**Professional Component Payment Reductions for Diagnostic Imaging Examinations When More Than One Service Is Rendered by the Same Provider in the Same Session: An Analysis of Relevant Payment Policy**

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**Purpose:** The aim of this study was to assess potential physician work efficiencies when more than one diagnostic imaging study is interpreted by the same provider during the same session.

**Methods:** Medicare Physician Fee Schedule data from the American Medical Association Resource-Based Relative Value Scale Data Manager for 2011 were analyzed to quantify relative contributions of preservice, intraservice, and postservice physician work to the total work of rendering diagnostic imaging services. An expert panel review identified potential duplications in preservice and postservice work when multiple examinations are performed on the same patient during the same session. Maximum potential percentage work duplication for various diagnostic imaging modalities was calculated and compared to US Government Accountability Office estimates.

**Results:** The relative contributions of preservice and postservice work to total work varied by modality, ranging from 20% [computed tomography (CT)] to 33% (ultrasound). The maximum percentage of potentially duplicated preservice and postservice activity ranged from 19% (nuclear medicine) to 24% (ultrasound). Maximum mean potentially duplicated work relative value units ranged from 0.0212 for radiography to 0.0953 for magnetic resonance imaging (MRI). Maximum percentage work reduction ranged from 4.32% for CT to 8.15% for ultrasound. This corresponds to maximum professional Physician Fee Schedule reductions of only 2.96% (CT) to 5.45% (ultrasound), approximating an order of magnitude less than the Government Accountability Office’s recommendations.

**Conclusion:** Although potential efficiencies in physician work occur when multiple services are provided to the same patient during the same session, these are highly variable and considerably less than previously estimated.

**Key Words:** Professional component, relative value unit, multiple procedure payment reduction, physician work, efficiencies

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**INTRODUCTION**

In its recent report *Medicare Physician Payments: Fees Could Better Reflect Efficiencies Achieved When Services Are Provided Together*, the US Government Accountability Office (GAO) [1] asserted that efficiencies associated with multiple medical services when performed together by the same provider on the same day could create savings in the Medicare fee-for-service program. This analysis was based on a review of information from the

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American Medical Association’s (AMA)/Specialty Society Relative Value Scale Update Committee (RUC), the AMA’s Resource-Based Relative Value Scale (RBRVS) Data Manager, impressions of Medicare contractor medical directors, and interviews with practicing physicians. The report concluded that the “systematic” application of a 25% multiple procedure payment reduction (MPPR) to the physician work component of the physician payment for 118 nonsurgical code pairs could save Medicare $175 million annually. In doing so, the GAO departed from historic budget neutrality mechanisms and recommended that these savings be used to “ensure the fiscal health of the Medicare program” rather than redistributing them to other physician services [1].

Despite challenges by the AMA [1], the Medicare Payment Advisory Commission (MedPAC) used the GAO report as the basis of recent recommendations to Congress, directing the Secretary of Health and Human Services “to apply a multiple procedure payment reduction to the professional component of diagnostic imaging services provided by the same practitioner in the same session” [2]. To our knowledge, MedPAC did not confirm the methods used by the GAO with any additional analysis, nor are we aware of any published analysis of the GAO report. Furthermore, unlike the GAO, MedPAC restricted its recommendations to only diagnostic imaging and did not propose a specific value for a systematic MPPR. To assess the appropriateness of MedPAC’s reliance on the GAO report, we conducted an independent analysis of the RBRVS Data Manager files for diagnostic imaging to better quantify potential efficiencies when more than one diagnostic imaging study is performed by the same provider during the same session.

**METHODS**

A comprehensive review of all relevant data from the commercially available AMA RBRVS Data Manager was performed, focusing on previous rigorously defined elements of physician work for individual physician services. Physician work is specifically divided into work before the performance of the actual service (“preservice work”), work involved in performing the service itself (“intraservice work”), and work after the specific service was performed (“postservice work”) [3]. For imaging services, examples of these activities include protocoling an examination in the preservice period, interpreting an examination in the intraservice period, and communicating critical results with a referring physician in the postservice period.

In developing its relative value unit (RVU) recommendations to CMS, the RUC, by historic convention, considers the value of preservice and postservice physician time to be 0.0224 RVUs/min [4]. The value of the intraservice physician time, often termed “intensity,” is almost always higher than that of preservice and postservice work and varies considerably depending on necessary technical skill and physical effort, mental effort and judgment, and the psychological stress associated with a physician’s concerns about patient risk or injury [3]. Intensity determinations capture the inherent variability in those various facets of physician work.

We reviewed time data from the AMA RBRVS Data Manager for the 2011 Medicare Physician Fee Schedule to determine the relative contributions of preservice, intraservice, and postservice time to the total time involved in rendering common diagnostic imaging services within the 70000 and 90000 series of Current Procedural Terminology (CPT) codes. This permitted a calculation of the relative contributions of the preservice and postservice work to physician work. We used only those services with assigned preservice and postservice time, specifically excluding ZZZ global period codes (add-on codes always reported in conjunction with others) and RUC-valued codes for which only intraservice time is available. We also excluded imaging guidance, therapeutic, and supervision and interpretation codes because these were all designed to be reported in conjunction with other codes. Representative and commonly performed services within each modality were selected for expert panel analysis. These included 21 diagnostic radiology and fluoroscopy codes, 32 CT codes, 13 nuclear medicine codes, 35 ultrasound codes, and 34 MRI codes. Selected CPT codes are outlined in Table 1.

An expert panel of 5 radiologists was enlisted to review the activities typically performed during preservice and postservice periods for each code to determine which activities are potentially duplicated when multiple examinations are performed by the same provider during the same session. Members of the expert panel are all familiar with the RBRVS process and serve as either voting members of the RUC (B.A.), current or former formal specialty society advisors to the RUC (G.M., W.D.D., R.M.B.), or formal alternate advisors (E.S.). Specific descriptions of physician work for 5 imaging modalities, as detailed in the RBRVS Data Manager files, were used to create a table of activities performed by interpreting physicians during preservice and postservice periods (Table 2). The modalities selected were radiography and fluoroscopy, ultrasound, nuclear medicine, CT, and MRI. Our panel reviewed a number of work descriptions for services in each modality and developed a roster of typical preservice and postservice physician activities. After determining the average preservice and postservice time for each modality, our panel estimated the proportionate time allocated to each activity and the percentage of maximum potential duplication for each activity when more than one imaging service within the same modality is performed. We generally considered any activity performed once (eg, obtaining informed consent) to have 100% of potential duplication, any activity that required some additional work (eg, discussing findings with the referring physician) to have 50% potential duplication, and any activity that was largely unique to each
service (eg, reviewing relevant prior images) to have 5% potential duplication. This allowed a calculation of maximum potential duplication of preservice and postservice time for each modality.

Using the total professional component (PC) RVU for each service, we identified the contributions of practice expense and malpractice RVUs to the PC for these CPT codes. Because practice expense and the risk for malpractice do not decrease when multiple examinations of the same modality are performed on the same day, these components should not change as a result of a MPPR for physician work. Therefore, we also determined the percentage contribution of this reduced work to the total PC RVUs. In other words, because the GAO did not propose a reduction in any of the components of the PC payment other than physician work, we elected to exclude practice expense and malpractice RVUs from the calculation of a MPPR for the PC.

Finally, we calculated the maximum potential percentage of duplicated total PC work on the basis of the assumptions of the GAO study for each diagnostic imaging modality as follows:

- We determined the average preservice and postservice time for each diagnostic imaging modality.
- Using the established value of 0.0224 RVUs/min, we determined the percentage contribution of preservice and postservice work to the average work RVU value for each modality.
- We applied the percentage of maximum potential duplicated preservice and postservice work, as developed by our expert panel, to the percent contribution of preservice and postservice work to determine a work reduction percentage when two or more services of the same modality are performed by the same provider in the same session.
- We applied this percentage to the average preservice and postservice work value for all codes in a particular modality to develop an average RVU reduction in work value for each modality for second and subsequent examinations.
- The work value adjustment was then subtracted from the total PC RVU to determine the adjusted total PC RVU for second and subsequent examinations.

### Table 1. Current Procedural Terminology® codes by modality selected for analysis

<table>
<thead>
<tr>
<th>Modality</th>
<th>Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiography and fluoroscopy</td>
<td>71010, 71020, 73080, 73100, 73110, 73120, 73130, 73140, 73610, 73630, 74000, 74020, 74022, 74251, 77055, 77056, 77057, 77076, 77080, 77081, and 77082</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>76510, 76511, 76512, 76514, 76536, 76700, 76776, 76801, 76805, 76811, 76813, 76815, 76816, 76817, 76818, 76819, 76820, 76821, 76825, 76830, 76831, 76873, 76881, 76882, 93306, 93307, 93312, 93350, 93351, 93890, 93892, 93893, 93922, 93923, and 93924</td>
</tr>
<tr>
<td>Nuclear medicine</td>
<td>78306, 78315, 78451, 78452, 78453, 78454, 78802, 78811, 78812, 78813, 78814, 78815, and 78816</td>
</tr>
<tr>
<td>CT</td>
<td>70496, 70498, 71250, 71260, 71275, 72125, 72128, 72131, 72191, 72192, 72193, 73200, 73206, 73700, 73706, 74150, 74160, 74175, 74176, 74177, 74178, 74261, 74262, 74263, 75571, 75572, 75573, 75574, 75635, 75636, 76376, 76377, and 77079</td>
</tr>
<tr>
<td>MRI</td>
<td>70542, 70543, 70544, 70545, 70546, 70547, 70548, 70549, 70551, 70554, 70555, 71552, 71555, 72159, 72196, 72197, 72198, 73219, 73220, 73222, 73223, 73225, 73719, 73720, 73722, 73723, 73725, 74182, 74185, 74188, 75557, 75561, and 75563</td>
</tr>
</tbody>
</table>

### Table 2. Definitions

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preservice</td>
<td>The preservice period includes physician work provided before the onset of the procedure and may include review of records, review of prior imaging, and clinical preparation (eg, protocol determination and communications with technologists).</td>
</tr>
<tr>
<td>Intraservice</td>
<td>The intraservice period begins at the onset of the examination and ends after the examination is interpreted and includes interpretation and report preparation.</td>
</tr>
<tr>
<td>Postservice</td>
<td>Activities in the postservice period may include report management (eg, signing off on the report for the medical record) and communication (eg, discussions with the patient and referring physician if performed).</td>
</tr>
<tr>
<td>XXX*</td>
<td>The global concept does not apply to this code (eg, evaluation and management services, anesthesia, laboratory, and radiologic procedures).</td>
</tr>
<tr>
<td>000*</td>
<td>Endoscopic or minor procedure with related preoperative and postoperative relative values on the day of the procedure only included in the fee schedule payment amount; evaluation and management services on the day of the procedure generally not payable.</td>
</tr>
<tr>
<td>010*</td>
<td>Minor procedure with preoperative relative values on the day of the procedure and postoperative relative values during a 10-day postoperative period included in the fee schedule amount; evaluation and management services on the day of the procedure and during the 10-day postoperative period generally not payable.</td>
</tr>
<tr>
<td>090*</td>
<td>Major surgery with a 1-day preoperative period and 90-day postoperative period included in the fee schedule amount.</td>
</tr>
<tr>
<td>ZZZ*</td>
<td>The code is related to another service and is always included in the global period of the primary service. These represent add-on codes.</td>
</tr>
</tbody>
</table>

*Included in the 2011 Medicare Physician Fee Schedule final rule.
We then used this value to develop a percentage reduction to the total PC RVU. An example of this analysis for a code pair in the CT family is illustrated in Table 3.

RESULTS

The time attributable to the preservice and postservice periods of imaging studies varied considerably among modalities, ranging from a mean of 4.4 ± 4.3 minutes for radiography and fluoroscopy to a mean of 19.8 ± 7.8 minutes for nuclear medicine, as outlined in Table 4. The large standard deviations within each modality indicate considerable intramodality variation in preservice and postservice time as well. Similarly, the relative contribution of preservice and postservice work to total work varied considerably between modalities. This relative contribution was highest for ultrasound (38%) and lowest for MRI (22%). For each modality family, the contribution of preservice and postservice work to total work was substantially less than the contribution of preservice and postservice time to total time due to the overall higher intensity of intraservice work. This difference is illustrated in Table 5, which reflects the average of the percent contributions of pre- and postservice time and work for each code within a modality.

The maximum percentage of potentially duplicated preservice and postservice activity varied as well by modality, ranging from 19% for nuclear medicine services to 24% for ultrasound. The mean service maximum potential duplicated work RVU similarly varied by modality, ranging from 0.0212 RVUs for radiography and fluoroscopy to 0.0953 RVUs for MRI.

Table 3. Sample calculations of percent savings for representative CT code pair

<table>
<thead>
<tr>
<th>Preservice Time Average</th>
<th>Postservice Time Average</th>
<th>Sum Average Preservice and Postservice Time</th>
<th>Contribution Of Preservice and Postservice Time to Total Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>5.0</td>
<td>8.0</td>
<td>39%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preservice and Postservice Work (0.0224* Preservice and Postservice Time)</th>
<th>Preservice and Postservice Work Contribution to Work RVU</th>
<th>Maximum % Duplication of Preservice and Postservice Work</th>
<th>Reduced Work RVU For Second Exam</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1792</td>
<td>15.38%</td>
<td>21.54%</td>
<td>0.0386</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Work RVU Average</th>
<th>Adjusted RVU For Second Exam (Average Work RVU-Reduced Work)</th>
<th>Work Reduction Calculation</th>
<th>Work Reduction Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.17</td>
<td>1.13</td>
<td>1 - (1.13/1.17)%</td>
<td>3.31%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total PC RVU Average</th>
<th>Adjusted Total PC RVU (Average Total RVU - Reduced Work)</th>
<th>Total PC RVU Reduction Calculation</th>
<th>% PC Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.71</td>
<td>1.67</td>
<td>1 - (1.71/1.67)%</td>
<td>2.26%</td>
</tr>
</tbody>
</table>

Note: Code pairs used: 71260 (Computed tomography, thorax; with contrast material(s)/23 total time (3 pre, 15 intra, and 5 post)/work RVU of 1.24/total RVU (work + PE + MP) of 1.83. 72192 (Computed tomography, pelvis; without contrast material)/18 total time (3 pre, 10 intra, and 5 post)/work RVU of 1.09/total RVU (work + PE + MP) of 1.59. MP = malpractice; PC = professional component; PE = practice expense; RVU = relative value unit.

Vignette: A patient seen in the emergency department after a motor vehicle accident is noted to have multiple pelvic fractures and a wide mediastinum on plain radiography. A CT scan of the thorax is ordered by the thoracic surgeon to evaluate and characterize the potential aortic laceration, and CT of the pelvis without contrast is ordered by the orthopedic surgeon for surgical planning of the pelvic fractures. The Table illustrates our logic in determining the percentage contribution of duplicative physician work to total work RVUs and total PC RVUs for the second examination.

Table 4. Variability of preservice and postservice time

<table>
<thead>
<tr>
<th>Modality</th>
<th>Preservice Time Mean ± SD</th>
<th>Preservice Time COV</th>
<th>Postservice Time Mean ± SD</th>
<th>Postservice Time COV</th>
<th>Total Pre and Postservice Time Mean ± SD</th>
<th>Total Pre and Postservice Time COV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiography and fluoroscopy</td>
<td>1.7 ± 1.4</td>
<td>82</td>
<td>2.6 ± 2.9</td>
<td>112</td>
<td>4.4 ± 4.3</td>
<td>98</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>6.8 ± 4.0</td>
<td>59</td>
<td>7.6 ± 3.7</td>
<td>49</td>
<td>14.4 ± 7.0</td>
<td>49</td>
</tr>
<tr>
<td>Nuclear medicine</td>
<td>10.2 ± 4.1</td>
<td>40</td>
<td>9.6 ± 3.8</td>
<td>40</td>
<td>19.8 ± 7.8</td>
<td>39</td>
</tr>
<tr>
<td>CT</td>
<td>6.4 ± 3.0</td>
<td>47</td>
<td>7.2 ± 3.0</td>
<td>42</td>
<td>13.6 ± 5.9</td>
<td>43</td>
</tr>
<tr>
<td>MRI</td>
<td>8.8 ± 3.1</td>
<td>35</td>
<td>9.6 ± 0.8</td>
<td>8</td>
<td>18.4 ± 3.7</td>
<td>20</td>
</tr>
</tbody>
</table>

Note: COV = coefficient of variation.
The maximum estimated percentage work reduction when second and subsequent services were performed during the same session ranged from 4.32% for CT to 8.15% for ultrasound, a mean of 5.87 ± 1.53%. Compared with the single systematic 25% reduction proposed by the GAO, our code-level expert panel analysis thus estimated maximum PC RVU reductions of a mean of only 3.98 ± 1.01% (means ranged from 2.96% for CT to 5.45% for ultrasound). Duplicated work summary data are shown in Table 6, where average pre- and postservice times and RVUs were used to develop aggregate values.

The expert panel reviewed a number of clinical scenarios in which more than one examination from a different modality is performed on the same patient on the same day. The panel identified even less overlap of preservice and postservice work in these scenarios than when considering multiple procedures using the same modality. This overlap was deemed so negligible that duplication calculations could not be performed.

**DISCUSSION**

**GAO Methodology Considerations**

Citing the work of the GAO, MedPAC has recommended that Congress and CMS apply a systematic MPPR to the PC of diagnostic imaging payments. Although the MedPAC did not propose a specific percentage, the GAO report suggests that this number could be as high as 25%. Using its own mathematical analysis of the RBRVS Data Manager, the GAO cited efficiencies in professional work when physician services are performed by the same provider for the same patient in the same session. Our expert panel analysis of that same RBRVS methodology when it equated the intensity of preservice and postservice work with that of intraservice work. In doing so, the GAO far overvalued preservice and postservice work.

The GAO focused on specific examples of services, but our more comprehensive assessment included all imaging services valued by the RUC with specific preservice and postservice time data. In doing so, we identified a higher average contribution of preservice and postservice work to total work than in the isolated example used by the GAO.

The GAO failed to acknowledge the extensive service to service variability within the database. The high variability in the contributions of preservice and postservice work to total work illustrates the overly simplistic approach taken in recommending a systematic MPPR on the basis of an average of the RBRVS data or a random analysis of just two code pairs.

The GAO failed to consider actual clinical practice in its determination that 100% of preservice and postservice work would be duplicated when two or more services are performed by the same physician in the same session. Our expert panel, all practicing radiologists, undertook a detailed review of activities associated with a large number of specific imaging services and concluded that the maximum potential duplication of the preservice and postservice activities is <25%. Our systematic approach, based on a more thorough and reproducible review of RBRVS data (compared with the methods used by the GAO), resulted in this marked difference.

Although the GAO recommended a systematic MPPR to address perceived duplications in preservice and postservice work, the MedPAC advised a systematic

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**Table 5. Percentage contributions of preservice and postservice time to total time and preservice and postservice work to total work RVUs**

<table>
<thead>
<tr>
<th>Modality</th>
<th>% Contribution Preservice and Postservice Time to Total Time</th>
<th>% Contribution Preservice and Postservice Work to Total Work RVUs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radiography and fluoroscopy</td>
<td>Mean ± SD 43 ± 12% Range 16%-75% COV 28</td>
<td>Mean ± SD 32 ± 28% Range 14%-153% COV 88</td>
</tr>
<tr>
<td>Ultrasound</td>
<td>47 ± 9% 29%-70%</td>
<td>38 ± 20% 12%-132%</td>
</tr>
<tr>
<td>Nuclear medicine</td>
<td>49 ± 6% 40%-57%</td>
<td>29 ± 10% 17%-59%</td>
</tr>
<tr>
<td>CT</td>
<td>39 ± 9% 20%-67%</td>
<td>25 ± 20% 9%-112%</td>
</tr>
<tr>
<td>MRI</td>
<td>43 ± 10% 27%-60%</td>
<td>22 ± 6% 16%-37%</td>
</tr>
</tbody>
</table>

Note: COV = coefficient of variation. Total physician time is the sum of preservice, intraservice, and postservice time. For each code in each modality, the percentage contribution of preservice and postservice time to total time was calculated. The percentage in the table is the average of this calculation.
reduction to the entire PC payment. This includes malpractice expenses and indirect practice expenses, for which no data exist to indicate efficiencies (e.g., there is no evidence to indicate that a physician's liability exposure is reduced when more than one procedure is performed).

Our expert panel considered the methodology of the RBRVS data and process in performing its analysis. Although we do not believe that the RBRVS Data Manager data completely lend themselves to this type of analysis, our study confirms previous comments by the AMA to the GAO that 25% duplication of preservice and postservice work grossly overstates the potential contribution of duplicated work when two or more nonsurgical services are performed by the same physician using the same modality during a single session [1]. When calculated in a systematic fashion, the maximum potential percent duplication for diagnostic imaging ranges from only 4% to 8%. The high variability in the contribution of preservice and postservice work to the work RVU between modalities (as much as 2 times) and between services within a single modality (9% to 153%, with a coefficient of variation of 27% to 88%) additionally argues against a systematic MPPR.

Although precedent ostensibly exists for MPPR for services in the Medicare Physician Fee Schedule, the discounting methodology and recommendations proposed by the GAO and MedPAC are entirely unprecedented. In the case of the surgical MPPR (in which subsequent services on the same day are discounted by 50%), much of the duplicated work occurs well beyond the day of the procedure, usually in the form of follow-up clinical visits. Furthermore, CMS indicated that duplicative direct practice expense payments are a major justification for that surgical MPPR. In contrast, for imaging services, the majority of practice expense is part of the technical component payment and handled by a separate technical component payment policy by CMS, which is already subject to contiguous body parts discounting [5].

### Performing Multiple Imaging Procedures May Actually Be Less Efficient

As part of its review, our expert panel reviewed many common clinical scenarios in which multiple imaging procedures are performed on the same patient in the same day and concluded that in many of these, there is actually decreased efficiency. These include trauma victims, cancer patients, and those with acute coronary syndromes or surgical abdomens. In such cases, clinical condition complexity increases preservice and postservice work, largely related to coordinating care in the radiology department to ensure appropriate chronologic sequencing of examinations and administration of contrast. Not uncommonly, different physicians will request different or conflicting examinations, further complicating the coordination of imaging care. These patients are often evaluated in the inpatient hospital or ER setting, reflecting as well the greater likelihood of increased intraservice work related to the acuity of their conditions. These variables all considerably negate potential efficiencies for other patients but, without diagnostic and frequency data in the RBRVS Data Manager files, could not be quantified. To that end, our mathematical analysis of these data, like the GAO’s, overestimates potential efficiencies when multiple services are rendered to patients during the same encounter.

### Potential Limitations of Our Analysis

We acknowledge that our comprehensive review of the RBRVS Data Manager files may overstate the contribution of preservice and postservice work to the work value. Services valued before the institution of standard preservice packages by the RUC tend to have higher preservice and postservice times than those valued more recently. This is true for all physician services, not just diagnostic imaging services. In our analysis, we found a large standard deviation from the mean for each modality, along with high coefficients of variation, indicating variability in the contributions of preservice and postservice work to
the work value, which does not support a single system-
tic MPPR.

Critics of our results might suggest that recently bun-
dled services such as abdominal and pelvic CT and myo-
cardial perfusion imaging have resulted in higher
percentage reductions for the second studies included as
part of the combined services than our analysis would
suggest and may support the GAO and MedPAC recom-
mendations. However, in the RUC valuation process,
RUC panel members concluded that intraservice effi-
ciencies might occur when a single organ is imaged, such
as with myocardial perfusion imaging, or when there is
some overlap in imaging volume, such as occurs with CT
imaging of the abdomen and pelvis. The GAO analysis
assigned many of the potential efficiencies in their ab-
dominal and pelvic CT example to the preservice and
postservice periods, rather than the intraservice period.
The identification of any intraservice duplication be-
tween services is not possible by a simple analysis of the
RBRVS Data Manager but requires an individual assess-
ment of the services commonly performed together.

In summary, although potential efficiencies in physi-
cian work may occur when multiple services are provided
to the same patient during the same encounter, in many
situations, such services are actually more complex and
less efficient. Any potential efficiencies in physician work
in such multiservice settings are highly variable, not only
between modalities but also within modality families,
and are considerably less than those previously estimated
by government accountants and policymakers. Proposed
arbitrary systematic payment reduction policies are un-
necessarily simplistic and methodologically flawed.

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