

2022 Categorical Adjustment Index Measure Supplement

This supplement provides details related to the adjusted measure set for the 2022 Categorical Adjustment Index (CAI).

CMS has updated the analyses examining the variability of the within-contract differences in performance between LIS/DE and non-LIS/DE beneficiaries for the candidate set of measures for informational purposes.

Figure 1 depicts the within-contract LIS/DE and non-LIS/DE differences in performance for the contracts that received a measure Star Rating in the 2021 Star Ratings. The figure first provides the variability of the within-contract differences for MA contracts, followed by the variability for PDPs. Figure 2 is provided to aid in the interpretation of the visuals shown in Figure 1. Tables 1 through 4 provide descriptive statistics of the within-contract differences that underlie the visuals in Figure 1. Tables 1 and 3 provide the overall summary statistics for central tendency and dispersion for MA and PDP contracts, respectively. Tables 2 and 4 provide specific percentiles of the distribution of the within-contract differences for MA and PDP contracts, respectively.

Tables 5 through 16 provide the rating-specific categories for classification of contracts based on the percentage of LIS/DE and disabled beneficiaries along with the final adjustment categories. Table 5 provides the range for the percentages that correspond to the LIS/DE categories determined by dividing the distribution of MA contracts' LIS/DE percentages into ten equal-sized groups. Table 6 provides the range of the percentages that correspond to the disability quintiles for the categorization of MA contracts for the CAI for the overall Star Rating. Table 7 provides the description of each of the final adjustment categories for the overall Star Rating for MA contracts and the associated values of the CAI. Tables 8 through 10 provide CAI values for the Part C summary rating. Tables 11 through 13 provide CAI values for the Part D summary rating for MA-PDs. Tables 14 through 16 provide CAI values for the Part D summary rating for PDPs.

For the 2022 Star Ratings, the adjusted measures are: Annual Flu Vaccine, Breast Cancer Screening, Colorectal Cancer Screening, Diabetes Care – Blood Sugar Controlled, Diabetes Care – Eye Exam, Diabetes Care – Kidney Disease Monitoring, Improving Bladder Control, Medication Reconciliation Post-Discharge, MTM Program Completion Rate for CMR, Monitoring Physical Activity, Osteoporosis Management in Women who had a Fracture, Reducing the Risk of Falling, Rheumatoid Arthritis Management, Medication Adherence for Diabetes Medications, Medication Adherence for Hypertension, Medication Adherence for Cholesterol, Statin Therapy for Patients with Cardiovascular Disease, and Statin Use in Persons with Diabetes.

Figure 1 shows within-contract LIS/DE and non-LIS/DE differences in performance for the contracts that received a measure Star Rating. LIS/DE is depicted in the shaded area and not-LIS/DE is depicted in the non-shaded area. The variability for MA contracts is provided first, followed by the variability for PDPs.

Figure 1: Variation across MA and PDP Contracts of the Within-Contract LIS/DE Differences

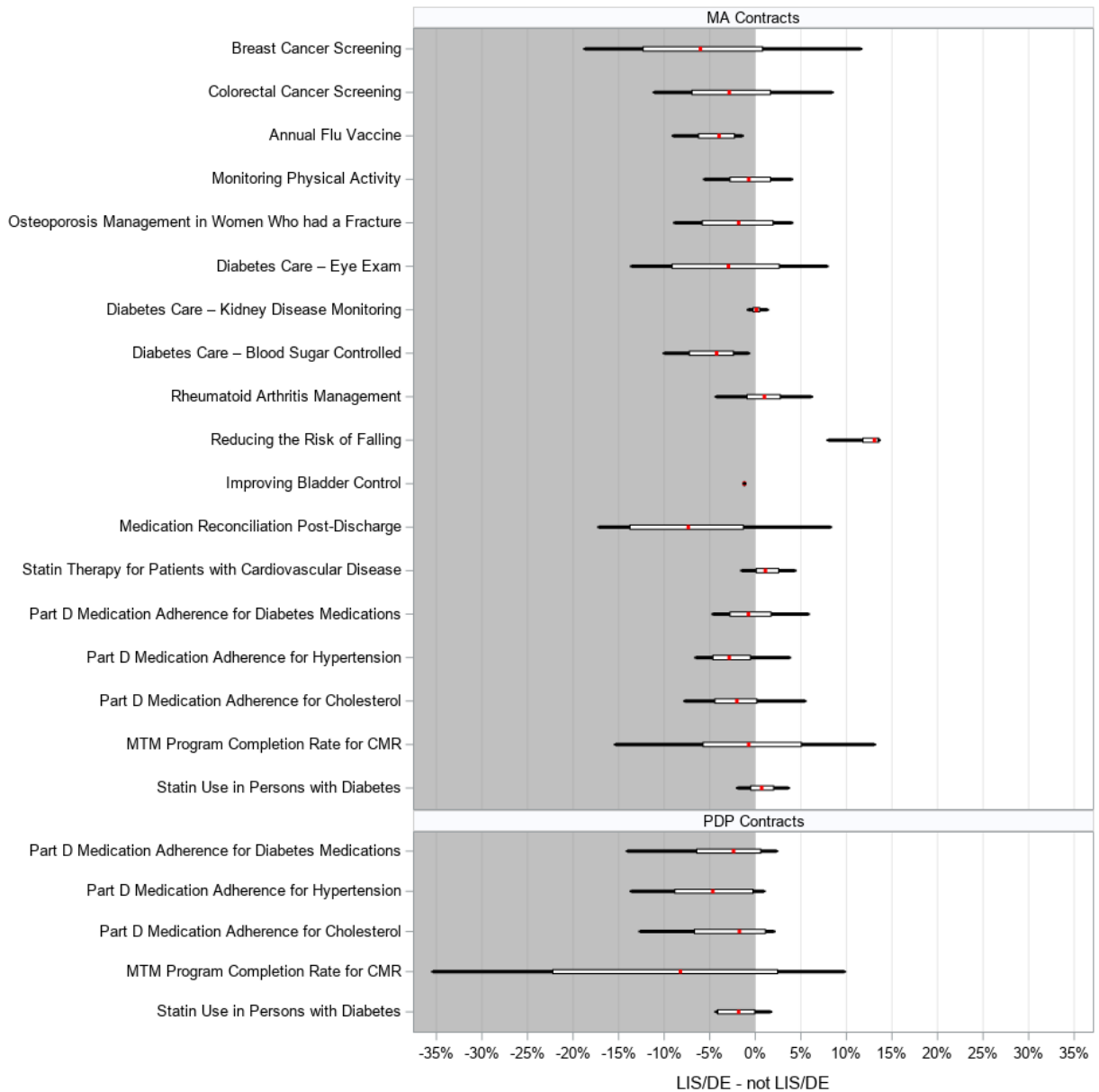
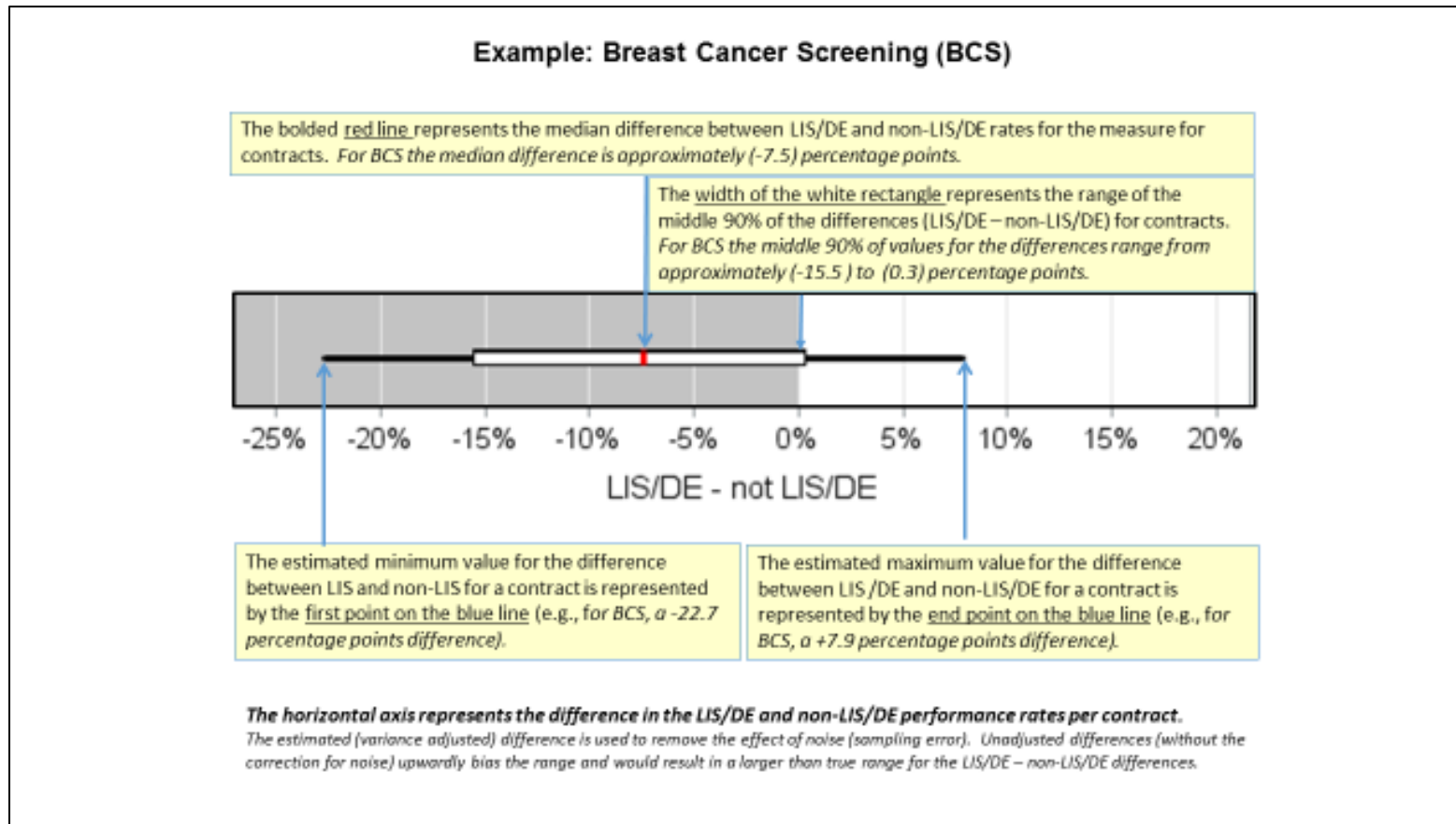


Figure 2 is provided to aid in the interpretation of the visuals shown in Figure 1.

Figure 2: Interpretation of the Visual of the Variation across Contracts of the Within-Contract LIS/DE Differences*



* The example is not based on 2022 results and thus, the values in the visual do not match the values in Figure 1 or Tables 1 and 2.

Table 1 shows overall summary descriptive statistics of the within-contract differences for MA contracts, and Table 2 provides specific percentiles of the distribution of the within-contract differences for MA contracts.

Table 1: Summary Statistics of the Within-Contract LIS/DE Differences for MA Contracts

Measure Name	Mean	Median	Minimum	Maximum	Standard Deviation
Breast Cancer Screening	-0.05918	-0.06023	-0.18702	0.11576	0.040699
Colorectal Cancer Screening	-0.02713	-0.02859	-0.11087	0.08435	0.026682
Annual Flu Vaccine	-0.04061	-0.03965	-0.09004	-0.01432	0.012092
Monitoring Physical Activity	-0.00713	-0.00717	-0.05568	0.03985	0.013292
Osteoporosis Management in Women Who had a Fracture	-0.01828	-0.01826	-0.08846	0.03999	0.021338
Diabetes Care – Eye Exam	-0.03096	-0.02949	-0.13578	0.07882	0.034279
Diabetes Care – Kidney Disease Monitoring	0.00120	0.00121	-0.00763	0.01327	0.002146
Diabetes Care – Blood Sugar Controlled	-0.04416	-0.04253	-0.09987	-0.00745	0.014540
Rheumatoid Arthritis Management	0.00995	0.00998	-0.04279	0.06159	0.011863
Reducing the Risk of Falling	0.12925	0.13076	0.08004	0.13578	0.006849
Improving Bladder Control	-0.01199	-0.01200	-0.01214	-0.01160	0.000096
Medication Reconciliation Post-Discharge	-0.07039	-0.07353	-0.17163	0.08251	0.037132
Statin Therapy for Patients with Cardiovascular Disease	0.01166	0.01110	-0.01479	0.04352	0.007239
Part D Medication Adherence for Diabetes Medications	-0.00734	-0.00750	-0.04644	0.05821	0.013189
Part D Medication Adherence for Hypertension	-0.02784	-0.02862	-0.06513	0.03761	0.012652
Part D Medication Adherence for Cholesterol	-0.02067	-0.02017	-0.07725	0.05446	0.013796
MTM Program Completion Rate for CMR	-0.00666	-0.00721	-0.15337	0.13069	0.032065
Statin Use in Persons with Diabetes	0.00696	0.00703	-0.01936	0.03629	0.007117

Table 2: Within-Contract LIS/DE Difference Distribution Values for MA Contracts¹

Measure Name	P2.5	P5	P10	P25	P50	P75	P90	P95	P97.5
Breast Cancer Screening	-0.14318	-0.12315	-0.10914	-0.08605	-0.06023	-0.03544	-0.00973	0.00795	0.02057
Colorectal Cancer Screening	-0.08842	-0.06952	-0.05798	-0.04172	-0.02859	-0.01168	0.00252	0.01646	0.03270
Annual Flu Vaccine	-0.07101	-0.06234	-0.05624	-0.04746	-0.03965	-0.03299	-0.02610	-0.02282	-0.01986
Monitoring Physical Activity	-0.03384	-0.02781	-0.02261	-0.01404	-0.00717	-0.00027	0.00944	0.01674	0.02072
Osteoporosis Management in Women Who had a Fracture	-0.06820	-0.05831	-0.03930	-0.02903	-0.01826	-0.00648	0.00747	0.01955	0.02857
Diabetes Care – Eye Exam	-0.10131	-0.09140	-0.07707	-0.05001	-0.02949	-0.01182	0.01193	0.02641	0.03633
Diabetes Care – Kidney Disease Monitoring	-0.00339	-0.00223	-0.00111	0.00034	0.00121	0.00206	0.00339	0.00471	0.00606
Diabetes Care – Blood Sugar Controlled	-0.07629	-0.07244	-0.06415	-0.05225	-0.04253	-0.03379	-0.02721	-0.02391	-0.02116
Rheumatoid Arthritis Management	-0.01943	-0.00896	-0.00266	0.00504	0.00998	0.01568	0.02281	0.02750	0.03854
Reducing the Risk of Falling	0.11055	0.11821	0.12262	0.12743	0.13076	0.13387	0.13510	0.13543	0.13564
Improving Bladder Control	-0.01214	-0.01213	-0.01211	-0.01207	-0.01200	-0.01193	-0.01187	-0.01183	-0.01175
Medication Reconciliation Post-Discharge	-0.14361	-0.13750	-0.11713	-0.09100	-0.07353	-0.04353	-0.02273	-0.01323	-0.00555
Statin Therapy for Patients with Cardiovascular Disease	-0.00267	0.00094	0.00323	0.00860	0.01110	0.01423	0.02077	0.02561	0.02964
Part D Medication Adherence for Diabetes Medications	-0.03075	-0.02781	-0.02235	-0.01370	-0.00750	-0.00272	0.00775	0.01739	0.02226
Part D Medication Adherence for Hypertension	-0.05162	-0.04655	-0.04149	-0.03434	-0.02862	-0.02304	-0.01323	-0.00553	0.00352
Part D Medication Adherence for Cholesterol	-0.04744	-0.04436	-0.03665	-0.02687	-0.02017	-0.01491	-0.00576	0.00179	0.00970
MTM Program Completion Rate for CMR	-0.06923	-0.05726	-0.04416	-0.02243	-0.00721	0.00592	0.03107	0.05064	0.06739
Statin Use in Persons with Diabetes	-0.00713	-0.00492	-0.00207	0.00376	0.00703	0.00973	0.01490	0.02010	0.02328

¹ The values provided in the table correspond to the percentiles in the distribution of the within-contract LIS/DE differences for MA contracts (these differences are also depicted in Figure 1).

Table 3 provides the overall summary statistics for central tendency and dispersion for PDP contracts, and Table 4 shows specific percentiles of the distribution of the within-contract differences for PDP contracts.

Table 3: Summary Statistics of the Within-Contract LIS/DE Differences for PDPs

Measure Name	Mean	Median	Minimum	Maximum	Standard Deviation
Part D Medication Adherence for Diabetes Medications	-0.02510	-0.02384	-0.14042	0.02345	0.024494
Part D Medication Adherence for Hypertension	-0.04679	-0.04670	-0.13617	0.00956	0.026573
Part D Medication Adherence for Cholesterol	-0.02555	-0.01740	-0.12651	0.02056	0.026218
MTM Program Completion Rate for CMR	-0.08048	-0.08218	-0.35393	0.09787	0.080895
Statin Use in Persons with Diabetes	-0.01794	-0.01826	-0.04306	0.01685	0.012071

Table 4: Within-Contract LIS/DE Difference Distribution Values for PDPs²

Measure Name	P2.5	P5	P10	P25	P50	P75	P90	P95	P97.5
Part D Medication Adherence for Diabetes Medications	-0.06815	-0.06420	-0.05196	-0.03197	-0.02384	-0.00892	-0.00126	0.00593	0.00728
Part D Medication Adherence for Hypertension	-0.09356	-0.08828	-0.08317	-0.06122	-0.04670	-0.02703	-0.01522	-0.00253	0.00794
Part D Medication Adherence for Cholesterol	-0.07280	-0.06675	-0.06091	-0.03809	-0.01740	-0.00935	0.00127	0.01105	0.01204
MTM Program Completion Rate for CMR	-0.23403	-0.22212	-0.18926	-0.12345	-0.08218	-0.01935	0.01571	0.02437	0.03907
Statin Use in Persons with Diabetes	-0.04116	-0.04103	-0.03337	-0.02436	-0.01826	-0.01120	-0.00234	-0.00062	0.00810

² The values provided in the table correspond to the percentiles in the distribution of the within-contract LIS/DE differences for PDP contracts (these differences are also depicted in Figure 1).

Table 5 provides the range of the percentages that correspond to the initial LIS/DE groups for the determination of CAI values for the overall rating. The upper limit for each category is not included in that category, but rather the next higher category. For example, in Table 5, if a contract's percentage of LIS/DE beneficiaries is 46.184837%, the contract's LIS/DE initial category is L8. Table 6 shows disability quintiles for the determination of the CAI values for the overall rating.

Table 5: Categorization of MA Contracts into Initial LIS/DE Groups for the Overall Rating

LIS/DE Initial Group	Percentage of Contract's LIS/DE Beneficiaries
1	0.000000 to less than 6.149984
2	6.149984 to less than 9.029351
3	9.029351 to less than 11.828362
4	11.828362 to less than 15.709822
5	15.709822 to less than 21.308980
6	21.308980 to less than 31.921094
7	31.921094 to less than 46.184837
8	46.184837 to less than 74.969719
9	74.969719 to less than 100.000000
10	100.00000

Table 6: Categorization of MA Contracts into Disability Quintiles for the Overall Rating

Disability Quintile	Percentage of Contract's Disabled Beneficiaries
1	0.000000 to less than 14.868805
2	14.868805 to less than 21.386431
3	21.386431 to less than 29.352138
4	29.352138 to less than 41.560510
5	41.560510 to 100.000000

Table 7 provides the description of each of the final adjustment categories for the overall Star Rating for MA contracts and the associated values of the CAI.

Table 7: Final Adjustment Categories and CAI Values for the Overall Rating

Final Adjustment Category	LIS/DE Initial Group	Disability Quintile	CAI Value
1	L1-L3 L1	D1 D2	-0.035526
2	L4-L9 L2-L8	D1 D2	-0.011166
3	L1-L4 L5-L8	D3-D5 D3	0.014507
4	L5-L7 L8 L9-L10 L10	D4-D5 D4 D2-D4 D1	0.050424
5	L8-L9	D5	0.102822
6	L10	D5	0.156984

Tables 8 and 9 provide the range of the percentages that correspond to the initial LIS/DE groups and disability quintiles for the initial categories for the determination of the CAI values for the Part C summary rating.

Table 8: Categorization of MA Contracts into Initial LIS/DE Groups for the Part C Summary Rating

LIS/DE Initial Group	Percentage of Contract's LIS/DE Beneficiaries
1	0.000000 to less than 5.918327
2	5.918327 to less than 8.879143
3	8.879143 to less than 11.513779
4	11.513779 to less than 15.383500
5	15.383500 to less than 20.699729
6	20.699729 to less than 31.242256
7	31.242256 to less than 44.828861
8	44.828861 to less than 71.554504

LIS/DE Initial Group	Percentage of Contract's LIS/DE Beneficiaries
9	71.554504 to less than 100.000000
10	100.000000

Table 9: Categorization of MA Contracts into Disability Quintiles for the Part C Summary Rating

Disability Quintile	Percentage of Contract's Disabled Beneficiaries
1	0.000000 to less than 14.455232
2	14.455232 to less than 20.904509
3	20.904509 to less than 28.992403
4	28.992403 to less than 41.212156
5	41.212156 to 100.000000

Table 10 provides the description of each of the final adjustment categories for the Part C summary rating and the associated values of the CAI.

Table 10: Final Adjustment Categories and CAI Values for the Part C Summary Rating

Final Adjustment Category	LIS/DE Initial Group	Disability Quintile	CAI Value
1	L1	D1	-0.009257
2	L1-L7	D2-D5	0.008841
	L2-L10	D1	
	L8	D2-D3	
3	L8	D4-D5	0.038872
	L9-L10	D2-D4	
4	L9-L10	D5	0.077490

Tables 11 and 12 provide the range of the percentages that correspond to the initial LIS/DE groups and the disability quintiles for the initial categories for the determination of the CAI values for the Part D summary rating for MA-PDs.

Table 11: Categorization of MA-PD Contracts into Initial LIS/DE Groups for the Part D Summary Rating

LIS/DE Initial Group	Percentage of Contract's LIS/DE Beneficiaries
1	0.000000 to less than 6.898150
2	6.898150 to less than 9.508387
3	9.508387 to less than 12.948776
4	12.948776 to less than 17.545908
5	17.545908 to less than 24.508407
6	24.508407 to less than 36.853885
7	36.853885 to less than 55.757227
8	55.757227 to less than 87.511880
9	87.511880 to less than 100.000000
10	100.000000

Table 12: Categorization of MA-PD Contracts into Disability Quintiles for the Part D Summary Rating

Disability Quintile	Percentage of Contract's Disabled Beneficiaries
1	0.000000 to less than 15.512493
2	15.512493 to less than 22.834150
3	22.834150 to less than 30.915751
4	30.915751 to less than 44.143983
5	44.143983 to 100.000000

Table 13 provides the description of each of the final adjustment categories for the Part D summary rating for MA-PDs and the associated values of the CAI.

Table 13: Final Adjustment Categories and CAI Values for the Part D Summary Rating for MA-PDs

Final Adjustment Category	LIS/DE Initial Group	Disability Quintile	CAI Value
1	L1-L7	D1	-0.052903
	L1	D2	
2	L2-L10	D2	-0.014857
	L8-L10	D1	
3	L1-L8	D3	0.015615
	L1-L4	D4-D5	
4	L9-L10	D3-D4	0.063605
	L7-L8	D4	
	L5-L6	D4-D5	
5	L7-L9	D5	0.149711
6	L10	D5	0.219180

Tables 14 and 15 provide the range of the percentages that correspond to the LIS/DE and disability quartiles for the initial categories for the determination of the CAI values for the Part D summary rating for PDPs. Quartiles are used for both dimensions (LIS/DE and disability) due to the limited number of PDPs as compared to MA contracts.

Table 14: Categorization of PDP Contracts into LIS/DE Quartiles for the Part D Summary Rating

LIS/DE Quartile	Percentage of Contract's LIS/DE Beneficiaries
1	0.000000 to less than 1.637509
2	1.637509 to less than 3.796364
3	3.796364 to less than 13.812463
4	13.812463 to 100.000000

Table 15: Categorization of PDP Contracts into Disability Quartiles for the Part D Summary Rating

Disability Quartile	Percentage of Contract's Disabled Beneficiaries
1	0.000000 to less than 6.924101
2	6.924101 to less than 11.583226
3	11.583226 to less than 19.860555
4	19.860555 to 100.000000

Table 16 provides the description of each of the final adjustment categories for the Part D summary rating for PDPs and the associated values of the CAI.

Table 16: Final Adjustment Categories and CAI Values for the Part D Summary Rating for PDPs

Final Adjustment Category	LIS/DE Initial Group	Disability Quintile	CAI Value
1	L1-L2	D1-D3	-0.220831
2	L1-L3	D4	-0.111542
	L3-L4	D1-D2	
	L3	D3	
3	L4	D3-D4	0.094156

Please note that the CAI values for the Part D summary rating for PDPs are different from the CAI values for the Part D summary rating for MA contracts. Under §§ 422.166(f)(2)(i)(A) and 423.186(f)(2)(i)(A), categories are chosen to enforce monotonicity (i.e., values increase as percent LIS/DE and disabled increases) in the final adjustment categories. There are three final adjustment categories for PDPs for the Part D summary rating.