

## Radiology Relative Value Scale

The following article, written by Paul Fullager; American College of Radiology (ACR) Director of the Center For Economics and Quality Assurance, and Clark Davis, ACR Director of Research and Assessment is reprinted from the Spring 1989 *Radiologic Practice Quarterly*, published by the ACR.

The new radiology fee schedule (RVS) for Medicare patients may significantly change the payment any practice receives for radiology procedures. As stated in the Omnibus Budget Reconciliation Act of 1987, total radiology expenditures under the Medicare program will be reduced 3% by the use of a relative value system and the resulting fee schedule. The percentage change produced by the new radiology fee plan will differ among radiology practices. Some practices will experience an increase in reimbursement; some will have a decrease; and others will remain about the same. The amount of the change will depend on many factors such as the variation in charges in the locality, the prevailing and customary charges in the locality, the mix of radiology procedures in the practice, and the comparison of internal practice relative values to the national median relative value scale.

It is important for financial decision-making purposes to produce an estimate of the effect on the practice of the new radiology fee schedule. This can easily be done using a computer spreadsheet program or a manual calculation as is done in the spreadsheet example.

### Calculating the New Fee Plan

Calculation of the effect of the new

fee schedule, requires the following information:

- The total number of procedures performed, by the Health Care Financing Administration common practice procedure coding system's code, for a defined time period. This can be a week, month, or year. The longer the time period the greater the probability of a more accurate estimate of the effect on the practice.
- The "allowed" charge from Medicare for each of the procedures for the practice (see spreadsheet 1). The allowed charge is defined as the lowest of the actual charge, the customary charge, or the prevailing charge. The best way to determine this charge is to refer for each procedure to copies of the explanation of benefits (EOB) from the Medicare carrier. The EOB will show the allowed charge for each procedure. *Use of any other charge will produce misleading results.*
- For each procedure, determine either the actual number of procedures performed for Medicare patients or estimate the percentage of total procedures performed for Medicare patients. If the practice is unable to determine this number for individual procedures, it should calculate the percentage of Medicare procedures for the practice as a whole.
- For a most complete estimate of the effect of the fee schedule, the practice should use all procedures performed for Medicare patients. Just looking at the estimate using the top 10 or 20 procedures can result in a misleading conclusion about the effects of the new fee schedule. Spreadsheet 1 is an example of the analysis necessary. Spreadsheet 1

represents a hypothetical radiology practice performing a mixture of general radiology, CT, MRI, nuclear medicine, and angiography. In this hypothetical example, this practice will have approximately a 7.4% percent decrease in reimbursement. This calculation assumes participation in the Medicare program and 100% collection of the patient's copayment.

### Fee Schedule: Different Effect on Each Practice

The fee schedule will have a different effect (positive or negative) on each radiology practice in a locality.

#### Note:

If the practice has not received a new fee schedule but knows the locality conversion factor, each fee can be calculated by multiplying the procedure RVS by the conversion factor.

For example: (Locality XYZ)

Procedure 72125: RV unit = 6.50 (professional component) conversion factor = \$14.32

Then the allowed professional charge for 72125 is:  $6.50 \times \$14.32 = \$93.08$

Non-participating physicians are limited to 125 percent of 95 percent of the allowed charge.

Using the example above, if the participating physician has an allowed charge of \$93.08 for procedure 72125, then the maximum allowed charge to the patient for a non-participating physician is  $\$93.08 \times 95\% \times 125\%$ , or  $\$93.08 \times .95 \times 1.25 = \$110.53$ . Two things to keep in mind:

- Medicare pays the patient, not the non-participating physician.

**Spreadsheet 1**

A HCPCs Code	B Frequency of Procedure	C Medicare Fee Allowed Amount (CPR)		D Schedule Amount (RVS)	E Frequency X Medicare Allowed Amount	F Frequency X Fee Schedule Amount	G Difference Column F – Column E
		Allowed Amount (CPR)	Schedule Amount (RVS)				
71020	2862	\$ 13.40	\$ 13.65	\$ 38,350.80	\$ 39,071.45	\$ 720.65	
71010	1588	9.00	11.19	14,292.00	17,769.72	3,477.72	
74000	265	9.00	11.19	2,385.00	2,965.35	580.35	
73510	200	15.00	12.98	3,000.00	2,596.08	- 403.92	
76091	1500	35.00	25.40	52,500.00	38,101.95	- 14,398.05	
74270	380	28.00	43.31	10,640.00	16,456.01	5,816.01	
73560	210	9.00	9.85	1,890.00	2,067.91	177.91	
74020	395	21.00	16.67	8,295.00	6,585.87	- 1,709.13	
70450	125	56.00	53.49	7,000.00	6,686.03	- 313.98	
70470	150	85.00	79.78	12,750.00	11,967.71	- 782.30	
70551	120	125.00	92.77	15,000.00	11,131.81	- 3,868.19	
74181	150	125.00	100.60	18,750.00	15,089.72	- 3,660.29	
75650	45	110.00	93.10	4,950.00	4,189.54	- 760.46	
75803	30	90.00	72.96	2,700.00	2,188.76	- 511.24	
76700	260	40.00	53.71	10,400.00	13,965.67	3,565.67	
78104	50	65.00	50.13	3,250.00	2,506.56	- 743.44	
78220	200	48.00	31.22	9,600.00	6,244.02	- 3,355.98	
78306	75	52.00	51.03	3,900.00	3,826.98	- 73.02	
<b>TOTAL</b>				<b>\$219,652.80</b>	<b>\$203,411.14</b>	<b>-\$16,241.66</b>	

Percent Change - 7.39%

**Note:** Medicare pays 80 percent of columns C and D. The group practice collects 20 percent from the patient.

\*In Spreadsheet 1, the column are defined as follows:

- A. The HCPC code for each procedure.
- B. The frequency of each procedure performed for Medicare patients. (Frequency = volume; i.e., a test done 5,000 times per year.)
- C. The Medicare allowed charge from EOB prior to the start of the fee schedule.
- D. The allowed charge for each procedure from the new fee schedule.
- E. The frequency of the procedure (Column B) multiplied by the Medicare allowed charges (Column C).
- F. The frequency of the procedure (Column B) multiplied by the new fee schedule charge (Column D).
- G. The subtraction of Column E from Column F.

### Calculation of a Practice's Internal RVS

To calculate a radiology group's internal relative value scale is a simple process. The following steps are required:

- Determine the practice's charge for a professional one-view chest procedure (*CPT* code 71010).
- Divide the practice's charge for a professional one-view chest into the charge for every other procedure.

This will result in an internal radiology practice relative value scale based on the one-view chest having a relative value of 1.

Example: A hypothetical radiology group's charge schedule:

**CPT Code:** 71010, 71020, 70450. **Charge:** \$20, \$40, \$160

- Professional one-view chest charge is equal to \$20.
- Divide one-view chest charges of \$20 into other charges.

$$71020/71010 = \$40/\$20 = 2 \text{ RVU} \quad 70450/71010 = \$160/\$20 = 8 \text{ RVU}$$

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act with DOE and continues to support Cintichem very strongly on this issue." Regarding the timetable DOE has set forth for the assessment, he added, "If Cintichem can live with this, then it's not an immediate problem. But we've got to follow this very closely. . . . We may have to go to the White House."

Whether DOE sticks to the schedule or not, the suspension could continue for months if the results of the assessment, positive or negative, must be circulated for public comment or even over a year if the assessment is negative and a full impact statement must be carried out. However, according to Mr. Smith, DOE is not about to let that happen. "We recognize the importance [of Cintichem's operations] to the radioisotope community, since they are the sole domestic source [of these radioisotopes]," he said. If DOE must do the impact statement, he added, "we would maybe pursue making the distinction" between spent reactor fuel and target material. "We are looking at the overall Atomic Energy Act to see if there are any provisions that would allow us to receive the shipments. . . . If Cintichem and the medical community demonstrated a negative impact, the department would be obligated to try to solve that problem."

*Sarah M. Tilyou*

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scanning and data analysis techniques need to be optimized to increase sensitivity and specificity of detecting areas of functional activation in a single patient." He recently received the Radiological Society of North America Research Scholars Award for a proposal related to this goal.

In a relatively short time, Dr. Mintun has established himself as a dedicated researcher in the field of nuclear medicine. In addition to his academic and research responsibilities, Dr. Mintun holds a consulting position with Mallinckrodt, Inc., for which he provides clinical problem solving support services; he is a reviewer for the *Journal of Nuclear Medicine*, *Radiology*, and the *Journal of Cerebral Blood Flow and Metabolism*; and he has recently served as a site visit review member for the National Institutes of Health. His Society memberships include The Society of Nuclear Medicine, the American College of Nuclear Physicians, the American Medical Association, and the Radiologic Society of North America.

His efforts have earned him the respect of his colleagues and peers. Dr. Ter-Pogossian concluded in his letter of support, "Mark Mintun will produce lasting contributions to the field of nuclear medicine."

*Sarah M. Tilyou*

## Board Elects JNM Editor

The Board of Trustees elected H. William Strauss, MD, as the Editor of *The Journal of Nuclear Medicine*, for a five-year term to commence January 1, 1990. In electing Dr. Strauss, director of the division of nuclear medicine at Massachusetts General Hospital and professor of radiology at Harvard Medical School, the Board accepted the unanimous choice of a subcommittee of the Publications Committee that was formed to recommend a candidate for editor.

Thomas P. Haynie, MD, chairman of the department of nuclear medicine, James E. Anderson Professor of Nuclear Medicine, and professor of medicine at the University of Texas M.D. Anderson Cancer Center, will continue his editorship through the December, 1989 issue, but as of July 1, 1989, all manuscripts submissions should be sent to Dr. Strauss at *The Journal of Nuclear Medicine*, Room 5406 Massachusetts General Hospital East, Building 149, 13th St., Charlestown, MA 02129. ■

- The 125% is to be decreased to 120% in 1990, and 115% in 1991 and thereafter.

### Medicare/Patient Cost Share— 80/20 Percent

The Medicare amount paid is not

the allowed amount by Medicare, but only 80%, with 20% copay by the patient. Similarly, the new Medicare fee schedule represents the same ratio; that is, 80% will be paid by Medicare, with 20% copay for participating physicians.

Also remember that if, for example, the practice bills Medicare \$60 for a procedure, the allowed may be \$40, of which the carrier pays \$32 (or 80 percent), if the radiologist participates. Don't confuse billing amounts, allowed amounts, and paid amounts.