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**Health Services Cost Review Commission**

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**538th MEETING OF THE HEALTH SERVICES COST REVIEW COMMISSION  
March 8, 2017**

**EXECUTIVE SESSION**

**11:00 a.m.**

(The Commission will begin in public session at 11:00 a.m. for the purpose of, upon motion and approval, adjourning into closed session. The open session will resume at 1:00 p.m.)

1. Update on the Primary Care Model - Authority General Provisions Article, §3-103 and §3-104
2. Update on Contract and Modeling of the All-payer Model vis-a-vis the All-Payer Model Contract – Administration of Model Moving into Phase II - Authority General Provisions Article, §3-103 and §3-104
3. Discussion on Planning for Model Progression – Authority General Provisions Article, §3-103 and §3-104

**PUBLIC SESSION**

**1:00 p.m.**

1. Review of the Minutes from the Public Meeting and Executive Session on February 8, 2017
2. Executive Director's Report
3. New Model Monitoring
4. Docket Status – Cases Closed
  - 2369A - Johns Hopkins Health System
  - 2373A – University of Maryland Medical Center
  - 2375A - Johns Hopkins Health System
  - 2377A - Johns Hopkins Health System
  - 2370A - Johns Hopkins Health System
  - 2374A - Johns Hopkins Health System
  - 2376A - Johns Hopkins Health System
5. Docket Status – Cases Open
  - 2371R – MedStar Franklin Square Medical Center
  - 2378N – Bowie Emergency Center
  - 2372A – Doctors Community Hospital
6. Presentation by University of Maryland St. Joseph's Hospital on Care Redesign Initiatives
  - ~~– Summary of Global Budget Infrastructure Reports –~~ Removed from Agenda
7. Final Recommendation for the Maryland Hospital Acquired Condition (MHAC) Policy for RY 2019

- 8. Final Recommendation on Implementation of Care Redesign Amendment**
- 9. Draft Recommendation to Substitute The Medicare Wage Index for the Annual Wage and Salary Survey**
- 10. Draft Recommendation on Changes to the Relative Value Units Scale for Imaging**
- 11. Legislative Update**
- 12. CRISP Update**
- 13. Hearing and Meeting Schedule**

## Executive Director's Report

The Executive Director's Report will be distributed during the Commission Meeting

## New Model Monitoring Report

The Report will be distributed during the Commission Meeting

## Cases Closed

The closed cases from last month are listed in the agenda

H.S.C.R.C's CURRENT LEGAL DOCKET STATUS (OPEN)

AS OF FEBRUARY 27, 2017

A: PENDING LEGAL ACTION : NONE  
 B: AWAITING FURTHER COMMISSION ACTION: NONE  
 C: CURRENT CASES:

Docket Number	Hospital Name	Date Docketed	Decision Required by:	Rate Order Must be Issued by:	Purpose	Analyst's Initials	File Status
2371R	MedStar Franklin Square Medical Center	12/23/2016	3/8/2017	5/22/2017	Capital	GS	OPEN
2372A	Doctors Community Hospital	1/5/2017	N/A	N/A	N/A	DK	OPEN
2373N	Bowie Emergency Center	2/8/2017	3/10/2017	7/10/2017	MRI/AMB.Rebundled	CK	OPEN

PROCEEDINGS REQUIRING COMMISSION ACTION - NOT ON OPEN DOCKET

<b>IN RE: THE PARTIAL RATE</b>	<b>*</b>	<b>BEFORE THE HEALTH SERVICES</b>	
<b>APPLICATION OF DIMENSIONS</b>	<b>*</b>	<b>COST REVIEW COMMISSION</b>	
<b>HEALTHCARE SYSTEM-</b>	<b>*</b>	<b>DOCKET:</b>	<b>2017</b>
<b>BOWIE HEALTH CENTER</b>	<b>*</b>	<b>FOLIO:</b>	<b>2188</b>
<b>BOWIE, MARYLAND</b>	<b>*</b>	<b>PROCEEDING:</b>	<b>2378N</b>

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**Staff Recommendation**

**March 8, 2017**

## **Introduction**

On February 8, 2017, Bowie Health Center, a freestanding emergency center (the Center), a member of Dimensions Healthcare System (the System), submitted a partial rate application to the Commission requesting new rebundled rates for Magnetic Resonance Imaging (MRI) and Ambulance (AMR) services.

Medicare regulations require that services furnished to a hospital or freestanding emergency facility outpatient during an encounter must be billed by the hospital or freestanding emergency facility. Therefore, if a hospital or freestanding emergency facility does not have a particular non-physician service and a physician orders that service for the registered outpatient, without discharging the patient, the hospital or freestanding emergency facility must transport the patient to and from an off-site facility to receive those services. Rebundled rates are required so that the hospital or freestanding emergency facility can bill for the service, as well as for the round trip transportation.

In this case, the freestanding emergency facility does not have MRI services. The Center requests that the rebundled MRI and AMR rates be set at the statewide median and be effective April 1, 2017.

## **Staff Evaluation**

Based on Staff's review, the statewide median for MRI services is \$41.22 per RVU and the statewide median for AMR services is \$5.08 per RVU.

## **Recommendation**

After reviewing the Center's application, the staff recommends as follows:

1. That a MRI rate of \$41.22 per RVU be approved effective April 1, 2017;
2. That an AMR rate of \$5.08 per RVU be approved effective April 1, 2017; and
3. That no change be made to the Center's Global Budget Revenue.



## **St. Joseph's Hospital on Care Redesign Initiatives**

Representatives from St. Joseph's Hospital will present materials at the Commission meeting.

## **Summary of Global Budget Infrastructure Reports**

Staff will present materials at the Commission meeting.

**FINAL Recommendation for the Maryland  
Hospital-Acquired Conditions Program  
for Rate Year 2019**

March 8, 2017

Health Services Cost Review Commission  
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## **LIST OF ABBREVIATIONS**

CMS	Centers for Medicare & Medicaid Services
CY	Calendar year
DRG	Diagnosis-related group
FFY	Federal fiscal year
FY	State fiscal year
HAC	Hospital-acquired condition
HSCRC	Health Services Cost Review Commission
ICD	International Statistical Classification of Diseases and Related Health Problems
MHAC	Maryland hospital-acquired condition
PPC	Potentially preventable complication
RY	Rate Year

## INTRODUCTION

A hospital-acquired condition (HAC) occurs when a patient goes to the hospital for one condition but develops another condition during that hospital stay. The second condition—for example, an adverse drug reaction or an infection at the site of a surgery—is referred to as hospital-acquired.<sup>1</sup> HACs can lead to 1) poor patient outcomes, including longer hospital stays, permanent harm, and death, and 2) increased costs.<sup>2</sup> Over the past decade, the Centers for Medicare & Medicaid Services (CMS) have implemented several programs to improve the quality of care for Medicare participants, including a program to reduce the frequency of HACs. Because of the state's long-standing Medicare waiver for its all-payer hospital rate-setting system, special considerations are given to Maryland hospitals, including exemption from the federal Medicare hospital quality programs, one of which is the HAC program. Instead, the Maryland Health Services Cost Review Commission (HSCRC or Commission) implements various Maryland-specific quality-based payment programs, which provide incentives for hospitals to improve their quality performance over time. The HSCRC first implemented the Maryland Hospital-Acquired Conditions (MHAC) program in state fiscal year (FY) 2011.

Maryland entered into a new All-Payer Model Agreement with CMS on January 1, 2014. One of the requirements under this Agreement is for Maryland to reduce the incidence of HACs by 30 percent by 2018. In order to meet this target, the Commission approved several methodological changes to the program for Rate Year (RY) 2016, which are discussed in further detail in the background section of this report. The Commission approved additional revisions to the methodology for RYs 2017 and 2018. The purpose of this report is to provide background information on the MHAC program and to make recommendations for the RY 2019 MHAC methodology and targets. The performance period for the RY 2019 MHAC adjustments is Calendar Year 2017.

In October 2015, health providers transitioned to the 10<sup>th</sup> version of the International Statistical Classification of Diseases (ICD-10). Since staff is still evaluating the effect of the ICD-10 transition, staff believes it is not possible to set a reasonable target for a statewide improvement rate at this time. Considering these challenges, staff is proposing that the MHAC program adopt a single scale, rather than a contingent scale based on the statewide improvement rate. Staff developed multiple options under a single scale methodology and is discussing these options with the Performance Measurement Work Group. Staff also adjusted the base period for the program to use 12 months of hospital data under ICD-10 (October 2015 to September 2016).

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<sup>1</sup> Cassidy, A. (2015, August 6). Health Policy Brief: Medicare's Hospital-Acquired Condition Reduction Program. *Health Affairs*. Retrieved from [http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief\\_id=142](http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief_id=142).

<sup>2</sup> Ibid.

## BACKGROUND

### Federal HAC Programs

Medicare's system for the payment of inpatient hospital services is called the inpatient prospective payment system. Under this system, patients are assigned to a payment category called a diagnosis-related group (DRG), which is a method of categorizing costs so that Medicare can determine how much to pay for the hospital stay. DRGs are based on a patient's primary diagnosis and the presence of other conditions; patients with higher co-morbidities or complications are categorized into higher-paying DRGs.<sup>3</sup> Historically, Medicare payments under this system were based on the volume of services. However, beginning in federal fiscal year (FFY) 2009, CMS stopped assigning patients to higher-paying DRGs if certain conditions were *not* present on the patient's admission, or, in other words, if the condition was acquired in the hospital and could have reasonably been prevented through the application of evidence-based guidelines. CMS identified 11 conditions that are presumed to be acquired in the hospital if the diagnosis is not present on the patient's admission. CMS will not assign these patients to more expensive DRGs, and thus does not pay, for these HACs.<sup>4</sup> This policy is referred to as the HAC (present on admission indicator) program.<sup>5</sup> Since non-payment on a case-by-case basis affects only a small fraction of claims, the impact of this program was estimated to be very limited. The program resulted in \$21 million in savings in FFY 2010.<sup>6</sup> Maryland hospitals were exempt from the payment adjustments under this program.

CMS expanded the use of HACs in payment adjustments in FFY 2015 with a new program entitled the "Hospital-Acquired Condition Reduction Program" under authority of the Affordable Care Act. In this program, CMS ranks hospitals according to performance on a list of HAC quality measures and reduces Medicare payments to the hospitals in the lowest performing quartile. Since the HAC program began, the maximum penalty has been set at 1 percent of total DRG payments. The CMS HAC measures for FFY 2017 are listed in Appendix I of this report and include measures of patient safety developed by the Agency for Healthcare Research and Quality and measures of healthcare-associated infections developed by the Centers for Disease Control and Prevention.<sup>7</sup> These will be updated to reflect FFY 2018 once 2018 measures and specifications are available. Prior to the new All-Payer Model Agreement, CMS required the HSCRC to submit an annual exemption request demonstrating that the outcomes and cost savings of the Maryland-specific program met or exceeded those of the CMS federal program.

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<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> For more information on the federal HAC Present on Admission program, see <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HospitalAcqCond/index.html>

<sup>6</sup> CMS. (2012, December). Report to Congress: Assessing the Feasibility of Extending the Hospital Acquired Conditions (HAC) IPPS Payment Policy to Non-IPPS Settings. Retrieved from <https://innovation.cms.gov/Files/x/HospAcquiredConditionsRTC.pdf>

<sup>7</sup> For more information on the federal HAC Reduction program, see <https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/HAC-Reduction-Program.html>.

Under Maryland's new All-Payer Model agreement, this requirement was replaced by a requirement that Maryland reduce its HACs by at least 30% throughout the duration of the All-Payer Model, as well as a requirement to match the aggregate amount of revenue at risk in quality-based payment adjustments with the amount at risk in the Medicare programs.

## Overview of the MHAC Program

Maryland is exempt from the federal HAC programs, and, instead, the HSCRC has implemented the MHAC program since FY 2011. The MHAC program is based on a classification system developed by 3M, using what are called potentially preventable complications (PPCs). PPCs are defined as harmful events that develop after the patient is admitted to the hospital and may result from processes of care and treatment rather than from the natural progression of the underlying illness. Therefore, these events are considered potentially preventable. 3M developed 65 PPC measures that are identified through secondary diagnosis codes that are not present on the patient's admission. Examples of PPCs include accidental puncture/laceration during an invasive procedure or infections related to central venous catheters.

The initial methodology for the MHAC program was in place until FY 2016. This methodology estimated the percentage of inpatient revenue associated with an excess number of PPCs. The excess number of PPCs was estimated by comparing hospitals' observed PPC rate to a statewide average PPC rate, given the diagnoses and severity of illness (or case-mix) of the hospital's patient population. The marginal cost of each PPC was estimated using a statewide regression analysis. Next, the payment adjustment approach penalized hospitals that had higher PPC costs than the statewide average and rewarded hospitals with lower PPC costs than the statewide average. The payment adjustments were proportional to a hospital's difference from the statewide average (this methodology is also known as continuous scaling). Rewards were adjusted to ensure that the final net impact was revenue neutral. In general, the payment adjustment process resulted in fewer hospitals receiving penalties, and consequently limited the amount of revenue available for rewards.

The HSCRC modified the guiding principles of those originally established for the MHAC program to conform to the goals of its new All-Payer Model agreement; they include the following:

- The program must improve care for all patients, regardless of payer.
- The breadth and impact of the program must meet or exceed the Medicare national program in terms of measures and revenue at risk.
- The program should identify predetermined performance targets and financial impact.
- An annual target for the program must be established in the context of the trends of complication reductions seen in the previous years, as well as the need to achieve the new All-Payer Model goal of a 30 percent cumulative reduction by 2018.
- The program should prioritize PPCs that have high volume, high cost, opportunity for improvement, and are areas of national focus.



- Program design should encourage cooperation and sharing of best practices.
- The scoring method should hold hospitals harmless for a lack of improvement if attainment is highly favorable.
- Hospitals should have the ability to track their progress during the performance period.

The HSCRC modified the program’s methodology to achieve these new goals and guiding principles for performance years beginning with calendar year (CY) 2014, which were applied to rate adjustments beginning in RY 2016.<sup>8</sup> The key changes to the methodology are listed below (see Appendix II for a more detailed description of the revised methodology).

- Determine hospital scores based on case-mix-adjusted PPC rates rather than excess PPC costs. This change simplified and aligned the measurement with the quality improvement methods, where hospitals focus shifted to the PPC rates rather than the number of excess PPCs and costs.
- Prioritize PPCs that are high cost, high volume, have opportunity to improve, and are of national concern by grouping and weighting the PPCs into tiers according to their level of priority. This tiered approach replaced the previous PPC-specific weighting approach that used marginal costs.
- Use the better of attainment or improvement scores. This change strengthened incentives for low-performing hospitals to improve. Previously, payment adjustments were calculated separately for hospital attainment and improvement rates that were based on a few PPCs.
- To determine payment rewards/penalties, use a preset point scale that can be set prospectively. This change replaced the original payment adjustment determinations, which were calculated based on the relative ranking of hospitals. This change attempted to improve the financial predictability of the MHAC program. In addition, the revised methodology removes the revenue neutrality requirement in scaling payments (i.e., the statewide total amount of rewards can exceed the total amount of penalties) to reward hospitals with better performance adequately.
- Link individual hospital performance with statewide performance by creating a “contingent” payment adjustment scale, where penalties are increased if the state does not reach pre-determined PPC reduction targets. Staff and the hospital industry believe that “contingent” scaling creates a balanced approach by maintaining hospital-level incentives with hospital-specific payment adjustments that are also tied to a statewide improvement goal. In addition to contingent scaling, “hold-harmless zones” were created to focus payment adjustments on better and worse performing hospitals.

The HSCRC used the same methodology for RY 2018, but made adjustments to the tiering system and PPCs. Staff is suggesting additional changes for the RY 2019 policy to accommodate the ICD-10 transition and other stakeholder input, as discussed below.

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<sup>8</sup> The performance period for PPCs is measured on a calendar year basis, and the results of these measures are then used in the hospitals’ rate calculations, which are set on a fiscal year basis.

## ASSESSMENT

In order to develop the MHAC methodology for RY 2019, the HSCRC solicited input from many stakeholder groups including consumers, hospitals, payers, researchers, and other industry experts. The Performance Measurement Workgroup discussed pertinent issues and potential changes to Commission policy for RY 2019.<sup>9</sup> Specifically, the Workgroup reviewed analyses and discussed issues related to 1) statewide PPC trends, 2) the list of PPCs and relevant tiers, 3) the current palliative care exclusion, and 4) the payment adjustment methodology. This section of the report provides an overview of the issues discussed by the Workgroup.

### Statewide PPC Trends

The State continued to make significant progress in reducing complications, as measured both in terms of the actual number of PPCs and case-mix adjusted PPC rates in FY 2016. Figure 1 below presents the PPC reduction trends in Maryland between FY 2013 and FY 2016. In this figure, the gray columns labeled “PPC Rates” display the number of PPC complications occurring in each year, the unadjusted PPC rate, and the case-mix adjusted rate of PPC complications, which may be interpreted as the number of PPCs per 1,000 at-risk discharges. The yellow columns in the figure labeled “Annual Change” show the percent change between each year, e.g., from FY 2013 to 2016. Finally, the green column displays the percent change over the entire measurement period of FY 2013 through 2016. Because the goal of the program is to reduce PPCs, the negative percent changes in this figure may be interpreted as a performance improvement. Overall, the number and rate of PPCs decreased significantly, with a cumulative case-mix adjusted improvement rate of 47.8 percent between FY 2013 and 2016. It should be noted that HSCRC contractors are still analyzing whether the ICD-10 transition is impacting the case-mix adjusted PPC rates.

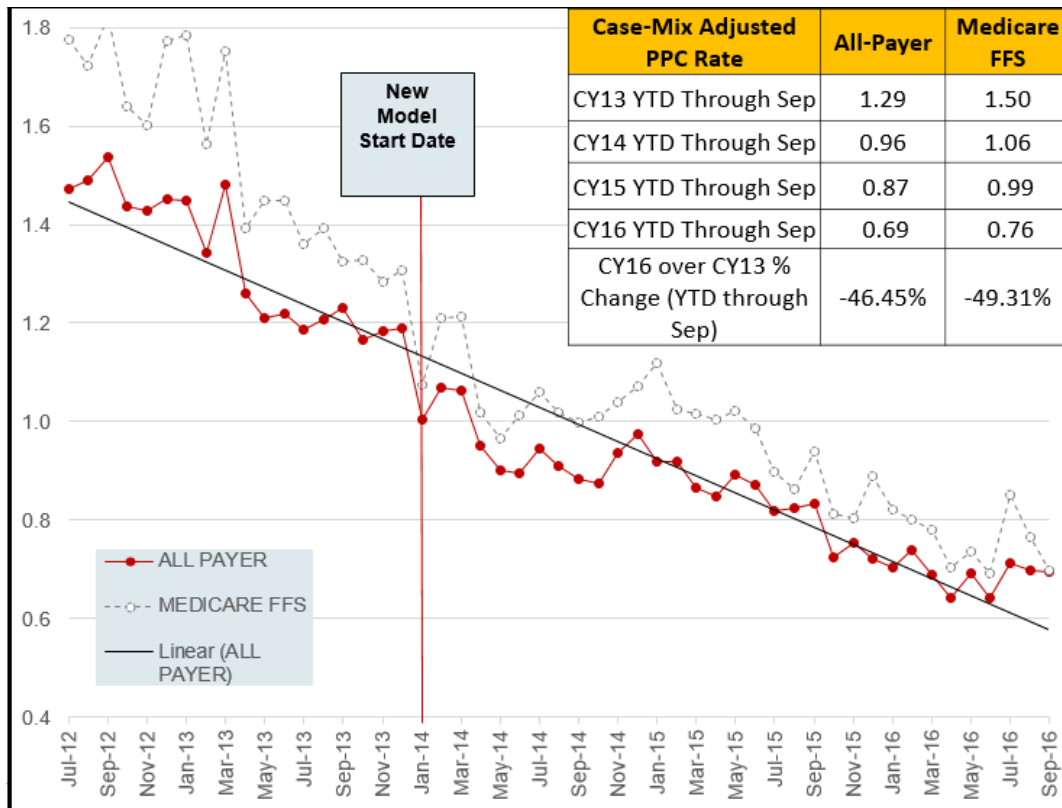
**Figure 1. PPC Reduction Trends in Maryland, FY 2013-2016**

	PPC RATES				Annual Change			Cumulative Improvement
	FY13	FY14	FY15	FY16	FY13-FY14	FY14-FY15	FY15-FY16	FY13-FY16
<b>TOTAL NUMBER OF COMPLICATIONS</b>	27,934	21,056	17,341	14,508	-24.6%	-17.6%	-16.3%	-48.1%
<b>UNADJUSTED PPC RATE PER 1,000 AT-RISK</b>	1.18	0.94	0.80	0.69	-20.5%	-14.6%	-13.5%	-41.3%
<b>CASE-MIX ADJUSTED COMPLICATION RATE PER 1,000 AT-RISK</b>	1.40	1.09	0.90	0.73	-22.4%	-16.8%	-19.2%	-47.8%

<sup>9</sup> For more information on the Performance Measurement Workgroup, see <http://hscrc.maryland.gov/hscrc-workgroup-performance-measurement.cfm>.

HSCRC staff also analyzed monthly PPC rates for Medicare fee-for-service and all payers for July 2012 through September 2016 (Figure 2). The dotted gray line in this figure shows the monthly case-mix adjusted PPC rate for Medicare fee-for-service, while the red line shows the monthly PPC rate for all payers, including Medicare fee-for-service patients. Both lines show a fairly consistent downward trend between July 2012 and September 2016.

**Figure 2. All-Payer Case-Mix Adjusted PPC Rates FY2013-FY2016 YTD through September**



### PPC List and Tier Adjustments

Two of the major strengths of the MHAC program compared with the CMS HAC programs is that the MHAC program includes a wide range of complications, and includes all patients who are at risk of developing these complications. For RY 2019 the HSCRC will be using the 3M PPC grouper version 34 (v34), which has been developed to take into account the increased specificity of ICD-10 coding. Hospitals and other stakeholders are very supportive of moving to v34. In order to use v34, the base period will be adjusted forward by one quarter to obtain 12 months of ICD-10 data (October 2015-September 2016). Under v34 many PPC definitions have been updated, and 3M has discontinued some PPCs for clinical reasons. Specifically under v34, 3M removed PPC 12 (cardiac arrhythmia) and PPCs 57 and 58 (OB Lacerations). 3M also made significant clinical changes to PPC 36 (Acute mental health changes) and PPC 66 (Catheter related UTI), such that no Maryland hospital meets minimum inclusion criteria. Two additional changes were made prior to v. 34 1) PPC 24 (Renal Failure without Dialysis) was suspended

from payment policy based on 3M clinical recommendations, and 2) PPC 43 was combined with PPC 42 to make comparable to ICD-9 PPC 42.

As a reminder, in RY 2018, several changes were made to the PPC list and tiering methodology including: 1). Moving from a three-tiered PPC weighting system to a two-tiered weighting system, with tier 1 weighted at 100 percent and tier 2 weighted at 50 percent in the scoring calculations. 2. Combining some PPC measures that are clinically similar for scoring purposes. 3. Moving a small subset of PPCs to a “monitoring” status, suspending their use for payment calculation for FY 2018.

For RY 2019, staff is proposing to keep to the RY 2018 two-tier structure, and make no changes to the combined PPCs, serious reportable events, or monitoring-only PPCs. The only change to PPC tiers is to move PPC 21 (c. Diff) to tier 2 based on 3M clinical input. Thus for RY 2019, there are 53 PPCs (48 with combinations) in the payment program and five monitoring-only PPCs. Appendix III lists the PPCs included in the payment program with the tier, as well as a comparison of the RY 2018 and RY 2019 benchmarks.

### Palliative Care Exclusion

Based on input from the work group participants, palliative care cases have been historically excluded from the MHAC program due to clinical concerns that including these cases would incentivize unwarranted care. Throughout the MHAC policy, HSCRC has continued to monitor the validity of the PPC data for any unintended consequences. In the draft policy, staff noted that, since 2012, the percent of discharges with palliative care has steadily increased. Also during that time, the percentage of PPCs counted in the MHAC program has dropped from greater than 95% to around 82% (Appendix IV).

Although these are notable changes, palliative care exclusion appears to have a limited impact on the case-mix adjusted statewide improvement trends. Statewide, the case-mix adjusted PPC rate (including palliative care cases) improves by 41%, compared to 46% when palliative care cases are excluded. This difference does not warrant a policy change in the RY 2019 MHAC policy, given the additional input that has been received, detailed below.

In the draft policy submitted in February 2017, staff proposed to remove the palliative care exclusion, beginning with the RY 2019 program. Upon further discussion and analysis with stakeholders, staff recommends to delay this policy change until staff and other stakeholders are more comfortable with the clinical implications and data modeling (see Appendix VII for stakeholder input on palliative care exclusion policy).

There are many reasons that a delay is warranted. According to guidance from 3M, they recommend to use a present-on-admission (POA) indicator for palliative care to determine when these cases should be excluded. However, the palliative care diagnosis was exempt from POA coding until October 2016 and may not be used consistently at this time. In the absence of this code, 3M recommended to delay including palliative care cases. Additionally, as mentioned in the draft policy, there are substantial coding variations among particular hospitals, and this

variation may be better addressed through individual special audits as opposed to a statewide policy change. Also, concerns about coding validity will not be addressed by including palliative care cases. Finally, the inclusion of palliative care cases has a relatively small impact on the overall statewide PPC reduction trends, reducing the improvement slightly from 46% to 41%. Appendix V shows case-mix adjusted rates and total at-risk with and without palliative care by hospital.

## Payment Adjustment Methodology

For RY 2019, staff is proposing several changes to the payment adjustment methodology. First, staff is recommending to remove the two-scale structure that has been used since RY 2016, whereby achievement of a minimum statewide reduction goal determined scale (i.e. the contingent scaling approach). Staff proposes this change for two reasons: a) the State has already achieved the 30% reduction goal, and b) under ICD-10 and v34, staff and work group members agreed that it is difficult to estimate a statewide reduction target. Hospital performance will continue to be scored as the better of the hospital’s attainment or improvement scores, as detailed in Appendix II. Both base year and performance periods will be under ICD-10 v34.

To move to a single scale, staff proposes to set the maximum penalty for the single scale at 2% and maximum reward at 1% of hospital inpatient revenue.

Second, as with the RY 2019 QBR policy, staff proposes to use the full range of scores to set the payment scale, rather than basing the scale on the statewide distribution of scores. The staff built the following models in considering the RY 2019 scaling adjustments using the final RY 2017 scores (see Figure 3 for statewide adjustments and Appendix VI for hospital-specific results):

- Current RY2018 Scale (assuming minimum improvement target met): 20-80% with 36% penalty cutoff and 46% reward threshold (neutral zone)
- Option 1: Full Score Range without Neutral Zone: 0-100% with 50% reward/penalty cutoff
- Option 2: Full Score Range with Neutral Zone: 0-100% with neutral zone from 45% to 55%

**Figure 3. RY 2019 MHAC Scaling Models – Statewide Results**

MHAC Scaling Models*	Min	Penalty/Reward Cut Point	Max	Statewide Penalties	Statewide Rewards
Current RY18 Scale	20%	36%/46%	80%	-\$1.3M	+27M
Full Range Scale without Neutral Zone	0%	50%	100%	-\$10M	+\$13M
Full Range Scale with Neutral Zone	0%	45%/55%	100%	-\$6M	+\$9M

\*These scaling models were created to analyze fiscal impact of different scaling options utilizing final scores from RY 2017, the most recent available final scores.

Staff vetted these options to create a single scale with the performance measurement work group members and recommends using a full score scale that ranges from 0 to 100%, where hospitals scoring below 45% are penalized, and hospitals scoring above 55% are rewarded. Staff recommends the continuation of a revenue-neutral zone for the MHAC program given positive statewide performance. The MHA letter in Appendix VII supports the full scale option and maintenance of the revenue-neutral or hold harmless zone.

## **RECOMMENDATIONS**

Based on this assessment, HSCRC staff recommends the following for RY 2019:

1. Continue to exclude palliative care discharges in program for RY 2019, and perform a special hospital audit on palliative care coding.
2. Modify scaling methodology to be a single payment scale, ranging from 0% to 100%, with a revenue neutral zone between 45% and 55%.
3. Set the maximum penalty at 2% and the maximum reward at 1%.

## **APPENDIX I. MEASURES FOR THE FEDERAL HAC PROGRAM**

### **CMS HAC Measures Implemented Since FFY 2012**

- HAC 01: Foreign Object Retained After Surgery
- HAC 02: Air Embolism
- HAC 03: Blood Incompatibility
- HAC 04: Stage III & Stage IV Pressure Ulcers
- HAC 05: Falls and Trauma
- HAC 06: Catheter-Associated Urinary Tract Infection
- HAC 07: Vascular Catheter-Associated Infection
- HAC 08: Surgical Site Infection - Mediastinitis After Coronary Artery Bypass Graft
- HAC 09: Manifestations of Poor Glycemic Control
- HAC 10: Deep Vein Thrombosis/Pulmonary Embolism with Total Knee Replacement or Hip Replacement
- HAC 11: Surgical Site Infection – Bariatric Surgery
- HAC 12: Surgical Site Infection – Certain Orthopedic Procedure of Spine, Shoulder, and Elbow
- HAC 13: Surgical Site Infection Following Cardiac Device Procedures
- HAC 14: Iatrogenic Pneumothorax w/Venous Catheterization

### **CMS HAC Reduction Program Measures Implemented Since FFY 2015**

- Domain 1- the Agency for Health Care Research and Quality composite patient safety indicator (PSI) #90 which includes the following indicators:
  - Pressure ulcer rate (PSI 3);
  - Iatrogenic pneumothorax rate (PSI 6);
  - Central venous catheter-related blood stream infection rate (PSI 7);
  - Postoperative hip fracture rate (PSI 8);
  - Postoperative pulmonary embolism (PE) or deep vein thrombosis rate (PSI 12);
  - Postoperative sepsis rate (PSI 13);
  - Wound dehiscence rate (PSI 14); and
  - Accidental puncture and laceration rate (PSI 15).
- Domain 2- two healthcare-associated infection measures developed by the Centers for Disease Control and Prevention’s National Health Safety Network:
  - Central Line-Associated Blood Stream Infection and
  - Catheter-Associated Urinary Tract Infection.

For the FY 2017 CMS HAC Reduction program, CMS decreased the Domain 1 weight from 25 percent to 15 percent and increased the Domain 2 weight from 75 percent to 85 percent.

CMS also expanded the data used for central line-associated blood stream infection and catheter-associated urinary tract infections and will include data from pediatric and adult medical ward, surgical ward, and medical/surgical ward locations, in addition to data from adult and pediatric intensive care unit locations.



## APPENDIX II. PPC MEASUREMENT DEFINITION AND POINTS CALCULATION

### Definitions

The PPC measure would then be defined as:

Observed (O)/Expected (E) value for each measure

The threshold value is the minimum performance level at which a hospital will be assigned points and is defined as:

Weighted mean of all O/E ratios (O/E =1)

*(Mean performance is measured at the case level. In addition, higher volume hospitals have more influence on PPCs' means.)*

The benchmark value is the performance level at which a full 10 points would be assigned for a PPC and is defined as:

Weighted mean of top quartile O/E ratio that include at least 25% of statewide discharges

For PPCs that are serious reportable events, the threshold and benchmark will be set at 0.

### Performance Points

Performance points are given based on a range between a “Benchmark” and a “Threshold,” which are determined using the base year data. The Benchmark is a reference point defining a high level of performance, which is equal to the mean of the top quartile. Hospitals whose rates are equal to or above the benchmark receive 10 full attainment points.

The Threshold is the minimum level of performance required to receive minimum attainment points, which is set at the weighted mean of all the O/E ratios which equals to 1. The improvement points are earned based on a scale between the hospital's prior year score (baseline) on a particular measure and the Benchmark and range from 0 to 9.

The formulas to calculate the attainment and improvement points are as follows:

- Attainment Points:  $[9 * ((\text{Hospital's performance period score} - \text{threshold}) / (\text{benchmark} - \text{threshold}))] + .5$ , where the hospital performance period score falls in the range from the threshold to the benchmark

Improvement Points:  $[10 * ((\text{Hospital performance period score} - \text{Hospital baseline period score}) / (\text{Benchmark} - \text{Hospital baseline period score}))] - .5$ , where the hospital performance score falls in the range from the hospital's baseline period score to the benchmark

**APPENDIX III.**  
**MHAC RY 2019 PPC LIST, TIERS, AND BENCHMARKS**

PPC Number	PPC Description	RY 19 Tier	Benchmark RY18 (based on FY15)	Benchmark RY19 (based 10/15-9/16)	Difference RY18 vs RY19
1	Stroke & Intracranial Hemorrhage	2	0.5707	0.4158	-0.1549
3	Acute Pulmonary Edema and Respiratory Failure without Ventilation	1	0.5502	0.5429	-0.0073
4	Acute Pulmonary Edema and Respiratory Failure with Ventilation	1	0.5994	0.4691	-0.1303
5	Pneumonia & Other Lung Infections	1	0.5440	0.4368	-0.1072
6	Aspiration Pneumonia	1	0.5021	0.5082	0.0061
7	Pulmonary Embolism	1	0.3555	0.3841	0.0286
8	Other Pulmonary Complications	2	0.4387	0.4557	0.0170
9	Shock	1	0.5528	0.4757	-0.0771
10	Congestive Heart Failure	2	0.2236	0.2273	0.0037
11	Acute Myocardial Infarction	2	0.5728	0.4924	-0.0804
12	Cardiac Arrhythmias & Conduction Disturbances	NA	0.3270	NA	NA
13	Other Cardiac Complications	2	0.0785	0.1527	0.0742
14	Ventricular Fibrillation/Cardiac Arrest	1	0.6793	0.5130	-0.1663
16	Venous Thrombosis	1	0.3001	0.3006	0.0005
19	Major Liver Complications	2	0.3577	0.1036	-0.2541
21	Clostridium Difficile Colitis	2	0.5634	0.4890	-0.0744
23	GU Complications Except UTI	2	0.2362	0.1740	-0.0622
27	Post-Hemorrhagic & Other Acute Anemia with Transfusion	1	0.5659	0.1540	-0.4119
28	In-Hospital Trauma and Fractures	2	0.0619	0.1741	0.1122
30	Poisonings due to Anesthesia	2	0.0000	0.0000	0.0000
31	Decubitus Ulcer	2	0.0000	0.0000	0.0000
32	Transfusion Incompatibility Reaction	2	0.0000	0.0000	0.0000
34	Moderate Infectious	2	0.3734	0.1614	-0.2120
35	Septicemia & Severe Infections	1	0.4251	0.4095	-0.0156
36	Acute Mental Health Changes	NA	0.2297	NA	NA
37	Post-Operative Infection & Deep Wound Disruption Without Procedure	1	0.4159	0.4868	0.0709
38	Post-Operative Wound Infection & Deep Wound Disruption with Procedure	1	0.5989	0.6453	0.0464
39	Reopening Surgical Site	2	0.0795	0.3162	0.2367
40	Post-Operative Hemorrhage & Hematoma without Hemorrhage Control Procedure or I&D Proc	1	0.6266	0.6280	0.0014
41	Post-Operative Hemorrhage & Hematoma with Hemorrhage Control Procedure or I&D Proc	1	0.2031	0.4585	0.2554
42	Accidental Puncture/Laceration During Invasive Procedure	1	0.4414	0.3882	-0.0532
44	Other Surgical Complication - Mod	2	0.3442	0.4108	0.0666
45	Post-procedure Foreign Bodies	2	0.0000	0.0000	0.0000

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PPC Number	PPC Description	RY 19 Tier	Benchmark RY18 (based on FY15)	Benchmark RY19 (based 10/15-9/16)	Difference RY18 vs RY19
46	Post-Operative Substance Reaction & Non-O.R. Procedure for Foreign Body	2	0.0000	0.0000	0.0000
47	Encephalopathy	2	0.1372	0.1221	-0.0151
48	Other Complications of Medical Care	2	0.3403	0.0770	-0.2633
49	Iatrogenic Pneumothrax	1	0.3514	0.2007	-0.1507
50	Mechanical Complication of Device, Implant & Graft	2	0.3919	0.4279	0.0360
51	Gastrointestinal Ostomy Complications	2	0.3631	0.3189	-0.0442
52	Inflammation & Other Complications of Devices, Implants or Grafts Except Vascular Infection	2	0.5058	0.4051	-0.1007
53	Infection, Inflammation & Clotting Complications of Peripheral Vascular Catheters & Infusions	2	0.1967	0.0890	-0.1077
54	Infections due to Central Venous Catheters	1	0.0877	0.0000	-0.0877
59	Medical & Anesthesia Obstetric Complications	2	0.5325	0.3470	-0.1855
60	Major Puerperal Infection and Other Major Obstetric Complications	2	0.0798	0.4861	0.4063
61	Other Complications of Obstetrical Surgical & Perineal Wounds	2	0.2060	0.1921	-0.0139
62	Delivery with Placental Complications	2	0.3366	0.2627	-0.0739
65	Urinary Tract Infection without Catheter	1	0.5645	0.0000	-0.5645
66	Catheter-Related Urinary Tract Infection	NA	0.0000	NA	NA
Combo 1	General Combination PPC: PPC 25, 26, 63	2	0.2139	0.2819	0.0680
Combo 2	Gastrointestinal Complications: PPC 17 and 18	2	0.4640	0.3313	-0.1327
Combo 3	OB Hemorrhage: PPC 55 and 56	2	0.6396	0.5660	-0.0736
Combo 4	OB Lacerations: PPC 57 and 58	NA	0.5331	NA	NA

## APPENDIX IV. PALLIATIVE CARE TRENDS IN MARYLAND, 2012-2016

Figure A. Percent of Total Discharges with Palliative Care, 2012 – March 2016

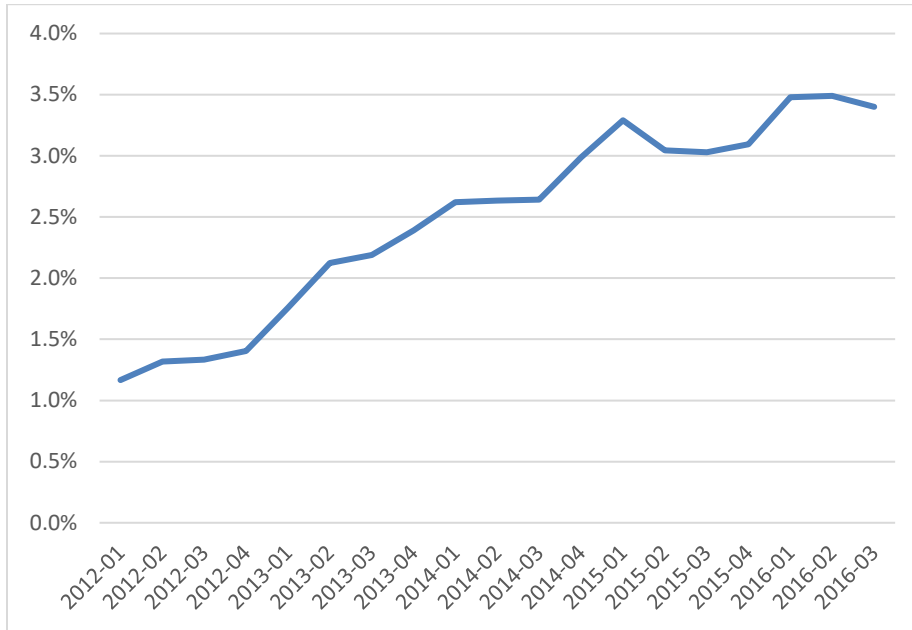
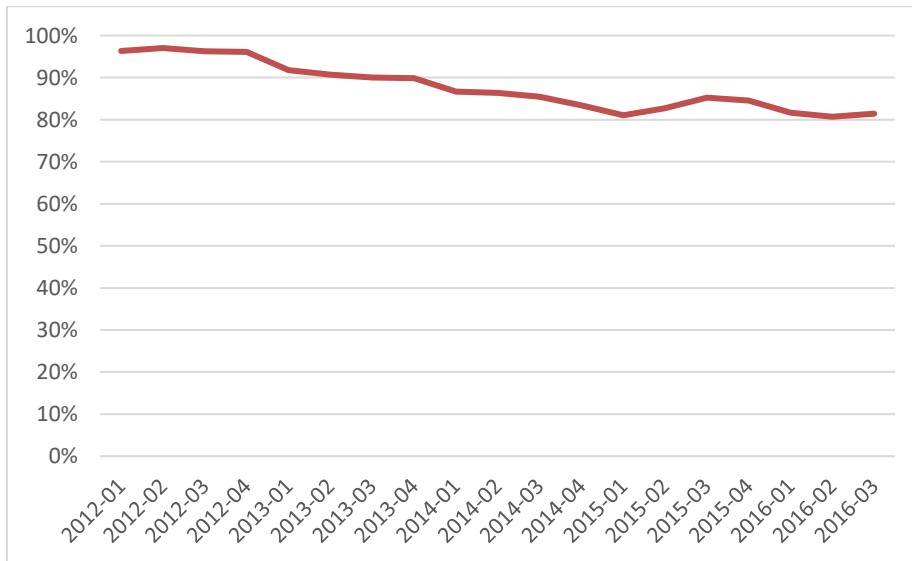


Figure B. Percent of Total PPCs in MHAC Program, 2012 – March 2016



**APPENDIX V.  
PPC RATES WITH AND WITHOUT PALLIATIVE CARE**

CY 2016 YTD September		Case Mix Adjusted PPC Rate*			At Risk Discharges*		
Hospital ID		Without PC	With PC	% Difference between with and without PC	Without PC	With PC	% Difference between with and without PC
210001	Meritus	0.71	0.79	11.44%	449,261	458,166	1.98%
210002	UMMC	0.72	0.84	16.44%	597,222	609,480	2.05%
210003	PG Hospital	0.76	0.88	16.37%	338,738	341,217	0.73%
210004	Holy Cross	0.51	0.61	19.83%	802,186	819,225	2.12%
210005	Frederick	0.71	0.85	20.71%	448,923	466,093	3.82%
210006	UM-Harford	0.69	0.84	21.69%	129,436	132,809	2.61%
210008	Mercy	0.61	0.67	10.03%	450,333	452,015	0.37%
210009	Johns Hopkins	0.79	0.97	22.99%	992,480	1,008,774	1.64%
210010	UM- Dorchester	0.68	1.05	54.99%	70,759	72,305	2.18%
210011	St. Agnes	0.59	0.69	16.66%	460,571	469,387	1.91%
210012	Sinai	0.71	0.83	16.53%	542,444	550,036	1.40%
210013	Bon Secours	1.00	1.02	1.65%	111,098	111,792	0.62%
210015	MedStar Fr Square	0.65	0.73	11.58%	596,079	605,869	1.64%
210016	Washington Adventist	0.98	1.09	11.40%	304,336	308,416	1.34%
210017	Garrett	0.54	0.63	18.07%	59,896	61,167	2.12%
210018	MedStar Montgomery	0.73	0.80	8.80%	193,168	197,434	2.21%
210019	Peninsula	0.82	0.98	19.22%	490,191	503,354	2.69%
210022	Suburban	0.66	0.78	18.56%	362,774	378,041	4.21%
210023	Anne Arundel	0.70	0.78	11.30%	823,210	849,224	3.16%
210024	MedStar Union Mem	0.58	0.74	27.32%	345,145	350,046	1.42%
210027	Western Maryland	0.88	1.05	19.95%	324,583	331,871	2.25%
210028	MedStar St. Mary's	0.44	0.53	19.82%	241,036	244,214	1.32%
210029	JH Bayview	0.50	0.53	7.39%	529,866	537,606	1.46%
210030	UM- Chestertown	0.89	1.06	19.63%	43,732	44,877	2.62%
210032	Union of Cecil	0.66	0.74	13.21%	165,087	170,274	3.14%
210033	Carroll	0.71	0.88	23.56%	284,965	292,575	2.67%
210034	MedStar Harbor	0.56	0.76	36.01%	206,612	210,663	1.96%
210035	UM-Charles Regional	0.67	0.76	13.03%	180,982	183,101	1.17%
210037	UM-Easton	0.62	0.78	25.45%	230,143	235,778	2.45%
210038	UMMC Midtown	0.10	0.11	9.62%	116,459	117,083	0.54%
210039	Calvert	0.56	0.59	5.67%	146,475	148,457	1.35%
210040	Northwest	0.52	0.79	50.46%	317,426	324,147	2.12%
210043	UM-BWMC	0.67	0.85	26.94%	486,260	500,814	2.99%

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210044	GBMC	0.93	0.98	5.12%	512,405	517,967	1.09%
210045	McCready	0.24	0.24	0.00%	8,251	8,251	0.00%
210048	Howard County	0.72	0.81	13.76%	509,712	520,528	2.12%
210049	UM-Upper Chesapeake	0.70	0.82	16.87%	336,573	349,182	3.75%
210051	Doctors	0.58	0.76	30.64%	276,776	281,780	1.81%
210055	Laurel Regional	0.58	0.70	20.34%	106,623	108,058	1.35%
210056	MedStar Good Sam	0.58	0.63	8.70%	278,913	282,609	1.33%
210057	Shady Grove	0.80	0.90	12.17%	528,778	534,827	1.14%
210058	UMROI	0.94	0.94	0.00%	64,211	64,211	0.00%
210060	Ft. Washington	0.12	0.14	17.80%	63,439	63,930	0.77%
210061	Atlantic General	0.41	0.48	17.76%	94,316	100,961	7.05%
210062	MedStar Southern MD	0.71	0.83	16.08%	314,039	318,399	1.39%
210063	UM-St. Joe	0.65	0.71	8.78%	488,064	494,568	1.33%
210064	Levindale	2.69	2.78	3.48%	40,202	40,900	1.74%
210065	HC- Germantown	0.58	0.64	10.16%	137,209	140,325	2.27%
210000	Statewide	0.69	0.80	16.52%	15,601,387	15,912,806	2.00%

\*Note that when rerunning the MHAC methodology to include palliative care cases, the PPCs included for each hospital may change due to the small sample exclusions (e.g., a PPC for a hospital will be included if the expected is greater than one when palliative care cases are included).

**APPENDIX VI.  
REVENUE ADJUSTMENTS – HOSPITAL-SPECIFIC MODELING**

MHAC Hospital Modeling (using RY2017 Final Scores)				RY 2018 Scale		Option 1: Full Scale without Neutral Zone		Option 2: Full Scale with Neutral Zone	
Hospital ID	Hospital Name	FY 16 Permanent Inpatient Revenue	RY 17 Final MHAC score	% Adjustment	\$ Adjustment	% Adjustment	\$ Adjustment	% Adjustment	\$ Adjustment
	<b>MAXIMUM PENALTY</b>			<b>-1.00%</b>	<b>\$</b>	<b>-2.00%</b>	<b>\$</b>	<b>-2.00%</b>	<b>\$</b>
210003	PRINCE GEORGE	\$220,306,426	0.29	-0.44%	\$(963,841)	-0.84%	-\$1,850,574	-0.71%	-\$1,566,623
210016	WASHINGTON ADVENTIST	\$155,199,154	0.32	-0.25%	\$(387,998)	-0.72%	-\$1,117,434	-0.58%	-\$896,706
210062	SOUTHERN MARYLAND	\$156,564,761	0.36	0.00%	\$0	-0.56%	-\$876,763	-0.40%	-\$626,259
210013	BON SECOURS	\$74,789,724	0.40	0.00%	\$0	-0.40%	-\$299,159	-0.22%	-\$166,199
210009	JOHNS HOPKINS	\$1,244,297,900	0.41	0.00%	\$0	-0.36%	-\$4,479,472	-0.18%	-\$2,212,085
210044	G.B.M.C.	\$207,515,795	0.43	0.00%	\$0	-0.28%	-\$581,044	-0.09%	-\$184,458
210051	DOCTORS COMMUNITY	\$132,614,778	0.44	0.00%	\$0	-0.24%	-\$145,035	-0.04%	-\$58,940
210055	LAUREL REGIONAL	\$60,431,106	0.44	0.00%	\$0	-0.24%	-\$318,275	-0.04%	-\$26,858
210027	WESTERN MARYLAND HEALTH SYSTEM	\$167,618,972	0.47	0.03%	\$49,300	-0.12%	-\$264,730	0.00%	\$0
210057	SHADY GROVE	\$220,608,397	0.47	0.03%	\$64,885	-0.12%	-\$201,143	0.00%	\$0
210023	ANNE ARUNDEL	\$291,882,683	0.49	0.09%	\$257,544	-0.04%	-\$64,318	0.00%	\$0
210056	GOOD SAMARITAN	\$160,795,606	0.49	0.09%	\$141,878	-0.04%	-\$116,753	0.00%	\$0
210033	CARROLL COUNTY	\$136,267,434	0.50	0.12%	\$160,315	0.00%	\$0	0.00%	\$0

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MHAC Hospital Modeling (using RY2017 Final Scores)				RY 2018 Scale		Option 1: Full Scale without Neutral Zone		Option 2: Full Scale with Neutral Zone	
Hospital ID	Hospital Name	FY 16 Permanent Inpatient Revenue	RY 17 Final MHAC score	% Adjustment	\$ Adjustment	% Adjustment	\$ Adjustment	% Adjustment	\$ Adjustment
	<b>MAXIMUM PENALTY</b>			<b>-1.00%</b>	<b>\$</b>	<b>-2.00%</b>	<b>\$</b>	<b>-2.00%</b>	<b>\$</b>
210037	EASTON	\$101,975,577	0.50	0.12%	\$119,971	0.00%	\$0	0.00%	\$0
210001	MERITUS	\$190,659,648	0.51	0.15%	\$280,382	0.02%	\$22,843	0.00%	\$0
210024	UNION MEMORIAL	\$238,195,335	0.51	0.15%	\$350,287	0.02%	\$38,132	0.00%	\$0
210040	NORTHWEST	\$114,214,371	0.51	0.15%	\$167,962	0.02%	\$47,639	0.00%	\$0
210005	FREDERICK MEMORIAL	\$190,413,775	0.53	0.21%	\$392,028	0.06%	\$22,650	0.00%	\$0
210048	HOWARD COUNTY	\$165,683,744	0.53	0.21%	\$341,114	0.06%	\$114,248	0.00%	\$0
210061	ATLANTIC GENERAL	\$37,750,252	0.53	0.21%	\$77,721	0.06%	\$99,410	0.00%	\$0
210035	CHARLES REGIONAL	\$67,052,911	0.54	0.24%	\$157,772	0.08%	\$53,642	0.00%	\$0
210022	SUBURBAN	\$193,176,044	0.55	0.26%	\$511,348	0.10%	\$193,176	0.00%	\$0
210038	UMMC MIDTOWN	\$126,399,313	0.57	0.32%	\$408,939	0.14%	\$176,959	0.04%	\$56,177
210012	SINAI	\$415,350,729	0.58	0.35%	\$1,465,944	0.16%	\$664,561	0.07%	\$276,900
210018	MONTGOMERY GENERAL	\$75,687,627	0.59	0.38%	\$289,394	0.18%	\$115,442	0.09%	\$67,278
210058	REHAB & ORTHO	\$64,134,443	0.59	0.38%	\$245,220	0.18%	\$136,238	0.09%	\$57,008
210008	MERCY	\$214,208,592	0.60	0.41%	\$882,035	0.20%	\$475,870	0.11%	\$238,010
210043	BALTIMORE WASHINGTON MEDICAL CENTER	\$237,934,932	0.60	0.41%	\$979,732	0.20%	\$428,417	0.11%	\$264,372
210011	ST. AGNES	\$232,266,274	0.62	0.47%	\$1,093,018	0.24%	\$166,536	0.16%	\$361,303



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MHAC Hospital Modeling (using RY2017 Final Scores)				RY 2018 Scale		Option 1: Full Scale without Neutral Zone		Option 2: Full Scale with Neutral Zone	
Hospital ID	Hospital Name	FY 16 Permanent Inpatient Revenue	RY 17 Final MHAC score	% Adjustment	\$ Adjustment	% Adjustment	\$ Adjustment	% Adjustment	\$ Adjustment
	<b>MAXIMUM PENALTY</b>			<b>-1.00%</b>	<b>\$</b>	<b>-2.00%</b>	<b>\$</b>	<b>-2.00%</b>	<b>\$</b>
210032	UNION HOSPITAL OF CECIL COUNTY	\$69,389,876	0.62	0.47%	\$326,541	0.24%	\$557,439	0.16%	\$107,940
210015	FRANKLIN SQUARE	\$274,203,013	0.63	0.50%	\$1,371,015	0.26%	\$712,928	0.18%	\$487,472
210063	UM ST. JOSEPH	\$234,223,274	0.65	0.56%	\$1,308,895	0.30%	\$702,670	0.22%	\$520,496
210004	HOLY CROSS	\$316,970,825	0.66	0.59%	\$1,864,534	0.32%	\$435,005	0.24%	\$774,818
210030	CHESTERTOWN	\$21,575,174	0.66	0.59%	\$126,913	0.32%	\$362,383	0.24%	\$52,739
210034	HARBOR	\$113,244,592	0.66	0.59%	\$666,145	0.32%	\$69,041	0.24%	\$276,820
210049	UPPER CHESAPEAKE HEALTH	\$135,939,076	0.66	0.59%	\$799,642	0.32%	\$1,014,307	0.24%	\$332,296
210002	UNIVERSITY OF MARYLAND	\$906,034,034	0.67	0.62%	\$5,596,093	0.34%	\$3,080,516	0.27%	\$2,416,091
210029	HOPKINS BAYVIEW MED CTR	\$343,229,718	0.68	0.65%	\$2,220,898	0.36%	\$1,235,627	0.29%	\$991,553
210019	PENINSULA REGIONAL	\$242,318,199	0.71	0.74%	\$1,781,751	0.42%	\$1,017,736	0.36%	\$861,576
210010	DORCHESTER	\$26,999,062	0.74	0.82%	\$222,345	0.48%	\$332,012	0.42%	\$113,996
210028	ST. MARY	\$69,169,248	0.74	0.82%	\$569,629	0.48%	\$129,595	0.42%	\$292,048
210006	HARFORD	\$45,713,956	0.77	0.91%	\$416,804	0.54%	\$246,855	0.49%	\$223,490
210039	CALVERT	\$62,336,014	0.78	0.94%	\$586,692	0.56%	\$349,082	0.51%	\$318,606
210017	GARRETT COUNTY	\$19,149,148	0.81	1.00%	\$191,491	0.62%	\$118,725	0.58%	\$110,640
210060	FT. WASHINGTON	\$19,674,774	0.90	1.00%	\$196,748	0.80%	\$157,398	0.78%	\$153,026

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MHAC Hospital Modeling (using RY2017 Final Scores)				RY 2018 Scale		Option 1: Full Scale without Neutral Zone		Option 2: Full Scale with Neutral Zone	
Hospital ID	Hospital Name	FY 16 Permanent Inpatient Revenue	RY 17 Final MHAC score	% Adjustment	\$ Adjustment	% Adjustment	\$ Adjustment	% Adjustment	\$ Adjustment
	<b>MAXIMUM PENALTY</b>			<b>-1.00%</b>	<b>\$</b>	<b>-2.00%</b>	<b>\$</b>	<b>-2.00%</b>	<b>\$</b>
210045	MCCREADY	\$2,815,158	1.00	1.00%	\$28,152	1.00%	\$28,152	1.00%	\$28,152
<b>State Total</b>		<b>\$8,796,981,441</b>			<b>\$25,359,237</b>	<b>State Total</b>	<b>\$2,990,533</b>		<b>\$3,644,677</b>
Penalty					<b>(\$1,351,838)</b>	Penalty	<b>(\$10,314,700 )</b>		<b>(\$5,738,130)</b>
% Inpatient					<b>0.0%</b>	% Inpatient	<b>-0.1%</b>		<b>-0.1%</b>
Reward					<b>\$26,711,075</b>	Reward	<b>\$13,305,234</b>		<b>\$9,382,806</b>
% Inpatient					<b>0.3%</b>	% Inpatient	<b>0.2%</b>		<b>0.1%</b>

**APPENDIX VII.**  
**STAKEHOLDER LETTERS ON RY 2019 MHAC POLICY**



Maryland  
Hospital Association

February 24, 2017

Alyson Schuster, Ph.D.  
Associate Director, Performance Measurement  
Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215

Dear Ms. Schuster:

On behalf of the 64 hospital and health system members of the Maryland Hospital Association (MHA), we appreciate the opportunity to comment on the February *Draft Recommendation for the Maryland Hospital-Acquired Conditions Program for Rate Year 2019*.

Maryland's hospitals have reduced the rates of preventable complications by over 45 percent in the first three years of the All-Payer Demonstration, with double digit reductions each year. In contrast, hospitals have reduced the number of cases that are counted as Prevention Quality Indicators (PQIs) by about four percent over the past three years, with over three-quarters of that reduction occurring between 2015 and 2016. The challenge now is to continue providing the right care, at the right time, in the right setting by expanding hospitals' efforts to work outside their four walls with physicians and other providers. To do that, we believe it is time to reduce the emphasis on Maryland Hospital-Acquired Conditions (MHACs) and focus our resources on alignment with physicians and others outside the hospital.

We support the staff's recommendation to eliminate the statewide improvement target and move to a single payment scale that includes a zone in which no payment adjustments are made. Because the expected values, the average, and the best practice performance standards are updated each year, there remains in the policy a strong incentive for each hospital to keep up with the prior year's statewide improvement just to maintain its prior year score. In addition, the points in the payment scale where penalties and rewards begin generate additional incentives. To reduce the emphasis on this program and provide hospitals the flexibility to build alignment with physicians and others, it is important to maintain a hold harmless zone.

We strongly oppose the recommendation to measure complications for individuals who have elected palliative care. Adding these cases to the measurement of MHACs sends the wrong message to clinicians because people who elect palliative care choose a multi-disciplinary approach focused on relieving the pain, symptoms and stresses of serious illness. These goals may be at cross purposes with interventions to prevent complications. For example, a decision to insert a urinary catheter risks infection but can relieve the dying patient of excess moisture and fouling of pressure ulcers; frequent turning can cause the patient distress and pain in a vain attempt to prevent inevitable pressure sores retaining a central line to provide pain relief also

Alyson Schuster, Ph.D.

February 24, 2017

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risks infection; and administering high doses of narcotics for pain relief can cause hypotension or ileus, which could be counted as an MHAC.

The draft recommendation notes a concern about coding cases as palliative care for the sole purpose of eliminating from MHAC those with complications. If there is a concern about the coding of palliative care cases, the commission should strengthen its current audit procedures.

Palliative care improves the patient and family experience, as well as quality of life. It also reduces emergency department use, admissions, and days in intensive care, all of which align with the goals of the All-Payer Demonstration. Expanded use of palliative care should be encouraged and expected, but the recommendation to measure complications in those receiving palliative care is at odds with these goals.

We appreciate the commission's consideration of our comments and we are happy to discuss our concerns at any time.

Sincerely,



Traci La Valle  
Vice President

cc: Nelson J. Sabatini, Chairman  
Herbert S. Wong, Ph.D., Vice Chairman  
Joseph Antos, Ph.D.  
Victoria W. Bayless  
George H. Bone, M.D.  
John M. Colmers  
Jack C. Keane  
Donna Kinzer, Executive Director

## Johns Hopkins Recommendations to Maintain Palliative Care Exclusion

The following is in response to the Maryland Health Services Cost Review Commission's concerns about the proliferation of the palliative care code, its impact on mortality statistics and as a global exclusion for Maryland Hospital Acquired Conditions (MHACs). We want to ensure that the Commission is provided with additional information from a clinical perspective in order to clarify palliative care definition, explain some of the reasons for the increase and provide evidence that the increase in palliative care codes is in line with increased palliative care programs, and penetration (the percentage of inpatients that are seen by palliative care professionals). We strongly urge the HSCRC to maintain the current palliative care global exclusion for MHACs and deaths. We are concerned that penalizing hospitals with robust palliative care programs by taking away the MHAC and mortality exclusion will dampen enthusiasm for palliative care and be contrary to the best interests of the patient.

The evidence of the benefits of palliative care combined with usual care is now incontrovertible. Table 1 shows the cancer studies that compared usual cancer care to usual cancer care plus palliative care. Note that there is always some benefit in improved quality of life, better symptom control, less depression and anxiety, and less caregiver distress. In addition, many studies show a survival benefit, and several show significant cost savings; none show increased costs. Similar data exist for multiple sclerosis, congestive heart failure, etc. and Johns Hopkins Hospital is studying other conditions. We believe palliative care concurrent with usual care is truly "better care at a cost we can afford."

First, we should agree on definitions and metrics. Palliative care, when done as a medical, nursing and social specialty, is a relatively new field. Doctors were only board-certified in Hospice and Palliative Medicine (HPM) in 2006, and received their own CMS billing code as a specialty in 2008. The definitions we use for modern palliative care is that of the Center to Advance Palliative Care (CAPC): "Palliative care is specialized medical care for people with serious illness. It focuses on providing patients with relief from the symptoms, pain and stress of a serious illness – whatever the diagnosis. The goal is to improve quality of life for both the patient and the family." Standards set by the Joint Commission Advanced Certification for Palliative Care state that the core interdisciplinary team should include a physician, an advanced practice registered nurse (APRN) or registered nurse (RN), a social worker, and a chaplain. From 2009 to 2015, the number of U. S. programs reporting a complete interdisciplinary team increased by nearly 50%, from 30% to 44%.

This contrasts with how the PC (v66.7 when we first starting testing it, now Z51.5 in ICD-10-CM) code is applied. It can be applied whenever the coder finds evidence of some aspect of hospice or palliative care: the words "comfort care", "DNR", "DNI" and "palliative care" all can be used to justify adding the code. Use of the code does not require an order for palliative care, or a formal consultation for palliative care. However, it does require that the coder identifies supportive documentation that elements of palliative care were actually delivered.

The growth in Maryland of the palliative coding, parallels the use of formal palliative care programs and consultations nationwide. The growth of palliative care programs has been phenomenal. (Figure 1)

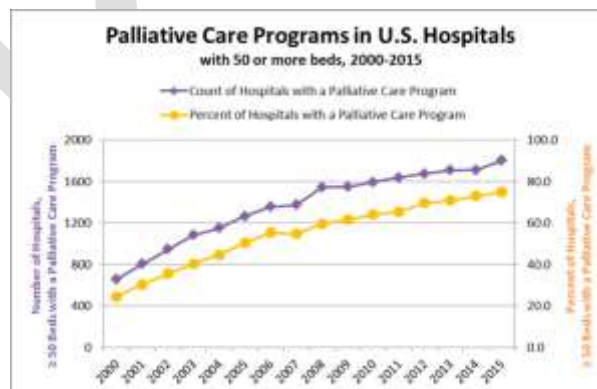


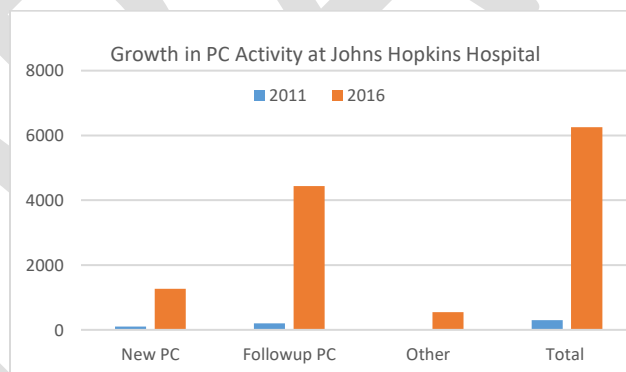
Figure 1: Growth in Palliative Care Programs Nationally

Similarly, the use of palliative care, as measured by penetration (the number of adult non-OB hospital discharges seen by palliative care consultation teams), has grown rapidly. The 2012-2015 growth of 1.8% is similar to the nationwide growth of 1.2%, from 3.6 to 4.8% penetration so, rather than being related to “up-coding” rather, it simply reflects the rapid growth of programs in Maryland. For instance, in 2011, Johns Hopkins Hospital had 300 billable PC consultation visits. In 2016, we had over 6300 billable consultation visits, an additional 800 nurse-led consultations, an additional 900+ pharmacy led consultations, 450 chaplain consultation visits in the Neonatal Intensive Care Unit for neonates with serious and often terminal illnesses.



*Figure 2: Growth in penetration*

We know that there has been a rapid proliferation of Palliative Care Programs in Maryland that could explain much of the growth. Within that is a rapid expansion of actual palliative consults; our data is shown in Figure 3.



*Figure 3: Growth in PC consults at Hopkins*

In addition, according to the Directive Decision Memo for Ventricular Assist Devices for Bridge-to-Transplant and Destination Therapy (CAG-00432R) August 1, 2013 from CMMS states that palliative care **MUST** be involved for programs that do Left Ventricular Assist Devices (LVADs, or artificial hearts).

"The team must include, at a minimum, all of the following:

- At least one physician with cardiothoracic surgery privileges and individual experience implanting at least 10 VADs over the course of the previous 36 months with activity in the last year.
- At least one cardiologist trained in advanced heart failure with clinical competence in medical and device-based management including VADs, and clinical competence in the management of patients before and after heart transplant.
- A VAD program coordinator.
- A social worker.
- A palliative care specialist."

This team collaboration was highlighted in our recent accreditation as an LVAD Center of Excellence. In addition, in order to be listed as a Pulmonary Hypertension Association PHA-accredited Center of Comprehensive Care (CCC) or a PHA-accredited Regional Clinical Program (RCP), one must have a palliative care team member and active services.

In conclusion, palliative care, as an increasing clinical specialty can result in expected complications, whether from disease progression or clinical decisions to ameliorate pain, stress, and depression or to allow dignity and improved comfort. Clinical studies have shown that palliative care in many cases increases survival and does not add to the cost of care and can reduce overutilization of costly care. Hospitals should maintain the distinction inherent in the delivery of palliative care.

Following are what we believe to be reasonable options for consideration by the HSCRC. Based on the information and data outlined above, Option 1 is the strongly recommended action.

**Option 1: Maintain the current palliative care global exclusion for MHACs and deaths.**

Option 2:

Add palliative care as part of the MHAC calculation of the expected by PPC for high mortality DRG groups

Add palliative care as part of the mortality calculation of the expected by PPC for high mortality DRG groups

Option 3: Exclude all palliative care accompanied by a DNR, DNI code

Option 4: Exclude all palliative care with POA "Y" for mortality and MHACs

Thank you for the opportunity to provide this information and recommendations for consideration.



Table 1: Summary of recent studies comparing usual care to UC + PC						
	Patient Experience					
Study and population	QOL	Symptoms	Anxiety Depression	Caregiver Distress	Survival	Cost
Brumley, 2007 (1/3 ca) <sup>i</sup>	NM Satisfaction increased	NM	NM	NM	=	-\$7550 per person (p 0.03) More likely to die at home, less likely to visit ED, admit to hospice
Gade, 2008 (1/3 ca) <sup>ii</sup>	+ p 0.04	NM	NM	NM	=	-\$4885 per person p 0.001. Fewer ICU admissions p 0.04, longer hospice stays p 0.04
Bakitas 2009 (Cancer) <sup>iii</sup>	+ p 0.02	+ p 0.06	Less depressed mood p 0.02		Longer, 5.5 months, p 0.14 NS	=
Temel 2010 (lung ca) <sup>iv</sup>	+ p 0.03	NR What about the 7 symptoms on the FACT-L?	Less depression p 0.01		Longer, 2.7 mon, p 0.02	No change in costs despite the longer survival, as cost per day was \$117 lower. <sup>v</sup>
Farquhar (cancer as cause of breathlessness) <sup>vi</sup>	<del>EQ-5D done but I don't see the results</del>	+ reduced patient distress due to breathlessness (P = 0.049)	=	=	=	Total costs £354 less (\$444), better QOL Dominates cost-effectiveness
Zimmermann, 2014 (Cancer) <sup>vii</sup>	+ p 0.05	3 months, =, p 0.33 4 months +, p 0.05	NR What about the ESAS scores?	+ p 0.003	=	NR. Anything pending?
Higginson 2014 (dyspnea, most cancer) <sup>viii</sup>	=	+mastery of breathlessness p 0.048 Dyspnea =	=	ND?	=	=
Bakitas 2015 (Ca) <sup>ix x</sup>	=, p 0.30	=, p 0.09	Mood =	Lower depression and stress, p 0.02 and 0.01, but not QOL	Longer, 6.5 months, 1 yr OS 63% vs 48%, p 0.038	NR; equal resource use
Ferrell, 2015 (Lung Ca) <sup>xii</sup>	+ p <0.001	+ p <0.001	+ p <0.001	+; better well being and less distress, p 0.001; less burden p 0.008	Longer 6 months, NS	NR; more ADs 44% vs 9%, p <0.001
Grudzen, 2016 (Cancer patients in ED) <sup>xiii</sup>	+ p 0.03	ND	=	ND	Longer, 5.2 mons, NS p 0.20	=; note only 25-28% use of hospice in both groups
Temel, 2016 (lung, GI CA) <sup>xiv</sup>	= at wk 12 p 0.34, + at wk 24 p 0.01	NR	+ 0.048	NR	Too early to tell	NR; more likely to discuss EOL wishes 30% vs 14.5% p 0.004
El-Jawahri, 2016 (BMT) <sup>xv</sup>	+ (Smaller decrease) p 0.045	+ (less increase) p 0.03 at 2 weeks; = at 3 months	+ depression and anxiety p <0.001	No change in QOL or anxiety; less increase in depression p 0.03	Too early to tell	NR
Maltoni, 2016 (Pancreas CA) <sup>xvi xvii</sup>	+ p 0.04	NR; FACT-Hep, HCS and TOI all better with PC	=	=	=; OS 32-37% at one year	NR; non-significant improvements in chemo in the last 30 days, hospice LOS, place of death

Key: Ca cancer; QOL quality of life; ED emergency department, GI gastrointestinal, BMT bone marrow transplant, NS not significant, NM not measured, NR not reported; FACT-Hep = Functional Assessment of Cancer Therapy – Hepatobiliary; HCS = Hepatobiliary Cancer Subscale;

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February 23, 2017

Alyson Schuster, PhD, MPH, MBA  
Associate Director, Performance Measurement  
State of Maryland Department of Health and Mental Hygiene, Health Services Cost Review  
Commission

Dear Ms. Schuster,

Maryland stands alone as the only state that does not include hospital deaths on palliative care services as a measure of poor performance. In this light, the proposed HSCRC policy penalizing hospitals for patients who die while under the care of a palliative care service deprives the nation of an important model of quality and cost effective care. We view the proposed policy as short sighted and harmful to Marylanders for whom inpatient palliative care is the optimal means of caring for them in their last days.

Well done, credible research has demonstrated the cost savings<sup>i</sup> and patient/family satisfaction<sup>ii</sup> benefits of hospital based palliative care. Thus, as a matter of policy, Maryland should be doing everything within its power to facilitate and support palliative care in its hospitals. A rule such as the one proposed that effectively retards palliative care and penalizes facilities that strive to provide top quality care for the dying is counterproductive to this goal.

While it is true that many patients can be transitioned to hospice care from inpatient care prior to their death, there are those for whom inpatient hospital based terminal palliative care is optimal: Some patients are so medically unstable that they cannot be safely transported to an alternative facility; others have terminal symptoms that are too complex to be effectively managed by local hospices – even with GIP status. There are specific cases where the local hospice cannot manage IV lines in their facility as they do not have 24 hour nursing coverage and, even if they did, have been unable to secure the services of board certified palliative care physicians or similarly qualified advanced practice clinicians qualified to attend to GIP patients in our inpatient hospital facilities.

Given the acute shortage of qualified palliative care clinicians<sup>iii</sup> it is not realistic to expect that every hospice in Maryland, especially in rural areas, will soon have the capacity to provide optimal palliative care to all terminal patients in a catchment area. The experience of many of our palliative care teams is that many patients and families lack resources to meet caregiving needs at home and are unable as a result, to receive hospice care at home. They are unable to afford the daily “room and board” rate at nursing homes to receive hospice care at such facilities. The hospice facilities are often fully occupied and do not offer alternative options for people to receive hospice care outside of the hospital. The financial information that hospice facilities require to qualify for the sliding scale room and board rate is sometimes overwhelming for patients and families. Despite, our sincere efforts to transition patients with terminal conditions to appropriate community settings, there are multiple barriers that result in a number of such patients receiving end-of-life care in the hospital.

Our patients from the Eastern shore, to inner city Baltimore, up to the Pennsylvania line don't have easy access to inpatient hospice beds. The University of Maryland Medical System has evolved

into a multi-hospital system with academic, community and specialty service missions reaching every part of the state and beyond. While we have a very diverse system, our clinicians can verbalize these same problems everywhere across our sites. Marylanders with complex terminal care needs should not be penalized in this way, nor should the hospitals that provide care to them. We ask you to please consider keeping this patient population excluded from both the mortality and MHAC methodology.

Sincerely,

The UMMS Palliative Care Clinical Performance Improvement Workgroup:

Lakshmi Vaidyanathan, MD  
Medical Director  
Shore Regional Palliative Care Program  
UM Shore Regional Health

Angela Poppe Ries, MD  
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President of Medical Staff  
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Christopher deBorja, MD  
Chairman Department of Medicine  
Chief of Internal Medicine  
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University of Maryland Shore Regional Health – University of Maryland Shore Medical Center at Easton -  
University of Maryland Shore Medical Center at Chestertown - University of Maryland Shore Medical Center at Dorchester •  
University of Maryland Charles Regional Medical Center • University of Maryland St. Joseph Medical Center •  
University of Maryland Upper Chesapeake Health System – University of Maryland Upper Chesapeake Medical Center –**

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<sup>ii</sup> Impact of an Inpatient Palliative Care Team: A Randomized Controlled Trial

Glenn Gade, M.D. Ingrid Venohr, Ph.D., R.N. Douglas Conner, Ph.D. Kathleen McGrady, M.D., M.S., M.A. Jeffrey Beane, M.D. Robert H. Richardson, M.D. Marilyn P. Williams, M.S., R.N. Marcia Liberson, M.P.H., A.C.S.W. Mark Blum, M.D. Richard Della Penna, M.D.

Journal of Palliative Medicine. March 2008, Vol. 11, No. 2: 180-190

<sup>iii</sup> Estimate of Current Hospice and Palliative Medicine Physician Workforce Shortage [Dale Lupu, PhD](#), American Academy of Hospice and Palliative Medicine Workforce Task Force<sup>a</sup>, American Academy of Hospice and Palliative Medicine, Glenview, Illinois, USA

# **FINAL Recommendation for CRISP as Administrator of the Care Redesign Programs**

March 8, 2017

Health Services Cost Review Commission  
4160 Patterson Avenue  
Baltimore, Maryland 21215  
(410) 764-2605  
FAX: (410) 358-6217

This recommendation is a final recommendation ready for Commission action. The recommendation remains unchanged from the draft version.

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## **LIST OF ABBREVIATIONS**

CCIP	Complex and Chronic Care Improvement Program
CMS	Centers for Medicare & Medicaid Services
CRISP	Chesapeake Regional Information System for Our Patients
HCIP	Hospital Care Improvement Program
HSCRC Health	Services Cost Review Commission
ICN	Integrated Care Network
MACRA	Medicare Access and CHIP Reauthorization Act
MHIP	Maryland Health Insurance Program



## INTRODUCTION

The Maryland Health Services Cost Review Commission (“HSCRC,” or “Commission”), in conjunction with the Maryland Department of Health and Mental Hygiene (“Department,” or “DHMH”) was recently granted an Amendment to the 2014 Maryland All-Payer Model (“Amendment”) to procure additional data and waivers necessary to the ongoing success of the All-Payer Model. Chesapeake Regional Information System for our Patients (“CRISP”) is a private not-for-profit organization focused on acting as the State’s Health Information Exchange and supporting infrastructure needs through its sophisticated reporting service and corresponding data analytic capacity. HSCRC staff is recommending that CRISP act as the administrator for the Amendment’s Care Redesign Programs, while HSCRC maintains its policy decision-making role and regulatory oversight.

## BACKGROUND

### Overview of Maryland’s Care Redesign Amendment

In response to Maryland stakeholders’ requests for greater provider alignment and transformation tools under the All-Payer Model, the State proposed, and the Centers for Medicare & Medicaid Services (CMS) approved, a Care Redesign Amendment (“Amendment”) to the Agreement in September 2016. The Amendment aims to modify the Model by:

- Implementing effective care management and chronic care management;
- Incentivizing efforts to provide high-quality, efficient, and well-coordinated episodes of care; and
- Supporting hospitals’ ability, in collaboration with their non-hospital care partners, to monitor and control Medicare beneficiaries’ total cost of care growth.

The Amendment gives Maryland hospitals the opportunity to implement Maryland-designed Care Redesign Programs intended to improve health outcomes. By participating in a Care Redesign Program, hospitals will have the opportunity to access comprehensive Medicare data, share resources, and offer incentives to community physicians and practitioners, physicians that practice at hospitals, and other providers, collectively known as Care Partners. Hospitals and their care partners can leverage Medicare data for implementing, monitoring, and improving their Care Redesign Programs.

### Amendment’s Care Redesign Programs

Under the Care Redesign Amendment, Participating Hospitals will have the opportunity to participate in at least one of two initial Care Redesign Programs, the Hospital Care Improvement Program (“HCIP”) and Complex and Chronic Care Improvement Program (“CCIP”).

- HCIP: Implemented by Participant Hospitals and hospital-based providers, the HCIP aims to improve inpatient medical and surgical care delivery; provide effective transitions

of care; ensure an effective delivery of care during acute care events, beyond hospital walls; encourage the effective management of inpatient resources; and reduce potentially avoidable utilization with a byproduct of reduced cost per acute care event.

- CCIP: Implemented by Participant Hospitals and community providers and practitioners, the CCIP aims to strengthen primary care supports for complex and chronic patients in order to reduce avoidable hospital utilization; enhance care management through tools such as effective risk stratification, health risk assessments, and patient-driven care profiles and plans; and facilitate overall practice transformation towards person-centered care that produces improved outcomes and meets or exceeds quality standards.

## Benefits of the Care Redesign Programs

Both HCIP and CCIP are voluntary programs. Hospitals who choose to participate in HCIP and/or CCIP will have access to patient identified Medicare claims data; achieve closer alignment with their Care Partners through a focus on common goals; enhance their person-centered focus of care; increase quality scores and improve outcomes; and generate greater savings and reductions of potentially avoidable utilization under global budgets. Care Partners who choose to participate in HCIP and/or CCIP will have access to transformation tools and incentives made available by the Participant Hospital(s), as well as the potential for other support for requirements under the Medicare Access and CHIP Reauthorization Act (“MACRA”).

Because the Care Redesign Amendment is a “living document,” the Care Redesign Programs also will continue to evolve to meet the changing needs of Maryland providers. Stakeholders and the State may choose to modify or eliminate Care Redesign Programs over time as they are replaced with more comprehensive delivery and payment approaches. The Amendment gives Maryland the flexibility to expand and refine Care Redesign Programs based on outcomes, learnings, and the changing levels of sophistication of Maryland’s health care system players, as well as the needs of healthcare consumers. The State will deploy a process by which providers and stakeholders make recommendations on enhancements to current programs or for the introduction of new programs to meet the unique needs of Maryland’s patients, payers, and health care providers. This flexibility also improves the State’s responsiveness to external changes brought on by MACRA and other new federal regulations and initiatives. Through this flexible framework, the Amendment will facilitate the State’s ongoing success and progression towards addressing system-wide health care outcomes and costs under the All-Payer Model.

Given the additional flexibility provided under the Amendment, CMS is requiring that Maryland have State oversight and administration responsibilities to ensure the success of the Care Redesign Programs. In particular, Program administration responsibilities under the Amendment will require intense data reporting and analytics capabilities. As such, the HSCRC is recommending that CRISP act as the administrator the Amendment’s Care Redesign Programs, while HSCRC maintains its policy decision-making role and regulatory oversight.

## OVERSIGHT AND ADMINISTRATION OF THE CARE REDESIGN PROGRAMS

### Public-Private Partnership Strategy

The HSCRC is focused on ensuring the availability of tools to support all types of providers in achieving transformation goals. As described in the Progression Plan to the All-Payer Model, Maryland’s strategy is to leverage private resources and public-private resources where implementation is best accomplished cooperatively to support transformation. The HSCRC employs a public-private partnership strategy for several reasons:

- Responsiveness—Resources under stakeholder governance can be more responsive to needs
- Lower costs—Providers and government need some of the same resources, and joint production decreases costs and increases sophistication. The HSCRC wants to avoid having providers pay for staff and consultants to recreate the data analytics and other tools that the State is developing, and visa-versa.
- Transparency—Providers have immediate access to the work of the State regulatory staff, improving the transparency of actions in an increasingly data-driven environment. Transparency creates a better opportunity for input and ongoing improvements.
- Agility—The private sector can be more agile in making changes (e.g., scaling size of resources based on needs).

### HSCRC & CRISP’s Oversight and Administrator Roles

Based on Maryland’s public-private partnership strategy, the HSCRC is recommending that CRISP act as the administrator of the Amendment’s Care Redesign Programs while HSCRC maintains its policy decision-making role and regulatory oversight. Figure 1 provides a high level description of the functions of the different entities involved for the first two Care Redesign Programs, HCIP and CCIP. Future Care Redesign Programs would also require design and development work.

**Figure 1: Care Redesign Programs - Entity Functions**

<b>CMS <i>Federal Regulator</i></b>	<b>HSCRC <i>State Regulator</i></b>	<b>CRISP <i>Administrator</i></b>	<b>PROVIDER COMMUNITY</b>
<ul style="list-style-type: none"> <li>• Approve terms of Care Redesign Programs.</li> </ul>	<ul style="list-style-type: none"> <li>• Set and interpret policy.</li> <li>• Develop methodology for total cost of care.</li> <li>• Approve incentive payment methodology.</li> </ul>	<ul style="list-style-type: none"> <li>• Communication and consulting hub.</li> <li>• CCIP administration and coordination.</li> <li>• HCIP administration and coordination.</li> </ul>	<ul style="list-style-type: none"> <li>• Establish and implement Care Redesign Programs.</li> </ul>

	<ul style="list-style-type: none"> <li>• Review and resolve disputes.</li> <li>• Coordinate with statewide regulatory activities.</li> <li>• Funding source and approval.</li> </ul>	<ul style="list-style-type: none"> <li>• Analytic support, including data collection and reporting.</li> <li>• Budget development.</li> </ul>	
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As a private not-for-profit organization focused on acting as the State’s Health Information Exchange and supporting infrastructure needs that can best be accomplished cooperatively, CRISP will offer the provider-led structure to lead the implementation of the programs. The Care Redesign Programs need to be led by the provider community to be successful. CRISP’s inclusive governance structure makes it well-positioned to ensure that implementation is responsive to provider needs and consumers. Moreover, while CRISP would be the administrator of the program, the HSCRC will work with CRISP to ensure that the administration will meet the needs of the filings that must be made with the State and CMS.

### Funding for CRISP’s Administrator Role

Currently through FY 2018, the care redesign administration is funded through the Integrated Care Network (ICN) budget that the legislature designated from former Maryland Health Insurance Program (MHIP) funds. The HSCRC staff’s position is that future assessments, like MHIP, provide the most stable and equitable source for long-term funding of Care Redesign Programs. However, the HSCRC staff is interested in CRISP’s ICN governance structure and the provider industry’s recommendations on the best strategy for long-term financing. It should be noted that the Commission will need to review and approve recommendations for long-term funding.

In terms of the size of the funding request, the HSCRC staff will ask CRISP staff for advice, particularly based on their experience with the budgets of existing care redesign efforts. However, the HSCRC staff would generally be supportive of a budget request that meets the needs of the stakeholders engaging in this work. As mentioned, the Care Redesign Programs must be provider-led initiatives to be successful, and the HSCRC staff will follow the lead of industry in terms of the administrative support required for implementation.

### RECOMMENDATION

Based on HSCRC’s public-private partnership strategy and analysis of how CRISP’s governance structures and capabilities position them well for implementation capability, the HSCRC staff is recommending that CRISP act as the administrator the Amendment’s Care Redesign Programs, while HSCRC maintains its policy decision-making role and regulatory oversight.

## **APPENDIX: ADDITIONAL BACKGROUND ON CRISP**

### **CRISP Vision, Mission, and Guiding Principles**

First Adopted 2007, Updated April 2014

#### ***Vision***

To advance health and wellness by deploying health information technology solutions adopted through cooperation and collaboration.

#### ***Mission***

We will enable and support the healthcare community of Maryland and our region to appropriately and securely share data in order to facilitate care, reduce costs, and improve health outcomes.

#### ***Guiding Principles***

1. Begin with a manageable scope and remain incremental.
2. Create opportunities to cooperate even while participating healthcare organizations still compete in other ways.
3. Affirm that competition and market-mechanisms spur innovation and improvement.
4. Promote and enable consumers' control over their own health information.
5. Use best practices and standards.
6. Serve our region's entire healthcare community.

#### **CRS Principles**

First Adopted 2015, Update January 2017

1. CRISP will provide reporting and analytics services when cooperation and collaboration is appropriate. CRISP will serve providers, regulators, investigators, public health officials, and patients – particularly when the engagement of multiple stakeholder groups is required.
2. CRISP will not seek to replicate services which are readily available commercially, but will work to assist those who provide commercial analytics services when that is requested by our participants.
3. CRISP will strive to make report creation efficient in effort and expense, internally and for those submitting and receiving data, so as to limit the burden for our participants.
4. CRISP will not report performance measures to regulators for individual hospitals/providers, unless the hospitals/providers have agreed for us to do so through our governance

committees. When we do create performance measure reports, we will seek to create transparency for participants to view, understand, and validate the data.

5. CRISP will be honest and trustworthy in all reports we create. We will not assist with any reporting in which we believe a participant may be falsifying data.
6. When CRISP is creating progress measures or comparison measures, for its own work or for that of a jurisdiction as a whole, it will endeavor to keep cell-level data de-identified.
7. CRISP will support approaches allowing consumer control and consent, and assist participants as they navigate these issues.
8. CRISP will serve our health care community in an evenhanded manner. We will prioritize reporting and analytics intended to facilitate care, reduce costs, and improve health outcomes. CRISP will not advocate the adoption of particular policies, although we sometimes function as a convener for stakeholders to make decisions cooperatively.

Additional information on CRISP can be found at <https://www.crisphealth.org/>.

Staff Recommendation

Draft Recommendation to Substitute the Medicare Wage Index For  
The Annual Wage and Salary Survey

March 8, 2017

This document contains the draft staff recommendation to substitute the Medicare Wage Index for the annual Wage and Salary Survey. Please submit comments on this draft to the Commission by Monday April 6<sup>th</sup>, 2017, via hard copy mail or email to [Dennis.Phelps@maryland.gov](mailto:Dennis.Phelps@maryland.gov).

## Introduction

The Wage and Salary (W&S) Survey is provided to enable each hospital to report certain wage, salary, and fringe benefit data for a specific time period of each year, a two week period which includes February 1<sup>st</sup>, for the purpose of developing hospital labor markets.

A separate zip code schedule within this survey is provided to report confidential individual employee payroll data along with the employee's zip code for enhanced analyses of the hospital's labor market.

The Medicare Hospital Wage Index (HWI) schedule provides for the collection of hospital wage data, which is needed to update the hospital wage index applied to the labor related portion of the national average standard amounts of the Prospective Payment System.

The HWI schedule is included with the hospital's Medicare cost report and utilizes the hospital's total salaries and fringe benefits for the hospital's fiscal year. The fiscal year for Maryland hospitals is the same as their HSCRC Annual Filing year end.

The HWI schedule is audited each year by Novitas (Medicare Fiscal Intermediary) to determine if the information reported is accurately stated.

When comparing the W&S survey to the HWI schedule, Staff believes that the HWI is a better source of wage and salary data because:

- The wage data is more accurate because a full year of salaries is reported rather than the 2 week time period;
- The format used is consistent with the other hospitals in the nation;
- Since the HWI will be used in HSCRC rate setting methodologies, the accuracy of the HWI, which is used by CMS in the calculation of other facility reimbursement, will be improved.

In addition, if the recommendation is approved and HWI is utilized, the W&S Survey can be eliminated thus reducing the administrative burden on hospitals.

## Staff Recommendation

Staff recommends that hospitals be required to file their Medicare Hospital Wage Index schedule as part of their HSCRC Annual Filing. The due date for this submission will coincide with the Annual Filing submission, which is 120 days after the fiscal year end.



# **Staff Recommendation**

**March 8, 2017**

The Commission staff recommends for review and public comment revisions to the Relative Value Unit (RVU) Scale for Radiology- Diagnostic, Nuclear Medicine, CT Scanner, Magnetic Resonance Imaging and Electroencephalography services. The revisions are specific to Chart of Accounts and Appendix D of the Accounting and Budget Manual. These revised RVUs were developed by a workgroup established by the Health Services Cost Review Commission. The workgroup's membership included representatives of many of the Maryland hospitals. The RVU scale was updated to reflect the revisions to the Current Procedural Terminology (CPT) codes mandated by the American Medical Association. At your direction, the staff will send the revision to all Maryland hospitals for their review and comment.

Radiology- Diagnostic  
Section 200- Chart of Accounts

Draft Recommendation 3-8-2017

7320	RADIOLOGY-DIAGNOSTIC
7322	Ultrasonography
7339	Radiology-Diagnostic-Other

Function

This cost center provides diagnostic radiology services as required for the examination and care of patients under the direction of a qualified radiologist. Diagnostic radiology services include the patient registration, taking, processing, examining and ~~interpreting of radiology by a non-physician, ultrasonograms, fluorographs, mammography~~ unofficial interpretation by a non-physician or other qualified medical staff of radiology services defined below, and up to six hours of recovery time. Radiology examinations for this Cost Center include general diagnostic radiology, ultrasound, fluoroscopy and mammography and excludes Computed Tomography, Magnetic Resonance Imaging (MRI and MRA), Radiation Therapy, Nuclear Medicine, and Interventional Radiology/Cardiovascular and Radiology procedures with a surgical component. Additional activities include, but are not limited to, the following:

Consultation with patients and attending physicians; radioactive waste disposal, storage of radioactive materials.

Description

This cost center contains the direct expenses incurred in providing diagnostic radiology services. Included as direct expenses are: salaries and wages, employee benefits, professional fees (non-physician), supplies (including Drugs incident to Radiology, i.e. contrast media) etc. purchased services, maintenance costs (maintenance contracts or bio-medical engineering costs if done in-house) on principal equipment, other direct expenses and transfers.

Standard Unit of Measure: Relative Value Units

~~Radiology Relative Values issued by the Health Services Cost Review Commission. (See Appendix D of this manual.)~~ Radiology- Diagnostic RVUs were assigned using the 2016 CMS Medicare Physician Fee Schedule (MPFS), technical component or global RVUs. The RVU Assignment Protocol is detailed in Appendix D Standard Unit of Measure Reference, account number 7320. Relative Value Units for unlisted and "BR" (By report) procedures should be based on the RVU value for the technical component from the Medicare physician fee schedule for the service or reasonably estimated on the basis of other comparable procedures if a Medicare RVU value is not available. If the MPFS RVUs change subsequent to the date of the current Appendix D, RVUs do not change.

Data Source

The number of Relative Value Units shall be the actual count maintained by the Radiology-Diagnostic cost center.

Reporting Schedule

Schedule D - Line D32

## Diagnostic Radiology, Ultrasound and Vascular Ultrasound

### Approach

Diagnostic-Radiology Relative Value Units were developed with the aid of an industry task force under the auspices of and approved by the Health Services Cost Review Commission. The descriptions of codes in this section of Appendix D were obtained from the 2017 edition of the Current Procedural Terminology (CPT) manual and the 2017 edition of the Healthcare Common Procedure Coding System (HCPCS). In assigning RVUs the group used the 2017 Medicare Physician Fee schedule (MPFS) released November 2, 2016. RVUs were assigned using the following protocol (“RVU Assignment Protocol”).

The RVUs reported in the 2017 MPFS include 2 decimal points. In order to maintain whole numbers in Appendix D, while maintaining appropriate relative value differences reported in the MPFS, the RVU work group agreed to remove the decimals by multiplying the reported RVUs by ~~one hundred~~ ten and then rounding the product of the calculation, where values less than X.5 are rounded down and all other values are rounded up.

1. CPT codes with RVUs listed in the MPFS.
  - a. For CPT codes with RVUs that include both professional (modifier 26) and technical (modifier TC) components, use only the technical (TC) component RVU.
  - b. CPT codes with only a single RVU listed
    - a. CPT codes that are considered technical only (such as treatment codes), the single RVU reported will be used.
    - b. CPT codes considered professional only are not listed in Appendix D.
2. CPT codes that do not have RVUs listed in the MPFS (e.g. CMS Status Code “C”)
  - a. CPT 70170, 74190, 74235, 74300, 74301, 74328, 74329, 74330, 74340, 74355, 74360, 74363, 74425, 74450, 74470, 74485, 74740, 74742, 75801, 75803, 75805, 75807, 75810, 75894, 75952, 75954, 75956, 75957, 75958, 75959, 75970, 76930, 76932, 76940, 76941, 76945, 76975, 76998 and 76999 did not have a published RVU in the MPFS. As these codes are bundled with a surgical code, these procedures should be reported under Interventional Radiology/Cardiovascular.
  - b. CPT 74420 did not have a published RVU in the MPFS. The work group agreed the work activity associate with this code is similar to CPT 74415. Given the similarity of the work activity, it was determined the same RVU should be applied to CPT 74420. If this procedure is performed with a surgical procedure, this code should be reported in the OR with one RVU.
  - c. CPT 74445 did not have a published RVU in the MPFS. The work group agreed that this code is priced similar to CPT 74415 by various state Medicaid agencies. Given the similarity in pricing it was determined the same RVU should be applied to CPT 74445.
  - d. CPT 74775 did not have a published RVU in the MPFS. The group agreed that this code is priced similar to CPT 74455 by various state Medicaid agencies. Given the similarity in pricing it was determined the same RVU should be applied to CPT 74775.

## Radiology Diagnostic Appendix D

### Draft Recommendation 3-8-2017

- e. CPT 76001 did not have a published RVU in the MPFS. The group agreed the work activity associated with this code is similar to CPT 76000. Given the similarity of the work activity, it was determined the same RVU should be applied to CPT 76001.
  - f. CPT 76125 did not have a published RVU in the MPFS. The group agreed the work activity associated with this code is similar to CPT 76120. Given the similarity of the work activity, it was determined the same RVU should be applied to CPT 76125.
  - g. CPT 76140 did not have a published RVU in the MPFS. This code is not valid for Medicare purposes and was removed from Appendix D.
  - h. CPT 76496, 76499 and 76999 did not have a published RVU in the MPFS. As these codes are for unlisted procedures, the group agreed these codes should be considered “By Report” and RVUs should be developed using the guidelines below.
  - i. CPT 77061 did not have a published RVU in the MPFS. The group agreed the work activity associated with this code is similar to CPT 77063. Given the similarity of the work activity, it was determined the same RVU should be applied to CPT 77061.
  - j. CPT 77062 did have a published RVU in the MPFS. The group agreed the work activity associated with this code is similar to CPT 77063. Given the similarity of the work activity, it was determined the same RVU should be applied to CPT 77062.
  - k. CPT 77065 did not have a published RVU per the MPFS. This code is not valid for Medicare reporting purposes as Medicare requires a HCPCS code for this service. Therefore, RVUs will be established at 26 RVUs to mirror HCPCS code G0206.
  - l. CPT 77066 did not have a published RVU per the MPFS. This code is not valid for Medicare reporting purposes as Medicare requires a HCPCS code for this service. Therefore, RVUs will be established at 34 RVUs to mirror HCPCS code G0204.
  - m. CPT 77067 did not have a published RVU per the MPFS. This code is not valid for Medicare reporting purposes as Medicare requires a HCPCS code for this service. Therefore, RVUs will be established at 28 RVUs to mirror HCPCS code G0202.
  - n. CPT 77520, 77522, 77523 and 77525 did not have a published RVU in the MPFS. The group agreed that these codes are therapeutic and are reported under the Radiology-Therapeutic section of Appendix D.
  - o. CPT 93315, 93317 and 93318 did not have a published RVU in the MPFS. The group agreed that these codes should be reported under the Electrocardiology section of Appendix D.
  - p. CPT 93895 did not have a published RVU in the MPFS. Per CMS, this is a non-covered service and should be reported with zero (0) RVUs.
  - q. CPT 93998 did not have a published RVU in the MPFS. As this code are for unlisted procedures, the group agreed these codes should be considered “By Report” and RVUs should be established using the guidelines below.
  - r. HCPCS code C9744 did not have a published RVU in the MPFS. This code is similar to CPT 76705, however, testing time is approximately double. A factor of 1.88 to account for additional testing time will be applied to the RVU value for CPT 76705 and will be assigned 34 RVUs ( $1.88 \times 18 = 33.84$ ).
  - s. HCPCS R0070 and R0075 did not have a published RVU in the MPFS. The group agreed that these codes were not diagnostic and therefore were excluded from Appendix D.
3. CPT/HCPCS codes for which the published RVU did not make sense,
    - a. There were no deviations from published RVUs when present.

### **Services With Both a HCPCS Code for Medicare and CPT Code for Non-Medicare**

All known HCPCS codes have been addressed in a payer-neutral fashion with this update. In instances of where Medicare implements a new HCPCS code to be utilized in lieu of a CPT code for a service, the RVU developed by the hospital must mirror the established CPT RVUs. The RVU for the service must be the same for all payers.

### **CPT Codes with Bundled Procedures**

CPT codes from 2017 with a surgical component have been assigned a zero (0) RVU value. When a Radiology CPT becomes bundled with a surgical code or replaced with a surgical code, these procedures should be charged as Interventional Radiology/Cardiovascular (IRC) and the associated costs of the procedure are to be reclassified to the IRC cost center. Note: These IRC procedures may be charged based on actual start/stop times or based on the average case time (based on an annual time study) for the service.

CPT codes that are listed in both Radiology and Labor & Delivery (e.g. 76946- Amniocentesis) are to be charged based on where performed and the personnel performing the procedure. Procedures performed by Radiology staff are to be charged through Radiology and procedures performed by Labor & Delivery staff are to be charged through Labor & Delivery

The group noted that CPT code 76000, Fluoroscopy- less than one hour and 76001, Fluoroscopy- greater than one hour, are noted as having a surgical component however, these codes should be charged the MPFS RVUs (1.07 x 10= 11 RVUs) when charged separately. These codes should be charged through the OR when performed in conjunction with a surgical procedure.

### **Reporting of Imaging Guidance for Invasive Cases**

Standard imaging RVUs are only to be used for non-invasive imaging services occurring in an imaging suite. For invasive imaging services, the imaging guidance is either separately reportable or bundled into the code for the invasive service. Invasive imaging services occurring in an imaging suite must be charged using IRC minutes based on case time. For separately reportable imaging guidance, hospitals are to report one (1) IRC minute per imaging code. Imaging expenses associated with the guidance are to be allocated from the diagnostic imaging rate center to the IRC rate center.

When an operating room or operating room-clinic case involves intraoperative/intraprocedural imaging guidance or imaging services, standard RVUs are to be used if the imaging guidance is separately reportable from the surgical procedure. The surgical portion of these cases will remain charged based on minutes. If the imaging guidance is bundled into the code for the surgical procedure, standard imaging RVUs are not to be charged and any related imaging expenses should be allocated from the imaging department to the operating room or operating room-clinic rate center.

### **CPT Codes without an Assigned RVU Value**

RVUs for new codes developed and reported by CMS after the FY 2016 reporting, must be developed "By Report". When assigning RVUs to these new codes, hospitals should use the RVU Assignment Protocol described above where possible using the most current MPFS. For codes that are not listed in the

MPFS, hospitals should assign RVUs based on time and resource intensity of the services provided compared to like services in the department. Documentation of the assignment of RVUs to codes not listed in Appendix D should always be maintained by the hospital.

~~The recommendations for the assignment of Relative Value Units (RVU's) for Diagnostic Radiology, Ultrasound and Vascular Ultrasound are based on the published 1973 American College of Radiology "Reference for Radiology Relative Values", the 1993 Health Services Cost Review Commission, "Appendix D Standard Unit of Measure References" and the 1997 Helix Health "New Statistical Units of Measure for Imaging" project.~~

### **General Guidelines**

The AMA CPT Code will be used as the identifier throughout the system. Assigned RVU's will be strictly tied to the CPT Code.

~~The RVU assigned to a procedure will be the same regardless of where the procedure is performed within the institution.~~ **No additional RVUs are to be added to portable procedures regardless when or where the service is performed.**

All RVU's are "each" per CPT unless otherwise stated.

Standard supplies and contrast material are included in the RVU assignment and should not be assigned separately.

**No drug is considered a routine part of any Radiology- Diagnostic examination; however, sedation and pain reducing agents may be used to make procedures more easily tolerated. These drugs should NOT be included in the RVU of the exam but would be billed separately through the pharmacy on an "as needed" basis. Drugs should not be assigned an RVU.**

~~For a new or unlisted procedure, use one of the "Unlisted Procedure" CPT codes and estimate an RVU assignment based on cost. RVU's must have a reasonable relationship to cost. The estimated value may also be based on the knowledge and experience of the department personnel.~~

~~Portable and After Hours procedures whose CPT Codes have been deleted will use the appropriate "Unlisted Procedure" code and assign a zero RVU value.~~

Radiology- Diagnostic  
RVU Draft Recommendation 3-8-2017

CPT Code	Description	RVU
70010	Myelography, posterior fossa, supervision and interpretation only	IRC
70015	Cisternography, positive contrast, supervision and interpretation only	26
70020	<del>Ventriculography, air contrast, supervisoin and interprestation only</del>	<del>15</del>
70030	Radiological exam, eye, for detection of foreign body	5
70100	Radiological exam, mandible, partial, less than four views	7
70110	Radiological exam, mandible, complete, minimum four views	7
70120	Radiological exam, Mastoids, less than three views per side	7
70130	Radiological exam, Mastoids complete, minimum of three views per side	10
70134	Radiological exam, Internal auditory meati, complete	10
70140	Radiological exam, Facial bones, less than three views	5
70150	Radiological exam, Facial Bones complete, minimum of three views	8
70160	Radiological exam, Nasal bones, complete, minimum of three views	7
70170	Dacryocystography, Nasolacrimal duct, radiological supervision and interpretation	IRC
70190	Radiological exam, Optic foramina	7
70200	Radiological exam, Orbits, complete, minimum of four views	8
70210	Radiological exam, Sinuses, paranasal, less than three views	6
70220	Radiological exam, Sinuses, paranasal complete, minimum of three views	7
70240	Radiological exam, Sella turcica	6
70250	Radiological exam, Skull, less than four views	7
70260	Radiological exam, Skull complete, minimum of four views	8
70300	Radiological exam, Teeth, single view	2
70310	Radiological exam, Teeth partial examination, less than full mouth	8
70320	Radiological exam, Teeth complete, full mouth	11
70328	Radiological exam, Temporomandibular joint, (TMJ) open and closed mouth, unilateral	6
70330	Radiological exam, Temporomandibular joint, (TMJ) open and closed mouth, bilateral	10
70332	Temporomandibular joint arthrography, radiological supervision and interpretation	IRC
70350	Cephalogram (orthodontic)	3
70355	Orthopantogram (e.g., panoramic x-ray)	3
70360	Radiological exam, Neck, soft tissue	5
70370	Radiological exam, Pharynx or larynx, including fluoroscopy &, or magnification technique	17
70371	Complex dynamic pharyngeal and speech evaluation by cine or video recording	13
70373	<del>Laryngography, contrast, supervision and interpretation only</del>	<del>6</del>
70380	Radiological exam, Salivary gland for calculus	7
70390	Sialography, radiological supervision and interpretation only	IRC

Radiology- Diagnostic  
RVU Draft Recommendation 3-8-2017

CPT Code	Description	RVU
71010	Radiological exam, chest, single view, frontal	4
71015	Radiological exam, chest, stereo, frontal	5
71020	Radiological exam, chest, 2 views, frontal & lateral	5
71021	Radiological exam, chest, 2 views, frontal & lateral w, apical lordotic procedure	6
71022	Radiological exam, chest, 2 views, frontal & lateral w, oblique projections	7
71023	Radiological exam, chest, 2 views, frontal & lateral, w, fluoroscopy	12
71025	<del>Stereo</del>	3
71030	Radiological exam, chest, complete, minimum of 4 views	7
71034	Radiological exam, chest, complete, minimum of 4 views, w, fluoroscopy	17
71035	Radiological exam, chest, special views, (e.g. lateral, decubitus, Bucky studies)	7
71036	<del>Fluoroscopic localization for needle biopsy of intrathoracic lesion, including follow-up film</del>	24
71040	<del>Bronchography, unilateral, supervision and interpretation only</del>	6
71060	<del>Bronchography, bilateral, supervision and interpretation only</del>	8
71090	<del>Pacemaker insertion, fluoroscopy and radiography, supervision and interpretation only</del>	Cardiac-Cath
71100	Radiological exam, Ribs, unilateral, 2 views	6
71101	Radiological exam, Ribs, unilateral, including posteroanterior chest, minimum of 3 views	6
71110	Radiological exam, Ribs, bilateral, 3 views	7
71111	Radiological exam, Ribs, bilateral, including posteroanterior chest, minimum of 4 views	9
71120	Radiological exam, Sternum, minimum of 2 views	5
71130	Sternoclavicular joint or joints, minimum of 3 views	7
72010	<del>Spine, entire, survey study, anteroposterior and lateral</del>	9
72020	Radiological exam, spine, single view, specify level	4
72040	Radiological exam, spine, cervical, 2 or 3 views	6
72050	Radiological exam, spine, cervical, 4 or 5 views	8
72052	Radiological exam, spine, cervical, 6 or more views	11
72069	<del>Radiological examination, spine, thoracolumbar, standing (scoliosis)</del>	Exclude
72070	Radiological exam, spine, thoracic, 2 views	6
72072	Radiological exam, spine, thoracic, 3 views	7
72074	Radiological exam, spine, thoracic, minimum 4 views	8
72080	Radiological exam, spine, thoracolumbar junction, minimum 2 views (to report thoracolumbar junction one view see CPT 72020)	5
72081	Radiological exam, spine, entire thoracic & lumbar, including skull, cervical and sacral spine if performed (e.g. scoliosis eval); one view	7



Radiology- Diagnostic  
RVU Draft Recommendation 3-8-2017

CPT Code	Description	RVU
72082	Radiological exam, spine, entire thoracic & lumbar, including skull, cervical and sacral spine if performed (e.g. scoliosis eval); 2 or 3 views	13
72083	Radiological exam, spine, entire thoracic & lumbar, including skull, cervical and sacral spine if performed (e.g. scoliosis eval); 4 or 5 views	14
72084	Radiological exam, spine, entire thoracic & lumbar, including skull, cervical and sacral spine if performed (e.g. scoliosis eval); minimum 6 views	17
72090	<del>Spine, scoliosis study, including supine and erect studies</del>	5
72100	Radiological exam, spine, lumbosacral, 2 or 3 view(s)	7
72110	Radiological exam, spine, lumbosacral, minimum 4 views	9
72114	Radiological exam, spine, lumbosacral, complete, including bending views, minimum of 6	13
72120	Radiological exam, spine, lumbosacral, bending views only, 2 or 3 views	8
72170	Radiological exam, pelvis, 1 or 2 view(s)	6
72190	Radiological exam, pelvis, minimum 3 view(s)	8
72200	Radiological exam, sacroiliac joints, less than three views	5
72202	Radiological exam, sacroiliac joints, 3 or more views	7
72220	Radiological exam, sacrum and coccyx, minimum of two views	5
72240	Myelography, cervical, supervision and interpretation only	IRC
72255	Myelography, thoracic, supervision and interpretation only	IRC
72265	Myelography, lumbosacral, supervision and interpretation only	IRC
72270	Myelography, entire spine canal, supervision and interpretation only	IRC
72275	Epidurography, radiological supervision and interpretation (includes 77003)	IRC
72285	Discography, cervical or thoracic, radiological supervision and interpretation	IRC
72295	Discography, lumbar, radiological supervision and interpretation	IRC
73000	Radiological exam, clavicle, complete	5
73010	Radiological exam, scapula complete	6
73020	Radiological exam, shoulder, one view	4
73030	Radiological exam, shoulder, complete, minimum 2 views	5
73040	Radiological exam, shoulder, arthrography, supervision and interpretation only	IRC
73050	Radiological exam, acromioclavicular joints, bilateral, w, or w, o weighted distraction	7
73060	Radiological exam, humerus, minimum two views	6
73070	Radiological exam, elbow, 2 views	5
73080	Radiological exam, elbow complete, minimum of three views	6
73085	Radiologic examination, elbow, arthrography, radiological supervision and interpretation	IRC
73090	Radiological exam, forearm, 2 views	5

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73092	Radiological exam, forearm, upper extremity, infant, minimum of 2 views	5
73100	Radiological exam, wrist, 2 views	6
73110	Radiological exam, wrist complete, minimum of 3 views	7
73115	Radiological examination, wrist, arthrography, radiological supervision and interpretation	IRC
73120	Radiological exam, hand, minimum of 2 views	5
73130	Radiological exam, hand minimum of 3 views	6
73140	Radiological exam, finger(s), minimum of 2 views	7
<del>73500</del>	<del>Hip, unilateral, one view</del>	<del>2</del>
73501	Radiological exam, hip, unilateral, w, pelvis when performed; 1 view	6
73502	Radiological exam, hip, unilateral, w, pelvis when performed; 2 to 3 views	8
73503	Radiological exam, hip, unilateral, w, pelvis when performed; minimum 4 views	10
<del>73510</del>	<del>complete, minimum of two views</del>	<del>4</del>
<del>73520</del>	<del>Hip, bilateral, minimum of two views of each hip, including anteroposterior view of pelvis</del>	<del>6</del>
73521	Radiological exam, hips, bilateral, w, pelvis when performed; 2 view	8
73522	Radiological exam, hips, bilateral, w, pelvis when performed; 3 to 4 views	9
73523	Radiological exam, hips, bilateral, w, pelvis when performed; minimum of 5 views	11
73525	Radiologic examination, hip, arthrography, radiological supervision and interpretation	IRC
<del>73530</del>	<del>Hip, during operative procedure, up to four studies</del>	<del>8</del>
<del>73540</del>	<del>Pelvis and hips, infant and child, minimum of two views</del>	<del>4</del>
<del>73550</del>	<del>Femur, anteroposterior and lateral views</del>	<del>3</del>
73551	Radiological exam, femur, 1 view	5
73552	Radiological exam, femur, minimum 2 views	6
73560	Radiological exam, knee, 1 or 2 views	6
73562	Radiological exam, knee, 3 views	7
73564	Radiological exam, knee, complete, 4 or more views	8
73565	Radiological exam, both knees, standing , anteroposterior	8
73580	Radiological exam, knee, arthrography, supervision and interpretation only	IRC
73590	Radiological exam, tibia and fibula, 2 views	6
73592	Radiological exam, tibia and fibula, lower extremity, infant, minimum of two views	5
73600	Radiological exam, ankle, 2 views	6
73610	Radiological exam, ankle complete, minimum of 3 views	6
73615	Radiological examination, ankle, arthrography, radiologic supervision and interpretation	IRC
73620	Radiological exam, foot, 2 views	5

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73630	Radiological exam, foot, complete, minimum of 3 views	6
73650	Radiological exam, calcaneus, minimum of 2 views	5
73660	Radiological exam, toe(s), minimum of 2 views	6
74000	Radiological exam, abdomen, single anteroposterior view	4
74010	Radiological exam, abdomen, anteroposterior and additional oblique and cone views	7
74020	Radiological exam, abdomen, complete, including decubitus and, or erect views	7
74022	Radiological exam, complete acute abdomen series, including supine, erect, and, or decubitus views, single view chest	8
74190	Peritoneogram (eg, after injection of air or contrast), radiological supervision and interpretation	IRC
74210	Radiological exam, pharynx and, or cervical esophagus	17
74220	Radiological exam, esophagus	18
74230	Swallowing function, with cineradiography, videoradiography	28
74235	Removal of foreign body(s), esophageal, with use of balloon catheter, radiologic supervision and interpretation	IRC
74240	Radiological exam, gastrointestinal tract, upper, w, or w, o delayed films, without KUB with and without delayed films, with KUB	22
74241	Radiological exam, gastrointestinal tract w, or w, o delayed films, with KUB	23
74245	Radiological exam, gastrointestinal tract, upper, w, small intestines, includes multiple serial images	35
74246	Radiological examination, gastrointestinal tract, upper, air contrast, with specific high density barium, effervescent agent, with or without glucagon, with or without delayed films, without KUB	26
74247	Radiological examination, gastrointestinal tract, upper, air contrast, with specific high density barium, effervescent agent, with or without glucagon, with or without delayed films, with KUB	30
74249	Radiological examination, gastrointestinal tract, upper, air contrast, with specific high density barium, effervescent agent, with or without glucagon, with or without delayed films, without KUB; w, small intestine follow-through	39
74250	Radiological exam, small intestines, includes multiple serial images	22
74251	Radiological exam, small intestines, includes multiple serial images via enteroclysis tube	108
74260	Duodenography hypotonic	89
74270	Radiological exam, colon, barium enema w, or w, o KUB	32
74280	Radiological exam, colon; air contrast with specific high density barium, w, or w, o glucagon	46

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CPT Code	Description	RVU
74283	Therapeutic enema, contrast or air, for reduction of intussusception or other intraluminal obstruction (e.g.. meconium ileus)	30
74290	Cholecystography, oral contrast	15
74291	<del>Cholecystography, oral contrast, additional or repeat examination or multiple day examination</del>	8
74300	Cholangiography and, or pancreatography; intraoperative, radiological supervision and interpretation	IRC
74301	additional set intraoperative, radiological supervision and interpretation	IRC
74305	post-operative	6
74328	Endoscopic catheterization of the biliary ductal system, radiological supervision and interpretation	IRC
74329	Endoscopic catheterization of the pancreatic ductal system, radiological supervision and interpretation	IRC
74330	Combined endoscopic catheterization of the biliary and pancreatic ductal systems, radiological supervision and interpretation	IRC
74340	Introduction of long gastrointestinal tube (e.g. Miller-Abbott) with multiple fluoroscopies and films	IRC
74355	Percutaneous placement of enteroclysis tube, radiological supervision and interpretation	IRC
74360	Intraluminal dilation of strictures and, or obstructions (eg esophagus) radiological supervision and interpretation	IRC
74363	Percutaneous transhepatic dilation of biliary duct structure w, or w, o placement of stent, radiological supervision & interpretation	IRC
74400	Urography (pyelography), intravenous, w, or w, o KUB, w or w, o tomography	IRC
74410	Urography, infusion, drip technique and, or bolus technique	24
74415	Urography, infusion, drip technique and, or bolus technique, with nephrotomography	31
74420	Urography, retrograde, w, or w, o KUB	31
74425	Urography, antegrade (pyleostogram, nephrostogram, loopogram) supervision and interpretation only	IRC
74430	Cystography, contrast or chain, minimum of 3 views, supervision and interpretation only	IRC
74440	Vasography, vesiculography, epididymography, radiological supervision and interpretation only	IRC
74445	Corpora cavernosography, radiological supervision and interpretation	31
74450	Urethrocytography, retrograde, radiological supervision and interpretation only	IRC
74455	Urethrocytography, voiding, radiological supervision and interpretation only	IRC
74470	Radiological exam, renal cyst study, translumbar, contrast visualization, radiological supervision and interpretation only	IRC

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CPT Code	Description	RVU
74485	Dilation of nephrostomy, ureters, or urethra, radiological supervision and interpretation	IRC
74710	Pelvimetry, with or without placental localization	5
74740	Hysterosalpingogram, supervision and interpretation only	IRC
74742	Transcervical catheterization of fallopian tube, radiological supervision and interpretation	IRC
74760	<del>Pneumography, pelvic, supervision and interpretation only</del>	6
74775	Perineogram (e.g., vaginogram, for sex determination or extent of anomalies)	18
75600	Aortography, thoracic, without serialography, radiological supervision and interpretation	IRC
75605	Aortography, thoracic, by serialography, radiological supervision and interpretation	IRC
75625	Aortography, abdominal, by serialography, radiological supervision and interpretation	IRC
75630	Aortography, abdominal plus bilateral iliofemoral lower extremity, catheter, by serialography, radiological supervision and interpretation	IRC
75658	Angiography, brachial, retrograde, radiological supervision and interpretation	IRC
75705	Angiography, spinal, selective, radiological supervision and interpretation	IRC
75710	Angiography, extremity, unilateral, radiological supervision and interpretation	IRC
75716	Angiography, extremity, bilateral, radiological supervision and interpretation	IRC
75726	Angiography, visceral, selective or supraseductive (with or without flush aortogram), radiological supervision and interpretation	IRC
75731	Angiography, adrenal, unilateral, selective, radiological supervision and interpretation	IRC
75733	Angiography, adrenal, bilateral, selective, radiological supervision and interpretation	IRC
75736	Angiography, pelvic, selective or supraseductive, radiological supervision and interpretation	IRC
75741	Angiography, pulmonary, unilateral, selective, radiological supervision and interpretation	IRC
75743	Angiography, pulmonary, bilateral, selective, radiological supervision and interpretation	IRC
75746	Angiography, pulmonary, by nonselective catheter or venous injection, radiological supervision and interpretation	IRC
75756	Angiography, internal mammary, radiological supervision and interpretation	IRC
75774	Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)	IRC

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CPT Code	Description	RVU
75801	Lymphangiography, extremity only, unilateral, radiological supervision and interpretation	IRC
75803	Lymphangiography, extremity only, bilateral, radiological supervision and interpretation	IRC
75805	Lymphangiography, pelvic, abdominal, unilateral, radiological supervision and interpretation	IRC
75807	Lymphangiography, pelvic, abdominal, bilateral, radiological supervision and interpretation	IRC
75809	Shuntogram for investigation of previously placed indwelling nonvascular shunt (eg, LeVeen shunt, ventriculoperitoneal shunt, indwelling infusion pump), radiological supervision and interpretation	IRC
75810	Splenoportography, radiological supervision and interpretation	IRC
75820	Venography, extremity, unilateral, radiological supervision and interpretation	IRC
75822	Venography, extremity, bilateral, radiological supervision and interpretation	IRC
75825	Venography, caval, inferior, with serialography, radiological supervision and interpretation	IRC
75827	Venography, caval, superior, with serialography, radiological supervision and interpretation	IRC
75831	Venography, renal, unilateral, selective, radiological supervision and interpretation	IRC
75833	Venography, renal, bilateral, selective, radiological supervision and interpretation	IRC
75840	Venography, adrenal, unilateral, selective, radiological supervision and interpretation	IRC
75842	Venography, adrenal, bilateral, selective, radiological supervision and interpretation	IRC
75860	Venography, venous sinus (eg, petrosal and inferior sagittal) or jugular, catheter, radiological supervision and interpretation	IRC
75870	Venography, superior sagittal sinus, radiological supervision and interpretation	IRC
75872	Venography, epidural, radiological supervision and interpretation	IRC
75880	Venography, orbital, radiological supervision and interpretation	IRC
75885	Percutaneous transhepatic portography with hemodynamic evaluation, radiological supervision and interpretation	IRC
75887	Percutaneous transhepatic portography without hemodynamic evaluation, radiological supervision and interpretation	IRC
75889	Hepatic venography, wedged or free, with hemodynamic evaluation, radiological supervision and interpretation	IRC
75891	Hepatic venography, wedged or free, without hemodynamic evaluation, radiological supervision and interpretation	IRC
75893	Venous sampling through catheter, with or without angiography (eg, for parathyroid hormone, renin), radiological supervision and interpretation	IRC

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CPT Code	Description	RVU
75894	Transcatheter therapy, embolization, any method, radiological supervision and interpretation	IRC
75898	Angiography through existing catheter for follow-up study for transcatheter therapy, embolization or infusion, other than for thrombolysis	IRC
75901	Mechanical removal of pericatheter obstructive material (eg, fibrin sheath) from central venous device via separate venous access, radiologic supervision and interpretation	IRC
75902	Mechanical removal of intraluminal (intracatheter) obstructive material from central venous device through device lumen, radiologic supervision and interpretation	IRC
75952	Endovascular repair of infrarenal abdominal aortic aneurysm or dissection, radiological supervision and interpretation	IRC
75953	Placement of proximal or distal extension prosthesis for endovascular repair of infrarenal aortic or iliac artery, aneurysm, pseudoaneurysm, dissection, radiological supervision and interpretation	IRC
75954	Endovascular repair of iliac artery aneurysm, pseudoaneurysm, arteriovenous malformation, or trauma, using ilio-iliac tube endoprosthesis, radiological supervision and interpretation	IRC
75956	Endovascular repair of descending thoracic aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption); involving coverage of left subclavian artery origin, initial endoprosthesis plus descending thoracic aortic extension(s), if required, to level of celiac artery origin, radiological supervision and interpretation	IRC
75957	Endovascular repair of descending thoracic aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption); not involving coverage of left subclavian artery origin, initial endoprosthesis plus descending thoracic aortic extension(s), if required, to level of celiac artery origin, radiological supervision and interpretation	IRC
75958	Placement of proximal extension prosthesis for endovascular repair of descending thoracic aorta (eg, aneurysm, pseudoaneurysm, dissection, penetrating ulcer, intramural hematoma, or traumatic disruption), radiological supervision and interpretation	IRC
75959	Placement of distal extension prosthesis(s) (delayed) after endovascular repair of descending thoracic aorta, as needed, to level of celiac origin, radiological supervision and interpretation	IRC
75970	Transcatheter biopsy, radiological supervision and interpretation	IRC
75984	Change of percutaneous tube or drainage catheter with contrast monitoring (eg, genitourinary system, abscess), radiological supervision and interpretation	IRC

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CPT Code	Description	RVU
75989	Radiological guidance (fluro, US or CT) for percutaneous drainage (e.g. abscess, specimen collection) w, placement of catheter, radiological supervision and interpretation	IRC
76000	Fluoroscopy (separate procedure- other than 71034 or 71023) up to 1 hour physician or other qualified health care professional time (e.g. cardiac fluoroscopy)	11
76001	Fluoroscopy, more than 1 hour physician or other qualified health care professional time, assisting a non-radiological physician or other qualified health care professional (e.g. Nephrosto-lithotomy, ERCP, bronchoscopy, transbronchial biopsy)	11
76003	Fluroscopic localization for needle biopsy or fine needle aspiration	24
76010	Radiologic exam from nose to rectum for foreign body, single view, child	5
76020	Bone age studies	3
76040	Bone length studies (orthoroentgenogram)	5
76061	Radiologic examination, osseous survey, limited (eg. for metastasis)	9
76062	Complete (axial and appendicular skeleton)	9
76065	Osseous survey, infant	4
76066	Joint survey, single view, one or more joints (specify)	9
76080	Radiological exam, abscess, fistula or sinus tract study, radiological supervision and interpretation	8
76086	Mammary ductogram or galactogram, single duct, radiological supervision and interpretation	8
76088	Mammary ductogram of galactogram, multiple ducts, radiological supervision and interpretation	10
76090	Mammography, unilateral	5
76091	Bilateral	7
76092	Screening mammography; bilateral (2 view study of each breast)	5
76095	Stereotactic localization for breast biopsy, each lesion, radiological supervision and interpretation	24
76096	Preoperative placement of needle localization wire, breast, radiological supervision and interpretation	15
76098	Radiological exam, surgical specimen	2
76100	Radiologic exam, single plane, body section (eg. tomography) other than w, urography	17
76101	Radiological examination, complex motion (ie, hypercycloidal) body section (eg, mastoid polytomography), other than with urography; unilateral	27
76102	Radiological examination, complex motion (ie, hypercycloidal) body section (eg, mastoid polytomography), other than with urography; bilateral	39
76120	Cineradiography, videography, except where specifically included	18
76125	Cineradiography, videography to complement routine examination	18
76140	Consultation on x-ray examination made elsewhere, written report	0



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CPT Code	Description	RVU
76150	Xeroradiography	By Report
76350	Subtraction in conjunction with contrast studies	5
76411	Examination after regular hours	0
76496	Unlisted fluoroscopic procedure (eg, diagnostic, interventional)	By Report
76499	Unlisted diagnostic radiographic procedure (see guidelines)	By Report
76506	Echoencephalography, real time w, image documentation (gray scale) (for determination of ventricular size, delineation of cerebral contents, and detection of fluid masses or other intracranial abnormalities) including A-mode encephalography as secondary component where indicated	24
76510	Ophthalmic ultrasound, diagnostic; B-scan and quantitative A-scan performed during the same patient encounter	23
76511	Ophthalmic ultrasound, diagnostic; quantitative A-scan only, performed during the same patient encounter	14
76512	Ophthalmic ultrasound, diagnostic; B-scan (w, or w, o superimposed non-quantitative A-scan) performed during the same patient encounter	11
76513	Ophthalmic anterior segment ultrasound, diagnostic; immersion (water bath) B-scan or high resolution biomicroscopy performed during the same patient encounter	17
76514	Ophthalmic ultrasound, diagnostic; corneal pachymetry, unilateral or bilateral (determination of corneal thickness) performed during the same patient encounter	1
76516	Ophthalmic biometry by ultrasound, echography, A-scan	13
76519	Ophthalmic biometry by ultrasound, echography, A-scan w, intraocular lens power calculation	15
76529	Ophthalmic ultrasonic foreign body localization	13
76536	Ultrasound soft tissue of head and neck (thyroid, parathyroid, parotid), real-time w, image documentation	25
76604	Ultrasound chest (includes mediastinum) real-time w, image documentation	17
76641	Ultrasound breast, unilateral, real-time w, image documentation includes axilla when performed; complete	20
76642	Ultrasound breast, unilateral, real-time w, image documentation includes axilla when performed; limited	15
76645	US scan of the breast with special attention to the area of interest; include measurements & location	10
76700	Ultrasound, abdominal, real time w, image documentation; complete	23
76705	Ultrasound, abdominal, real time w, image documentation; limited (ie single organ, quadrant, follow-up)	18
76706	Ultrasound, abdominal aorta, real time w/ image documentation, screening study for abdominal aortic aneurysm (AAA)	19

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CPT Code	Description	RVU
76770	Ultrasound, retroperitoneal (eg renal, aorta, nodes), real time w, image documentation; complete	22
76775	Ultrasound, retroperitoneal (eg renal, aorta, nodes), real time w, image documentation; limited	8
76776	Ultrasound, transplanted kidney, real time & duplex doppler w, image documentation;	34
76778	Sonogram of renal transplant	8
76800	Ultrasound, spinal canal and contents	23
76801	Ultrasound, pregnant uterus, real-time w, image documentation, fetal and maternal eval, first trimester (<14 wks 0 days) transabdominal approach; single or first gestation	21
76802	Ultrasound, pregnant uterus, real-time w, image documentation, fetal and maternal eval, first trimester (<14 wks 0 days) transabdominal approach; each additional gestation	6
76805	Ultrasound, pregnant uterus, real-time w, image documentation, fetal and maternal eval, after first trimester (> or = 14 wks 0 days) transabdominal approach; single or first gestation	26
76810	Ultrasound, pregnant uterus, real-time w, image documentation, fetal and maternal eval, plus detailed fetal anatomic examination, transabdominal approach; each add'l gestation	12
76811	Ultrasound, pregnant uterus, real-time w, image documentation, fetal and maternal eval, plus detailed fetal anatomic exam, transabdominal approach; single or first gestation	24
76812	Ultrasound, pregnant uterus, real-time w, image documentation, fetal and maternal eval, plus detailed fetal anatomic exam, transabdominal approach; each additional gestation	32
76813	Ultrasound, pregnant uterus, real-time w, image documentation, first trimester fetal nuchal translucency measurement, transabdominal or transvaginal approach; single or first gestation	17
76814	Ultrasound, pregnant uterus, real-time w, image documentation, first trimester fetal nuchal translucency measurement, transabdominal or transvaginal approach; each additional gestation	8
76815	Ultrasound, pregnant uterus, real-time w, image documentation, limited (eg fetal heart beat, placental location, fetal position and, or qualitative amniotic fluid volume), 1 or more fetus	15
76816	Ultrasound, pregnant uterus, real-time w, image documentation, follow-up (eg re-evaluation of fetal size by measuring standard growth parameters and amniotic fluid volume, re-evaluation of organ system(s) suspected or confirmed to be abnormal on a previous scan), transabdominal approach , per fetus	20
76817	Ultrasound, pregnant uterus, real-time w, image documentation; transvaginal	17
76818	Fetal biophysical profile; w, non-stress testing	20
76819	Fetal biophysical profile; w, o non-stress testing	14
76820	Doppler velocimetry, fetal; umbilical artery	6
76821	Doppler velocimetry, fetal; middle cerebral artery	16

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CPT Code	Description	RVU
76825	Echocardiography, fetal, cardiovascular system, real-time w, image documentation (2D); w, or w, o M-mode recording	55
76826	Echocardiography, fetal, cardiovascular system, real-time w, image documentation (2D); w, or w, o M-mode recording; follow-up or repeat study	35
76827	Doppler Echocardiography, fetal pulsed wave and, or continous wave w, spectral display; complete	13
76828	Doppler Echocardiography, fetal pulsed wave and, or continous wave w, spectral display; follow-up or repeat study	7
76830	Ultrasound, transvaginal	25
76831	Endovaginal introduction of the saline enhanced endometrium	IRC
76856	Ultrasound pelvic (non-obstetric) real time w, image documentation; complete	21
76857	Ultrasound pelvic (non-obstetric) real time w, image documentation; limited or follow-up (eg follicles)	7
76870	Ultrasound scrotum and contents	10
76872	Ultrasound, transrectal	17
76873	Ultrasound, transrectal; prostate volume study for brachytherapy treatment planning	26
76880	<del>Sonogram of limb, not including the vascular structures</del>	9
76881	Ultrasound, extremity, non-vascular, real-time w, image documentation; limited; complete	25
76882	Ultrasound, extremity, non-vascular, real-time w, image documentation; anatomic specific	3
76885	Ultrasound, infant hips, real-time w, image documentation; dynamic; (requiring physician or other healthcare prof. manipulation)	31
76886	Ultrasound, infant hips, real-time w, image documentation; limited; static; (NOT requiring physician or other healthcare prof. manipulation)	22
76930	US guided aspiration of pericardium	IRC
76932	US guided endomyocardial biopsy	IRC
76934	<del>US scan to localize pleural fluid for collection of fluid and, or drainage by radiologist</del>	11
76934	<del>US scan to localize abdominal fluid for collection of fluid and, or drainage by radiologist</del>	11
76936	US scan to localize and therapeutically compress a pseudo-aneurysm	IRC
76937	US guided for vascular access requiring US eval., of potential access sites, vessel patency, visualization of vascular needle entry w, permanent recording and reporting	IRC
76938	<del>US scan to localize a cyst for collection of fluid and, or drainage by radiologist</del>	Exclude
76940	US guidance for & monitoring of parenchymal tissue ablation	IRC
76941	US guidance for intrauterine fetal transfusion or cordocentesis, imaging supervision and interpretation	IRC

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CPT Code	Description	RVU
76942	US guidance for needle placement (eg. Biopsy, aspiration, injection, localization device), imaging supervision and interpretation	IRC
76945	US guidance for chorionic villus sampling, imaging supervision and interpretation	IRC
76946	US guidance for amniocentesis, imaging supervision and interpretation	IRC
76948	US guidance for aspiration of ova, imaging supervision and interpretation	IRC
76965	US guidance for interstitial radioelement application	IRC
76970	Ultrasound study follow-up (specify)	21
76975	Gastrointestinal endoscopic ultrasound, supervision and interpretation	IRC
76977	US bone density measurement and interpretation, peripheral site(s); any method	1
76986	Operating room sonography	5
76999	Unlisted ultrasonic procedure (eg diagnostic)	By Report
77001	Fluoroscopic guidance for central venous access device placement, replacement (catheter only or complete), or removal (includes fluoroscopic guidance for vascular access and catheter manipulation, any necessary contrast injections through access site or catheter with related venography radiologic supervision and interpretation, and radiographic documentation of final catheter position) (List separately in addition to code for primary procedure)	IRC
77002	Fluoroscopic guidance for needle placement (eg, biopsy, aspiration, injection, localization device) ** NOTE surgical &, or injection codes listed depends on anatomical location	IRC
77003	Fluoroscopic guidance and localization of needle or catheter tip for spine or paraspinal diagnostic or therapeutic injection procedures (epidural or subarachnoid)	IRC
77020	<del>Superficial or contact, Grenz-ray, Chaoul, Phillips</del>	3
77030	<del>Orthovoltage (under 600 KVP)</del>	3
77040	<del>Supervoltage (600 KVP 2 MeV, including Cobalt and cesium)</del>	4
77050	<del>Megavoltage (over 2MeV - 6MeV)</del>	5
77053	Mammary ductogram or galactogram, single ducts, radiological supervision and interpretation	11
77054	Mammary ductogram or galactogram, multiple ducts, radiological supervision and interpretation	15
77061	Digital breast tomosynthesis; unilateral (add 1 additional RVU when reported in conjunction with G0204 or G0206)	7
77062	Digital breast tomosynthesis; bilateral (add 1 additional RVU when reported in conjunction with G0204 or G0206)	7
77063	Screening digital breast tomosynthesis; bilateral (list separately in addition to code for primary procedure)	7
77065	<del>Megavoltage ( over 6MeV or electron beam)</del>	6

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CPT Code	Description	RVU
77065	Diagnostic mammography, including computer-aided detection (CAD) when performed; unilateral	26
77066	Diagnostic mammography, including computer-aided detection (CAD) when performed; bilateral	34
77067	Screening mammography, bilateral (2 view study of each breast), including computer-aided detection (CAD) when performed	28
77071	Manual application of stress performed by physician or other qualified healthcare professional for joint radiography; including contralateral joint if indicated	9
77072	Bone age studies	4
77073	Bone length studies (orthoroentgenogram)	6
77074	Radiologic examination, osseous survey, limited (eg. for metastasis)	12
77075	Radiologic examination, osseous survey; complete (axial and appendicular skeleton)	17
77076	Radiologic examination, osseous survey, infant	17
77077	Joint survey, single view, one or more joints (specify)	6
77080	Dual-energy X-ray absorptiometry (DXA) bone density study, 1 or more sites; axial skeleton (eg hips, pelvis, spine)	9
77081	Dual-energy X-ray absorptiometry (DXA) bone density study, 1 or more sites; appendicular skeleton (eg hips, pelvis, spine)	5
77085	Dual-energy X-ray absorptiometry (DXA) bone density study, 1 or more sites; appendicular skeleton (eg hips, pelvis, spine) including vertebral fracture assessment	11
77086	Vertebral fracture assessment via dual-energy X-ray absorptiometry (DXA)	7
77240	Teleradiotherapy consultation	By Report
77250	Treatment planning	By Report
77500	Application only, radium, or other radioelement, superficial plaque or mold	By Report
77520	Proton treatment delivery; simple, without compensation	By Report
77550	Application only, interstitial	By Report
77585	Consultation	By Report
77595	Treatment planning dosage calculations, preparation and supervision of radioelement	By Report
77598	Provision of radioelement	By Report
77999	Unlisted radiotherapy procedure	By Report

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CPT Code	Description	RVU
92922	Non invasive physiologic study of Le arteries, ankle level, bilateral with ankle brachial indices, doppler waveform analysis segmental volume plethysmography or oxygen tension measurements	2
93307	Echocardiography, transthoracic, real time with image documentation	7
93308	F, U or limited study	8
93312	Echocardiography, transesophageal, real time with image documentation	12
93320	Doppler echocardiography, pulsed wave and, or continuous wave with spectral display, complete	9
93321	Doppler echocardiography, pulsed wave and, or continuous wave with spectral display; F, U or limited study	7
93325	Doppler echocardiography color flow velocity mapping	4
93350	Echocardiography, transthoracic, real time with image documentation, with or without M code recording, during rest and cardiovascular stress test using treadmill, bicycle exercise and, or pharmacologically induced stress	9
93880	Duplex scan of extracranial vessels complete bilateral study	46
93882	Duplex scan of extracranial vessels, unilateral or limited study	29
93886	Transcranial doppler study of the intracranial arteries; complete	65
93888	Transcranial doppler study of the intracranial arteries; limited	35
93890	Transcranial doppler study of the intracranial arteries; vasoreactivity study	66
93892	Transcranial doppler study of the intracranial arteries; emboli detection w, o intravenous microbubble injection	76
93893	Transcranial doppler study of the intracranial arteries; emboli detection w, intravenous microbubble injection	81
93895	Quantitative carotid intima media thickness and carotid atheroma eval; bilateral	0
93922	Limited bilateral non-invasive physiologic study of Upper or Lower extremities arteries; (eg, for lower extremity: ankle, brachial indices at distal posterior tibial and anterior tibial, dorsalis pedis arteries plus bidirectional, Doppler waveform recording and analysis at 1-2 levels, or ankle, brachial indices at distal posterior tibial and anterior tibial, dorsalis pedis arteries plus volume plethysmography at 1-2 levels, or ankle, brachial indices at distal posterior tibial and anterior tibial, dorsalis pedis arteries w, transcutaneous oxygen tension measurement at 1-2 levels	21

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CPT Code	Description	RVU
93923	Complete bilateral non-invasive physiologic study of Upper or Lower extremities arteries; 3 or more levels (eg, for lower extremity: ankle, brachial indices at distal posterior tibial and anterior tibial, dorsalis pedis arteries plus segmental blood pressure measurements with bidirectional Doppler waveform recording and analysis at 3 or more levels, or ankle, brachial indices at distal posterior tibial and anterior tibial, dorsalis pedis arteries plus volume plethysmography at 3 or more levels, or ankle, brachial indices at distal posterior tibial and anterior tibial, dorsalis pedis arteries w, transcutaneous oxygen tension measurement at 3 or more levels	32
93923	Non-invasive physiologic studies of LE arteries, multiple levels, complete bilateral study with segmental systolic pressure measurements, segmental doppler analysis or segmental volume plethysmography or segmental oxygen tension measurements, with reactive hyperemia	32
93923	Non-invasive physiological studies of UE arteries, multiple levels complete bilateral study with segmental systolic pressure measurements, segmental doppler analysis or segmental volume plethysmography or segmental oxygen tension measurements	32
93923	As above with provocative response to stress or UE exercise	32
93923	As above with provocative response to cold stress	32
93923	As above with provocative response to local digital block with or without cold stress	32
93923	Non-invasive physiologic studies of UE arteries, multiple levels, complete bilateral study with segmental systolic pressure measurements, segmental doppler analysis or segmental volume plethysmography or segmental oxygen tension measurements performed in operating room	32
93924	Non-Invasive physiologic studies of lower extremity arteries, at rest and following treadmill stress testing (i.e. bidirectional Doppler waveform or volume plethysmography recording and analysis at rest with ankle, brachial indices immediately after and at timed intervals following performance of a standardized protocol on a motorized treadmill plus recording of time of onset of claudication or other symptoms, maximal walking time, and time to recovery) complete bilateral study	41
93925	Duplex scan of lower extremity arteries or arterial bypass grafts, complete bilateral study	62
93926	Duplex scan of lower extremity arteries or arterial bypass grafts, unilateral or limited study	36
93930	Duplex scan of upper extremity arteries or arterial bypass grafts, complete bilateral study	47
93931	Duplex scan of upper extremity arteries or arterial bypass grafts, unilateral or limited study	29

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CPT Code	Description	RVU
93970	Duplex scan of extremity veins including responses to compression and other maneuvers; complete bilateral study	46
93971	Duplex scan of lower extremity veins including responses to compression and other maneuvers to investigate chronic venous disorders, unilateral or limited study	28
93971	Duplex scan of lower extremity veins including responses to compression and other maneuvers, unilateral or limited study	28
93971	Duplex scan of upper extremity veins including responses to compression and other maneuvers, unilateral or limited study	28
93975	Duplex scan of arterial inflow or venous outflow of abdominal, Pelvic and, or scrotal contents and, or retroperitoneal organs; complete study	63
93975	Duplex scan of arterial inflow or abdominal, pelvic and, or retroperitoneal organs, complete study	63
93976	Duplex scan of arterial inflow or venous outflow of abdominal, Pelvic and, or scrotal contents and, or retroperitoneal organs; limited study	35
93978	Duplex scan of aorta, inferior vena cava, iliac vasculature or bypass grafts, complete study	43
93979	Duplex scan of aorta, inferior vena cava, iliac vasculature or bypass grafts, unilateral or limited study	27
93980	Duplex scan of arterial inflow and venous outflow of penile vessels, complete study	17
93981	Duplex scan of arterial inflow and venous outflow of penile vessels, follow-up or limited study	15
93982	Noninvasive physiologic study of implanted wireless pressure sensor in aneurysmal sac following endovascular repair, complete study including recording analysis of pressure and waveform tracings, interpretation and report	9
93990	Duplex scan of hemodialysis access including arterial inflow, body of access and venous outflow	38
93998	Unlisted noninvasive vascular diagnostic study	By Report
C9744	Ultrasound, abdominal, with contrast	34
G0106	Colorectal cancer screening; alternative to G0104, screening sigmoidoscopy, barium enema	46
G0120	Colorectal cancer screening; alternative to G0105, screening colonoscopy, barium enema	46
G0121	Colorectal cancer screening; colonoscopy on individual not meeting criteria for high risk	53.0
G0130	Single energy x-ray absorptiometry (DEXA) bone density study, on one or more sites, appendicular skeleton (peripheral) (e.g., radius, wrist, heel)	6
G0202	Screening mammography, bilateral (2-view study of each breast), including computer-aided detection (CAD) when performed	28



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CPT Code	Description	RVU
G0204	Diagnostic mammography, including computer-aided detection (cad) when performed; bilateral	34
G0206	Diagnostic mammography, including computer-aided detection (cad) when performed; unilateral	26
G0279	Diagnostic digital breast tomosynthesis, unilateral or bilateral (List separately in addition to G0204 or G0206)	7

Nuclear Medicine  
Section 200- Chart of Accounts

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7380	NUCLEAR MEDICINE
7381	NUCLEAR MEDICINE-DIAGNOSTIC
7382	NUCLEAR MEDICINE-THERAPEUTIC

Function

This cost center provides diagnosis and treatment by injectable or ingestible radioactive isotopes as required for the care and treatment of patients under the direction of a qualified physician. Additional activities include, but are not limited to, the following:

Consultation with patients and attending physician; radioactive waste disposal;  
storage of radioactive materials.

Description

This cost center contains the direct expenses incurred in providing nuclear medicine services to patients. Included as direct expenses are: salaries and wages, employee benefits, professional fees (non-physician), supplies, purchased services, maintenance costs (maintenance contracts or bio-medical engineering costs if done in-house) on principal equipment, other direct expenses and transfers.

Standard Unit of Measure: **Relative Value Units**

~~Maryland~~ **Relative Value Units as determined by the Health Services Cost Review Commission (see Appendix D of this manual).**

Data Source

The number of **Relative Value Units** shall be the actual count maintained by the Nuclear Medicine Cost Center.

Reporting Schedule

Schedule D - Line D35

## Nuclear Medicine Appendix D

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#### Approach

Nuclear Medicine Relative Value Units were developed with the aid of an industry task force under the auspices of and approved by the Health Services Cost Review Commission. The descriptions of codes in this section of Appendix D were obtained from the 2017 edition of the Current Procedural Terminology (CPT) manual and the 2017 edition of the Healthcare Common Procedure Coding System (HCPCS). In assigning RVUs the group used the 2017 Medicare Physician Fee schedule (MPFS) released November 2, 2016. RVUs were assigned using the following protocol (“RVU Assignment Protocol”).

The RVUs reported in the 2017 MPFS include 2 decimal points. In order to maintain whole numbers in Appendix D, while maintaining appropriate relative value differences reported in the MPFS, the RVU work group agreed to remove the decimals by multiplying the reported RVUs by ten and then rounding the product of the calculation, where values less than X.5 are rounded down and all other values are rounded up.

1. CPT codes with RVUs listed in the MPFS.
  - a. For CPT codes with RVUs that include both professional (modifier 26) and technical (modifier TC) components, use only the technical (TC) component RVU.
  - b. CPT codes with only a single RVU listed
    - a. CPT codes that are considered technical only, the single RVU reported will be used.
    - b. CPT codes considered professional only are not listed in Appendix D.
2. CPT codes that do not have RVUs listed in the MPFS (e.g. CMS Status Code “C”)
  - a. CPTs 78099, 78199, 78299, 78399, 78499, 78599, 78699, 78799 and 78999 did not have a published RVU in the MPFS. As these codes are for an unlisted procedure, RVUs should be developed “By Report” following the protocol below in the section “CPT Codes Without an Assigned RVU Value.”
  - b. CPT 78267 did not have a published RVU in the MPFS. Due to its similarity to CPT 78270 in time and resources, it was assigned 26 RVUs.
  - c. CPT 78268 did not have a published RVU in the MPFS. As time and resources used are about one-half of CPT 78267, it was assigned 13 RVUs.
  - d. CPT 78282 did not have a published RVU in the MPFS. CMS APC weights for this code are similar to other gastrointestinal codes that are assigned approximately 2.5 RVUs per the MPFS, it was assigned 25 RVUs.
  - e. CPT 78351 did not have a published RVU in the MPFS. Due to its similarity to CPT 78350 in time and resources, it was assigned 6 RVUs.
  - f. CPT 78414 did not have a published RVU in the MPFS. Due to its similarity to CPT 78320 in assigned CMS APC weights, it was assigned 52 RVUs.
  - g. CPTs 78459, 78491, 78492, 78608, 78609, 78811, 78812, 78813 78814 78815 and 78816 did not have a published RVU in the MPFS. The workgroup agreed that two (2) RVUs per minute for average testing time plus an additional one (1) RVU per minute to account

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for machine cost and other resources is a reasonable basis for establishing RVUs for PET scans for a total of 3 RVUs per minute as follow:

<u>CPT CODE</u>	<u>AVERAGE TESTING TIME</u>	<u>RVUS</u>
78459	240 minutes	720
78491	80 minutes	240
78492	150 minutes	450
78608	120 minutes	360
78609	120 minutes	360
78811	90 minutes	270
78812	120 minutes	360
78813	150 minutes	450
78814	120 minutes	360
78815	145 minutes	435
78816	165 minutes	495

#### **Services with both a HCPCS for Medicare and CPT for Non-Medicare**

All known HCPCS codes have been addressed in a payer-neutral fashion with this update. In instances of where Medicare implements a new HCPCS code to be utilized in lieu of a CPT code for a service, the RVU developed by the hospital must mirror the established CPT RVUs. The RVU for the service must be the same for all payers.

#### **CPT Codes with Bundled Procedures**

CPT codes from 2017 with a surgical component have been assigned a zero (0) RVU value. If a NUC CPT becomes bundled with a surgical code or replaced with a surgical code, these procedures should be charged as Interventional Radiology/Cardiovascular (IRC) and the associated costs of the procedure are to be reclassified to the IRC cost center. (This is minimal for Nuclear Medicine.) Note: These IRC procedures may be charged based on actual start/stop times or based on the average case time (based on an annual time study) for the service.

#### **Reporting of Imaging Guidance for Invasive Cases**

Standard imaging RVUs are only to be used for non-invasive imaging services occurring in an imaging suite. For invasive imaging services, the imaging guidance is either separately reportable or bundled into the code for the invasive service. Invasive imaging services occurring in an imaging suite must be charged using IRC minutes based on case time. For separately reportable imaging guidance, hospitals are to report one (1) IRC minute per imaging code. Imaging expenses associated with the guidance are to be allocated from the diagnostic imaging rate center to the IRC rate center.

When an operating room or operating room-clinic case involves intraoperative/ intraprocedural imaging guidance or imaging services, standard imaging RVUs are to be used if the imaging guidance is separately reportable from the surgical procedure. The surgical portion of these cases will remain charged based on minutes. If the imaging guidance is bundled into the code for the surgical procedure, standard imaging RVUs are not to be charged and any related imaging expenses should be allocated from the imaging department to the operating room or operating room-clinic rate center.

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### **CPT Codes without an Assigned RVU Value**

RVUs for new codes developed and reported by CMS after the 2017 reporting, must be developed “By Report”. When assigning RVUs to these new codes, hospitals should use the RVU Assignment Protocol described above where possible using the most current MPFS. For codes that are not listed in the MPFS, hospitals should assign RVUs based on time and resource intensity of the services provided compared to like services in the department. Documentation of the assignment of RVUs to codes not listed in Appendix D should always be maintained by the hospital.

### **General Guidelines**

The AMA CPT Code will be used as the identifier throughout the system. Assigned RVU's will be strictly tied to the CPT Code.

All RVU's are per CPT unless otherwise stated.

Standard supplies and contrast material are included in the RVU assignment and should not be assigned separately.

No drug, including radiopharmaceuticals, is considered a routine part of any NUC examination. Radiopharmaceuticals and sedation and pain reducing agents may be used with these procedures. These drugs should NOT be included in the RVU of the exam and are to be billed separately through the pharmacy on an "as needed" basis. Drugs should not be assigned an RVU

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CPT Code	Description	RVU
78001	Thyroid uptake, multiple	10
78003	Thyroid uptake, stimulation, suppression or discharge (not including initial uptake studies)	8
78006	Thyroid imaging w/uptake, single	19
78007	Thyroid imaging w/uptake, multiple	21
78010	Thyroid imaging; only	17
78011	Thyroid imaging w/ vascular flow	18
78012	Thyroid uptake, single or multiple quantitative measurements including stimulation, suppression, or discharge, when performed.	21
78013	Thyroid imaging (including vascular flow, when performed)	50
78014	Thyroid imaging (including vascular flow, when performed); with single or multiple uptake(s) quantitative measurements(s) (including stimulation, suppression, or discharge, when performed)	63
78015	Thyroid carcinoma metastases imaging; limited area (e.g. neck/chest only)	55
78016	Thyroid carcinoma metastases imaging; w/additional studies (e.g., urinary recovery)	73
78017	Thyroid carcinoma metastases imaging; multiple areas	23
78018	Thyroid carcinoma metastases imaging; whole body	79
78020	Thyroid carcinoma metastases uptake (List separately in addition to code for primary procedure)	16
78070	Parathyroid planar imaging (including subtraction, when performed)	76
78071	Parathyroid planar imaging (including subtraction, when performed); with tomographic (SPECT)	87
78072	Parathyroid planar imaging (including subtraction, when performed); with tomographic (SPECT), and concurrently acquired computed tomography (CT) for anatomical localization	98
78075	Adrenal imaging, cortex and/or medulla	119
78099	Unlisted endocrine procedure, diagnostic nuclear medicine	By Report
78102	Bone marrow imaging; limited area	42
78103	Bone marrow imaging; multiple areas	54
78104	Bone marrow imaging; whole body	61
78110	Plasma volume, radiopharmaceutical volume-dilution technique (separate procedure); single sampling	26
78111	Plasma volume, radiopharmaceutical volume-dilution technique (separate procedure); multiple samplings	24
78120	Red cell volume determination (separate procedure); single sampling	24
78121	Red cell volume determination (separate procedure); multiple samplings	26
78122	Whole blood volume determination, including separate measurement of plasma volume and red cell volume (radiopharmaceutical volume-dilution technique)	22
78130	Red cell survival study;	40
78135	Red cell survival study; differential organ/tissue kinetics (e.g., splenic and/or hepatic sequestration)	94
78140	Labeled red cell sequestration, differential organ/tissue (e.g., splenic and/or hepatic)	31
78185	Spleen imaging only, with or without vascular flow	56
78190	Kinetics, study of platelet survival, with or without differential organ/tissue localization	99
78191	Platelet survival study	40
78195	Lymphatics and lymph node imaging	87

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CPT Code	Description	RVU
78199	Unlisted hematopoietic, reticuloendothelial and lymphatic procedure, diagnostic nuclear medicine	By Report
78201	Liver imaging; static only	49
78202	Liver imaging; with vascular flow	52
78205	Liver imaging (SPECT);	52
78206	Liver imaging (SPECT); with vascular flow	86
78215	Liver and spleen imaging; static only	50
78216	Liver and spleen imaging; with vascular flow	29
78220	Liver function study with hepatobiliary agents with serial images	20
78223	Hepatobiliary ductal system imaging, including gallbladder, with or without pharmacologic intervention, with or without quantitative measurement of gallbladder function	23
78226	Hepatobiliary system imaging, including gallbladder when present;	86
78227	Hepatobiliary system imaging, including gallbladder when present; with pharmacologic intervention, including quantitative measurement(s) when performed	118
78230	Salivary gland imaging;	44
78231	Salivary gland imaging; with serial images	30
78232	Salivary gland function study	23
78258	Esophageal mobility	55
78261	Gastric mucosa imaging	62
78262	Gastroesophageal reflux study	61
78264	Gastric emptying study (e.g., solid, liquid, or both)	87
78265	Gastric emptying study (e.g., solid, liquid, or both); with small bowel transit	102
78266	Gastric emptying study (e.g., solid, liquid, or both); with small bowel and colon transit, multiple days	123
78267	Urea breath test, C-14 (isotopic); acquisition for analysis	26
78268	Urea breath test, C-14 (isotopic); analysis	13
78270	Vitamin B-12 absorption study (e.g.. Schilling test); without intrinsic factor	26
78271	Vitamin B-12 absorption study (e.g.. Schilling test); with intrinsic factor	23
78272	Vitamin B-12 absorption study combined, with and without intrinsic factor	25
78278	Acute gastrointestinal blood loss imaging	88
78282	Gastrointestinal protein loss	25
78290	Intestine imaging (e.g., ectopic gastric mucosa, Meckel's localization, volvulus)	87
78291	Peritoneal-venous shunt patency test (e.g., LeVeen, Denver shunt)	62
78299	Unlisted gastrointestinal procedure, diagnostic Nuclear Medicine	By Report
78300	Bone and/or joint imaging; limited area	44
78305	Bone and/or joint imaging; multiple areas	56
78306	Bone and/or joint imaging; whole body	61
78315	Bone and/or joint imaging; 3 phase study	87
78320	Bone and/or joint imaging; tomographic (SPECT)	52
78350	Bone density (bone mineral content) study, 1 or more sites; single photon absorptiometry	6
78351	Bone density (bone mineral content) study, 1 or more sites; dual photon absorptiometry, 1 or more sites	6

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CPT Code	Description	RVU
78399	Unlisted musculoskeletal procedure, diagnostic nuclear medicine	By Report
78414	Determination of central c-v hemodynamics (non-imaging) (e.g., ejection fraction with probe technique) with or without pharmacologic intervention or exercise, single or multiple determinations	52
78428	Cardiac shunt detection	42
78445	Non-cardiac vascular flow imaging (i.e., angiography, venography)	46
78451	Myocardial perfusion imaging, tomographic (SPECT) (including attenuation correction, qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); single study, at rest or stress (exercise or pharmacologic)	80
78452	Myocardial perfusion imaging, tomographic (SPECT) (including attenuation correction, qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or redistribution and/or rest reinjection	115
78453	Myocardial perfusion imaging, planar (including qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); single study, at rest or stress (exercise or pharmacologic)	74
78454	Myocardial perfusion imaging, planar (including qualitative or quantitative wall motion, ejection fraction by first pass or gated technique, additional quantification, when performed); multiple studies, at rest and/or stress (exercise or pharmacologic) and/or redistribution and/or rest reinjection	108
78456	Acute venous thrombosis imaging, peptide	79
78457	Venous thrombosis imaging, venogram; unilateral	40
78458	Venous thrombosis imaging, venogram; bilateral	47
78459	Myocardial imaging, positron emission tomography (PET), metabolic evaluation	720
78460	Myocardial perfusion imaging: single study, at rest or stress (exercise and/or pharmacologic), qualitative or quantitative	22
78461	Myocardial perfusion imaging: multiple studies, at rest or stress (exercise and/or pharmacologic), and redistribution and/or rest injection, qualitative or quantitative	33
78464	Myocardial perfusion imaging: tomographic (SPECT), single study at rest or stress (exercise and/or pharmacologic), with or without quantitation	27
78465	Myocardial perfusion imaging: tomographic (SPECT, multiple studies at rest or stress (exercise and/or pharmacologic), and redistribution and/or rest injection, qualitative or quantitative	43
78466	Myocardial imaging, infarct avid, planar; qualitative or quantitative	47
78468	Myocardial imaging, infarct avid, planar; with ejection fraction by first pass technique	45
78469	Myocardial imaging infarct avid, planar; tomographic SPECT with or without quantification	53
78472	Cardiac blood pool imaging, gated equilibrium; planar, single study at rest or stress (exercise and/or pharmacologic), wall motion study plus ejection fraction, with or without additional quantitative processing	53
78473	Cardiac blood pool imaging, gated equilibrium; multiple studies, wall motion study plus ejection fraction, at rest and stress (exercise and/or pharmacologic), with or without additional quantification	64
78478	Myocardial perfusion study with wall motion, quantitative study (list separately in addition to code for primary procedure). (Use only for codes 78460, 78461, 78464, 78465)	2



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CPT Code	Description	RVU
78480	Myocardial perfusion study with ejection fraction (list separately in addition to code for primary procedure). (Use only for codes 78460, 78461, 78464, 784465)	2
78481	Cardiac blood pool imaging (planar), first pass technique; single study, at rest or with stress (exercise and/or pharmacologic), wall motion study plus ejection fraction with or without quantification	37
78483	Cardiac blood pool imaging (planar) first pass technique; multiple studies, at rest or with stress (exercise and/or pharmacologic) wall motion study plus ejection fraction with or without quantification	50
78491	Myocardial imaging, positron emission tomography (PET), perfusion; single study at rest or stress	240
78492	Myocardial imaging, positron emission tomography (PET), perfusion; multiple studies at rest or stress	450
78494	Cardiac blood pool imaging, gated equilibrium, SPECT, at rest, wall motion study plus ejection fraction, with or without quantitative processing	49
78496	Cardiac blood pool imaging, gated equilibrium, single study, at rest, with right ventricular ejection fraction by first pass technique (list separately in addition to code for primary procedure)	6
78499	Unlisted cardiovascular procedure, diagnostic nuclear medicine	By Report
78499	Unlisted cardiovascular procedure, diagnostic NM— <del>DELAY THALLIUM SPECT</del>	16
78579	Pulmonary ventilation imaging (e.g., aerosol or gas)	47
78580	Pulmonary perfusion imaging (e.g., particulate)	59
78582	Pulmonary ventilation (e.g., aerosol or gas) and perfusion imaging	82
78585	Pulmonary perfusion imaging, particulate, w/ventilation, rebreathing and washout, w/wo single breath	26
78586	Pulmonary ventilation imaging, aerosol; single projection	13
78587	Pulmonary ventilation imaging, aerosol; multiple projections (e.g., anterior, posterior, lateral views)	15
78591	Pulmonary ventilation imaging, gaseous, single breath, single projection	13
78593	Pulmonary ventilation imaging, gaseous, single breath, single projection	13
78594	Pulmonary ventilation imaging, gaseous, with rebreathing and washout with or without single breath; multiple projections, (e.g., anterior, posterior, lateral views)	15
78596	Pulmonary quantitative differential function (VIP) study	26
78597	Quantitative differential pulmonary perfusion, including imaging when performed	49
78598	Quantitative differential pulmonary perfusion and ventilation (e.g., aerosol or gas), including imaging when performed	77
78599	Unlisted respiratory procedure, diagnostic nuclear medicine	By Report
78600	Brain imaging, less than 4 static views;	48
78601	Brain imaging, less than 4 static views; with vascular flow	55
78605	Brain imaging, minimum 4 static views;	51
78606	Brain imaging, minimum 4 static views; with vascular flow	87
78607	Brain imaging, tomographic (SPECT)	86
78608	Brain imaging, positron emission tomography (PET); metabolic evaluation	360
78609	Brain imaging, positron emission tomography (PET); perfusion evaluation	360
78610	Brain imaging, vascular flow only	47
78615	Cerebral blood flow	12

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CPT Code	Description	RVU
78630	Cerebrospinal fluid flow, imaging (not including introduction of material); cisternography	89
78635	Cerebrospinal fluid flow, imaging (not including introduction of material); ventriculography	91
78645	Cerebrospinal fluid flow, imaging (not including introduction of material); shunt evaluation	87
78647	Cerebrospinal fluid flow, imaging (not including introduction of material); tomographic (SPECT)	90
78650	Cerebrospinal fluid leakage detection and localization	88
78660	Radiopharmaceutical dacryocystography	45
78699	Unlisted nervous system procedure, diagnostic nuclear medicine	By Report
78700	Kidney imaging morphology;	44
78701	Kidney imaging morphology; with vascular flow	55
78704	Kidney imaging with function study (i.e., imaging renogram)	17
78707	Kidney imaging morphology; with vascular flow and function, single study without pharmacological intervention	54
78708	Kidney imaging morphology; with vascular flow and function, single study, with pharmacological intervention (e.g., angiotensin converting enzyme inhibitor and/or diuretic)	34
78709	Kidney imaging morphology; with vascular flow and function, multiple studies, with and without pharmacological intervention (e.g., angiotensin converting enzyme inhibitor and/or diuretic)	87
78710	Kidney imaging morphology; tomographic (SPECT)	50
78715	Kidney vascular flow only	12
78725	Kidney function study, non-imaging radioisotopic study	26
78726	Kidney function study including pharmacologic intervention – <del>LASIX</del>	17
78726	Kidney function study including pharmacologic intervention – <del>CAPTOPRIL</del>	29
78727	Kidney transplant evaluation	18
78730	Urinary bladder residual study (List separately in addition to code for primary procedure)	18
78740	Ureteral reflux study (radiopharmaceutical voiding cystogram)	56
78760	Testicular imaging	17
78761	Testicular imaging with vascular flow	52
78799	Unlisted genitourinary procedure, diagnostic nuclear medicine	By Report
78800	Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); limited area	46
78801	Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); multiple areas	65
78802	Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); whole body, single day imaging	82
78803	Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); tomographic (SPECT)	85
78804	Radiopharmaceutical localization of tumor or distribution of radiopharmaceutical agent(s); whole body, requiring 2 or more days imaging	150
78805	Radiopharmaceutical localization of inflammatory process; limited area	43
78806	Radiopharmaceutical localization of inflammatory process; whole body	85
78807	Radiopharmaceutical localization of inflammatory process; tomographic (SPECT)	85

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CPT Code	Description	RVU
78808	Injection procedure for radiopharmaceutical localization by non-imaging probe study, intravenous (e.g., parathyroid adenoma)	11
78811	Positron emission tomography (PET) imaging; limited area (e.g., chest, head/neck)	270
78812	Positron emission tomography (PET) imaging; skull base to mid-thigh	360
78813	Positron emission tomography (PET) imaging; whole body	450
78814	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; limited area (e.g., chest, head/neck)	360
78815	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; skull base to mid-thigh	435
78816	Positron emission tomography (PET) with concurrently acquired computed tomography (CT) for attenuation correction and anatomical localization imaging; whole body	495
78890	<del>Generation of automated data, interactive process involving nuclear physician and/or allied health professional personnel: simple manipulations and interpretation, not to exceed 30 minutes</del>	6
78891	<del>Generation of automated data, interactive process involving nuclear physician and/or allied health professional personnel: simple manipulations and interpretation, exceeding 30 minutes</del>	12
78999	Unlisted miscellaneous procedure, diagnostic nuclear medicine	By Report
79001	Radiopharmaceutical therapy, hyperthyroidism, subsequent each therapy	5
79005	Radiopharmaceutical therapy, by oral administration	14
79030	Radiopharmaceutical ablation of gland for thyroid carcinoma	24
79035	Radiopharmaceutical therapy for metastases of thyroid carcinoma	24
79101	Radiopharmaceutical therapy, by intravenous administration	14
79200	Radiopharmaceutical therapy, by intracavitary administration	15
79400	<del>Radiopharmaceutical therapy, non thyroid, non hematologic — e.g. METASTRON QUADRAMET (Bone pain relieving agents)</del>	12
79403	Radiopharmaceutical therapy, radiolabeled monoclonal antibody by intravenous infusion	23
79440	Radiopharmaceutical therapy, by intra-articular administration	14
79999	Radiopharmaceutical therapy, unlisted procedure	By Report

Electroencephalography  
Section 200- Chart of Accounts

Draft Recommendation 3-8-2017

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ELECTROENCEPHALOGRAPHY

Function

This cost center provides diagnostic electroencephalography services. Specialized equipment is used to record electromotive variations in brain waves and to record electrical potential variation for diagnosis of muscular and nervous disorders. Additional activities include, but are not limited to, the following:

Wheeling portable equipment to patient's bedside; explaining test procedures to patient; operating specialized equipment; attaching and removing electrodes from patients.

Description

This cost center contains the direct expenses incurred in providing diagnostic electroencephalography services to patients. Included as direct expenses are: salaries and wages, employee benefits, professional fees (non-physician), supplies, purchased services, maintenance costs (maintenance contracts or biomedical engineering costs if done in-house) on principal equipment, and other direct expenses and transfers.

Standard Unit of Measure: Relative Value Units

Diagnostic Neurology Relative Values as determined by the ~~California Medical Association, 1974 California Relative Value Studies.~~ Health Services Cost Review Commission (See Appendix D of this manual.) Relative Value Units for unlisted and "BR" (By Report) procedures should be reasonably estimated on the basis of other comparable procedures.

Data Source

The number of Relative Value Units shall be the actual count maintained by the Electroencephalography cost center.

Reporting Schedule

Schedule D - Line D38

# Electroencephalography (EEG) Appendix D

## Draft Recommendation 3-8-2017

### Approach

Electroencephalography Relative Value Units were developed with the aid of an industry task force under the auspices of and approved by the Health Services Cost Review Commission. The descriptions of codes in this section of Appendix D were obtained from the 2017 edition of the Current Procedural Terminology (CPT) manual and the 2017 edition of the Healthcare Common Procedure Coding System (HCPCS). In assigning RVUs the group used the 2017 Medicare Physician Fee schedule (MPFS) released November 2, 2016. RVUs were assigned using the following protocol (“RVU Assignment Protocol”).

The RVUs reported in the 2017 MPFS include 2 decimal points. In order to maintain whole numbers in Appendix D, while maintaining appropriate relative value differences reported in the MPFS, the RVU work group agreed to remove the decimals by multiplying the reported RVUs by ten and then rounding the product of the calculation, where values less than X.5 are rounded down and all other values are rounded up.

1. CPT codes with RVUs listed in the MPFS.
  - a. For CPT codes with RVUs that include both professional (modifier 26) and technical (modifier TC) components, use only the technical (TC) component RVU.
  - b. CPT codes with only a single RVU listed
    - a. CPT codes that are considered technical only, the single RVU reported will be used.
    - b. CPT codes considered professional only are not listed in Appendix D.
2. CPT codes that do not have RVUs listed in the MPFS (e.g. CMS Status Code “C”)
  - a. CPT 95824 did not have a published RVU in the MPFS. Due to its similarity to CPT 95822, it was assigned 89 RVUs.
  - b. CPT 95941 did not have a published RVU in the MPFS. This procedure is not reportable to Medicare and will be assigned zero (0) RVUs. This type of monitoring performed by the facility involves 1:1 monitoring by the technician.
  - c. CPT 95943, 95965, 95966 and 95967 did not have a published RVU in the MPFS. These CPTs will be assigned “By Report” as this procedure is not currently being provided by hospitals. When hospitals do provide this service, RVUs shall be assigned following the protocol below in the section “CPT Codes Without an Assigned RVU Value.”
  - d. CPT 95951 did not have a published RVU in the MPFS. Due to its similarity to CPT 95950, it was assigned 71 RVUs.
  - e. Home sleep study G-codes (G0398, G0399 and G0400) did not have published RVUs as they are only reportable in the facility setting. Due to its similarity to CPT 95806, they were assigned 30 RVUs.

## Electroencephalography (EEG) Appendix D

### Draft Recommendation 3-8-2017

3. CPT/HCPCS codes for which the published RVU did not make sense,
  - a. There were no deviations from published RVUs when present.

#### **CPT Codes Without an Assigned RVU Value**

RVUs for new codes developed and reported by CMS after the 2017 reporting, must be developed “By Report”. When assigning RVUs to these new codes, hospitals should use the RVU Assignment Protocol described above where possible using the most current MPFS. For codes that are not listed in the MPFS, hospitals should assign RVUs based on time and resource intensity of the services provided compared to like services in the department. Documentation of the assignment of RVUs to codes not listed in Appendix D should always be maintained by the hospital.

#### **General Guidelines**

The AMA CPT Code will be used as the identifier throughout the system. Assigned RVU's will be strictly tied to the CPT Code.

All RVU's are per CPT unless otherwise stated.

Standard supplies are included in the RVU assignment and should not be assigned separately.

No drug is considered a routine part of any EEG examination, however, sedation and pain reducing agents may be used to make procedures more easily tolerated. These drugs should NOT be included in the RVU of the exam but would be billed separately through the pharmacy on an “as needed” basis. Drugs should not be assigned an RVU.

Electroencephalography (EEG)  
RVU Draft Recommendation 3-8-2017

CPT Code	Description	RVU
95782	Polysomnography; younger than 6 years, sleep staging with 4 or more additional parameters of sleep, attended by a technologist	251
95783	Polysomnography; younger than 6 years, sleep staging with 4 or more additional parameters of sleep, with initiation of continuous positive airway pressure therapy or bi-level ventilation, attended by a technologist	285
95800	Sleep study, unattended, simultaneous recording; heart rate, oxygen saturation, respiratory analysis (e.g., by airflow or peripheral arterial tone), and sleep time	36
95801	Sleep study, unattended, simultaneous recording; minimum of heart rate, oxygen saturation, and respiratory analysis (e.g., by airflow or peripheral arterial tone)	12
95803	Actigraphy testing, recording, analysis, interpretation, and report (minimum of 72 hours to 14 consecutive days of recording)	27
95805	Multiple sleep latency or maintenance of wakefulness testing, recording, analysis and interpretation of physiological measurements of sleep during multiple trials to assess sleepiness	103
95806	Sleep study, unattended, simultaneous recording of, heart rate, oxygen saturation, respiratory airflow, and respiratory effort (e.g., thoracoabdominal movement)	30
95807	Sleep study, simultaneous recording of ventilation, respiratory effort, ECG or heart rate, and oxygen saturation, attended by a technologist	113
95808	Polysomnography; any age, sleep staging with 1-3 additional parameters of sleep, attended by a technologist	155
95810	Polysomnography; age 6 years or older, sleep staging with 4 or more additional parameters of sleep, attended by a technologist	140
95811	Polysomnography; age 6 years or older, sleep staging with 4 or more additional parameters of sleep, with initiation of continuous positive airway pressure therapy or bi-level ventilation, attended by a technologist	148
95812	Electroencephalogram (EEG) extended monitoring; 41-60 minutes	75
95813	Electroencephalogram (EEG) extended monitoring; greater than 1 hour	90
95816	Electroencephalogram (EEG); including recording awake and drowsy	85
95819	Electro-encephalogram (EEG); including recording awake and asleep	101
95821	portable, to an alternate facility	30
95822	Electroencephalogram (EEG); recording in coma or sleep only	89
95823	physical or pharmacological, activation	30
95824	Electroencephalogram (EEG); cerebral death evaluation only	89
95826	inter-cerebral (depth) EEG	By Report
95827	Electroencephalogram (EEG); all night recording	170
95828	<del>Polysomnography (recording, analysis and interpretation of the multiple-simultaneous physiological measurements of sleep</del>	By Report
95829	Electrocorticogram at surgery (separate procedure)	445
95830	Insertion by physician or other qualified health care professional of sphenoidal electrodes for electroencephalographic (EEG) recording	62
95831	Muscle testing, manual (separate procedure) with report; extremity (excluding hand) or trunk	9
95832	Muscle testing, manual (separate procedure) with report; hand, with or without comparison with normal side	9
95833	Muscle testing, manual (separate procedure) with report; total evaluation of body, excluding hands	11

Electroencephalography (EEG)  
RVU Draft Recommendation 3-8-2017

CPT Code	Description	RVU
95834	Muscle testing, manual (separate procedure) with report; total evaluation of body, including hands	15
95842	Electro testing reaction of degeneration; chronaxy; galvanic/tetanus ratio; one or more extremities, one or more methods; per hour	20
95845	Strength duration curve, per nerve	9
95851	Range of motion measurements and report (separate procedure); each extremity (excluding hand) or each trunk section (spine)	5
95852	Range of motion measurements and report (separate procedure); hand, with or without comparison with normal side	4
95857	Cholinesterase inhibitor challenge test for myasthenia gravis	15
95858	with electromyographic recording	By Report
95860	Needle electromyography; 1 extremity with or without related paraspinal areas	20
95861	Needle electromyography; 2 extremities with or without related paraspinal areas	26
95863	Needle electromyography; 3 extremities with or without related paraspinal areas	33
95864	Needle electromyography; 4 extremities with or without related paraspinal areas	39
95865	Needle electromyography; larynx	17
95866	Needle electromyography; hemidiaphragm	19
95867	Needle electromyography; cranial nerve supplied muscle(s), unilateral	15
?	limited study of specific muscles, e.g., external anal sphincter, thoracic spinal muscles, etc. (for eye muscles see 92265)	By Report
95868	Needle electromyography; cranial nerve supplied muscles, bilateral	20
95869	Needle electromyography; thoracic paraspinal muscles (excluding T1 or T12)	20
95870	Needle electromyography; limited study of muscles in 1 extremity or non-limb (axial) muscles (unilateral or bilateral), other than thoracic paraspinal, cranial nerve supplied muscles, or sphincters	20
95872	Needle electromyography using single fiber electrode, with quantitative measurement of jitter, blocking and/or fiber density, any/all sites of each muscle studied	12
95873	Electrical stimulation for guidance in conjunction with chemodenervation (List separately in addition to code for primary procedure)	15
95874	Needle electromyography for guidance in conjunction with chemodenervation (List separately in addition to code for primary procedure)	15
95875	Ischemic limb exercise test with serial specimen(s) acquisition for muscle(s) metabolite(s)	16
95880	Assessment of higher cerebral functions with medical interpretations, aphasia-testing	By Report
95881	developmental testing	By Report
95882	cognitive testing and others	By Report
95883	developmental and cognitive testing	By Report
95885	Needle electromyography, each extremity, with related paraspinal areas, when performed, done with nerve conduction, amplitude and latency/velocity study; limited (List separately in addition to code for primary procedure)	11



Electroencephalography (EEG)  
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CPT Code	Description	RVU
95886	Needle electromyography, each extremity, with related paraspinal areas, when performed, done with nerve conduction, amplitude and latency/velocity study; complete, five or more muscles studied, innervated by three or more nerves or four or more spinal levels (List separately in addition to code for primary procedure)	13
95887	Needle electromyography, non-extremity (cranial nerve supplied or axial) muscle(s) done with nerve conduction, amplitude and latency/velocity study (List separately in addition to code for primary procedure)	12
95900	<del>Nerve conduction, velocity and/or latency study, motor, each nerve</del>	9
95904	<del>sensory, each nerve</del>	9
95905	Motor and/or sensory nerve conduction, using preconfigured electrode array(s), amplitude and latency/velocity study, each limb, includes F-wave study when performed, with interpretation and report;	19
95907	Nerve conduction studies; 1-2 studies	12
95908	Nerve conduction studies; 3-4 studies	16
95909	Nerve conduction studies; 5-6 studies	19
95910	Nerve conduction studies; 7-8 studies	25
95911	Nerve conduction studies; 9-10 studies	28
95912	Nerve conduction studies; 11-12 studies	28
95913	Nerve conduction studies; 13 or more studies	31
95921	Testing of autonomic nervous system function; cardiovagal innervation (parasympathetic function), including 2 or more of the following: heart rate response to deep breathing with recorded R-R interval, Valsalva ratio, and 30:15 ratio	11
95922	Testing of autonomic nervous system function; vasomotor adrenergic innervation (sympathetic adrenergic function), including beat-to-beat blood pressure and R-R interval changes during Valsalva maneuver and at least 5 minutes of passive tilt	14
95923	Testing of autonomic nervous system function; sudomotor, including 1 or more of the following: quantitative sudomotor axon reflex test (QSART), silastic sweat imprint, thermoregulatory sweat test, and changes in sympathetic skin potential	27
95924	Testing of autonomic nervous system function; combined parasympathetic and sympathetic adrenergic function testing with at least 5 minutes of passive tilt	18
95925	Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in upper limbs	31
95926	Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in lower limbs	30
95927	Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in the trunk or head	31
95928	Central motor evoked potential study (transcranial motor stimulation); upper limbs	37
95929	Central motor evoked potential study (transcranial motor stimulation); lower limbs	39
95930	Visual evoked potential (VEP) testing central nervous system, checkerboard or flash	31
95933	Orbicularis oculi (blink) reflex, by electrodiagnostic testing	13
95935	<del>"H" reflex, by electrodiagnostic testing</del>	Deleted

Electroencephalography (EEG)  
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CPT Code	Description	RVU
95937	Neuromuscular junction testing (repetitive stimulation, paired stimuli), each nerve, any one method (for ultrasonography, see 76500 et seq.)	13
95938	Short-latency somatosensory evoked potential study, stimulation of any/all peripheral nerves or skin sites, recording from the central nervous system; in upper and lower limbs	83
95939	Central motor evoked potential study (transcranial motor stimulation); upper and lower limbs	108
95940	Continuous intraoperative neurophysiology monitoring in the operating room, one on one monitoring requiring personal attendance, each 15 minutes (List separately in addition to code for primary procedure)	3
95941	Continuous intraoperative neurophysiology monitoring from outside the operating room (remote or nearby) or for monitoring of more than one case while in the operating room, per hour (List separately in addition to code for primary procedure)	0
95943	Simultaneous, independent, quantitative measures of both parasympathetic function and sympathetic function, based on time-frequency analysis of heart rate variability concurrent with time-frequency analysis of continuous respiratory activity, with mean heart rate and blood pressure measures, during rest, paced (deep) breathing, Valsalva maneuvers, and head-up postural change	By Report
95950	Monitoring for identification and lateralization of cerebral seizure focus, electroencephalographic (e.g., 8 channel EEG) recording and interpretation, each 24 hours	71
95951	Monitoring for localization of cerebral seizure focus by cable or radio, 16 or more channel telemetry, combined electroencephalographic (EEG) and video recording and interpretation (e.g., for pre-surgical localization), each 24 hours	71
95953	Monitoring for localization of cerebral seizure focus by computerized portable 16 or more channel EEG, electroencephalographic (EEG) recording and interpretation, each 24 hours, unattended	73
95954	Pharmacological or physical activation requiring physician or other qualified health care professional attendance during EEG recording of activation phase (e.g., thiopental activation test)	92
95955	Electroencephalogram (EEG) during nonintracranial surgery (e.g., carotid surgery)	45
95956	Monitoring for localization of cerebral seizure focus by cable or radio, 16 or more channel telemetry, electroencephalographic (EEG) recording and interpretation, each 24 hours, attended by a technologist or nurse	404
95957	Digital analysis of electroencephalogram (EEG) (e.g., for epileptic spike analysis)	56
95958	Wada activation test for hemispheric function, including electroencephalographic (EEG) monitoring	99
95961	Functional cortical and subcortical mapping by stimulation and/or recording of electrodes on brain surface, or of depth electrodes, to provoke seizures or identify vital brain structures; initial hour of attendance by a physician or other qualified health care professional	40
95962	Functional cortical and subcortical mapping by stimulation and/or recording of electrodes on brain surface, or of depth electrodes, to provoke seizures or identify vital brain structures; each additional hour of attendance by a physician or other qualified health care professional (List separately in addition to code for primary procedure)	25
95965	Magnetoencephalography (MEG), recording and analysis; for spontaneous brain magnetic activity (e.g., epileptic cerebral cortex localization)	By Report

Electroencephalography (EEG)  
RVU Draft Recommendation 3-8-2017

CPT Code	Description	RVU
95966	Magnetoencephalography (MEG), recording and analysis; for evoked magnetic fields, single modality (e.g., sensory, motor, language, or visual cortex localization)	By Report
95967	Magnetoencephalography (MEG), recording and analysis; for evoked magnetic fields, each additional modality (e.g., sensory, motor, language, or visual cortex localization) (List separately in addition to code for primary procedure)	By Report
95970	Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple or complex brain, spinal cord, or peripheral (i.e., cranial nerve, peripheral nerve, sacral nerve, neuromuscular) neurostimulator pulse generator/transmitter, without reprogramming	19
95971	Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); simple spinal cord, or peripheral (i.e., peripheral nerve, sacral nerve, neuromuscular) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming	14
95972	Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex spinal cord, or peripheral (i.e., peripheral nerve, sacral nerve, neuromuscular) (except cranial nerve) neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming	17
95974	Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, with or without nerve interface testing, first hour	59
+ 95975	Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude, pulse duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient compliance measurements); complex cranial nerve neurostimulator pulse generator/transmitter, with intraoperative or subsequent programming, each additional 30 minutes after first hour (List separately in addition to code for primary procedure)	32
95978	Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, battery status, electrode selectability and polarity, impedance and patient compliance measurements), complex deep brain neurostimulator pulse generator/transmitter, with initial or subsequent programing; first hour	71
95979	Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, battery status, electrode selectability and polarity, impedance and patient compliance measurements), complex deep brain neurostimulator pulse generator/transmitter, with initial or subsequent programing; each additional 30 minutes after first hour (List separately in addition to code for primary procedure)	31

Electroencephalography (EEG)  
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CPT Code	Description	RVU
95980	Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements) gastric neurostimulator pulse generator/transmitter; intraoperative, with programming	4
95981	Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements) gastric neurostimulator pulse generator/transmitter; subsequent, without reprogramming	9
95982	Electronic analysis of implanted neurostimulator pulse generator system (e.g., rate, pulse amplitude and duration, configuration of wave form, battery status, electrode selectability, output modulation, cycling, impedance and patient measurements) gastric neurostimulator pulse generator/transmitter; subsequent, with reprogramming	15
95999	Unlisted neurological or neuromuscular diagnostic procedure	By Report
G0398	Home sleep test/type 2 portable	30
G0399	Home sleep test/type 3 portable	30
G0400	Home sleep test/type 4 portable	30

## CT Scanner Section 200- Chart of Accounts

Draft Recommendation 3-8-2017

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CT SCANNER

### Function

The CT (~~Computerized Tomography~~) Scanner ~~function provides~~ **uses** computerized tomography ~~principally of the head but also of other parts of the body~~ **imaging in order to diagnose a variety of disorders abnormalities.**

### Description

This cost center shall contain the direct ~~expenses~~ **expenses** incurred in providing CT scans, patient registration and up to six hours of recovery time. Included as direct expenses are: salaries and wages, employee benefits, professional fees (non-physician), supplies, (including Drugs incident to Radiology, i.e. contrast media), ~~etc.~~ purchased services, ~~x-ray tubes~~ **equipment**, maintenance costs (maintenance ~~contracts~~ **contracts** or bio-medical engineering costs if done in-house) on principal equipment, other direct expenses and transfers.

### Standard Unit of Measure: Relative Value Units

**Relative Value Units as determined by the Health Services Cost Review Commission (see Appendix D of this manual).**

### Data Source

The number of relative value units shall be the actual count maintained by the CT Scanner cost center.

### Reporting Schedule

Schedule D - Line D33

## CT Scanner Appendix D

### Draft Recommendation 3-8-2017

#### **Approach**

CT Scanner Relative Value Units were developed with the aid of an industry task force under the auspices of and approved by the Health Services Cost Review Commission. The descriptions of codes in this section of Appendix D were obtained from the 2017 edition of the Current Procedural Terminology (CPT) manual and the 2017 edition of the Healthcare Common Procedure Coding System (HCPCS). In assigning RVUs the group used the 2017 Medicare Physician Fee schedule (MPFS) released November 2, 2016. RVUs were assigned using the following protocol (“RVU Assignment Protocol”).

The RVUs reported in the 2017 MPFS include 2 decimal points. In order to maintain whole numbers in Appendix D, while maintaining appropriate relative value differences reported in the MPFS, the RVU work group agreed to remove the decimals by multiplying the reported RVUs by ten and then rounding the product of the calculation, where values less than X.5 are rounded down and all other values are rounded up.

1. CPT codes with RVUs listed in the MPFS.
  - a. For CPT codes with RVUs that include both professional (modifier 26) and technical (modifier TC) components, use only the technical (TC) component RVU.
  - b. CPT codes with only a single RVU listed
    - a. CPT codes that are considered technical only, the single RVU reported will be used.
    - b. CPT codes considered professional only are not listed in Appendix D.
2. CPT codes that do not have RVUs listed in the MPFS (e.g. CMS Status Code “C”)
  - a. CPT 76497 did not have a published RVU in the MPFS. As this code is for an unlisted procedure, RVUs should be developed “By Report” following the protocol below in the section “CPT Codes Without an Assigned RVU Value.”.
  - b. CPT 77013 did not have a published RVU in the MPFS. As these codes are bundled with a surgical code, these procedures should be reported under Interventional Radiology/Cardiovascular.
  - c. HCPCS 0042T did not have a published RVU in the MPS. Due to its similarity to CPT 70496, it was assigned 72 RVUs (58 RVUs plus 14 RVUs for double time post processing).
  - d. HCPCS 0351T-0354T did not have published RVU in the MPS. These are new technology codes and RVUs should be developed “By Report”.
3. CPT/HCPCS codes for which the published RVU did not make sense,
  - a. There were no deviations from published RVUs when present.
4. CPT 77014 is considered a Radiology- Therapeutic service and is not reportable in CT Scanner.

## CT Scanner Appendix D

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#### **Services With Both a HCPCS Code for Medicare and CPT Code for Non-Medicare**

All known HCPCS codes have been addressed in a payer-neutral fashion with this update. In instances of where Medicare implements a new HCPCS code to be utilized in lieu of a CPT code for a service, the RVU developed by the hospital must mirror the established CPT RVUs. The RVU for the service must be the same for all payers.

#### **CPT Codes with Bundled Procedures**

CPT codes from 2017 with a surgical component have been assigned a zero (0) RVU value. If a CT CPT becomes bundled with a surgical code or replaced with a surgical code, these procedures should be charged as Interventional Radiology/Cardiovascular (IRC) and the associated costs of the procedure are to be reclassified to the IRC cost center. Note: These IRC procedures may be charged based on actual start/stop times or based on the average case time (based on an annual time study) for the service.

#### **Surgical Component and Non-Invasive Exam on Same Day**

If a patient has a service with a surgical component (invasive) and non-invasive exam on same day – for example, an enhanced CT arthrogram and a CT of the joint- the patient will be charged based on IRC rules for the invasive exam and CT RVUs for the non-invasive exam.

#### **Intrathecal Injections**

If intrathecal injections are performed, the service should be reported under IRC. If the service does not include intrathecal injections, standard CT RVUs should be reported.

#### **Reporting of Imaging Guidance for Invasive Cases**

Standard imaging RVUs are only to be used for non-invasive imaging services occurring in an imaging suite. For invasive imaging services, the imaging guidance is either separately reportable or bundled into the code for the invasive service. Invasive imaging services occurring in an imaging suite must be charged using IRC minutes based on case time. For separately reportable imaging guidance, hospitals are to report one (1) IRC minute per imaging code. Imaging expenses associated with the guidance are to be allocated from the diagnostic imaging rate center to the IRC rate center.

When an operating room or operating room-clinic case involves intraoperative/intraprocedural imaging guidance or imaging services, standard RVUs are to be used if the imaging guidance is separately reportable from the surgical procedure. The surgical portion of these cases will remain charged based on minutes. If the imaging guidance is bundled into the code for the surgical procedure, standard imaging RVUs are not to be charged and any related imaging expenses should be allocated from the imaging department to the operating room or operating room-clinic rate center.

#### **CPT Codes without an Assigned RVU Value**

RVUs for new codes developed and reported by CMS after the 2017 reporting, must be developed “By Report”. When assigning RVUs to these new codes, hospitals should use the RVU Assignment Protocol described above where possible using the most current MPFS. For codes that are not listed in the MPFS, hospitals should assign RVUs based on time and resource intensity of the services provided compared to

## CT Scanner Appendix D

### Draft Recommendation 3-8-2017

like services in the department. Documentation of the assignment of RVUs to codes not listed in Appendix D should always be maintained by the hospital.

#### **General Guidelines**

The AMA CPT Code will be used as the identifier throughout the system. Assigned RVU's will be strictly tied to the CPT Code.

All RVUs are per CPT unless otherwise stated.

Standard supplies and contrast material are included in the RVU assignment and should not be assigned separately.

No drug is considered a routine part of any CT examination; however, sedation and pain reducing agents may be used to make procedures more easily tolerated. These drugs should NOT be included in the RVU of the exam but would be billed separately through the pharmacy on an "as needed" basis. Drugs should not be assigned an RVU.



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RVU Draft Recommendation 3-8-2017

CPT Code	Description	RVU
70450	CT Head or Brain w/o contrast	21
70460	CT Head or Brain w contrast	30
70470	CT Head or Brain w & w/o contrast	36
70480	CT Orbit, Sella, Posterior Fossa or outer, middle or inner ear w/o contrast	47
70481	CT Orbit, Sella, Posterior Fossa or ourter, middle or inner ear w/ contrast	58
70482	CT Orbit, Sella, Posterior Fossa or outer, middle or inner ear w/ & w/o contrast	64
70486	CT Maxillofacial area w/o contrast	27
70487	CT Maxillofacial area w contrast	31
70488	CT Maxillofacial area w & w/o contrast	40
70490	CT Soft Tissue Neck w/o contrast	36
70491	CT Soft Tissue Neck w/ contrast	47
70492	CT Soft Tissue Neck w/ & w/o contrast	58
70496	CT Angiography, <b>Head</b> w/ contrast, including noncontrast images, if performed and image postprocessing	58
70498	CT Angiography, <b>Neck</b> w/ contrast, including noncontrast images, if performed and image postprocessing	57
71250	CT Thorax w/o contrast	36
71260	CT Thorax w/ contrast	47
71270	CT Thorax w/ & w/o contrast	58
71275	CT Angiography, chest (noncoronary) w/ contrast; including noncontrast images, if performed & image postprocessing	59
72125	CT Cervical Spine w/o contrast - Constrast material in CT of spine is either by intrathecal or IV injection. For intrathecal injection use also 61055 or 62284. IV injection of contrast material is part of the CT procedure	37
72126	CT Cervical Spine w/ contrast - Constrast material in CT of spine is either by intrathecal or IV injection. For intrathecal injection use also 61055 or 62284. IV injection of contrast material is part of the CT procedure	47
72127	CT Cervical Spine w/ & w/o contrast Constrast material in CT of spine is either by intrathecal or IV injection. For intrathecal injection use also 61055 or 62284. IV injection of contrast material is part of the CT procedure	58
72128	CT Thoracic Spine w/o contrast Constrast material in CT of spine is either by intrathecal or IV injection. For intrathecal injection use also 61055 or 62284. IV injection of contrast material is part of the CT procedure	36
72129	CT Thoracic Spine w/ contrast Constrast material in CT of spine is either by intrathecal or IV injection. For intrathecal injection use also 61055 or 62284. IV injection of contrast material is part of the CT procedure	47

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CPT Code	Description	RVU
72130	CT Thoracic Spine w/ & w/o contrast Contrast material in CT of spine is either by intrathecal or IV injection. For intrathecal injection use also 61055 or 62284. IV injection of contrast material is part of the CT procedure	58
72131	CT Lumbar Spine w/o contrast Contrast material in CT of spine is either by intrathecal or IV injection. For intrathecal injection use also 61055 or 62284. IV injection of contrast material is part of the CT procedure	36
72132	CT Lumbar Spine w/ contrast Contrast material in CT of spine is either by intrathecal or IV injection. For intrathecal injection use also 61055 or 62284. IV injection of contrast material is part of the CT procedure	47
72133	CT Lumbar Spine w/ & w/o contrast Contrast material in CT of spine is either by intrathecal or IV injection. For intrathecal injection use also 61055 or 62284. IV injection of contrast material is part of the CT procedure	58
72191	CT Angiography; Pelvis w/ contrast, including noncontrast images, if performed, and image postprocessing	60
72192	CT Pelvis w/o contrast	26
72193	CT Pelvis w contrast	47
72194	CT Pelvis w/ & w/o contrast	56
73200	CT Upper Extremity w/o contrast	36
73201	CT Upper Extremity w/ contrast	46
73201	CT Upper Extremity w contrast, w/ fluoroscopic guided injection for enhanced CT Arthrography	46
73202	CT Upper Extremity w/ & w/o contrast	61
73206	CT Angiography, Upper Extremity w/ contrast; including noncontrast images, if performed and image postprocessing	67
73700	CT Lower Extremity w/o contrast	36
73701	CT Lower Extremity w contrast	47
73702	CT Lower Extremity w/ & w/o contrast	60
73706	CT Angiography, Lower Extremity w/ contrast, including noncontrast images, if performed, and image postprocessing	73
74150	CT Abdomen w/o contrast	25
74160	CT Abdomen w contrast	47
74170	CT Abdomen w/ & w/o contrast	54
74174	CT Angiography, Abdomen & Pelvis w/ contrast material, including noncontrast images, if performed and image postprocessing	78
74175	CT Angiography, Abdomen w/ contrast material,, including noncontrast images, if performed and image postprocessing	61
74176	CT Abdomen & Pelvis w/o contrast material	32
74177	CT Abdomen & Pelvis w contrast	62
74178	CT Abdomen & Pelvis w/ & w/o contrast	71
74261	CT colonography diagnostic, including image postprocessing; w/o contrast	103

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CPT Code	Description	RVU
74262	CT colonography diagnostic, including image postprocessing; w/ contrast including non-contrast images, if performed	118
74263	CT colonography, screening, including image postprocessing	180
75571	CT Heart w/o contrast; w/ quantitative evaluation of coronary calcium	20
75572	CT Heart w/ contrast material, for evaluation of cardiac structure & morphology (includes 3D imaging postprocessing, assessment of cardiac function and evaluation of venous structures, if performed)	55
75573	CT Heart w/ contrast material, for evaluation of cardiac structure & morphology in the setting of congenital disease (includes 3D imaging postprocessing, assessment of LV cardiac function, RV structure and function & evaluation of venous structures, if performed)	74
75574	CT Angiography, heart, CABG (coronary arteries and bypass graft - when present), with contrast, includes 3D imaging postprocessing (including evaluation of cardiac structure & morphology, assessment of cardiac function & evaluation of venous structures, if performed)	85
75635	CT Angiography, Abdominal aorta and bilateral iliofemoral lower extremity runoff, w/ contrast, including noncontrast images, if performed, and image postprocessing	74
75989	Radiological Guidance (ie. Fluoroscopy, US, or CT), for percutaneous drainage (ie. Abscess, specimen collection), w/ placement of catheter, radiological supervision and interpretation	IRC
76070	<del>CT Bone Density</del>	<del>15</del>
76355	<del>CT Stereotactic Tumor Localization</del>	<del>25</del>
76360	<del>CT Guidance Needle Biopsy</del>	<del>40</del>
76365	<del>CT Guidance Cyst Aspiration</del>	<del>40</del>
76370	<del>CT Guidance Radiation Therapy Fields</del>	<del>33</del>
76375	<del>CT Multiplanar (Sag, Cor. Obl) Reconstruction</del>	<del>15</del>
76375	<del>CT 3D Reconstruction</del>	<del>35</del>
76376	3D Rendering w/ interpretation and reporting of CT, MRI, US, or other tomographic modality w/ image post processing under concurrent supervision; <b>not</b> requiring image postprocessing on an independent workstation - use in conjunction w/ code(s) for base imaging procedure	4
76377	3D Rendering w/ interpretation and reporting of CT, MRI, US, or other tomographic modality w/ image post processing under concurrent supervision; <b>requiring</b> image postprocessing on an independent workstation - use in conjunction w/ code(s) for base imaging procedure	9
76380	CT limited or localized follow-up study	27
76497	Unlisted CT Procedure (diagnostic or interventional)	By Report
77011	CT Guidance for stereotactic localization (do not report in conjunction w/ 22586, 0195T, 0196T, 0309T)	IRC

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CPT Code	Description	RVU
77012	CT Guidance for needle placement (eg. Biopsy, aspiration, injection, localization device), radiological supervision and interpretation (do not report in conjunction w/ 10030, 22586, 27906, 32554-32557, 64479-64484,64490-64495, 64633-64636, 0195T, 0196T, 0232T, 0309T)	IRC
77013	CT Guidance for, and monitoring of, parenchymal tissue ablation (do not report in conjunction w/ 20982, 20983, 0340T)	IRC
77078	CT Bone mineral density study, 1 or more sites, axial skeleton (hips, pelvis, spine)	29
G0297	Low dose CT scan (LDCT) for lung cancer screening	57
0042T	Cerebral perfusion analysis using CT w/ contrast, including post-processing of parametric maps with determination of cerebral blood flow, cerebral blood volume, and mean transit time	72
0351T	Optical coherence tomography of breast or axillary lymph node, excised tissue, each specimen; real time intraoperative	By Report
0352T	Optical coherence tomography of breast or axillary lymph node, excised tissue, each specimen; interpretation and report, real time or referred	By Report
0353T	Optical coherence tomography of breast, surgical cavity; real time intraoperative	By Report
0354T	Optical coherence tomography of breast, surgical cavity; interpretation and report, real time or referred	By Report

MRI Scanner  
Section 200- Chart of Accounts

Draft Recommendation 3-8-2017

7350 MRI SCANNER

Function

The MRI (~~Magnetic Resonance Imaging~~) Scanner ~~function provides~~ uses magnetic resonance imaging principally of the head but also of other parts of the body in order to diagnose a variety of disorders abnormalities.

Description

This cost center shall contain the direct expenses incurred in providing MRI scans, patient registration and up to six hours of recovery time. Included as direct expenses are: salaries and wages, employee benefits, professional fees (non-physician) supplies, (including Drugs incident to Radiology, i.e. contrast media) etc., purchased services, maintenance costs (maintenance contracts or bio-medical engineering costs if done in-house) on principal equipment, other direct expenses and transfers.

Standard Unit of Measure: Relative Value Units

Relative Value Units as determined by the Health Services Cost Review Commission (see Appendix D of this manual).

Data Source

The number of relative value units shall be the actual count maintained by the MRI Scanner cost center.

Reporting Schedule

Schedule D - Line D51

## Magnetic Resonance Imaging Appendix D

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### MRI

#### Approach

Magnetic Resonance Imaging Relative Value Units were developed with the aid of an industry task force under the auspices of and approved by the Health Services Cost Review Commission. The descriptions of codes in this section of Appendix D were obtained from the 2017 edition of the Current Procedural Terminology (CPT) manual and the 2017 edition of the Healthcare Common Procedure Coding System (HCPCS). In assigning RVUs the group used the 2017 Medicare Physician Fee schedule (MPFS) released November 2, 2016. RVUs were assigned using the following protocol (“RVU Assignment Protocol”).

The RVUs reported in the 2017 MPFS include 2 decimal points. In order to maintain whole numbers in Appendix D, while maintaining appropriate relative value differences reported in the MPFS, the RVU work group agreed to remove the decimals by multiplying the reported RVUs by ten and then rounding the product of the calculation, where values less than X.5 are rounded down and all other values are rounded up.

1. CPT codes with RVUs listed in the MPFS.
  - a. For CPT codes with RVUs that include both professional (modifier 26) and technical (modifier TC) components, use only the technical (TC) component RVU.
  - b. CPT codes with only a single RVU listed.
    - a. CPT codes that are considered technical only, the single RVU reported will be used.
    - b. CPT codes considered professional only are not listed in Appendix D.
2. CPT codes that do not have RVUs listed in the MPFS (e.g. CMS Status Code “C”).
  - a. CPT 77022 did not have a published RVU in the MPFS. As these codes are bundled with a surgical code, these procedures should be reported under Interventional Radiology/Cardiovascular.
  - b. CPT 70557, 70558 and 70559 did not have a published RVU in the MPFS. As these codes are performing intraoperatively, not in the MR suite, these will not have MRI RVUs.
  - c. CPT 70555 did not have a published RVU in the MPFS. As this code is similar to 70554, it was set to mirror 70554. See #3 below.
  - d. CPT 76498 did not have a published RVU in the MPFS. As this code is for an unlisted procedure, RVUs should be developed “By Report”.
  - e. CPT 0159T did not have a published RVU in the MPFS. As this procedure is always performed in conjunction with a primary procedure, one RVU will be assigned.
  - f. HCPCS 0398T did not have a published RVU in the MPFS. Intracranial procedures are typically performed in the operating room. However, this code is for the MRI piece. Hospital data to establish RVUs is limited as this is a new code and very few hospitals are performing this procedure. Therefore RVUs should be developed “By Report”

## Magnetic Resonance Imaging Appendix D

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following the protocol below in the section “CPT Codes Without an Assigned RVU Value.”

3. CPT/HCPCS codes for which the published RVU did not make sense
  - a. CPT 70554 has a published RVU in the MPFS that is too low for the amount of resources involved. On the professional side, the physician charges this CPT and CPT 96020. Given the significant time and resources involved, the group felt there was a valid reason for deviating from the prescribed methodology. Therefore, an additional 54 RVUs will be added to the MPFS for a total of 150 (96 + 54 = 150).

#### **Services With Both a HCPCS Code for Medicare and CPT Code for Non-Medicare**

All known HCPCS codes have been addressed in a payer-neutral fashion with this update. In instances of where Medicare implements a new HCPCS code to be utilized in lieu of a CPT code for a service, the RVU developed by the hospital must mirror the established CPT RVUs. The RVU for the service must be the same for all payers.

#### **CPT Codes with Bundled Procedures**

CPT codes from 2017 with a surgical component have been assigned a zero (0) RVU value. If a MRI CPT becomes bundled with a surgical code or replaced with a surgical code, these procedures should be charged as Interventional Radiology/Cardiovascular (IRC) and the associated costs of the procedure are to be reclassified to the IRC cost center. Note: These IRC procedures may be charged based on actual start/stop times or based on the average case time (based on an annual time study) for the service.

#### **Surgical Component and Non-Invasive Exam on Same Day**

If a patient has a service with a surgical component (invasive) and non-invasive exam on same day – for example, an enhanced MR arthrogram and a MRI of the joint- the patient will be charged based on IRC rules for the invasive exam and MRI RVUs for the non-invasive exam.

#### **Reporting of Imaging Guidance for Invasive Cases**

Standard imaging RVUs are only to be used for non-invasive imaging services occurring in an imaging suite. For invasive imaging services, the imaging guidance is either separately reportable or bundled into the code for the invasive service. Invasive imaging services occurring in an imaging suite must be charged using IRC minutes based on case time. For separately reportable imaging guidance, hospitals are to report one (1) IRC minute per imaging code. Imaging expenses associated with the guidance are to be allocated from the diagnostic imaging rate center to the IRC rate center.

When an operating room or operating room-clinic case involves intraoperative/intraprocedural imaging guidance or imaging services, standard imaging RVUs are to be used if the imaging guidance is separately reportable from the surgical procedure. The surgical portion of these cases will remain charged based on minutes. If the imaging guidance is bundled into the code for the surgical procedure, standard imaging RVUs are not to be charged and any related imaging expenses should be allocated from the imaging department to the operating room or operating room-clinic rate center.

#### **CPT Codes without an Assigned RVU Value**

## Magnetic Resonance Imaging Appendix D

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RVUs for new codes developed and reported by CMS after the 2017 reporting, must be developed “By Report”. When assigning RVUs to these new codes, hospitals should use the RVU Assignment Protocol described above where possible using the most current MPFS. For codes that are not listed in the MPFS, hospitals should assign RVUs based on time and resource intensity of the services provided compared to like services in the department. Documentation of the assignment of RVUs to codes not listed in Appendix D should always be maintained by the hospital.

#### **General Guidelines**

The AMA CPT Code will be used as the identifier throughout the system. Assigned RVU's will be strictly tied to the CPT Code.

All RVUs are per CPT unless otherwise stated.

Standard supplies and contrast material are included in the RVU assignment and should not be assigned separately.

No drug is considered a routine part of any MRI examination; however, sedation and pain reducing agents may be used to make procedures more easily tolerated. These drugs should NOT be included in the RVU of the exam but would be billed separately through the pharmacy on an "as needed" basis. Drugs should not be assigned an RVU.



## MRI

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CPT Code	Description	RVU
70336	MRI Temporomandibular joints	70
70540	MRI Orbit, Face, and/or Neck w/o contrast	66
70541	<del>MRA Brain and/or Neck</del>	18
70542	MRI Orbit, Face, and/or Neck w/ contrast	72
70543	MRI Orbit, Face, and/or Neck w/ & w/o contrast	87
70544	MRA Head w/o contrast	93
70545	MRA Head w contrast	92
70546	MRA Head w/ & w/o contrast	143
70547	MRA Neck w/o contrast	94
70548	MRA Neck w contrast	99
70549	MRA Neck w & w/o contrast	144
70551	MRI Brain (including brain stem), w/o contrast	44
70552	MRI Brain (including brain stem), w/ contrast	65
70553	MRI Brain (including brain stem), w/ & w/o contrast	74
70554	MRI Brain, functional MRI; including test selection and administration of repetitive body part movement and/or visual stimulation, not requiring physician or psychologist administration	150
70555	MRI Brain, functional MRI; including test selection and administration of repetitive body part movement and/or visual stimulation, requiring physician or psychologist administration of entire neurofunctional testing	150
71550	MRI Chest (e.g. for evaluation of hilar and mediastinal lymphadenopathy); w/o contrast	96
71551	MRI Chest (e.g. for evaluation of hilar and mediastinal lymphadenopathy); w/ contrast	105
71552	MRI Chest (e.g. for evaluation of hilar and mediastinal lymphadenopathy); w/ & w/o contrast	131
71555	MRA Chest (excluding myocardium) w or w/o contrast	87
72141	MRI, C-spine, spinal canal and contents; w/o contrast	42
72142	MRI, C-spine, spinal canal and contents; w/ contrast	66
72146	MRI, T-spine, spinal canal and contents; w/o contrast	42
72147	MRI, T-spine, spinal canal and contents; w/ contrast	66
72148	MRI, L-spine, spinal canal and contents; w/o contrast	42
72149	MRI, L-spine, spinal canal and contents; w/ contrast	65
72156	MRI, C-spine, spinal canal and contents; w/ & w/o contrast	74
72157	MRI, T-spine, spinal canal and contents; w/ & w/o contrast	75
72158	MRI, L-spine, spinal canal and contents; w/ & w/o contrast	74
72159	MRA spinal canal and contents w or w/o contrast	92
72195	MRI Pelvis w/o contrast	85
72196	MRI Pelvis w/ contrast	91
72197	MRI Pelvis w/ & w/o contrast	110
72198	MRA Pelvis w/ or w/o contrast	88
73218	MRI Upper Extremity, other than joint; w/o contrast	84
73219	MRI Upper Extremity, other than joint; w/ contrast	90
73220	MRI Upper Extremity, other than joint; w/ & w/o contrast	110
73221	MRI any Joint of Upper Extremity w/o contrast	47

MRI  
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CPT Code	Description	RVU
73222	MRI any Joint of Upper Extremity w/ contrast	83
73223	MRI any Joint of Upper Extremity w/ & w/o contrast	102
73225	MRA Upper Extremity w or w/o contrast	91
73718	MRI Lower Extremity, other than joint, w/o contrast	83
73719	MRI Lower Extremity, other than joint, w/ contrast	91
73720	MRI Lower Extremity, other than joint, w/ & w/o contrast	111
73721	MRI any Joint of Lower Extremity w/o contrast	47
73722	MRI any Joint of Lower Extremity w/ contrast	84
73723	MRI any Joint of Lower Extremity w/ & w/o contrast	102
73725	MRA Lower Extremity w/ or w/o contrast	87
74181	MRI Abdomen w/o contrast	73
74182	MRI Abdomen w/ contrast	103
74183	MRI Abdomen w & w/o contrast	111
74185	MRA Abdomen, w/ or w/o contrast	88
74712	MRI Fetal; including placental and maternal pelvic imaging when performed; single or first gestation	93
74713	MRI Fetal; including placental and maternal pelvic imaging when performed; each additional gestation	39
75552	<del>Morphology, without contrast</del>	<del>18</del>
75553	<del>Morphology, with contrast</del>	<del>21</del>
75554	<del>Cardiac Function complete</del>	<del>25</del>
75555	<del>Cardiac Function limited</del>	<del>18</del>
75556	<del>Cardiac Velocity Flow/Map</del>	<del>25</del>
75557	Cardiac MRI for morphology and function w/o contrast	57
75559	Cardiac MRI for morphology and function w/o contrast; w/ stress imaging	83
75561	Cardiac MRI for morphology and function w/ & w/o contrast	83
75563	Cardiac MRI for morphology and function w/ & w/o contrast; w/ stress imaging	101
75565	Cardiac MRI for velocity flow mapping (list separately in addition to code for primary procedure)	12
76093	<del>Breast, unilateral</del>	<del>13</del>
76094	<del>Breast, bilateral</del>	<del>18</del>
76390	Magnetic Resonance Spectroscopy	106
76400	<del>Bone Marrow</del>	<del>13</del>
76498	Unlisted magnetic resonance procedure (e.g. diagnostic, interventional)	By Report
77021	Magnetic Resonance Guidance for needle placement (eg. Biopsy, needle aspiration, injection, or placement of localization device) radiological supervision and interpretation (do not report in conjunction w/ 10030,19085, 19287, 32554 ,32555, 32556, 32557 or 0232T)	IRC
77022	Magnetic Resonance Guidance for monitoring of parenchymal tissue ablation	IRC
77058	MRI Breast w/ and/or w/o constrast; unilateral	129
77059	MRI Breast w/ and/or w/o constrast; bilateral	128

MRI  
RVU Draft Recommendation 3-8-2017

CPT Code	Description	RVU
77084	MRI Bone Marrow blood supply	87
+0159T	Computer-aided detection, including computer algorithm analysis of MRI image data for lesion detection/characterization, pharmacokinetic analysis, w/ further physician review for interpretation, breast MRI (List separately in addition to code for primary procedure)	1
0398T	MRI guided high intensity focused US (MRgFUS), stereotactic ablation lesion, intracranial for movement disorder including stereotactic navigation and frame placement when performed	By Report

# Legislative Update

The Legislative Update will be presented at the Commission Meeting

## Update from CRISP

Representatives from CRISP will present slides and materials during the Commission meeting

State of Maryland  
Department of Health and Mental Hygiene



Nelson J. Sabatini  
Chairman  
Herbert S. Wong, PhD  
Vice-Chairman  
Joseph Antos, PhD  
Victoria W. Bayless  
George H. Bone,  
M.D.  
John M. Colmers  
Jack C. Keane

Donna Kinzer  
Executive Director  
Katie Wunderlich, Director  
Engagement  
and Alignment  
Sule Gerovich, PhD, Director  
Population Based  
Methodologies  
Chris L. Peterson, Director  
Clinical and Financial  
Information  
Gerard J. Schmith, Director  
Revenue and Regulation  
Compliance

**Health Services Cost Review Commission**

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**TO: Commissioners**  
**FROM: HSCRC Staff**  
**DATE: March 8, 2017**  
**RE: Hearing and Meeting Schedule**

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April 12, 2017      To be determined - 4160 Patterson Avenue  
HSCRC/MHCC Conference Room  
May 10, 2017      To be determined - 4160 Patterson Avenue  
HSCRC/MHCC Conference Room

Please note that Commissioner's binders will be available in the Commission's office at 11:45 a.m.

The Agenda for the Executive and Public Sessions will be available for your review on the Thursday before the Commission meeting on the Commission's website at <http://hsrc.maryland.gov/commission-meetings-2017.cfm>.

Post-meeting documents will be available on the Commission's website following the Commission meeting.