Supplementary Online Content

Orenstein LAV, Nelson MM, Wolner Z, et al. Differences in outpatient dermatology encounter work relative value units and net payments by patient race, sex, and age. *JAMA Dermatol.* Published online February 17, 2021. doi:10.1001/jamadermatol.2020.5823

eTable 1. Factors Associated With Net Payments Received for Outpatient Dermatology Encounters in a General Dermatology Practice, Excluding Mohs Surgeons (2016-2020)

eTable 2. Proportion of wRVU Differences Explained by Procedures in a General Dermatology Practice, Excluding Mohs Surgeons (2016-2020)

eTable 3. Factors Associated With wRVUs Generated by Outpatient Dermatology Encounters, Excluding Mohs Surgeons: Sensitivity Analysis Using Multiple Imputation to Include Non-Mohs Participants With Missing Race

eTable 4. Sensitivity Analysis for wRVU Differences Explained by Procedures, Using Multiple Imputation to Include 8,036 Non-Mohs Encounters Missing Race

eTable 5. Factors Associated With wRVUs Generated by General Outpatient Dermatology Encounters, Excluding Mohs Surgeons: Sensitivity Analysis Using a Generalized Estimating Equation Model to Account for RVU Clustering at the Patient Level

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Factors Associated With Net Payments Received for Outpatient Dermatology Encounters in a General Dermatology Practice, Excluding Mohs Surgeons (2016-2020)

	Net Payments/encounter mean (SD)	Crude β[a] (95% CI)	Adjusted β[a] (95% CI)
Overall	$133.39 (112.74)	--	--
Age (per year)	--	0.225 (0.179, 0.271)	1.02 (0.96, 1.08)
Sex			
Male	$141.95 (121.99)	Ref	Ref
Female	$127.58 (105.62)	-14.36 (-12.62, -16.10)	-9.76 (-8.07, -11.45)
Race			
White	$145.57 (119.81)	Ref	Ref
Black	$103.02 (86.53)	-42.55 (-40.56, -44.53)	-28.25 (-26.26, -30.24)
Asian	$111.46 (92.78)	-34.11 (-29.89, -38.33)	-30.98 (-26.87, -35.10)
Other	$119.25 (92.11)	-26.33 (-18.48, -34.17)	-21.33 (-13.73, -28.94)
Insurance type[b]			
Commercial	$147.51 (118.70)	62.66 (60.67, 64.67)	46.82 (44.07, 49.57)
Medicare	$112.57 (80.16)	-31.79 (-30.01, -33.58)	-37.12 (-34.30, -39.94)
Medicaid	$77.24 (67.38)	-57.44 (-51.68, -63.21)	-4.71 (-10.61, 1.18)
Self-pay	$45.68 (103.20)	-88.63 (-80.25, -97.02)	-64.31 (-56.05, -72.58)
Other	$124.19 (96.22)	-9.37 (-2.96, -15.78)	10.50 (4.14, 16.86)

[a]β estimates give the change in net payments per encounter by patient characteristic.
[b]Individual patients may have multiple insurances. We therefore analyzed each insurance type as its own dichotomous variable (i.e. present or absent). For example, in adjusted analysis, encounters associated with commercial insurance reimbursed $46.82 (95% CI: 44.07 - 49.57) more per encounter than encounters without commercial insurance.

eTable 2. Proportion of wRVU Differences Explained by Procedures in a General Dermatology Practice, Excluding Mohs Surgeons (2016-2020)[a]

	Age	Female sex	Black race	Asian race	Other race
Destruction of premalignant lesion	0.429 (0.385, 0.472)	0.602 (0.523, 0.693)	0.312 (0.292, 0.335)	0.303 (0.249, 0.368)	0.272 (0.198, 0.405)
Biopsy	0.263 (0.233, 0.297)	0.257 (0.204, 0.31)	0.277 (0.257, 0.299)	0.255 (0.201, 0.326)	0.294 (0.197, 0.426)
Destruction premalignant lesion or biopsy	0.656 (0.605, 0.714)	0.823 (0.727, 0.931)	0.562 (0.531, 0.593)	0.532 (0.456, 0.638)	0.536 (0.404, 0.774)
Malignant destruction	0.011 (0.007, 0.017)	0.017 (0.009, 0.029)	0.01 (0.007, 0.014)	0.01 (0.005, 0.017)	0.012 (0.008, 0.02)
Malignant neoplasm excision	0.062 (0.039, 0.087)	0.047 (0.01, 0.085)	0.048 (0.037, 0.061)	0.05 (0.038, 0.067)	0.04 (-0.036, 0.086)
Benign neoplasm excision	-0.014 (-0.036, 0.008)	0.032 (0.001, 0.062)	-0.007 (-0.024, 0.007)	0.015 (-0.021, 0.041)	0.058 (0.038, 0.088)
[a]Male sex and white race were used as reference groups.					

eTable 3. Factors Associated With wRVUs Generated by Outpatient Dermatology Encounters, Excluding Mohs Surgeons: Sensitivity Analysis Using Multiple Imputation to Include Non-Mohs Participants With Missing Race[a]

	wRVUs/encounter mean (SD)	Crude β, (95% CI)	Adjusted β, (95% CI)
Overall		--	--
Age (per year)	--	0.008 (0.008, 0.008)	0.007 (0.006, 0.007)
Sex			
Male	1.49 (0.78)	Ref	Ref
Female	1.33 (0.64)	-0.158 (-0.147, -0.168)	-0.102 (-0.092, -0.112)
Race			
White	1.48 (0.73)	Ref	Ref
Black	1.18 (0.55)	-0.298 (-0.285, -0.310)	-0.254 (-0.242, -0.267)
Asian	1.19 (0.60)	-0.289 (-0.263, -0.315)	-0.204 (-0.178, -0.229)
Other	1.22 (0.53)	-0.258 (-0.209, 0.306)	-0.173 (-0.125, -0.221)
Insurance type			
Commercial	1.39 (0.68)	-0.051 (-0.038, -0.063)	0.074 (0.057, 0.091)
Medicare	1.53 (0.77)	0.206 (0.195, 0.216)	0.060 (0.043, 0.077)
Medicaid	1.37 (0.74)	-0.023 (-0.057, 0.011)	0.173 (0.138, 0.208)
Self-pay	1.41 (1.15)	0.013 (-0.033, 0.058)	0.130 (0.084, 0.175)
Other	1.33 (0.61)	-0.064 (-0.025, -0.102)	0.021 (-0.017, 0.060)

[a] Sensitivity analysis included 8,036 non-Mohs patients with missing race, for a total sample size of 74,499 encounters. Race was imputed using age, sex, insurance status, and home zip code.

eTable 4. Sensitivity Analysis for wRVU Differences Explained by Procedures, Using Multiple Imputation to Include 8,036 Non-Mohs Encounters Missing Race[a]

	Age	Female sex	Black race	Asian race	Other race
Destruction of premalignant lesion	0.403 (0.368, 0.441)	0.622 (0.54, 0.724)	0.312 (0.289, 0.332)	0.307 (0.262, 0.374)	0.261 (0.187, 0.352)
Biopsy	0.269 (0.234, 0.306)	0.272 (0.224, 0.325)	0.272 (0.255, 0.296)	0.251 (0.191, 0.307)	0.288 (0.174, 0.395)
Destruction premalignant lesion or biopsy	0.634 (0.588, 0.699)	0.851 (0.745, 0.97)	0.553 (0.519, 0.59)	0.528 (0.449, 0.619)	0.516 (0.382, 0.65)
Malignant destruction	0.011 (0.006, 0.016)	0.018 (0.007, 0.032)	0.01 (0.007, 0.015)	0.01 (0.004, 0.017)	0.013 (0.008, 0.02)
Malignant neoplasm excision	0.056 (0.034, 0.082)	0.054 (0.016, 0.102)	0.049 (0.039, 0.063)	0.052 (0.04, 0.065)	0.038 (-0.032, 0.084)
Destruction of malignant neoplasm	-0.011 (-0.031, 0.004)	0.023 (-0.004, 0.054)	-0.01 (-0.028, 0.006)	0.015 (-0.025, 0.05)	0.061 (0.041, 0.092)
[a]Male sex and white race were used as reference groups.					

eTable 5. Factors Associated With wRVUs Generated by General Outpatient Dermatology Encounters, Excluding Mohs Surgeons: Sensitivity Analysis Using a Generalized Estimating Equation Model to Account for RVU Clustering at the Patient Level

	Crude β, Patient clustering analysis[a] (95% CI)	Adjusted β, Patient clustering analysis[a] (95% CI)
Age (per year)	0.006 (0.005,0.006)	0.004 (0.004, 0.005)
Sex		
Male	Ref	Ref
Female	-0.122 (-0.110, -0.134)	-0.068 (-0.058, -0.077)
Race		
White	Ref	Ref
Black	-0.242 (-0.230, -0.254)	-0.199 (-0.189, -0.209)
Asian	-0.235 (-0.209, -0.260)	-0.162 (-0.139, -0.186)
Other	-0.210 (-0.167, -0.253)	-0.137 (-0.102, -0.171)
Insurance type		
Commercial	-0.027 (-0.013, -0.040)	0.075 (0.060, 0.091)
Medicare	0.138 (0.126, 0.149)	0.045 (0.029, 0.061)
Medicaid	-0.022 (-0.062, 0.017)	0.127 (0.093, 0.161)
Self-pay	0.027 (-0.071, 0.126)	0.146 (0.054, 0.239)
Other	-0.052 (-0.023, -0.081)	0.033 (0.003. 0.062)
[a] Sensitivity analysis included 66,463 encounters among 30,036 unique patients with a mean cluster size of 2.2.		