The American Medical Association (AMA) would like to ask the Standing Committee to thoughtfully consider whether there is increased risk for negative unintended consequences related to a potential association of increased in patient mortality following the implementation of the Center for Medicare and Medicaid Services (CMS) Hospital Readmissions Reduction Program (HRRP). Following the publication by Gupta and colleagues (2017), the AMA completed a literature search to evaluate whether the conclusions of Gupta and co-authors could be replicated. This scan was conducted to better understand the significance of the authors' findings within the larger body of literature on readmissions. While the results were inconclusive due to the various studies using inconsistent data and implementing different versions of the CMS readmission measures, the review raised additional questions that the AMA believes are important to explore. As a result, the AMA sent a letter to CMS in February and plan to reiterate in our 2019 IPPS proposed rule comments outlining a set of questions that should be investigated to assist CMS, physicians, providers and patients better understand the impact our actions on readmissions and outcomes. These questions were:

- There is a need to examine the data to determine if additional reductions in scores can be made using the existing measures in the HRRP since the readmission rates are now somewhat stable. Minimal improvements (decreases in rates) are now seen for most if not all of the readmission measures, but it is not known whether the rates have plateaued because there is not more room for improvement and the measures are now capturing appropriate readmissions. To a certain degree, some level of readmissions is to be expected. However, we do not yet know with certainty what the appropriate target should be. There remains an urgent need to answer the question so that the benchmarks and program are based on and use evidence-based optimal performance scores. These unknowns lead us to ask two questions:
 - Specifically, do the current measures in the program truly identify inappropriate readmissions at this point?
 - If CMS, physicians and providers continue to try and drive down readmission rates even further, what additional unintended negative consequences for patients might we be introducing?
- To what degree is the reported association of lower readmissions with higher mortality found over longer or shorter time periods, such as one year or one week, as compared to the first 30-days post discharge? Gupta and colleagues report that the inverse association was still evident at one year. To what degree are any positive or negative correlations related to all-cause mortality and/or readmissions versus the condition-specific outcome?
- It is also worth examining whether trends exist based on unadjusted data and adjusted data. Most of the studies identified through our search of the literature, including Dharmarajan et al (2017), used risk-adjusted data. Most individual patient care decisions are not made with risk-adjustment in mind. To better understand the outliers (those who are readmitted), there is a need to investigate and determine whether there are small but important associations between reduced readmissions rates with patient mortality. Therefore, are we masking the issue by only examining the adjusted rates? Examination of unadjusted and risk-adjusted rates could help address this concern.

In addition, there is emerging evidence questioning the validity of the timeframe of this measure—30-day post-discharge. According to a recent study in the *Annals of Internal Medicine* (*Graham, 2017*), the preventability of readmissions might change over the post discharge time

frame. As the authors highlight, readmissions within 7 days of discharge differ from those between 8 and 30 days after discharge with respect to preventability. Early readmissions were more likely to be preventable and amenable to hospital-based interventions. Late readmissions were less likely to be preventable and were more amenable to ambulatory and home-based interventions. Therefore, post-7-days discharge there are potentially little influence a hospital has over a patient being readmitted to a hospital.

Regarding the expansion of this measure to apply to Accountable Care Organizations (ACOs), we note that the evidence provided in 1A focuses solely on the inpatient setting and does not yet address the underlying evidence support expansion to ACOs. In addition, it would be useful to better understand the composition of the various ACOs used in 1b. Opportunity for Improvement and for the testing results provided under Criteria 2. Inclusion of specific entities such as a hospital or physician practice are not required by the Medicare Shared Savings or Pioneer ACO Programs and it would be useful to understand whether performance rates and reliability and validity results are influenced by which entities participated in the ACOs. We also remain disappointed to see that the variables used for social risk factors have not yet been expanded to other critical aspects such as access to transportation and pharmacies.

We respectfully request that the Standing Committee discuss the implications of the articles noted and the research questions we posed to CMS around the impact that the implementation of readmissions measures such as this one has had on patient mortality and the questions related to the expansion to ACOs during the review of this measure.

References:

Dharmarajan, Wang, Lin, et al. Association of Changing Hospital Readmission Rates With Mortality Rates After Hospital Discharge. JAMA. 2017;318:270-278.

Graham, Auerbach, Schnipper, et al. Preventatility of Early Versus Late Hospital Readmissions in a National Cohort of General Medicine Patients. Ann Int Med. 2018. doi:10.7326/M17-1724. Published online May 1, 2018.

Gupta, Ankar, et al. Association of the Hospital Readmissions Reduction Program Implementation With Readmission and Mortality Outcomes in Heart Failure. *JAMA Cardiol*. 2017. doi:10.1001/jamacardio.2017.4265. Published online November 12, 2017.