DEPARTMENT OF HEALTH & HUMAN SERVICES
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CENTERS FOR MEDICARE & MEDICAID SERVICES
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Memorandum

DATE: **Monday, May 16, 2016**

TO: **The National Quality Forum (NQF)**

FROM: **Lein Han, PhD, Contracting Officer Representative**
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The Centers for Medicare & Medicaid Services (CMS)

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SUBJECT: **CMS Response to Appeal of Acute Myocardial Infarction (NQF # 2431), Heart Failure (NQF #2436) and Pneumonia (NQF #2579) 30-Day Episode-Of-Care Payment Measures**

Background

On February 18, 2016, the National Quality Forum's (NQF) Board of Directors ratified NQF #2431: Hospital-level, risk-standardized payment associated with a 30-day episode-of-care for Acute Myocardial Infarction (AMI), NQF #2436: Hospital-level, risk-standardized payment associated with a 30-day episode-of-care for heart failure (HF), and Hospital-level, risk-standardized payment associated with a 30-day episode of care for pneumonia (PN) for continued endorsement, followed by a 30-day appeals period. We received two letters of appeal on the February 18, 2016 endorsement decision. Several stakeholders, including the American Hospital Association (AHA), the Federation of American Hospitals (FAH), the Association of American Medical Colleges (AAMC), the America's Essential Hospitals (AEH), and the American Medical Association (AMA), offered comments addressing the following: use of race variable, consideration of community and environmental factors, and use of additional patient-level variables. We appreciate their interest and thoughtful comments made on the measures. Although some comments will not be addressed in this memo, we have discussed with NQF and the Yale Center for Outcomes Research and Evaluation (CORE). This memo is organized to summarize and respond to the appellant's comments on each issue identified above.

I. Use of Race Variable

Comment: Stakeholders expressed concern on use of the race variable, commenting on the quality of race/ethnicity data and noting that race/ethnicity should not be used as a proxy for socioeconomic status (SES).

Response: In regards to the issue of using race as a proxy for SES, we agree with the appellants that race generally should not serve as a proxy for SES. We feel it is useful to examine race not as a proxy for SES but as an important comparator. Although the NQF Expert Panel on Risk Adjustment for Sociodemographic Factors did not provide clear guidance regarding inclusion of race, the panel did broaden the term from SES to SDS to account for consideration of racial disparities, and we feel it is useful to understand the pattern of racial disparities along with SES disparities in these payment measures. Moreover, the Cost and Resource Use Standing Committee did agree with CORE's analytic plan to examine race. We believe it is helpful to show analyses with race, not because it should be incorporated in risk adjustment models, but as a point of comparison with other SES variables. The conceptual rationale for not adjusting for SES has important parallels with race in that both SES and race are associated with access to high quality care and can lead to differential care within hospitals. These comparisons can be helpful in understanding causal pathways and for making decisions about incorporation of SES in risk adjustment models.

We share concerns regarding the quality of national race/ethnicity data. However, CMS data are not yet specific or sensitive enough to determine race/ethnicity at a more granular level. To be specific, CMS research has shown that "black" and "white" are the only categories of CMS' beneficiary race code variable with high sensitivity and specificity. In the future, when other race/ethnicity categories are more reliable or when other race/ethnicity variables are reliably available, we would certainly support their inclusion in SDS evaluation, but only as a comparator with other SES variables.

II. Consideration of Community and Environmental Factors

Comment: Stakeholders expressed interest in incorporating community-level factors in analyses and risk models.

Response: We appreciate the stakeholder's consideration of community-level factors. We believe the use of ZIP code-linked variables – e.g., the Agency for Healthcare Research and Quality (AHRQ) SES Index that is derived from the American Community Survey (ACS) census block group level data and linked to a patient's ZIP code – can capture community factors and are tested in models at the patient-level as a proxy for patient SES. Additionally, conducting analyses using patient-level variables was consistent with the guidance from NQF: "If a conceptual relationship exists between a *patient-level* sociodemographic factor and outcome, it should be tested empirically."

In terms of using community-level factors that are not at the patient level within the risk adjustment model, we see a few challenges. First there, there is insufficient evidence on which community factors influence health care utilization and episode payment and what would be appropriate to incorporate in risk models. There is also a need to carefully consider the policy implications of incorporating community factors into episode payment models since many potential variables are related to availability of services (such as nursing homes or primary care) which may be driving utilization patterns that the measures are meant to illuminate. So although we are open to considering new approaches to modelling and potential incorporation of community variables, we felt this was not the charge of the NQF guidance, and we do not feel the evidence is sufficient to do so at this time.

III. Use of Additional Patient-Level Variables

Comment: Stakeholders expressed concern with performing analyses using only dual-eligible status and expressed interest in the use of 9-digit zip code data in analyses.

Response: At the time of CORE's meeting with the NQF Cost and Resource Use Standing Committee, CORE identified all feasible variables for use in measures based on the Medicare administrative claims dataset. Among the identified variables, the Committee discouraged CORE from further examination of the AHRQ SES Index linked to a patient's 5-digit ZIP code. (CORE was not able to link the AHRQ SES Index at the 9-digit zip code level at the time of the Standing Committee's in-person meeting.) Secondly, CORE considered the Low-Income Subsidy (LIS) variable and the Supplemental Security Income (SSI) variable. LIS was not used because it has a slightly higher income threshold and does not capture many additional patients above dual eligible status. Patient-level SSI is unavailable for use by developers (only used by CMS to calculate disproportionate share hospital [DSH] status but not otherwise available).

We note that CORE has now completed analyses for the acute myocardial infarction, heart failure, and pneumonia payment measures using 9-digit ZIP code linked to the AHRQ SES Index (a composite of 7 SES variables including housing, income and education from the American Community Survey) at the census block group level. We also adjusted the AHRQ SES Index for cost of living. The results of these analyses are similar to the results of the analyses using the black/non-black and dual-eligible status indicator variables.