

## 2024 Categorical Adjustment Index Measure Supplement

*This supplement provides details related to the adjusted measure set for the 2024 Categorical Adjustment Index (CAI).*

CMS has updated the analyses examining the variability of the within-contract differences in performance between low-income subsidy/dual eligible (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 2023 Star Ratings. The figure provides (1) the variability of the within-contract differences for MA contracts and, (2) 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 to supplement 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 of 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 for the CAI for the overall Star Rating.
  - 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 2024 Star Ratings, the adjusted measures are: Annual Flu Vaccine, Breast Cancer Screening, Colorectal Cancer Screening, Controlling Blood Pressure, Diabetes Care – Blood Sugar Controlled, Diabetes Care – Eye Exam, 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, 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.

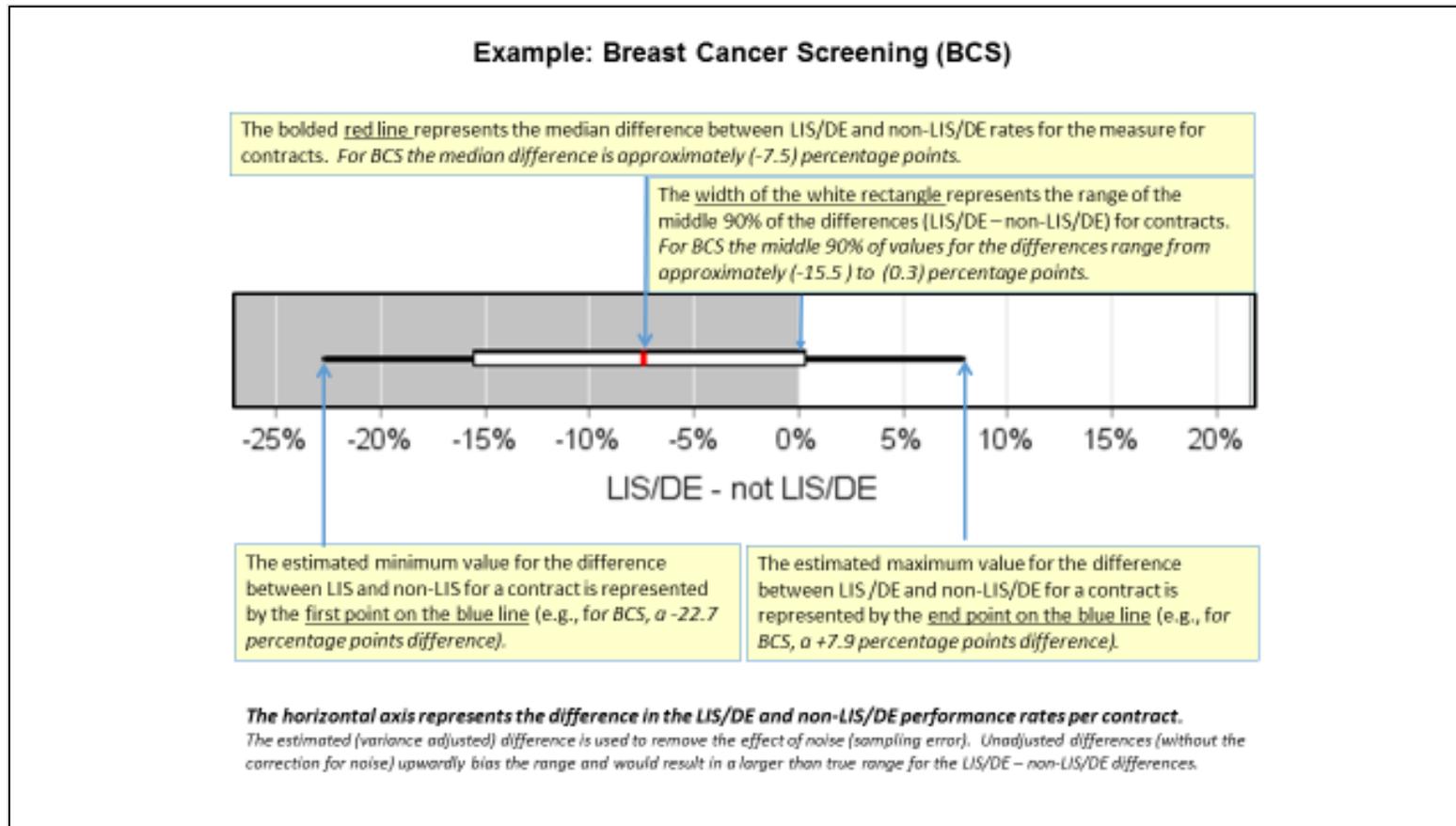
Figure 1 shows distributions of within-contract LIS/DE and non-LIS/DE differences in performance for the contracts that received a measure Star Rating. The shaded area corresponds to worse performance for LIS/DE beneficiaries, and the non-shaded area corresponds to better performance for LIS/DE beneficiaries, relative to non-LIS/DE beneficiaries. Distributions of the within-contract differences are provided first for MA contracts, followed by PDPs.

**Figure 1: Distribution of Within-Contract LIS/DE Differences in Performance across MA and PDP Contracts**



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

**Figure 2: Interpretation of the Visual of the Distribution of Within-Contract LIS/DE Differences in Performance across Contracts \***



\* The example is not based on 2024 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	-0.06958	-0.07161	-0.22847	0.11521	0.04184
Colorectal Cancer Screening	-0.04161	-0.04204	-0.13994	0.05072	0.02540
Annual Flu Vaccine	-0.05224	-0.05262	-0.13628	0.03224	0.01885
Monitoring Physical Activity	-0.01413	-0.01422	-0.05564	0.04065	0.01076
Osteoporosis Management in Women Who had a Fracture	-0.03639	-0.03747	-0.12031	0.05280	0.02095
Diabetes Care – Eye Exam	-0.03016	-0.02917	-0.12848	0.07024	0.02592
Diabetes Care – Blood Sugar Controlled	-0.05103	-0.04941	-0.11869	-0.00716	0.01702
Controlling Blood Pressure	-0.00577	-0.00572	-0.01496	0.00184	0.00209
Reducing the Risk of Falling	0.11501	0.11525	0.05700	0.17710	0.01757
Improving Bladder Control	-0.01266	-0.01268	-0.01282	-0.01220	0.00011
Medication Reconciliation Post-Discharge	-0.06683	-0.06736	-0.18775	0.15616	0.03444
Statin Therapy for Patients with Cardiovascular Disease	0.00884	0.00881	-0.02704	0.03758	0.00685
Part D Medication Adherence for Diabetes Medications	0.00250	0.00210	-0.04543	0.05938	0.01267
Part D Medication Adherence for Hypertension	-0.02269	-0.02262	-0.06576	0.03592	0.01136
Part D Medication Adherence for Cholesterol	-0.01611	-0.01657	-0.05389	0.05196	0.01223
MTM Program Completion Rate for CMR	-0.00447	-0.00426	-0.07563	0.09453	0.01776
Statin Use in Persons with Diabetes	0.00878	0.00895	-0.02002	0.04194	0.00643

**Table 2: Within-Contract LIS/DE Difference Distribution Values for MA Contracts<sup>1</sup>**

Measure Name	P2.5	P5	P10	P25	P50	P75	P90	P95	P97.5
Breast Cancer Screening	-0.15054	-0.14244	-0.11966	-0.09211	-0.07161	-0.04551	-0.01821	-0.00590	0.01490
Colorectal Cancer Screening	-0.09828	-0.08165	-0.06919	-0.05327	-0.04204	-0.02843	-0.01116	0.00200	0.01238
Annual Flu Vaccine	-0.08828	-0.08054	-0.07283	-0.06329	-0.05262	-0.04209	-0.02989	-0.02056	-0.01154
Monitoring Physical Activity	-0.03571	-0.02985	-0.02604	-0.01958	-0.01422	-0.00922	-0.00113	0.00449	0.00839
Osteoporosis Management in Women Who had a Fracture	-0.07642	-0.06502	-0.05785	-0.04766	-0.03747	-0.02776	-0.01292	-0.00356	0.00681
Diabetes Care – Eye Exam	-0.08679	-0.07423	-0.06531	-0.04327	-0.02917	-0.01535	0.00010	0.01028	0.02224
Diabetes Care – Blood Sugar Controlled	-0.09051	-0.08090	-0.07229	-0.06063	-0.04941	-0.03958	-0.03135	-0.02794	-0.02261
Controlling Blood Pressure	-0.01067	-0.00947	-0.00833	-0.00683	-0.00572	-0.00456	-0.00343	-0.00260	-0.00197
Reducing the Risk of Falling	0.07906	0.08443	0.09425	0.10505	0.11525	0.12496	0.13889	0.14528	0.14909
Improving Bladder Control	-0.01282	-0.01280	-0.01279	-0.01275	-0.01268	-0.01260	-0.01252	-0.01246	-0.01243
Medication Reconciliation Post-Discharge	-0.13735	-0.12561	-0.10789	-0.08686	-0.06736	-0.04052	-0.02679	-0.01896	-0.01350
Statin Therapy for Patients with Cardiovascular Disease	-0.00514	-0.00104	0.00107	0.00542	0.00881	0.01157	0.01613	0.02138	0.02596
Part D Medication Adherence for Diabetes Medications	-0.02056	-0.01688	-0.01191	-0.00394	0.00210	0.00702	0.01593	0.02404	0.03346
Part D Medication Adherence for Hypertension	-0.04432	-0.04077	-0.03540	-0.02851	-0.02262	-0.01785	-0.01079	-0.00360	0.00479
Part D Medication Adherence for Cholesterol	-0.03809	-0.03504	-0.03050	-0.02209	-0.01657	-0.01145	-0.00329	0.00478	0.01323
MTM Program Completion Rate for CMR	-0.04140	-0.03274	-0.02480	-0.01123	-0.00426	0.00158	0.01478	0.02547	0.03744
Statin Use in Persons with Diabetes	-0.00499	-0.00157	0.00142	0.00591	0.00895	0.01136	0.01572	0.02035	0.02316

<sup>1</sup> 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	-0.01713	-0.01456	-0.10269	0.01320	0.01847
Part D Medication Adherence for Hypertension	-0.03544	-0.03347	-0.11874	-0.00248	0.01874
Part D Medication Adherence for Cholesterol	-0.02208	-0.02139	-0.10804	0.01792	0.01987
MTM Program Completion Rate for CMR	-0.06010	-0.04606	-0.24487	0.04138	0.06313
Statin Use in Persons with Diabetes	-0.00861	-0.00821	-0.02280	0.00798	0.00478

**Table 4: Within-Contract LIS/DE Difference Distribution Values for PDPs<sup>2</sup>**

Measure Name	P2.5	P5	P10	P25	P50	P75	P90	P95	P97.5
Part D Medication Adherence for Diabetes Medications	-0.06409	-0.04734	-0.03289	-0.02164	-0.01456	-0.00654	-0.00086	0.00751	0.00942
Part D Medication Adherence for Hypertension	-0.08303	-0.06132	-0.05572	-0.04185	-0.03347	-0.02447	-0.01701	-0.01146	-0.00872
Part D Medication Adherence for Cholesterol	-0.07190	-0.04813	-0.04165	-0.02768	-0.02139	-0.01190	-0.00050	0.00680	0.00827
MTM Program Completion Rate for CMR	-0.18025	-0.17945	-0.14063	-0.10393	-0.04606	-0.01705	0.01485	0.03698	0.04070
Statin Use in Persons with Diabetes	-0.01903	-0.01874	-0.01334	-0.01013	-0.00821	-0.00728	-0.00362	-0.00050	0.00159

<sup>2</sup> 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. With the exception of the highest category, the upper limit for each category is not included in that category, but rather the next (higher) category. For example, in Table 5, if the percentage of beneficiaries who are LIS/DE in a contract is 48.171334%, 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 Beneficiaries who are LIS/DE
1	0.000000 to less than 6.301653
2	6.301653 to less than 8.983864
3	8.983864 to less than 12.272291
4	12.272291 to less than 17.623062
5	17.623062 to less than 23.811644
6	23.811644 to less than 32.478787
7	32.478787 to less than 48.171334
8	48.171334 to less than 76.744186
9	76.744186 to less than 100.000000
10	100.000000

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

Disability Quintile	Percentage of Contract's Beneficiaries who are Disabled
1	0.000000 to less than 15.246926
2	15.246926 to less than 22.226124
3	22.226124 to less than 29.541446
4	29.541446 to less than 43.095797
5	43.095797 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	D1	-0.024917
2	L4-L10	D1	-0.001531
	L1-L10	D2	
	L1-L4	D3	
3	L5-L6	D3	0.016703
	L1-L6	D4-D5	
4	L7-L9	D3	0.036199
	L7-L8	D4	
	L7	D5	
5	L8	D5	0.067616
6	L10	D3	0.087672
	L9-L10	D4	
	L9	D5	
7	L10	D5	0.133273

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 Beneficiaries who are LIS/DE
1	0.000000 to less than 5.758017
2	5.758017 to less than 8.524590
3	8.524590 to less than 11.765670
4	11.765670 to less than 17.215998
5	17.215998 to less than 23.365002
6	23.365002 to less than 31.600120
7	31.600120 to less than 46.717818
8	46.717818 to less than 74.752781
9	74.752781 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 Beneficiaries who are Disabled
1	0.000000 to less than 14.974530
2	14.974530 to less than 21.948529
3	21.948529 to less than 29.414572
4	29.414572 to less than 42.395693
5	42.395693 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-L7	D1	-0.003487
	L1-L6	D2	
	L1-L5	D3	
	L1-L4	D4	
2	L8-L10	D1	0.006987
	L7-L10	D2	
	L6-L7	D3	
	L5-L6	D4	
	L1-L5	D5	
3	L8-L10	D3	0.022797
	L7-L8	D4	
	L6-L7	D5	
4	L8	D5	0.044588
5	L9-L10	D4-D5	0.066880

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 Beneficiaries who are LIS/DE
1	0.000000 to less than 6.507512
2	6.507512 to less than 9.702347
3	9.702347 to less than 13.812027
4	13.812027 to less than 19.485294
5	19.485294 to less than 26.769231
6	26.769231 to less than 38.003026
7	38.003026 to less than 58.059701
8	58.059701 to less than 93.000000
9	93.000000 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 Beneficiaries who are Disabled
1	0.000000 to less than 15.588308
2	15.588308 to less than 23.253251
3	23.253251 to less than 32.385819
4	32.385819 to less than 46.047270
5	46.047270 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-L3	D1	-0.035219
2	L4-L8	D1	-0.018599
	L1-L7	D2	
3	L1-L6	D3	0.009901
	L1-L5	D4-D5	
4	L9	D1	0.034454
	L8-L9	D2	
	L7-L8	D3	
	L6-L7	D4	
	L6	D5	
5	L8	D4	0.079744
	L7-L8	D5	
6	L10	D1-D4	0.110538
	L9	D3-D5	
7	L10	D5	0.124667

Tables 14 and 15 provide the range of the percentages that correspond to the LIS/DE and disability quintiles for the initial categories for the determination of the CAI values for the Part D summary rating for PDPs. Quintiles 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 Quintiles for the Part D Summary Rating**

LIS/DE Quintile	Percentage of Contract's Beneficiaries who are LIS/DE
1	0.000000 to less than 1.243781
2	1.243781 to less than 2.398356
3	2.398356 to less than 4.421104
4	4.421104 to less than 10.174281
5	10.174281 to 100.000000

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

Disability Quintile	Percentage of Contract's Beneficiaries who are Disabled
1	0.000000 to less than 6.154784
2	6.154784 to less than 8.398344
3	8.398344 to less than 11.264808
4	11.264808 to less than 15.616311
5	15.616311 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 Quintile	Disability Quintile	CAI Value
1	L1	D1	-0.317950
2	L2	D1	-0.172794
	L1-L2	D2	
3	L3-L5	D1-D2	-0.139296
	L1-L3	D3	
	L1	D4	
4	L4-L5	D3	-0.067530
	L2-L5	D4	
	L1-L4	D5	
5	L5	D5	0.043919

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 five final adjustment categories for PDPs for the Part D summary rating.