

March 4, 2020

Seema Verma, MPH  
Administrator  
Centers for Medicare & Medicaid Services  
Department of Health and Human Services  
200 Independence Avenue, SW  
Washington, DC 20201

**RE: Request for comments on the Advance Notice of Methodological Changes for Calendar Year (CY) 2021 for Medicare Advantage (MA) Capitation Rates and Part C and Part D Payment Policies—Part I, CMS–HCC Risk Adjustment Model**

Dear Ms. Verma:

The Medicare Payment Advisory Commission (MedPAC) welcomes the opportunity to comment on the Centers for Medicare & Medicaid Services' (CMS's) January 6, 2020 "Advance Notice of Methodological Changes for Calendar Year (CY) 2021 for Medicare Advantage (MA) Capitation Rates and Part C and Part D Payment Policies—Part I, CMS–HCC Risk Adjustment Model." We appreciate your staff's work on the notice and continued work to implement the extensive changes to the risk adjustment model required by statute.

Our comments focus on the following issues:

- Part C risk adjustment model changes required by the 21<sup>st</sup> Century Cures Act:
  - Using at least two years of diagnostic data
- Encounter data and Risk Adjustment Processing System (RAPS) data as a source of diagnoses for 2021

**Using at least two years of diagnostic data**

Medicare payments to MA plans are enrollee-specific and account for differences in health status by applying a risk score that, relative to a base payment amount, increases payments for beneficiaries with higher expected medical expenditures and decreases payments for beneficiaries with lower expected medical expenditures. The risk adjustment model (known as the CMS–hierarchical condition category (CMS–HCC) model) uses demographic information along with diagnostic information from the calendar year prior to the payment year to calculate a coefficient for each demographic characteristic and medical condition in the model. Demographic characteristics and medical conditions with larger coefficients are associated with higher expected medical expenditures and vice versa. A risk score is the sum of the coefficients identified for a beneficiary.

CMS estimates the size of the coefficients with spending and diagnostic data from fee-for-service (FFS) claims, which are the only available data source with complete spending and diagnostic data. To calculate risk scores for MA enrollees, CMS applies the coefficients estimated with FFS data to demographic and diagnostic information for MA enrollees. Therefore, the completeness and accuracy of diagnostic data in both FFS Medicare and MA affect the accuracy of risk scores and payments to MA plans. CMS currently uses one year of diagnostic data to estimate the size of the coefficients with FFS data and to identify diagnoses for MA enrollees.

The 21<sup>st</sup> Century Cures Act mandates certain updates to the MA risk adjustment model (e.g., accounting for the total number of beneficiary conditions, considering additional HCCs for inclusion in the model, and adjusting for dual-eligible status) and permits the Secretary to use at least two years of diagnostic data in the calculation of the risk adjustment model. CMS addresses the required risk adjustment provisions of the 21<sup>st</sup> Century Cures Act in the advance notice, noting that updates to the risk adjustment model must be initiated in 2020 to meet the timeline mandated by the Act. CMS did not propose to use two years of FFS and MA diagnostic data to estimate the model and calculate MA risk scores in this notice.

#### *Comment*

CMS should use two years of diagnostic data for risk adjustment in future years. In a 2000 mandated report to the Congress (prior to the implementation of the CMS–HCC model), the Commission recommended that CMS use more than one year of diagnostic data as a way to make payments more accurate and payments to plans more stable.<sup>1</sup> Subsequent research by MedPAC and others shows that in both FFS Medicare and MA, some beneficiaries who have a chronic condition (a condition that persists over time and is expected to be documented every year after diagnosis) identified in one year do not have the condition identified in the subsequent year.<sup>2,3</sup> Such inconsistencies in FFS diagnostic data reduce the accuracy of the model coefficients, while inconsistencies in MA diagnostic data introduce year-to-year fluctuations in MA enrollee risk scores and the resulting payments to MA plans. Using two years of diagnostic data would both improve the accuracy of coefficients estimated with FFS data and reduce year-to-year variation in payments to MA plans.

In 2016, the Commission recommended that CMS use two years of diagnostic data for risk adjustment.<sup>4</sup> MedPAC's prior analysis of chronic coding persistence also shows that having a chronic condition coded in one year and not in the subsequent year occurred more often for FFS beneficiaries than MA beneficiaries.<sup>5</sup> A separate MedPAC analysis shows that these differential coding rates between MA and FFS Medicare cause Medicare payments to MA plans to be larger

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<sup>1</sup> Medicare Payment Advisory Commission. 2000. *Report to the Congress: Improving risk adjustment in Medicare*. Washington, DC: MedPAC.

<sup>2</sup> Medicare Payment Advisory Commission. 2012. *Report to the Congress: Medicare and the health care delivery system*. Washington, DC: MedPAC.

<sup>3</sup> Frogner, B. K., G. F. Anderson, R. A. Cohen, et al. 2011. Incorporating new research into Medicare risk adjustment. *Medical Care* 49, no. 3 (March): 295–300.

<sup>4</sup> Medicare Payment Advisory Commission. 2016. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.

<sup>5</sup> MedPAC 2012.

than the amount Medicare would have spent if the MA enrollees were enrolled in FFS Medicare instead.<sup>6,7</sup> Therefore, the greater improvement to FFS diagnostic data from using two years of diagnostic data would reduce the difference in coding rates between MA and FFS Medicare and improve the accuracy of payments to MA plans.

### **Encounter data and RAPS data as a source of diagnoses for 2021**

For 2021, CMS proposes to use two versions of the CMS–HCC risk adjustment model and to continue phasing in model changes mandated by the 21<sup>st</sup> Century Cures Act through a new risk adjustment model. For payment, CMS proposes to blend risk scores generated by the new alternative payment condition count (APCC) model (with 75 percent weight) and risk scores generated by the model introduced in 2017 (with 25 percent weight).

Compared with the 2017 model, the APCC model adds five HCCs for substance use disorders, mental health, chronic kidney disease, dementia, and pressure ulcers, and adds a set of condition count variables that account for the additional cost of having multiple HCCs. The APCC model incorporates all changes that CMS has made to date based on the 21<sup>st</sup> Century Cures Act.

Since the implementation of the CMS–HCC model in 2004, CMS has collected the minimum information needed for risk adjustment through RAPS, including beneficiary ID, date of encounter, type of provider, and diagnosis code. In 2012, CMS began collecting a more complete set of data about each health care encounter for MA enrollees. Encounter data include a similar set of elements as FFS claims data, including more specific data elements (e.g., specific provider information, services provided, and payment amounts for most services). Starting in 2015, CMS began a transition to using encounter data as the source of diagnoses for risk adjustment and has based risk scores on a combination of RAPS and encounter data for each subsequent year.

For 2021, CMS proposes to use encounter data supplemented with inpatient RAPS data as the source of diagnoses for the APCC model and RAPS data as the source of diagnoses for the 2017 model. In last year’s advance notice, CMS found the number of inpatient records reported in encounter data to be low relative to inpatient records reported in RAPS data and therefore proposed supplementing encounter data with inpatient RAPS data.

CMS proposes to use the following combination of risk adjustment models and diagnostic data sources for 2021 payments:

- The APCC model, which uses encounter data supplemented with inpatient RAPS data as the source of diagnoses (75 percent weight).
- The 2017 model, which uses RAPS data as the sole source of diagnoses (25 percent weight).

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<sup>6</sup> MedPAC 2016.

<sup>7</sup> Medicare Payment Advisory Commission. 2019. *Report to the Congress: Medicare payment policy*. Washington, DC: MedPAC.

For the third year in a row, the proposal would use the encounter data as the primary source of diagnoses for the model mandated by the 21<sup>st</sup> Century Cures Act. The Act's phase-in schedule leads to full implementation of model changes in 2022. CMS did not state that encounter data would be the sole source of diagnoses for the fully implemented APCC model in 2022.

*Comment*

We applaud CMS for continuing to put a greater reliance on encounter data for risk adjustment and for returning to the phase-in schedule outlined in the announcement for payment year 2017. However, given our significant concerns about RAPS data and the greater reliability of encounter data, we urge CMS to use encounter data as the sole source of diagnoses for the APCC model in 2021 with 75 percent weight.

Furthermore, we urge CMS to base 2022 risk scores entirely on encounter data.<sup>8</sup> Relying only on encounter data for risk scores would relieve plans of the burden of collecting, compiling, and submitting RAPS data. Because 2022 risk scores are based on 2021 dates of service, using only encounter data for 2022 risk scores would mean that plans do not have to submit RAPS data for services starting in January 2021. Given this timeframe, CMS would need to notify plans of the reduced administrative burden in the announcement for payment year 2021.

We have significant concerns about the overall accuracy of RAPS data and its continued use for risk adjustment. RAPS data have received relatively little scrutiny. Initial results from audits of RAPS data reveal a large number of diagnoses reported in RAPS data that are not supported by medical records as required by risk adjustment rules.<sup>9</sup> Recent whistleblower lawsuits reveal lax standards and processes for some plans when extracting claims data elements for aggregation into RAPS data, and they allege that these plans manipulated standards and processes for their financial advantage.<sup>10</sup>

CMS began supplementing encounter data with inpatient RAPS data because the agency found the number of inpatient records reported in encounter data to be low relative to inpatient records reported in RAPS data. The agency did not evaluate whether the discrepancy was caused by too few inpatient encounter records or too many inpatient RAPS records; however, CMS proposed a remedy that solely assumes too few inpatient encounter records.

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<sup>8</sup> Program of All-Inclusive Care for the Elderly (PACE) plans have used pooled RAPS and encounter data as the source of diagnoses since 2015 and, therefore, have not been on the same schedule of transition to encounter data as other MA plans. We believe all MA plans should use encounter data as the source of diagnostic information for risk adjustment. CMS should consider applying a blend of encounter-based and RAPS-based risk scores for PACE plans to initiate the transition to using encounter data for risk scores for those plans.

<sup>9</sup> Schulte, F. 2016. Medicare Advantage audits reveal pervasive overcharges. August 29.

<https://www.publicintegrity.org/2016/08/29/20148/medicare-advantage-audits-reveal-pervasive-overcharges>.

<sup>10</sup> Example cases include *United States v. Janke*, 2:09-cv-14044; *Sewell v. Freedom Health Inc. et al.*, 8:09-cv-01625; *United States ex rel. Swoben v. Secure Horizons et al.*, 09-5013; *United States of America ex rel. Benjamin Poehling v. UnitedHealth Group, Inc.*, No. 16-08697 (text online at <https://www.nytimes.com/interactive/2017/02/17/business/dealbook/document-Whistleblower-Lawsuit-Accuses-Insurer.html>).

Based on our analysis (see *Discussion of RAPS data* below for more detail), we conclude that there are too many inpatient RAPS records because physician and outpatient visits have been erroneously identified as “inpatient stays” (i.e., an error in the “provider type indicator”) in RAPS data. We compared inpatient stays in RAPS data with inpatient stays in encounter data and Medicare Provider Analysis and Review (MedPAR) data (submitted by hospitals) for 2015, 2016, and 2017 and found:

- many more inpatient stays have been reported in RAPS data than in the encounter data or in the MedPAR data (see Figure 1),
- a disproportionate share of RAPS inpatient stays with the same admission and discharge dates compared to encounter or MedPAR data (see Figure 2), and
- more than 90 percent of the RAPS “inpatient stays” with the same admission and discharge date are likely to have been physician or outpatient visits that were incorrectly recorded as inpatient stays in RAPS (see Figure 3).

Because the discrepancy between inpatient stays reported in encounter and RAPS data is almost entirely caused by errors in RAPS data, CMS should not supplement encounter data with inpatient RAPS data in the APCC model. Doing so effectively reduces the reliance on encounter data, mitigating CMS’s goals of exclusively using encounter data in risk adjustment and improving the completeness of encounter data.

Encounter data are more reliable than RAPS as a source of diagnostic data. The use of encounter data allows CMS to verify that risk adjustment criteria (e.g., diagnoses are made from an acceptable hospital type or an acceptable physician service) are met to a greater extent compared to the verification process for RAPS data. We believe that the front-end processing of encounter data before acceptance by CMS generates higher quality data relative to RAPS, which relies heavily on MA organizations’ attestation that the data are complete and accurate. Although we have heard that many revisions to the encounter data submission process caused some difficulty for plans in early years, plans we interviewed over the past two years reported considerable investment in the infrastructure and processes to submit encounter data and identified few or no ongoing issues with the encounter data submission process. We believe the refinements CMS implemented have resulted in a more stable process for encounter data submission.

Furthermore, encounter data are of value to many aspects of the Medicare program beyond risk adjustment. The administration of the Medicare program could be simplified by using encounter data where the program currently requires collection of similar data for bids, quality measurement, risk adjustment, calculation of disproportionate share hospital (DSH) and medical education payments to hospitals, and tracking certain lifetime limits on the Medicare benefit. The Commission believes that increasing the use of encounter data in risk adjustment and in other program operations, particularly for assessing quality in MA, would improve the completeness and accuracy of the data and would increase the reliability of the MA data used.

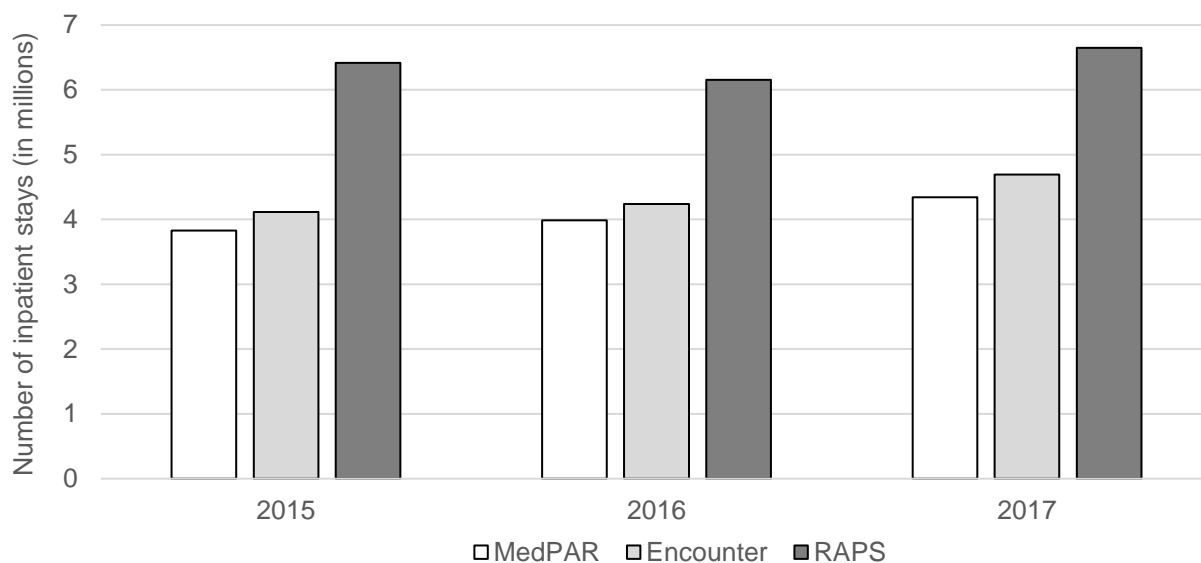
Finally, our analysis shows convergence in risk scores based on RAPS and encounter data: Between 2017 and 2018, the share of MA enrollees with the same RAPS-based and encounter-

based risk score increased from 93 percent to 95 percent. RAPS-based risk scores were only 1 percent higher on average than encounter-based risk scores in 2018, a smaller overall difference than 2017. Because the difference between RAPS-based and encounter-based risk scores is small and diminishing, CMS could base MA risk scores entirely on encounter data with minimal impact on plan payments. Furthermore, relying entirely on encounter data would reduce the burden imposed on plans of maintaining two systems for collecting and submitting diagnostic data.

### ***Discussion of RAPS data***

We conducted the following analyses to evaluate whether inpatient encounter submissions are low relative to inpatient RAPS submissions and whether any discrepancy is due to too few inpatient stays reported in encounter data or too many inpatient stays reported in RAPS data. First, we compared inpatient stays reported in MedPAR data (which include “information-only” claims submitted by hospitals to CMS for MA enrollees), MA encounter data, and RAPS data for 2015, 2016, and 2017.<sup>11</sup> Figure 1 shows the total number of inpatient stays for MA enrollees as reported in MedPAR data, encounter data, and RAPS data.

**Figure 1. Number of inpatient stays in MA, 2015 – 2017**



Note: MA (Medicare Advantage), MedPAR (Medicare Provider Analysis and Review), RAPS (Risk Adjustment Processing System). An *inpatient stay* is defined as unique beneficiary ID, admission date, and discharge date combination. Analysis excludes inpatient records for cost plans from all three data sources because inpatient stays for cost plan enrollees are processed and paid by fee-for-service Medicare.

Source: MedPAC analysis of 2015, 2016, and 2017 MedPAR, encounter, and RAPS data.

There are more inpatient RAPS records than inpatient encounter records. When comparing unique inpatient stays (based on combinations of beneficiary ID, admission date, and discharge date) in

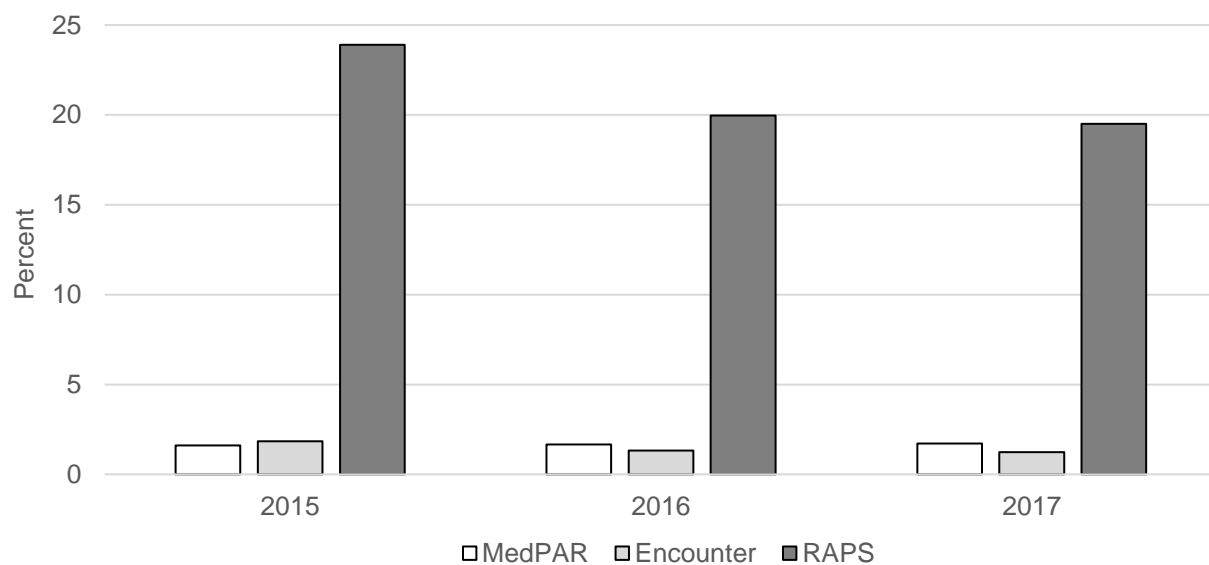
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<sup>11</sup> Information about inpatient stays for MA enrollees collected from “information-only” claims is used to calculate Medicare’s disproportionate share hospital and indirect medical education payments to hospitals.

the three data sources, we found many inpatient stays in RAPS data that were not identified in MedPAR or encounter data: 2.2 million in 2015, 1.8 million in 2016, and 1.9 million in 2017. However, this analysis does not assess whether there are too few encounter (and MedPAR) records or too many RAPS records for inpatient stays.

Next, we analyzed the length of stay for the inpatient stays reported only in RAPS data and found that a disproportionate share of inpatient stays reported in RAPS indicate that admission and discharge occurred on the same day. By contrast, MedPAR and encounter data consistently indicate that same-day admission and discharge is relatively rare, occurring in less than 2 percent of inpatient stays in 2015, 2016, and 2017 (see Figure 2). Furthermore, staying overnight in a hospital (discharge occurring at least one day after admission) is generally the distinguishing feature between an inpatient hospital stay and an outpatient visit. RAPS data for 2015 indicate that nearly 25 percent of “inpatient stays” for MA enrollees did not include an overnight stay, and for 2016 and 2017 about 20 percent of MA “inpatient stays” did not include an overnight stay.

**Figure 2. Percent of inpatient stays with the same admission and discharge date, 2015 – 2017**



Note: MedPAR (Medicare Provider Analysis and Review), RAPS (Risk Adjustment Processing System).

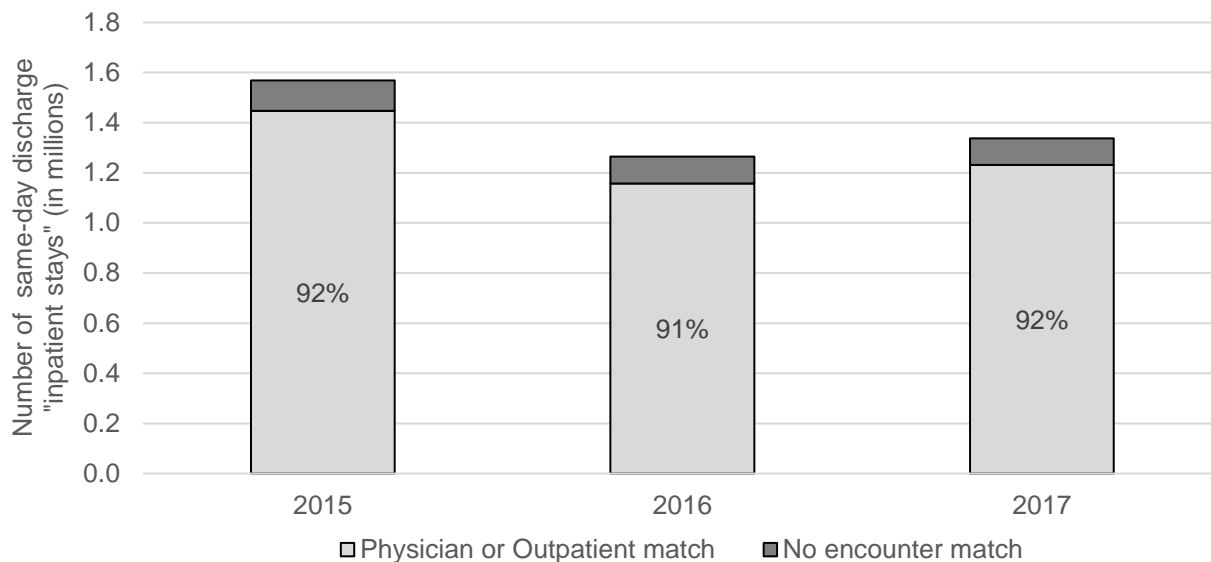
Source: MedPAC analysis of 2015, 2016, and 2017 MedPAR, encounter, and RAPS data.

Given the disproportionate share of same-day discharges for “inpatient stays” in RAPS data, we considered whether outpatient or physician visits may have been incorrectly reported as inpatient stays in the RAPS data. For example, perhaps physician visits that occurred during an inpatient stay or outpatient hospital visits were incorrectly reported as having “inpatient hospital” provider type rather than the correct provider type: “outpatient hospital” or “physician.”

To evaluate this possibility, we first identified inpatient stays with same-day discharge in RAPS data. There are about 1.6 million same-day discharge stays in 2015, 1.2 million in 2016, and 1.2 million in 2017 (see Figure 3). Then we matched these “inpatient stays” with same-day discharge

in RAPS data with physician and outpatient encounter records and found that more than 90 percent matched a physician or outpatient visit in encounter data in 2015, 2016, and 2017.<sup>12</sup>

**Figure 3. Number of MA same-day discharge “inpatient stays” in RAPS data, and share that are likely misclassified physician or outpatient visits based on matching encounter data, 2015 – 2017**



Note: MA (Medicare Advantage). RAPS (Risk Adjustment Processing System).

Source: MedPAC analysis of 2015, 2016, and 2017 encounter and RAPS data.

We conclude that the provider type indicator in RAPS data does not accurately identify inpatient stays, and a significant portion of the “inpatient stays” reported in RAPS are likely to be misclassified physician or outpatient visits. We believe the discrepancy in inpatient stays reported in RAPS versus encounter data is caused by inaccurate RAPS data rather than missing inpatient encounter records. Therefore, there is no valid reason for CMS to supplement encounter data with inpatient RAPS data. We urge CMS to avoid supplementing encounter data with RAPS data of any type when identifying diagnoses for risk adjustment.

<sup>12</sup> We identified matches based on combinations of beneficiary ID, admission date, and discharge date.



**Conclusion**

The Commission values the ongoing cooperation and collaboration between CMS and our staff on technical policy issues. We look forward to continuing this productive relationship. If you have any questions, or require clarification of our comments, please feel free to contact James E. Mathews, the Commission's Executive Director, at 202-220-3700.

Sincerely,

A handwritten signature in black ink that reads "Francis J. Crosson M.D." The signature is written in a cursive, flowing style.

Francis J. Crosson, M.D.  
Chairman