Public Comment Submitted by Yale/CORE for the:

Hospital-level, risk-standardized payment associated with a 90-day episode of care for elective primary total hip and/or total knee arthroplasty (CBE #3474)

90-day THA/TKA Payment Measure background: As a reminder, the THA/TKA Payment Measure (CBE #3474) calculates payments that reflect differences in the care provided for patients undergoing THA/TKA by removing geographic differences and policy adjustments in payment rates, and standardizing payments across geographic areas. By removing payment adjustments unrelated to clinical care, this risk-adjusted measure reflects differences in payment due to practice variation at the hospital level.

During the February 2023 Standing Committee meeting, the THA/TKA Payment measure received a "Consensus Not Reached" vote. The Committee expressed their concern that the measure as submitted for endorsement maintenance does not adjust for dual eligibility in the risk model. Below we describe the rationale for this decision, and also provide existing (submitted with our original submission) and new analyses, to support this decision. **We believe that the rationale and evidence presented below support the validity of the THA/TKA payment measure.**

To summarize:

- **Adding the dual eligibility variable has little impact on measure scores**: Adding the dual eligibility variable to the risk model has little impact on measure scores, and the proportion of dual eligible patients in the measure cohort is small.
    - Mean changes in payments are less than $75 (or less than 0.3% of total payments).
    - Measure scores calculated with and without dual eligibility are highly correlated (0.994).
    - The mean hospital prevalence of the dual eligibility variable is 3.4%.
- **Risk model validity**: The measure's risk model performs similarly for dual eligible vs. non-dual eligible patients, as shown by risk-decile plots.
- New analyses provided in this public comment show that **payments have declined for both dual and non-dual patients, but quality has improved** for both groups of patients.
- **The THA/TKA measure is used in a pay-for-reporting program, not a pay-for-performance program.** Therefore, facilities are not penalized based on their performance on this measure.
- **The THA/TKA payment measure is reported together with the THA/TKA Complications measure which was endorsed by the Surgery Standing Committee without adjustment for dual eligibility.** They cannot be reported together if they do not use the same risk-adjustment approach. Reporting these two measures together is important because the payment measure alone is not a quality signal (payments are not characterized as too high or too low, but rather taken in context with quality to identify providers with higher payments and low quality). The payment measure needs to be reported together with a quality measure for a value signal.

Each item above is covered in more detail below:

1. **Adding the dual-eligibility variables has little impact on measure scores**
    a. Median differences in measure scores calculated with and without dual eligibility are very small ($76.84 or about 0.26% of total costs) (Table 1).

b. Measure scores calculated with and without dual eligibility in the model are highly correlated (Pearson's correlation coefficient of 0.994).
c. The mean hospital prevalence of the dual eligibility variable is 3.4%.

Table 1: Change in Risk-Standardized Payments (RSPs) and correlation between measure scores calculated with and without dual eligibility in the risk model.

Social risk factor	Median change in RSP (Percent of Average Payments)	Interquartile Range (IQR)	Correlation in measure scores (Pearson Correlation Coefficient)
Dual Eligibility	$76.84 (0.29%)	$-18.50 to $125.20	0.994

2. **Validity of the risk mode**l: The THA/TKA **risk model performs nearly identically for just patients with dual eligibility** (Figure A) compared with all patients (Figure B). Below we show risk decile plots that demonstrate that the model performs well separately for patients with dual eligibility.

Figure A: Risk-decile plots for patients with dual eligibility

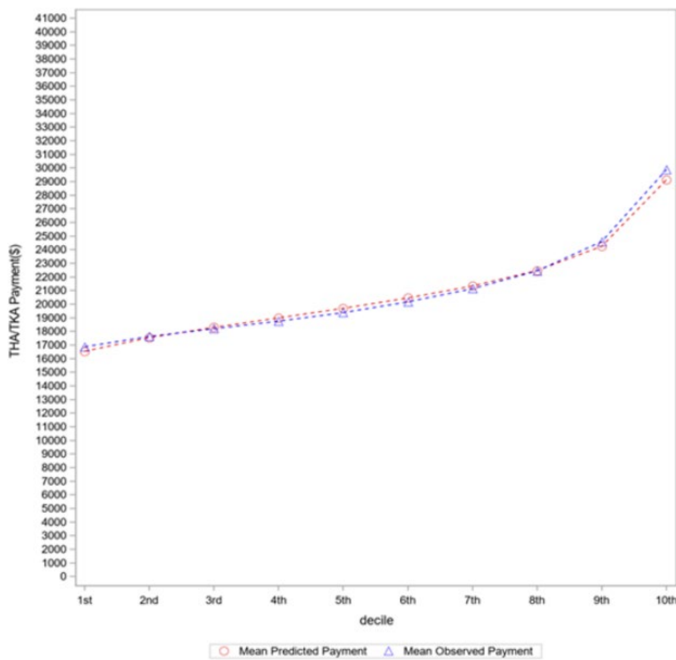


Figure 4a. Risk-decile plot for the patients with dual eligibility

Figure B: Risk-decile plot for entire THA/TKA cohort

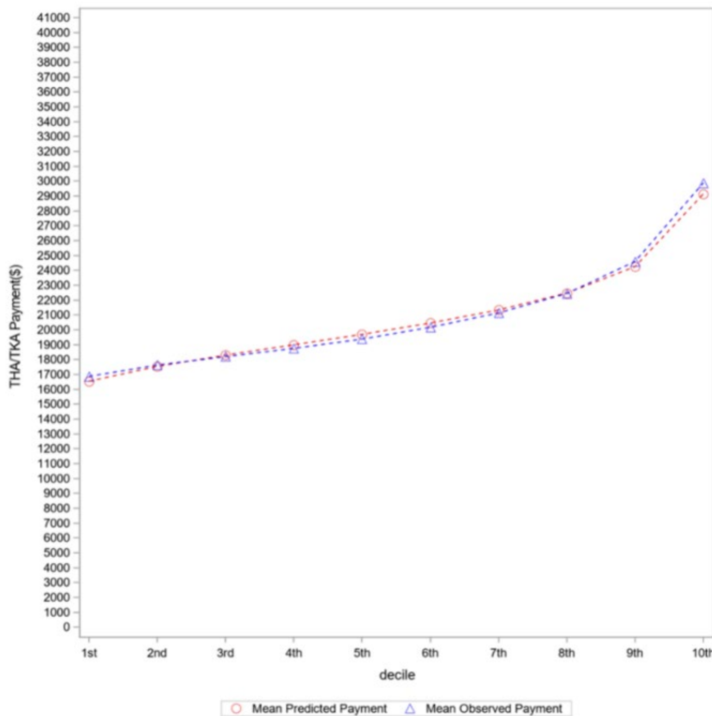


Figure 4: Risk-decile plot for the entire THA/TKA Payment cohort

3. New analyses suggest that hospitals are not "skimping" on care for dual eligible patients.

The Committee expressed concern that because the THA/TKA payment measure is not adjusted for dual eligibility, hospitals may "skimp" on care for dual eligible patients. To attempt to address this concern we performed three additional analyses, described below. **Our results show that hospitals are spending less on both dual eligible and non-dual eligible patients but are not reducing utilization at the expense of quality for either patient group.** In summary, our results shown below show that:

(a) Payments decreased a similar magnitude for both dual eligible and non-dual eligible patients.
(b) The association between payments and the hospital-proportion of patients with dual-eligibility did not decrease year over year (as one would expect if hospitals with a high proportion of dual eligible patients were skimping on care for those patients).
(c) Outcomes (complications) as measured by the THA/TKA Complications measure improved for both dual eligible and non-dual eligible patients.

Each set of analyses is explained in more detail below.

(a) Trends in mean payments for dual eligible vs. non-dual eligible patients for three years separately within the performance period show that payments are declining for both non-dual eligible and dual-eligible patients.

If hospitals were spending less on care for DE patients but not non-DE patients, we would expect to see a decrease in payments year over year for DE patients but not for non-DE patients. We compared mean total payments for each of three years (2016/2017; 2017/2018; 2018/2019) and found that mean payments declined somewhat over the three-year period for both DE and non-DE admissions. The decline was similar in magnitude for both patient groups (Figure C); **for non-dual eligible patients, mean observed payments declined by 7.2% between the 2016/2017 and 2018/2019 periods, compared with a 6.2% decline for dual-eligible patients across the same time period.**

Because we know that hospitals spend more on post-acute care for DE patients compared with non-DE patients, we also compared mean post-acute care payments and found similar results (Figure D); **for non-dual eligible patients, mean observed payments declined by 5.2% between the 2016/2017 and 2018/2019 periods, compared with a 5.6% decline for dual-eligible patients across the same time period.**

Figure C. Comparison of average annual total THA/TKA observed payments for non-dual eligible (blue) and dual eligible (orange) patients

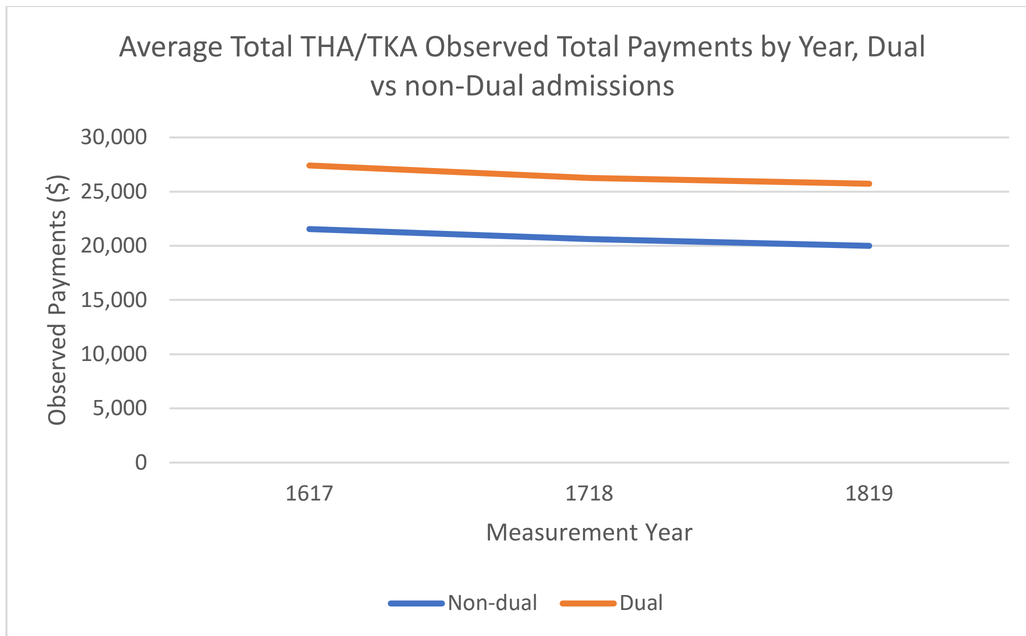
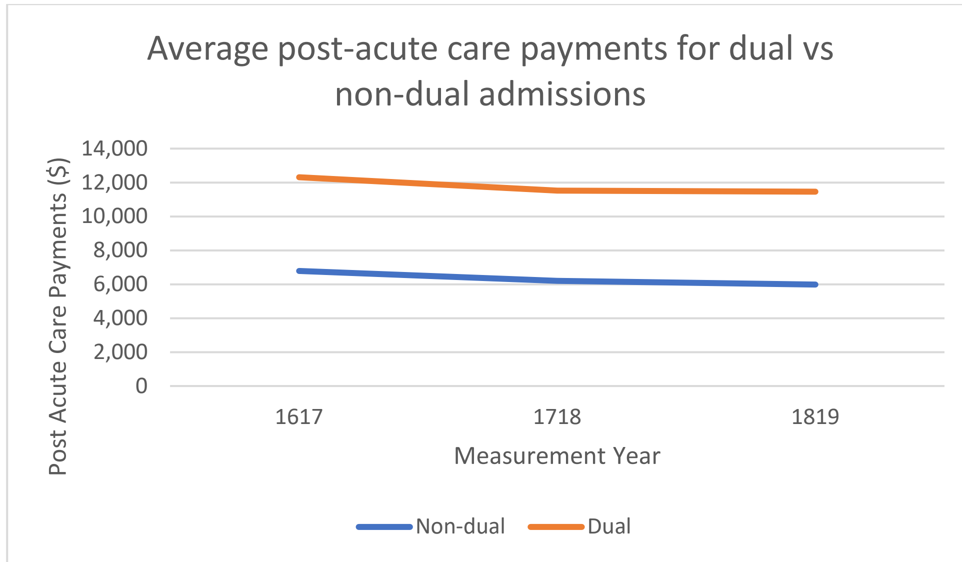
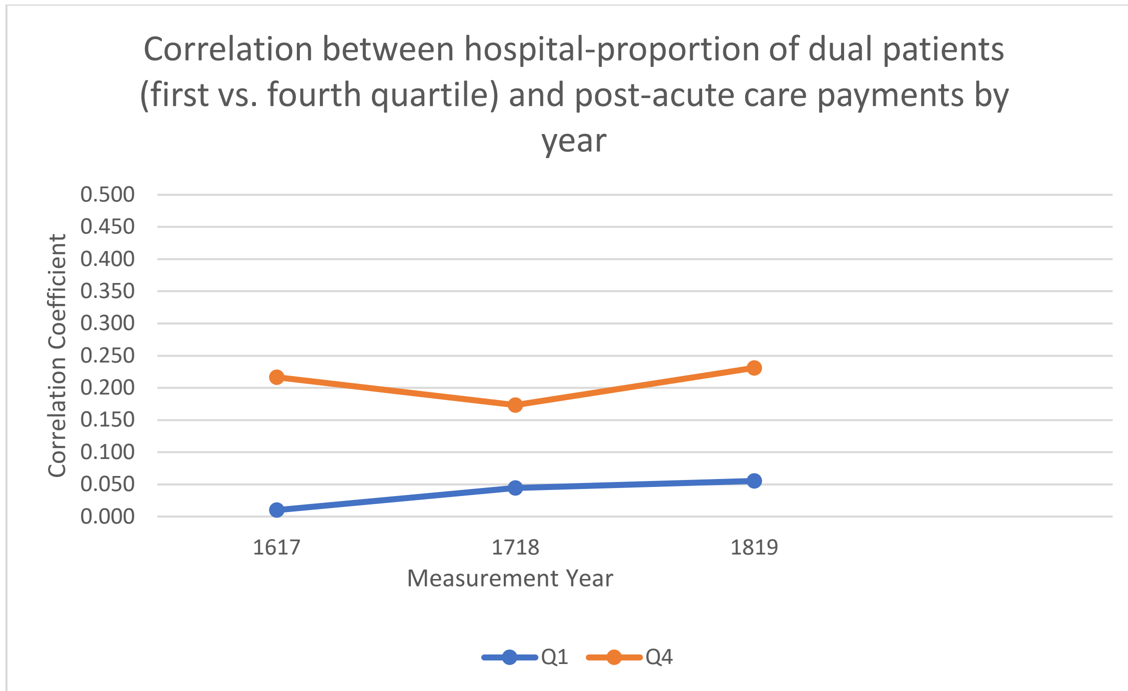


Figure D. Trends in post-acute care payments for non-dual eligible (blue) vs. dual eligible patients (orange) by year



(b) We then hypothesized that if hospitals were spending less on dual patients vs. non-dual patients, we should see a weaker correlation between the proportion of dual-eligible patients and spending across each year of the three-year period. We therefore examined trends in the strength of the correlations (Pearson's, weighted by hospital volume) between spending on index hospitalization or post-acute care and the proportion of dual eligible patients at the hospital level. Our results suggest almost no correlation (<0.1) between index payment and the proportion of dual-eligible patients. The correlation between post-acute care payment and the proportion of dual patients is slightly stronger though still weak (<0.3) and **does not show a decreasing trend within any quartile of post-acute care payment (quartile 1 and quartile 4 shown in Figure E as examples) across years.**

Figure E Comparison in trend of correlations between the hospital-proportion of patients with dual eligibility and post-acute care payments for each year within the three-year performance period, for first quartile (blue) vs. fourth quartile (orange) of hospital-proportion of patients with dual eligibility



4. **Use**: **The THA/TKA measure is currently used in a <u>pay-for-reporting</u> program**, not a pay-for-performance program. Therefore, facilities are not penalized based on their performance on this measure.

   Rather than adjusting quality measures for social risk factors, CMS accounts for any impact on social risk factors within their payment programs. For example, for THA/TKA procedures there is a pay-for-performance program called CJR, or the Comprehensive Care for Joint Replacement model. CJR, run through the Center for Medicare and Medicaid Innovation (CMMI), is a retrospective bundled payment model where CMS provides participant hospitals with a target price prior to the start of each performance year. Following the end of a model performance year, actual total spending for the episode is compared to the target price for the participant hospital where the beneficiary had the initial surgery. **Target prices within CJR now include beneficiary-level risk adjustment, including adjustment for dual eligibility**. Then, depending on the participant hospital's quality and episode spending performance, the hospital may receive an additional payment from Medicare or be required to repay Medicare for a portion of the episode spending. In this model, dual eligibility is a variable in the model that adjusts for the payment target. Similarly, CMS addresses dual eligibility for its readmission program not by adjusting quality measures for dual eligibility, but by peer-grouping hospitals by the proportion of patients with dual eligibility, within the payment program (HRRP).

5. **Usability: The THA/TKA payment measure is paired with the THA/TKA Complications measure that is <u>not</u> adjusted for dual eligibility**. This THA/TKA payment measure is reported together

with a THA/TKA complications measure (CBE #1550, re-endorsed in Fall 2020 without dual eligibility by the Surgery Standing Committee) to provide a signal of value to consumers and other stakeholders. The two measures are reported together on *Care Compare*. If one measure were adjusted for dual eligibility and the other was not, they could not be reported together. The Surgery Standing Committee supported the endorsement of the THA/TKA complications measure without adjustment for dual eligibility.