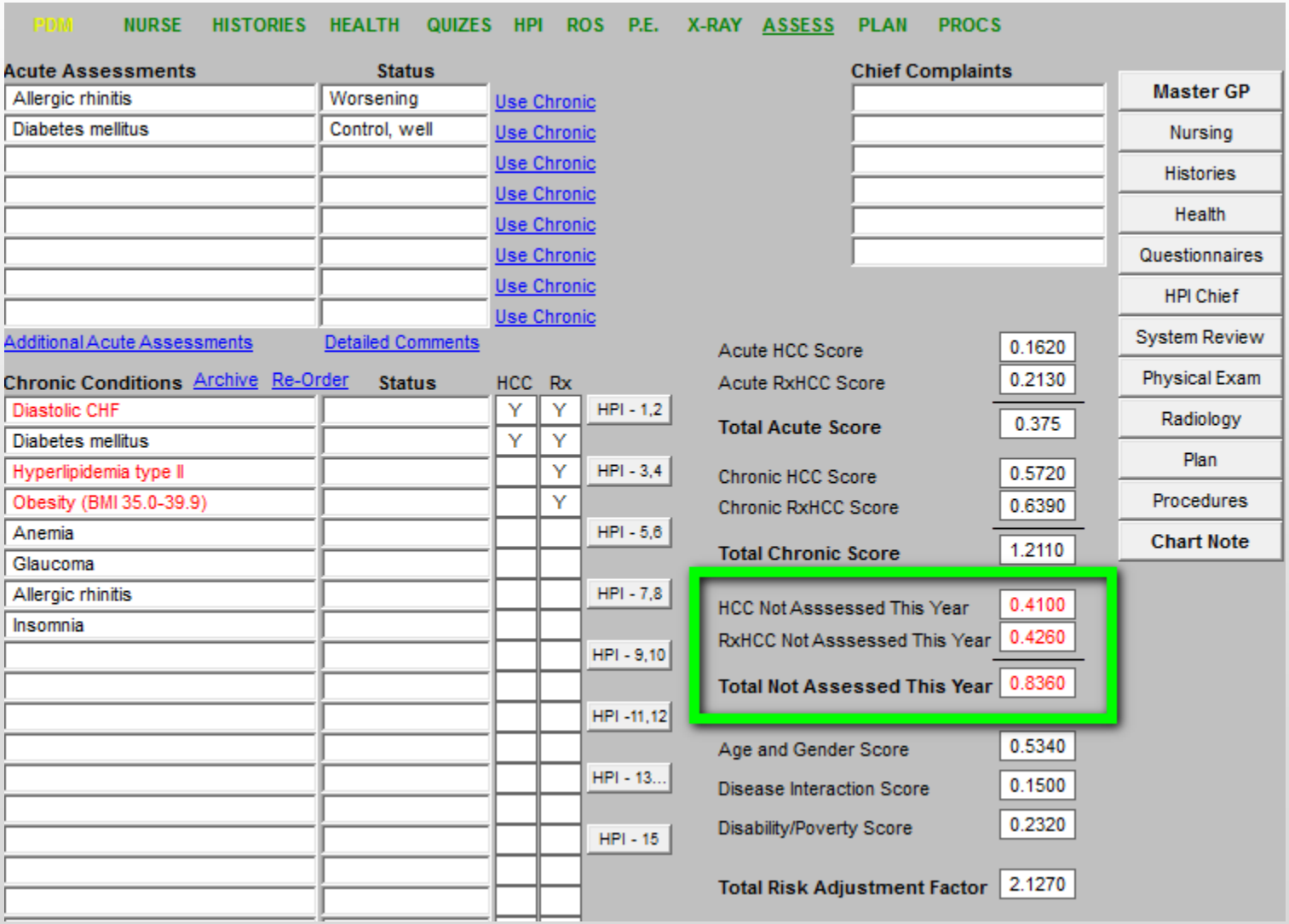


SETMA's Strategy

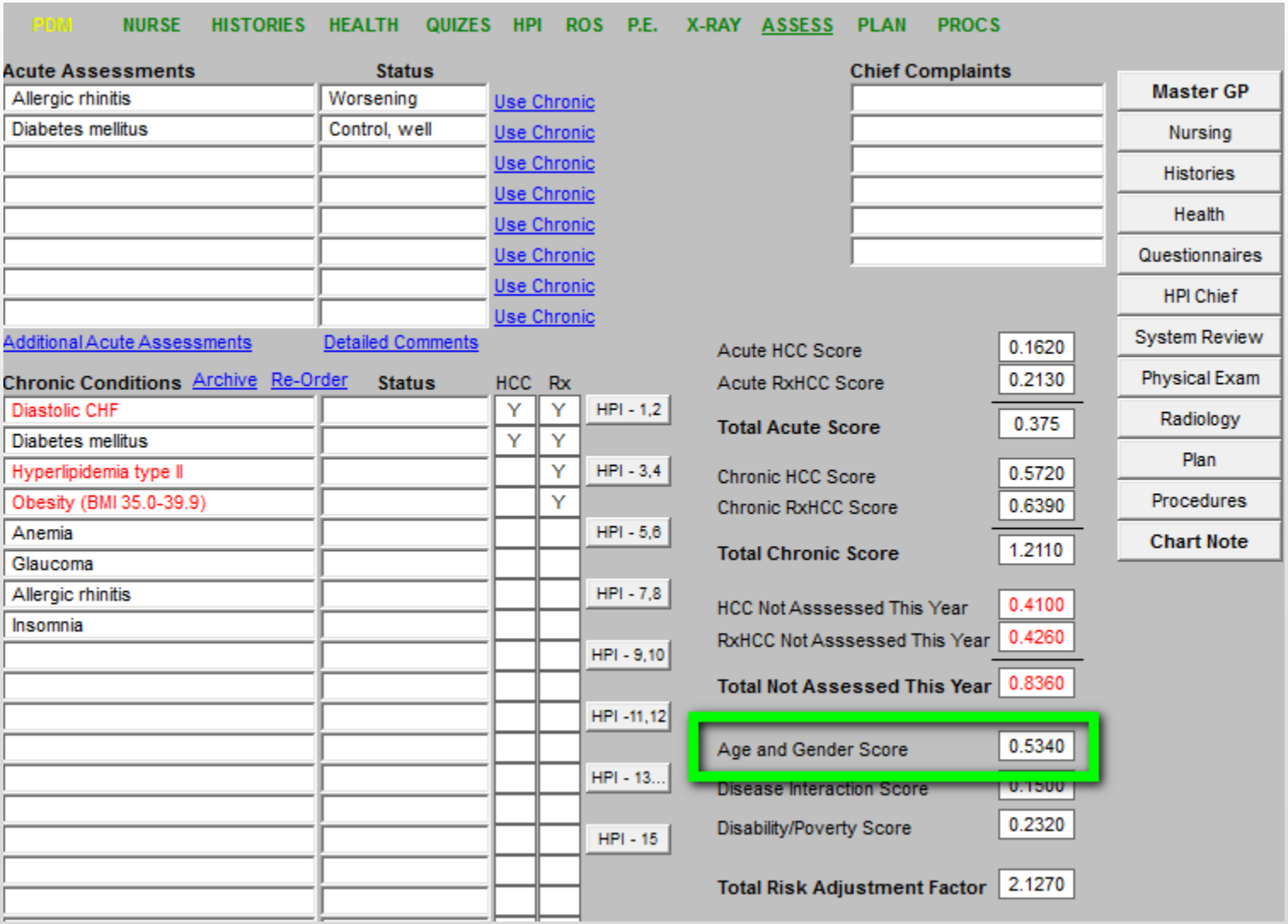
- At each visit, providers can view the patients HCC/RxHCC status for both the acute visit and the patient's chronic conditions.

- Chronic conditions which are an HCC or RxHCC, that have not been evaluated during the year, are highlighted in red to alert a provider to assess them before the end of the payment year.

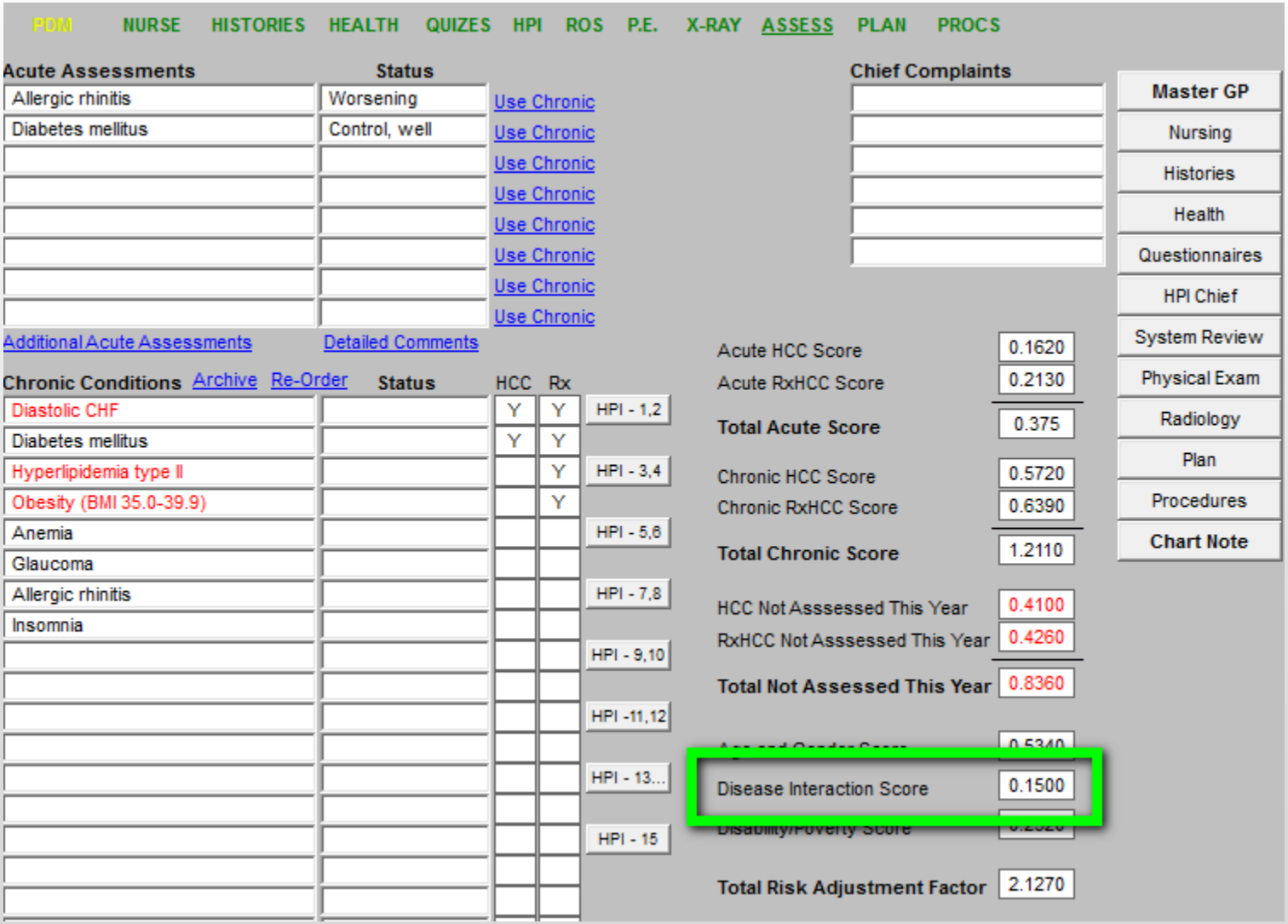
Robust ICD-9 Codes



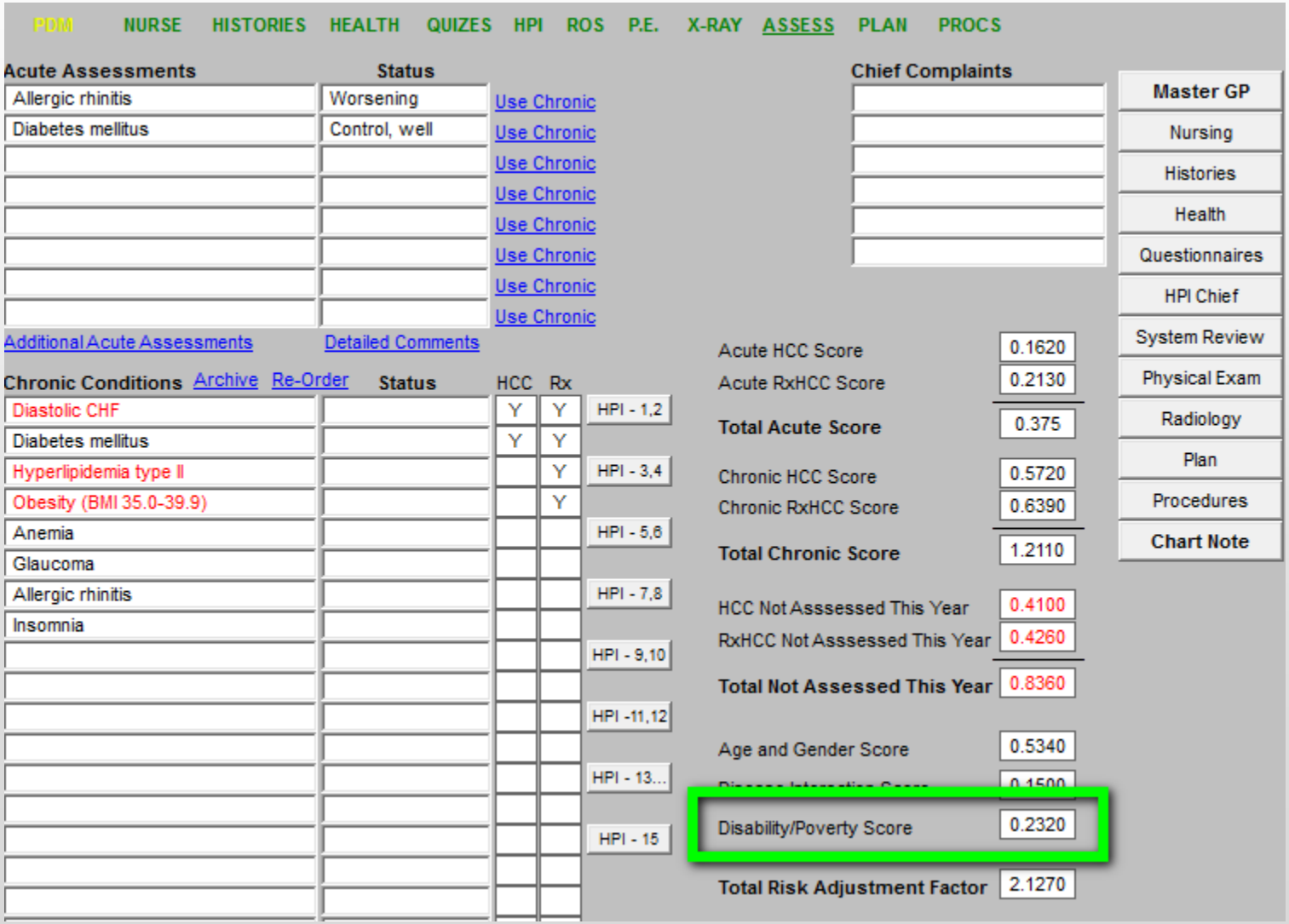
Gender and Age HCC Coefficient



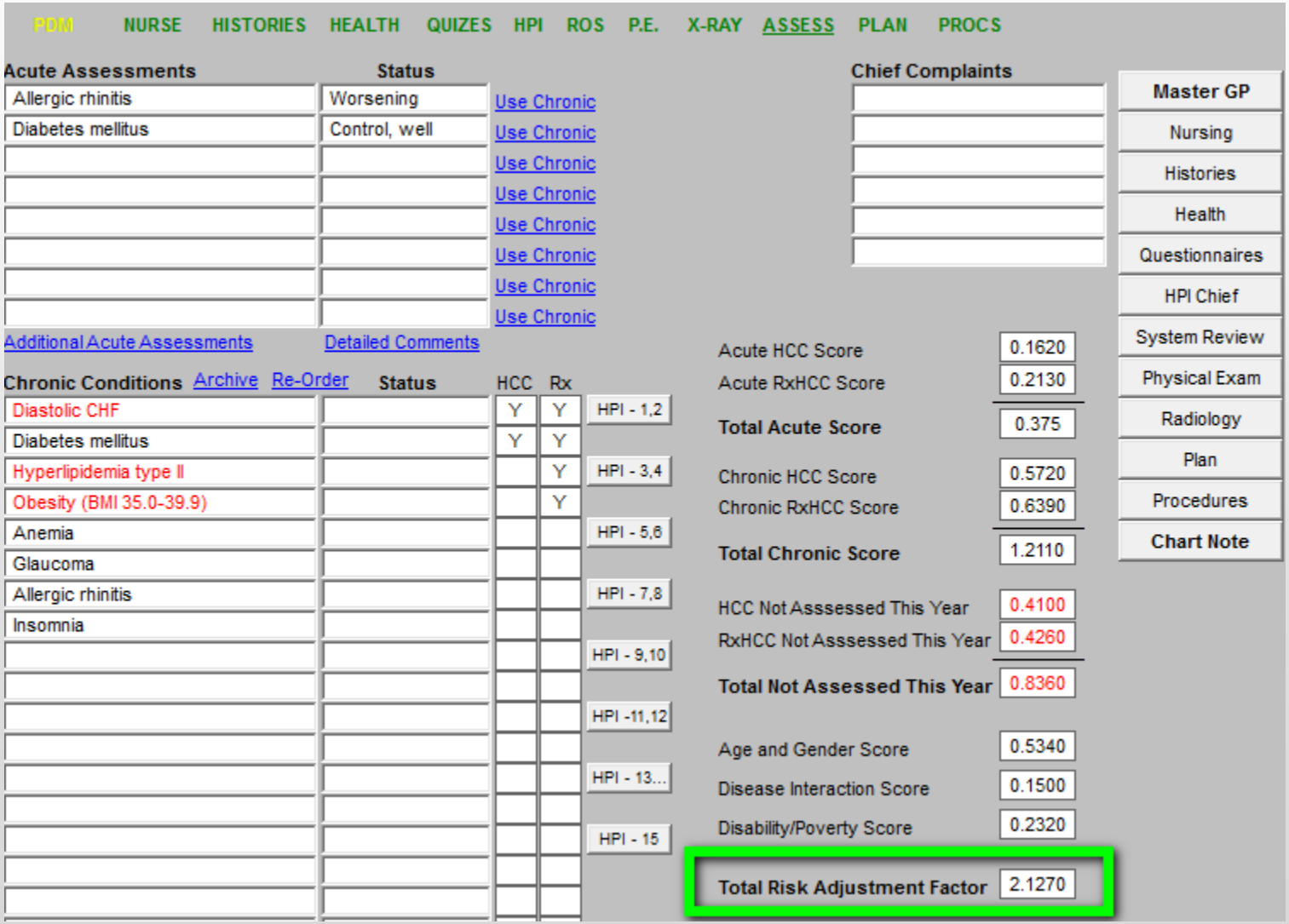
Disease Interaction Coefficient



Disability/Poverty Coefficient



Total Risk Adjustment Factor



Robust ICD-9 Codes

- The following are examples of coding so as to maximize valid HCC/RxHCC codes rather than using non-specific diagnostic codes which are not HCC/RxHCC.

- Increasingly, “unspecified” ICD-9 Codes are not accepted as codes for HCC and in ICD-10, they absolutely will not be accepted.

Robust ICD-9 Codes

Chronic Kidney disease (CKD) vs. Renal insufficiency:

- Review GFR levels on labs and re-run labs within 3 months if GFR less <60. When GFR levels are consistently <60, use CKD unspecified 585.9, or use specific level CKD III 585.3 (GFR 30-59), CKD IV 585.4 (GFR 15-29), or CKD V 585.5 (GFR less than 15). Do not use Renal insufficiency 593.9 if level is consistently <60.

Cardiac arrhythmia vs. specified arrhythmia:

- Atrial Fib/PAF (427.31), Atrial Flutter (427.32), SSS/Sinoatrial Node Dysf (427.81), PSVT (427.0), Parox. Tachycardia (427.2), Parox Ventric Tachycardia (427.1) are specific and risk-assessed. Cardiac arrhythmia 427.9 is not risk-assessed.

Robust ICD-9 Codes

Abuse vs. Dependence:

- Alcohol dependence 303.90 is risk-assessed. Alcohol or drug abuse is not.

The word “chronic” makes some diagnoses risk-assessed:

- Chronic Hepatitis 571.40 is risk-assessed vs. Hepatitis 573.3, which is not.
- Chronic Hepatitis B 070.32 is risk-assessed vs. Hepatitis B 070.30, which is not.

Robust ICD-9 Codes

Major, recurrent depression is risk-assessed:

- 296.X Episodic mood disorder (Mild 296.1, Moderate 296.2, Severe 296.3) 296.80 Bipolar disorder, unspecified
- 296.90 Mood disorder, episodic, unspecified
- 296.2 Major depression, single episode
- 296.3 Major depression, recurrent episode
- Definition of mood disorder from Ingenix ICD-9-CM for Physicians 2009 Expert: "Mood disorder that produces depression, may exhibit as sadness, low self-esteem, or guilt feelings; other manifestations may be withdrawal from friends and family, interrupted sleep."

Unspecified depression is not risk-assessed:

- 311 Depression, not otherwise specified

- Must document the characteristics of the depression and it's current status, i.e. Major depression - stable on meds, Bipolar disorder – not controlled, referred to Dr. Smith.

Robust ICD-9 Codes

Code higher level DM and code manifestation:

- 250.00 DM w/o Complication
- 250.40 DM w/Renal Manifestations + CKD 585.9, Nephropathy 583.81, or Nephrosis 581.81
- 250.50 DM w/Ophthalmic Manifestations + Glaucoma 365.44, Macular Edema 362.07, Retinopathy 362.01-362.07, Cataract 366.41, or Retinal Edema 362.07
- 250.60 DM w/Neurological Manifestations + Polyneuropathy 357.2, Gastroparesis 536.3, Peripheral Autonomic Neuropathy 337.1, Neurogenic Arthropathy 713.5
- 250.70 DM w/Peripheral Circulatory Disorders + PVD 443.81
- 250.80 DM w/Other Specified Manifestations + DM w/Ulcerations 707.10, 707.9, Bone Changes 731.8, or Hypoglycemia (no add'l code)
- 250.90 DM w/Unspecified Complication

You may document the manifestation immediately without listing the higher level of manifestation category.

- *i.e. instead of writing "DM with Renal manifestations", which does not specify the manifestation, use "DM w/CKD" to be more concise.*

Robust ICD-9 Codes

- If a patient is currently being treated for a condition, do not use “History of”, even if condition is stable. Instead document as “CHF - compensated, Angina - stable, COPD - compensated, SSS - stable with pacemaker, A-fib on Coumadin, Old MI w/CAD”.
- “History of”, “S/P”, or “H/O” refers to conditions the patient had in the past, which could be resolved, i.e. H/O DVT, H/O Angina w/CABG, H/O Prostate CA w/Prostatectomy. The exception to “History of” is Old MI, which is a risk-assessed diagnosis (ICD-9 code 412).
- DO NOT use ICD-9 code 436 for “History of” CVA. Instead diagnose as: “Old CVA” (ICD-9 code V12.54); OR “Old CVA with late effects”, i.e. aphasia, slurred speech, gait problem, etc. (ICD-9 code 438.9); OR “Old CVA w/hemiplegia” (ICD-9 code 438.20). Please note that ICD-9 code 436 is acute, but ill-defined, cerebrovascular disease, which is okay if cerebrovascular disease is documented but not CVA. Acute CVA is coded 434.91 and should only be used in a hospital setting.

2013 CMS HCC Weights

http://www.univhc.com/docs/Doctors Hospitals/MRA/2013_CMS-HCCs_Weights.pdf

- This is a list of new codes for 2013 which have extraordinary coefficient values, some as high as 2.7.

Guiding Principles

1. The risk adjustment diagnosis must be based on clinical medical record documentation from a face-to-face encounter,
2. Coded according to the ICD-9-CM Guidelines for Coding and Reporting;
3. Assigned based on dates of service within the data collection period,
4. Submitted from an appropriate risk adjustment provider type and an appropriate risk adjustment physician data source.

Validation Guidelines

- The medical record documentation must support an assigned HCC.
- Beneficiary HCCs and risk adjustment records are selected based on risk adjustment diagnoses (ICD-9 codes),
- Provider type, Health Insurance Claim (HIC) number that is submitted to the Risk Adjustment Processing System (RAPS).

Provider Signatures on Progress Notes

1. All hand-written Progress Notes must be signed by the provider rendering services.

2. Provider credentials must either be pre-printed on the Progress Note as a stationary or the provider must sign all Progress Notes with his/her credentials as part of the signature.

Provider Signatures on Progress Notes

3. Dictated notes and consults must be signed by the provider. The provider's credentials must either follow the signature or be pre-printed on the stationary.

4. Stamped signatures are no longer acceptable as of January 1, 2009, as stated by the Centers for Medicare & Medicaid Services ("CMS").

Provider Signatures on Progress Notes

4. EMR Progress Notes must have the following wording as part of the signature line: “Electronically signed”, Authenticated by”, “Signed by”, “Validated by”, Approved by”, or “Sealed by”.

5. The signed EMR record must be closed to all changes.

6. Any additional information or updates can be added as a separate addendum to the DOS, i.e. lab result returned which confirms diagnosis within 30 days of the initial DOS.

Requirements for Progress Notes

1. CMS wants an evaluation of each diagnosis on the Progress Note, not just the listing of chronic conditions, i.e.: DM w/Neuropathy - meds adjusted, CHF - compensated, COPD - test ordered, HTN - uncontrolled, Hyperlipidemia - stable on meds.
2. CMS considers diagnoses listed on the Progress Note without an evaluation or assessment as a “problem list”, which is unacceptable for encounter data submission.
3. Each Progress Note must be able to “stand alone”. Do not refer to diagnoses from a prior Progress Note, problem list, etc.

Areas of Concern – Active vs. History

Coding errors predominately often fall into two categories:

1. CVA submitted as a current condition instead of as "History of".

2. Cancer submitted as a current condition instead of as "History of".

Areas of Concern – Active vs. History

- CVA becomes “history of” when the member is discharged from the hospital after the acute episode.

- At the point of PCP follow-up, post-CVA with no residual effects is coded as V12.54. It is not coded as 434.91 or 436.

- Residual effects of CVA should be coded using ICD-9-CM codes from the 438 section of ICD-9-CM.

Areas of Concern – Active vs. History

- Cancer becomes “history of” when all current and adjunct treatment has been completed.
- History of Cancer is coded using V-codes from the V10 section of ICD-9-CM.
- Use a V-code from the V67 section in ICD-9-CM for ongoing surveillance following completed treatment.

SETMA's Strategy
Evaluating Each Problem Annually

SETMA has ways of documenting the evaluation of an HCC/RxHCC which are discussed at length in the tutorial which has been passed out to you. They are:

1. Disease management tools;
2. Chronic Conditions evaluation pop-ups;
3. "Detailed Comment" pop-ups which launch from the Assessment Template;
4. The main body of the patient encounter in GP Master.

What Documentation Is Necessary?

Because all of the HCC and/or RxHCC are Chronic Conditions, the following would be required:

- They must be identified in the E&M coding event for that encounter and they must appear on the Chronic Problem list for that patient.

- Lab, x-rays and procedures should be appropriate to that condition, when required.

What Documentation Is Necessary?

- Medications should be reviewed and appropriate medications for the condition should be present in the documentation for the encounter.
- Physical examination should be specific for that condition – for instance if you state the patient has CHF and do not document the lungs and heart, it would not be a valid evaluation. If you say the patient has cancer of the prostate and you do not comment whether they are currently in treatment or are in surveillance, that would not be valid.
- Documented History (CC, ROS, PMH) should be appropriate for that condition.

What Documentation Is Necessary?

What steps must be taken take to qualify a diagnosis as an HCC? The diagnosis must be:

- Established as applying to this patient.
- Documented in the patient's record in the Chronic Problem list.
- Evaluated at least once in the year prior to the qualification as an HCC or RxHCC and reported in the Acute Assessment of the record.
- Reported to the HMO and via the HMO to CMS.

Provider Responsibility

Providers simply need to pay attention to the needs and condition of the patient and

- Add any HCC or RxHCC which you diagnose to both your chronic problem list and to the acute assessment.
- Update your Chronic Problem list so that the HCC and RxHCC are displayed on your diagnoses.
- Evaluate each of the HCC and RxHCC at least once during the year.
- Pay particular attention to specialty consultations or reports and make sure the capture those diagnoses in your problem list and that you evaluate them at least once a year.

What Documentation Is Necessary?

The best way to evaluate whether you have identified ALL of the HCC and/or RxHCC is to review:

1. Scanned documents particularly under cardiology, discharge summaries, radiology, specialty correspondence, pulmonary, echo's, x-rays, etc.
2. The patient's past history template.
3. Laboratory results and medications.
4. Previous encounters.

Numbers Don't Lie

All Conditions Coded Appropriately	
76 year female	0.468
Medicaid eligible	0.177
DM w/vascular CC (HCC 15)	0.608
Vascular disease w/CC (HCC 104)	0.645
CHF (HCC 80)	0.395
Disease Interaction*	0.204
Total RAF	2.497
PMPM Payment	$1,873
Annual Payment	**$22,473**

Some Conditions Coded And With Poor Specificity	
76 year female	0.468
Medicaid eligible	0.177
DM w/o CC (HCC 19)	0.181
Vascular disease w/o CC (HCC 105)	0.324
CHF not coded	
No Disease Interaction	
Total RAF	1.150
PMPM Payment	$863
Annual Payment	**$10,350**

No Conditions Coded	
76 year female	0.468
Medicaid eligible	0.177
DM not coded	
Vascular disease not coded	
CHF not coded	
No Disease Interaction	
Total RAF	0.645
PMPM Payment	$484
Annual Payment	**$5,805**

Interesting Cases of HCC/RxHCC

- Altered Mental Status see AOC Altered Mental Status
- Amputations – including toes
- Attention to all ostomies
- Aneurysms
- Halitosis Choking Sneezing Mouth Breathing
- Death Sudden Unattended
- Decubitus

Interesting Cases of HCC/RxHCC

- Vegetative state Persistent, see, AOC Vegetative State Persistent
- Decubitus and Ulcers of the skin and extremities
- Difficulty walking due to deranged joints
- Drug Dependence and addiction including alcohol
- Fluid and electrolyte balance
- Malnutrition
- Generalized Pain see Pain Generalized

HCC/RxHCC In The Same Category

- HCC/RxHCC codes which are in the same category, will result in a payment for only one of those codes, but it will be the highest value code, i.e., the diagnosis of CAD and MI are in the same category so you will be paid for only one, which is the highest, MI.

HCC/RxHCC In The Same Category

- Related Codes from different categories will result in payment for both, i.e., Diabetes and Diabetic Neuropathy are related conditions but are in different HCC categories and will thus both be paid.

- Example…If a patient has CHF Systolic and CHF Diastolic, you need to document both for clinical purposes but for HCC purposes you will only be paid for one.

Important Facts

- Initially, HCCs codes were valuable only in Medicare Advantage, but now are valuable in Patient-Centered Medical Home and in Accountable Care Organizations.

- In PC-MH, it is the Risk Adjustment Factor which is important, while in MA and ACO it is the individual codes which result in increased revenue.

PC-MH and HCC

Some payments are being made in some states for Patient-Centered Medical Home. CMS continues to discuss such payments but have not yet launch the program due to the ACA and cost reduction. When that happens, and it will, it will be based on two things:

1. The level of medical home you have achieved
2. The Risk Adjustment Factor for each individual patient

PC-MH and HCC

- If a provider has NCQA Tier III and if the patient has a Risk Adjustment Factor of 2.0 or above, then the monthly payment for that patient will be the maximum.

- Discussions are between $20-100 per member per month.

Coefficient Aggregates

- Each HCC/RxHCC code has a coefficient associated with it.
- When the total value of the coefficients for each HCC/RxHCC code is added up, you produce the “coefficient aggregate” from which the Risk Adjustment Factor is calculated.
- For older patients a coefficient value is added for age and gender.

Coefficient Aggregates and E&M Codes

- SETMA has been experimenting with the auditing of Evaluation and Management Code distribution in practice.
- The most subjective aspect of E&M coding is the complexity of medical decision making.
- It follows that the higher the HCC coefficient aggregate for the acute visit, the more complex the medical decision making is.

Coefficient Aggregates and E&M Codes

- By implication, we think there is a correlation between the acute diagnoses' HCC/RxHCC coefficient aggregate and the E&M code. The higher the HCC/RxHCC coefficient aggregate for the acute visit, the higher it is reasonable to expect the E&M coding to be, IF the documentation is present in the record related to two or more chronic conditions.

Coefficient Aggregates and E&M Codes

Because SETMA's EMR displays whether a diagnosis is an HCC, an RxHCC or both, and because our system aggregates the coefficients for all of the diagnoses which are documented in a patient's care, it is possible for a provider to know on each patient he/she treats:

- The coefficient aggregate for the acute diagnoses documented for each visit.
- The coefficient aggregate for the chronic diagnoses documented for each patient.
- The coefficient aggregate which has not been evaluated on a patient for the current year.

Coefficient Aggregates and E&M Codes

The following tables contrast:

- Medicare Fee-for-Service HCC/RxHCC coefficient aggregates with Medicare Advantage HCC/RxHCC aggregates
- Medicare Fee-for-Service contrasted with Medicare Fee-for-Service E&M Code distribution by provider name
- All Payers HCC/RxHCC aggregates contrasted with E&M Codes

Coefficient Aggregates and E&M Codes

Acute & Chronic HCC/RxHCC Coefficients Versus E&M Code Distribution
All Payers, January 1, 2013 - October 31, 2013

Provider	Acute		Chronic		E&M Code Distribution			
	Average	Deviation	Average	Deviation	99212	99213	99214	99215
Ahmed, J	0.798	0.447	1.793	1.125	2.0	26.1	71.8	0.1
Anthony, J	1.041	0.852	1.566	1.319	1.2	64.4	34.3	0.0
Anwar, S	0.825	0.625	1.811	1.305	1.3	36.1	62.1	0.5
Aziz, M	0.510	0.567	1.508	1.154	0.0	33.1	66.9	0.0
Cash, C	1.363	0.566	2.144	1.136	0.1	37.7	62.1	0.0
Castro, M	0.897	0.699	1.191	1.056	1.2	24.3	74.5	0.0
Cox, R	0.233	0.319	0.702	0.646	3.3	52.0	44.7	0.0
Darden, K	0.301	0.456	0.916	0.896	0.1	64.0	36.0	0.0
Deiparine, C	0.479	0.520	1.229	1.116	0.0	3.6	96.3	0.1
Duncan, N	0.318	0.451	1.093	1.025	0.4	46.3	53.3	0.0
Foster, T	0.636	0.581	1.321	1.236	1.7	19.3	79.1	0.0
George, W	0.791	0.496	1.427	1.030	0.0	20.7	79.3	0.0
Green, E	0.244	0.340	0.651	0.622	18.5	57.7	23.8	0.0
Halbert, D	0.297	0.454	1.245	1.033	0.5	48.9	50.5	0.1
Henderson, D	0.558	0.630	1.598	1.177	0.3	37.4	62.2	0.0
Holly, J	1.048	0.902	1.688	1.355	0.0	4.5	95.1	0.4
Horn, A	0.527	0.528	1.017	0.874	0.3	30.0	69.7	0.0
Le, P	0.501	0.489	1.161	1.024	0.3	47.3	52.4	0.0
Leifeste, A	0.718	0.673	1.659	1.264	7.1	18.8	74.1	0.0
Murphy, V	0.870	0.727	1.289	1.105	0.2	28.9	71.0	0.0
Palang, R	0.352	0.344	1.046	0.887	0.9	53.5	45.6	0.0
Qureshi, A	0.650	0.607	1.284	1.194	2.0	39.7	58.3	0.0
Read, T	0.361	0.506	1.362	1.190	0.0	48.8	51.2	0.0
Shepherd, J	1.002	0.889	1.405	1.172	1.2	24.3	74.5	0.1
Thomas, M	1.118	1.149	1.699	1.374	0.5	38.6	61.0	0.0
Vardiman, J	0.181	0.260	1.008	0.966	5.7	60.9	33.3	0.0
Wheeler, M	0.569	0.665	1.160	1.140	0.1	29.0	70.8	0.0

Coefficient Aggregates and E&M Codes

Acute & Chronic HCC/RxHCC Coefficients Versus E&M Code Distribution
Medicare Advantage, January 1, 2013 - October 31, 2013

	Acute		Chronic		E&M Code Distribution			
Provider	Average	Deviation	Average	Deviation	99212	99213	99214	99215
Ahmed, J	0.780	0.467	2.032	1.228	3.0	23.5	73.5	0.0
Anthony, J	1.396	0.785	2.017	1.161	0.0	60.3	39.7	0.0
Anwar, S	0.937	0.632	1.801	1.155	0.4	24.6	74.2	0.7
Aziz, M	0.595	0.615	1.719	1.191	0.0	27.3	72.7	0.1
Cash, C	1.476	0.565	2.449	1.145	0.0	33.5	66.5	0.0
Castro, M	0.891	0.630	1.115	0.875	1.0	21.3	77.7	0.0
Cox, R	0.329	0.346	1.196	0.943	0.0	68.2	31.8	0.0
Darden, K	0.475	0.574	1.416	1.016	0.0	57.1	42.9	0.0
Deiparine, C	0.575	0.622	1.709	1.281	0.0	2.1	97.9	0.0
Duncan, N	0.489	0.601	1.712	1.206	0.2	39.4	60.2	0.1
Foster, T	0.829	0.535	1.879	1.128	0.0	1.6	98.4	0.0
George, W	0.833	0.586	1.731	1.152	0.0	35.8	64.2	0.0
Green, E	0.391	0.352	1.129	0.783	3.4	44.8	51.7	0.0
Halbert, D	0.505	0.610	1.565	1.154	0.4	46.9	52.6	0.1
Henderson, D	0.726	0.704	2.123	1.172	0.0	29.5	70.4	0.1
Holly, J	1.062	0.807	1.887	1.255	0.0	4.6	95.0	0.5
Horn, A	0.693	0.659	1.465	1.140	0.0	16.7	83.3	0.0
Le, P	0.610	0.599	1.830	1.210	0.0	53.0	47.0	0.0
Leifeste, A	0.675	0.676	1.803	1.222	10.1	16.3	73.6	0.0
Murphy, V	1.131	0.800	1.779	1.242	0.1	24.2	75.8	0.0
Palang, R	0.484	0.546	1.628	1.381	0.0	51.4	48.6	0.0
Qureshi, A	0.751	0.569	1.453	1.162	0.4	26.7	72.9	0.0
Read, T	0.421	0.537	1.710	1.168	0.0	42.3	57.7	0.0
Shepherd, J	1.080	0.748	1.540	1.050	0.7	22.3	76.9	0.1
Thomas, M	0.977	0.794	1.623	1.097	0.4	33.5	66.1	0.0
Vardiman, J	0.317	0.348	0.972	0.874	4.1	57.1	38.8	0.0
Wheeler, M	0.891	0.769	1.699	1.061	0.0	12.4	87.5	0.1

Coefficient Aggregates and E&M Codes

Acute & Chronic HCC/RxHCC Coefficients Versus E&M Code Distribution
Medicare Fee For Service, January 1, 2013 - October 31, 2013

Provider	Acute		Chronic		E&M Code Distribution			
	Average	Deviation	Average	Deviation	99212	99213	99214	99215
Ahmed, J	0.865	0.422	1.952	1.067	1.3	24.9	73.4	0.3
Anthony, J	1.213	0.860	1.928	1.389	0.0	58.8	41.2	0.0
Anwar, S	0.827	0.597	1.939	1.333	1.1	40.2	58.3	0.3
Aziz, M	0.519	0.557	1.610	1.097	0.0	31.9	68.1	0.0
Cash, C	1.399	0.543	2.207	1.111	0.0	37.0	63.0	0.0
Castro, M	0.968	0.718	1.333	1.130	0.4	25.0	74.6	0.0
Cox, R	0.246	0.324	0.768	0.657	2.5	46.9	50.6	0.0
Darden, K	0.388	0.498	1.202	0.910	0.0	52.2	47.8	0.0
Deiparine, C	0.518	0.494	1.383	1.111	0.0	1.3	98.6	0.2
Duncan, N	0.359	0.466	1.286	0.937	0.2	47.3	52.5	0.0
Foster, T	0.675	0.484	1.475	1.189	0.0	2.6	97.4	0.0
George, W	0.798	0.490	1.413	1.022	0.0	16.2	83.8	0.0
Green, E	0.293	0.377	0.820	0.635	9.5	52.4	38.1	0.0
Halbert, D	0.270	0.405	1.342	0.988	0.4	47.0	52.5	0.1
Henderson, D	0.639	0.661	1.644	1.071	0.2	29.5	70.3	0.0
Holly, J	1.117	0.987	1.582	1.354	0.0	0.0	100.0	0.0
Horn, A	0.608	0.543	1.194	0.842	0.0	16.9	83.1	0.0
Le, P	0.538	0.461	1.278	0.993	0.4	37.5	62.1	0.0
Leifeste, A	0.814	0.696	1.822	1.246	3.4	17.6	79.0	0.0
Murphy, V	0.922	0.692	1.316	0.961	0.0	25.5	74.5	0.0
Palang, R	0.357	0.328	1.067	0.845	0.1	47.6	52.3	0.0
Qureshi, A	0.785	0.655	1.668	1.248	0.0	29.4	70.6	0.0
Read, T	0.441	0.553	1.678	1.207	0.0	41.5	58.5	0.0
Shepherd, J	1.110	1.007	1.553	1.274	0.8	22.1	76.9	0.3
Thomas, M	1.339	1.436	1.956	1.637	0.7	35.5	63.9	0.0
Vardiman, J	0.157	0.236	1.152	1.002	5.7	68.6	25.7	0.0
Wheeler, M	0.692	0.670	1.504	1.180	0.0	17.2	82.8	0.0

Coefficient Aggregates and E&M Codes

- There has been no official endorsement of this analysis, but it seems to us to be valid. It has exposed several coding errors in SETMA's work which has enable us to correct those errors.

- We look forward to other practices experimenting with this contrast to see if they validate our findings.

- Whether ultimately validated or not, it illustrates how data analysis and associations should attract our attention.