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White Paper
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Real-World Analysis of the CMS-HCC V28 Risk Model

Do not put your organization at financial risk by not analyzing and acting upon the potentially significant impact of the new CMS-HCC V28 risk model.

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Real-World Analysis of the CMS-HCC V28 Risk Model

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Overview

The CMS-HCC risk model, developed by the Centers for Medicare & Medicaid Services (CMS), is a sophisticated risk adjustment algorithm used in healthcare to assess and predict the healthcare needs and costs of Medicare Advantage (MA) beneficiaries. This model is designed to calculate risk scores for individual beneficiaries based on their health status and demographic factors, helping to determine payment rates to Medicare Advantage plans.

The introduction of the V28 risk model by CMS is perhaps the most disruptive update to the CMS-HCC Risk model system since the switch to ICD-10-CM diagnoses codes back in 2015. These changes include:

- A net decrease of over 2000 diagnoses codes that map to an HCC.
- The complete reorganization of Hierarchical Condition Categories (HCC's), including the addition of new HCCs like HCC 279 (Severe Persistent Asthma).
- Modifications to the RAF **(**Risk Adjustment Factor**)** points associated with HCC's that place a weighting emphasis on the severity of medical conditions rather the number of less-severe conditions detected.

Additionally, the introduction of new HCC categories and associated diagnosis mapping in V28 places a much stronger emphasis on diagnosis specificity, requiring clinicians to be more precise about the diseases they capture and address during clinical encounters.

CMS Expected V28 Impact

According to CMS, the CY **(**Calendar Year**)** 2024 impact on MA risk scores of the proposed Part C CMS-HCC model, is projected to be -3.12%, which represents a $11.0 billion net savings to the Medicare Trust fund in 2024. Some industry insiders are projecting the impact could go as high as an 8% drop in risk adjustment scores.

Impact Analysis #1: V28 CMS-HCC Risk Model (non-blended) applied to 2022 Claim Data:

In order to gauge the impact of the V28 model, we first applied the new V28 (non-blended) model to 2022 claim data to an actual MA population comprised of 56,603 members and compared it to the same claim data with V24 (unblended) applied. The results were rather startling:

- 35% of the MA population was affected by the removal of a DX **(**diagnosis**)** code in the V28 model.
- 28,650 previously Risk-Adjustable diagnoses were dropped from the MA population.

- 8,908 HCC RAF points (Using Community, Non-Dual Coverage, Aged into Medicare attributes) were removed from risk scoring.

Assuming a fully capitated PMPY reimbursement of $13,129 per RAF point using the V28 (non-blended) model, the organization could expect a $117M reduction in RAF payments if the unblended V28 model were applied to its MA 2022 claim data vs. V24 (unblended).

Analysis parameters:

- 2022 County 5-star fully capitated PMPY reimbursement rate of $13,129
- Community, Non-Dual Coverage, Aged into Medicare attributes for members.

To more deeply understand the areas impacted by V28, we broke the dropped DX down into three grouping categories:

Top financially impactful dropped DX using the V28 (non-blended) model applied to 2022 claims:

DX	Description	Dropped DX	HCC RAF	Impact
D84.9	Immunodeficiency, unspecified	933	620.45	$8,145,946
N17.9	Acute kidney failure, unspecified	1156	502.86	$6,602,150
I47.1	Supraventricular tachycardia	1645	440.86	$5,788,139
I73.9	Peripheral vascular disease, unspecified	1471	423.65	$5,562,159
F32.0	Major depressive disorder, single episode	1206	372.65	$4,892,649
D69.6	Thrombocytopenia, unspecified	1924	369.41	$4,850,032
M35.00	Sjogren syndrome, unspecified	730	307.33	$4,034,997
I70.0	Atherosclerosis of aorta	755	217.44	$2,854,813
I77.810	Thoracic aortic ectasia	719	207.07	$2,718,690

Top financially impactful dropped DX, grouped by HCC, using the V28 (non-blended) model applied to 2022 claims:

HCC	Description	Dropped DX	HCC RAF	Impact
108.V24	Vascular Disease	5600	1612.80	$21,174,774
040.V24	Rheumatoid Arthritis and Inflammation	3486	1467.61	$19,268,493
047.V24	Disorders of Immunity	1580	1050.70	$13,794,850
059.V24	Major Depressive, Bipolar, and Paranoid Disorders	3097	956.97	$12,564,290
048.V24	Coagulation Defects and Other Hemorrhagic Conditions	4185	803.52	$10,549,575

023.V24	Other Significant Endocrine Disorders	3439	667.17	$8,759,356
135.V24	Acute Renal Failure	1218	529.83	$6,956,244
096.V24	Specified Heart Arrhythmias	1645	440.86	$5,788,139
021.V24	Protein-Calorie Malnutrition	692	314.86	$4,133,860
075.V24	Myasthenia Gravis/Myoneural Dis...	529	249.69	$3,278,204

Top financially impactful dropped DX, Grouped by Disease Group, using the V28 (non-blended) model applied to 2022 claims:

Disease Group	Dropped DX	HCC RAF	Impact
Blood	5780	1874.80	$24,614,624
Vascular	5726	1661.06	$21,808,363
Musculoskeletal	3494	1470.81	$19,310,611
Metabolic	4131	982.03	$12,893,216
Psychiatric	3097	956.97	$12,564,290
Heart	3451	686.83	$9,017,476
Kidney	1505	654.67	$8,595,359
Neurological	556	266.05	$3,493,024
Complication	347	201.95	$2,651,494
Amputation	86	44.63	$586,009

These numbers will vary by region and business practice. These analytics provided key insights and a targeted starting point for our customers to begin a deeper dive into the business impact of V28.

Buffering the Impact

After receiving extensive industry feedback, CMS has agreed to phase in the V28 model over a 3-year period using their standard "blended model" approach.

Payment Year	V24 Blending	V28 Blending
2024	67%	33%
2025	33%	67%
2026		100%

The blended phase-in buys more time for organizations to budget, prepare, assign resources, and train staff. In 2026 the full impact will be felt.

Impact Analysis #2: CMS-HCC V24 (non-blended) model vs. V24/V28 (blended) model applied to 2023 Claim Data:

In order to gauge the impact of the 2024 blended approach to V28, we next compared 2023 claim data run against both the V24 (unblended) and the V24/V28 (67%/33% blended) models. Again, the results were rather startling.

V24 (unblended) HCC RAF Points	**40,076.81**
V24/V28 (67%/33% blended) HCC RAF Points	**37,716.59**
Difference (Percent)	**-5.89%**
Difference (HCC RAF Points)	**2,360.21**
Fully capitated PMPY (Per Member Per Year) **Rate**	**$13,847.28**
Net Reimbursement Impact	**-$32.68M**

Assuming a fully capitated PMPY reimbursement of $13,847.28 per RAF point, the organization could expect a $32.68M reduction in RAF payments if the V24/V28 (blended) model were applied to 2023 claims.

Impact Analysis #3: V24/V28 (blended) model patient-level impact on Diabetes with Chronic Complications:

Finally, we analyzed the new HCC coefficient disease severity weighting by drilling down on a simple Diabetes with Chronic Complications member with both the V24 (unblended) and V24/V28 (blended 67%/33%) applied to the member's 2023 diagnoses history.

Model V24 (unblended):

HCC	RAF	Blending (%)	Adjusted RAF	PMPY	Reimbursement
018.V24 Diabetes with Chronic Complications	0.302	100%	0.302	$13,847.28	$4,181.88

Model V24/V28 (blended 67%/33%):

HCC	RAF	Blending (%)	Adjusted RAF	PMPY	Reimbursement
018.V24 Diabetes with Chronic Complications	0.302	67%	0.20234	$13,847.28	$2801.86
037.V28 Diabetes with Chronic Complications	0.166	33%	0.05478	$13,847.28	$758.55

Total			**0.25712**		**$3560.41**
Change					**-$621.47**

Assuming a fully capitated county PMPY reimbursement of $13,847.28 per RAF point, the organization can expect a $621.47 reduction in RAF payments for this member with the V24/V28 (blended) model applied to the member's 2023 claim data.

This example demonstrates the de-emphasis of HCC coefficient weighting (.302 to .166) for less severe conditions in the V28 model.

Conclusion

Analytics plays a crucial role in the transition to the CMS-HCC V28 risk model for several reasons. Analytics enable healthcare organizations to effectively ingest and analyze vast amounts of clinical and claims data, which are essential inputs for risk adjustment calculations. By leveraging analytics tools and techniques, organizations can identify patterns, trends, and risk factors within their patient populations, leading to more accurate risk scoring and allocation of resources. Additionally, Analytics also facilitate predictive modeling, allowing organizations to forecast future healthcare utilization needs and costs based on current population health data. This information is vital for budgeting, resource planning, and developing optimal risk management strategies.

The capability to successfully manage HCCs while maintaining quality is crucial in value-based care and in contract performance. Analytics support quality improvement initiatives by providing insights into care delivery processes, patient outcomes, and areas for performance enhancement, aligning with the goals of value-based care and continuous improvement in healthcare delivery. When healthcare systems partner with a certified NCQA HEDIS vendor they can objectively validate results, avoid compliance issues, and optimize overall performance.

Performing analytics on the impact of the V28 model on your Medicare Advantage population could be a critical tool in helping your organization to properly predict and adjust business practices, predict resources required and anticipate revenue differences resulting from the move to V28.

Stay tuned for a qrcLuminate™ blog with operational recommendations for responding to the V-28 risk model.