2018 Categorical Adjustment Index Measure Selection

CMS has updated the analyses to guide the selection of the measures for adjustment to determine the 2018 Categorical Adjustment Index.[1] Using the 2015 measurement period data, the variability of the within-contract differences in performance for a similar subset of Star Ratings measures[2] examined last year was assessed and is provided within this supplement to the 2018 draft Call Letter. The decision criteria used to select measures for adjustment was (1) a median absolute difference between LIS/DE and non-LIS/DE beneficiaries of 5% or more, and/or (2) the LIS/DE subgroup performed better or worse than the non-LIS/DE subgroup in all contracts.

Figures 1 and 2 in the appendix depict the within-contract differences for the contracts that received a Star Rating in the 2017 Star Ratings Program. Figure 1 employs data for MA-PDs and MA contracts only, while Figure 2 employs data for PDPs only. Figure 3 is provided to aid in the interpretation of the visuals. Tables 1 through 4 provide in tabular format the descriptive statistics of the within-contract differences that underlie the visuals in the figures. Tables 1 and 3 provide the overall summary statistics for central tendency and dispersion. Tables 2 and 4 provide specific points of the distribution of the within-contract differences for MA-PDs/MA contracts and PDPs respectively.

For the 2018 Star Ratings Program, the measures proposed for adjustment for the 2018 Star Ratings include the following three Part C measures for MA (MA-only, MA-PD) and 1876 contracts: Breast Cancer Screening, Osteoporosis Management in Women Who had a Fracture, and Diabetes Care – Blood Sugar Controlled. As done last year, in order to apply consistent adjustments across MA-PDs and PDPs, the Part D measures were selected by applying the selection criteria to MA-PDs and PDPs independently and, then, selecting measures that met the criteria for either delivery system. For the 2018 Star Ratings program, the two Part D measures: Medication Adherence for Hypertension (RAS antagonists) and Medication Therapy Management (MTM) Program Completion Rate for Comprehensive Medication Review (CMR) are proposed for adjustment for MA-PDs and PDPs.
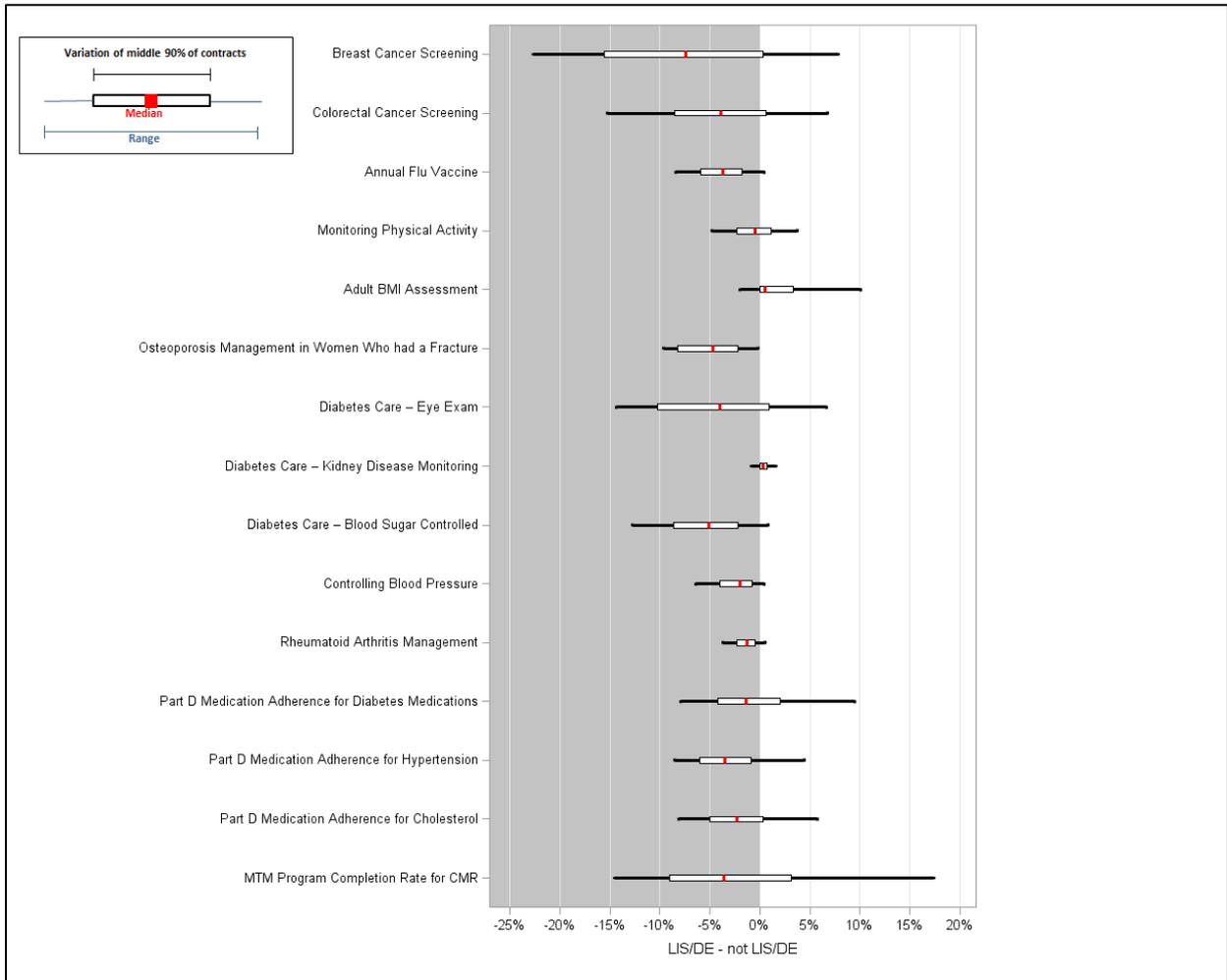
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[1] The details of the analyses for the within-contract differences provided in the figures and tables can be found in the response to question 4 of the Technical Appendix using the Updated Research Findings on the Impact of Socioeconomic Status on Star Ratings 09-08-2015-v-101232015.zip link at: https://www.cms.gov/Medicare/Prescription-Drug-Coverage/PrescriptionDrugCovGenIn/PerformanceData.html Note: Figures 1 and 2 and the associated tables within this supplement were created applying the same methodology as the referenced slides (30 and 31) in the Technical Appendix.
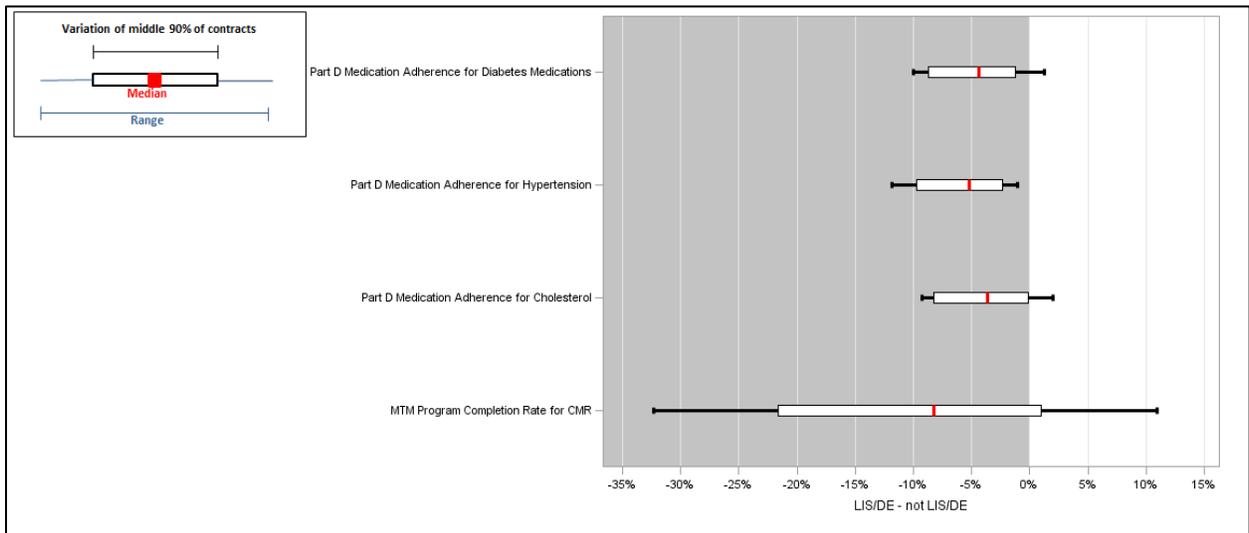
[2] The 16 clinical quality measures that comprised the subset of the Star Ratings measures examined for the 2017 CAI included: adult BMI assessment, rheumatoid arthritis management, breast cancer screening, controlling blood pressure, diabetes care – blood sugar controlled, diabetes care – eye exam, diabetes care – kidney disease monitoring, colorectal cancer screening, osteoporosis management in women who had a fracture, plan all-cause readmissions, annual flu vaccine, monitoring physical activity, reducing the risk of falling, medication adherence for diabetes medications, medication adherence for hypertension, and medication adherence for cholesterol. For the 2018 CAI analysis, reducing the risk of falling was removed for possible adjustment because it will not be included in the 2018 Star Ratings Program due to a specification change. In addition, plan all-cause readmissions was removed because revisions are under consideration. One new measure was added to the analysis for the 2018 Star Ratings, Medication Therapy Management (MTM) Program Completion Rate for Comprehensive Medication Review (CMR).
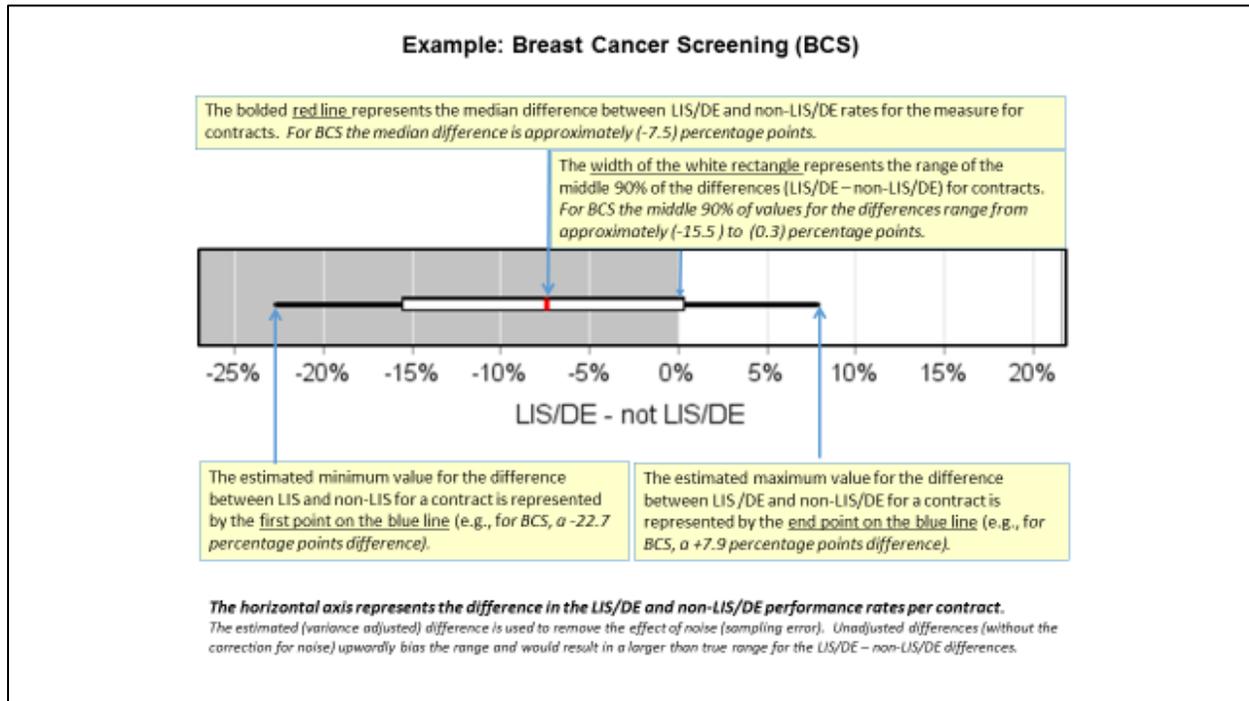
Appendix

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

Figure 2: Variation across PDP Contracts of the Within-Contract LIS/DE Differences

Figure 3: Interpretation of the Visual of the Variation across Contracts of the Within-Contract LIS/DE Differences

Example: Breast Cancer Screening (BCS)

The bolded red line represents the median difference between LIS/DE and non-LIS/DE rates for the measure for contracts. For BCS the median difference is approximately (-7.5) percentage points.

The width of the white rectangle represents the range of the middle 90% of the differences (LIS/DE – non-LIS/DE) for contracts. For BCS the middle 90% of values for the differences range from approximately (-15.5) to (0.3) percentage points.

-25%   -20%   -15%   -10%   -5%   0%   5%   10%   15%   20%

LIS/DE - not LIS/DE

The estimated minimum value for the difference between LIS and non-LIS for a contract is represented by the first point on the blue line (e.g., for BCS, a -22.7 percentage points difference).

The estimated maximum value for the difference between LIS /DE and non-LIS/DE for a contract is represented by the end point on the blue line (e.g., for BCS, a +7.9 percentage points difference).

The horizontal axis represents the difference in the LIS/DE and non-LIS/DE performance rates per contract. The estimated (variance adjusted) difference is used to remove the effect of noise (sampling error). Unadjusted differences (without the correction for noise) upwardly bias the range and would result in a larger than true range for the LIS/DE – non-LIS/DE differences.

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

Measure	Mean	Median	Standard Deviation	Range	Min	Max
Breast Cancer Screening	-0.073083	-0.074617	0.045327	0.305840	-0.227270	0.078570
Colorectal Cancer Screening	-0.038756	-0.038987	0.028689	0.220310	-0.152730	0.067580
Annual Flu Vaccine	-0.037712	-0.037160	0.012292	0.088400	-0.084320	0.004070
Monitoring Physical Activity	-0.005332	-0.005288	0.010840	0.085350	-0.047890	0.037470
Adult BMI Assessment	0.009534	0.005633	0.013172	0.120600	-0.020380	0.100220
Osteoporosis Management in Women Who had a Fracture	-0.047182	-0.047572	0.017109	0.095280	-0.096790	-0.001510
Diabetes Care – Eye Exam	-0.042894	-0.039824	0.033174	0.209790	-0.143880	0.065910
Diabetes Care – Kidney Disease Monitoring	0.003351	0.003171	0.002440	0.024430	-0.008670	0.015760
Diabetes Care – Blood Sugar Controlled	-0.052626	-0.051444	0.019977	0.135900	-0.127910	0.007990
Controlling Blood Pressure	-0.021228	-0.020384	0.009731	0.068670	-0.064160	0.004500
Rheumatoid Arthritis Management	-0.013485	-0.013340	0.005638	0.042320	-0.037410	0.004910
Part D Medication Adherence for Diabetes Medications - MA Contracts	-0.013699	-0.013883	0.019487	0.173050	-0.078950	0.094100
Part D Medication Adherence for Hypertension - MA Contracts	-0.033482	-0.034561	0.015982	0.129910	-0.085170	0.044740
Part D Medication Adherence for Cholesterol - MA Contracts	-0.022418	-0.022549	0.017022	0.138480	-0.081100	0.057380
MTM Program Completion Rate for CMR - MA Contracts	-0.033767	-0.036140	0.035983	0.319090	-0.145340	0.173740

Table 2: Within-Contract LIS/DE Difference Distribution Values for MA-PDs and MAs

Measure	P2_5	P5	P10	P25	P50	P75	P90	P95	P97_5
Breast Cancer Screening	-0.165940	-0.155470	-0.127590	-0.098330	-0.074617	-0.050420	-0.015770	0.002938	0.023609
Colorectal Cancer Screening	-0.091490	-0.084910	-0.072960	-0.053090	-0.038987	-0.024770	-0.007060	0.006142	0.029338
Annual Flu Vaccine	-0.063480	-0.059090	-0.052480	-0.043750	-0.037160	-0.031160	-0.024190	-0.018290	-0.011450
Monitoring Physical Activity	-0.026180	-0.023370	-0.019310	-0.011370	-0.005288	0.000397	0.007063	0.011573	0.018449
Adult BMI Assessment	-0.003990	0.000420	0.001530	0.003270	0.005633	0.010680	0.022423	0.033395	0.049205
Osteoporosis Management in Women Who had a Fracture	-0.085930	-0.082630	-0.068120	-0.056170	-0.047572	-0.035530	-0.027090	-0.022060	-0.013100
Diabetes Care – Eye Exam	-0.114520	-0.102570	-0.089290	-0.060980	-0.039824	-0.024630	-0.002280	0.009196	0.020331
Diabetes Care – Kidney Disease Monitoring	-0.000670	0.000110	0.000970	0.001940	0.003171	0.004549	0.006207	0.007366	0.008670
Diabetes Care – Blood Sugar Controlled	-0.098530	-0.086480	-0.076820	-0.065450	-0.051444	-0.039620	-0.028650	-0.022010	-0.013390
Controlling Blood Pressure	-0.044100	-0.040040	-0.034080	-0.026030	-0.020384	-0.014570	-0.010560	-0.007650	-0.005140
Rheumatoid Arthritis Management	-0.026470	-0.023360	-0.020100	-0.016440	-0.013340	-0.010400	-0.007030	-0.005140	-0.002400
Part D Medication Adherence for Diabetes Medications - MA Contracts	-0.046890	-0.041910	-0.035790	-0.023250	-0.013883	-0.007060	0.007072	0.020241	0.034310
Part D Medication Adherence for Hypertension - MA Contracts	-0.064630	-0.060110	-0.050620	-0.041930	-0.034561	-0.025520	-0.016270	-0.008890	0.006188
Part D Medication Adherence for Cholesterol - MA Contracts	-0.058070	-0.050390	-0.040220	-0.030910	-0.022549	-0.015730	-0.003430	0.003093	0.015497
MTM Program Completion Rate for CMR - MA Contracts	-0.099440	-0.090180	-0.076100	-0.052870	-0.036140	-0.015160	0.009941	0.031047	0.048931

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

Measure	Mean	Median	Standard Deviation	Range	Min	Max
Part D Medication Adherence for Diabetes Medications - PDP Contracts	-0.044724	-0.044180	0.022149	0.112300	-0.100080	0.012220
Part D Medication Adherence for Hypertension - PDP Contracts	-0.055330	-0.052253	0.022443	0.107610	-0.118540	-0.010930
Part D Medication Adherence for Cholesterol - PDP Contracts	-0.036717	-0.035942	0.024476	0.112970	-0.093000	0.019970
MTM Program Completion Rate for CMR - PDP Contracts	-0.085647	-0.082120	0.081578	0.432640	-0.323260	0.109380

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

Measure	P2_5	P5	P10	P25	P50	P75	P90	P95	P97_5
Part D Medication Adherence for Diabetes Medications - PDP Contracts	-0.099200	-0.087450	-0.075370	-0.053750	-0.044180	-0.032064	-0.019367	-0.012411	-0.004902
Part D Medication Adherence for Hypertension - PDP Contracts	-0.100080	-0.097290	-0.091800	-0.067270	-0.052253	-0.040838	-0.02851	-0.023398	-0.019977
Part D Medication Adherence for Cholesterol - PDP Contracts	-0.089960	-0.082110	-0.072480	-0.050560	-0.035942	-0.020372	-0.006886	-0.000878	0.018838
MTM Program Completion Rate for CMR - PDP Contracts	-0.225720	-0.216680	-0.190860	-0.135870	-0.082120	-0.022755	-0.003408	0.009393	0.054064