The New 2013 Coronary Intervention Codes

As of January 1, 2013, coronary intervention codes in use since 1992 were replaced by new codes with new values for complex interventions.

BY JAMES C. BLANKENSHIP, MACC, FSCAI, AND CLIFFORD J. KAVINSKY, FACC, FSCAI

Why have interventional cardiologists' salaries ranked near the top compared to other specialties for the past decade?[1] Is it the long hours under high stress using extreme skills to perform dangerous procedures? Yes, but there is more. Effective advocacy by the Society for Cardiovascular Angiography and Interventions (SCAI) and American College of Cardiology (ACC) has played a large role. This is the story.

CORONARY INTERVENTION CODES AND REIMBURSEMENT: 2 DECADES OF EFFECTIVE ADVOCACY

Medicare, enacted in 1965, based reimbursement for physician services on the actual charge on the current bill, the customary charge during the past year, or the local medical profession's "prevailing" charge during the past year, whichever was lowest.[2] This system was chaotic and confusing. In response, the Omnibus Budget Reconciliation Act of 1989 switched Medicare to the Resource-Based Relative Value Scale, which used the estimates by Hsaio et al of physician time and effort to assign relative value units (RVUs) to physician services.[3]

In 1991, the Centers for Medicare & Medicaid Services (CMS) convened a series of technical expert panels (TEPs) to refine the initial estimates by Hsaio et al of work for selected procedures, including percutaneous transluminal coronary angioplasty (PTCA). A representative of the SCAI/ACC convinced the TEP to increase reimbursement for PTCA from Hsaio et al's estimate of 9.5 RVUs to 10.5 RVUs. The 20 million or so coronary angioplasty and stenting procedures performed in the United States since 1992 have all been reimbursed at a rate reflecting that one RVU increase granted by the TEP in 1991. Thus, this one instance of effective advocacy by the SCAI/ACC increased reimbursement for these 20 million coronary intervention procedures over the last 2 decades.

Then, in 1994, the STRESS[4] and BENESTENT[5] studies compared elective stenting to balloon angioplasty, and a randomized trial compared the then state-of-the-art Palmaz-Schatz (Johnson & Johnson, New Brunswick, NJ) and Gianturco-Roubin II stents (Cook Medical, Bloomington, IN).[6] At the time, elective stenting was just starting; most stents were placed to bail out failed balloon angioplasty. In this milieu, a code for coronary stenting was developed. The expert panel that advised CMS on reimbursement estimated that the average stenting procedure required 120 minutes of physician time from the first injection of lidocaine to the last catheter being withdrawn (diagnostic catheterization not included), 45 minutes of preparation time before the procedure, and 60 minutes of physician work after the procedure, for a total physician work time of 225 minutes per coronary stenting case. Thus, interventionists have been paid for coronary stenting at a rate based on almost 4 hours of work per procedure for the past 17 years.

NEW CORONARY INTERVENTION CODES AND VALUES

For the past several years, CMS has attempted to curb Medicare expenditures by identifying and reduc-

TABLE 1. CPT CODES, PHYSICIAN WORK RELATIVE VALUE UNITS, AND INTENSITY FOR CORONARY INTERVENTIONAL PROCEDURES, 1992–2012				
Procedure	CPT Code	Date Published	RVUs	Intensity (RVUs per minute)
Angioplasty[a]	92982	1992	10.96	.11
Angioplasty, additional vessel[b]	92984	1992	2.97	.04
Atherectomy[a]	92995	1992	12.07	.06
Atherectomy, additional vessel[b]	92996	1992	3.26	.04
Stenting[a]	92980	1994	14.82	.10
Stenting, additional vessel[b]	92981	1994	4.16	.07
[a]Base codes. [b]Add-on codes.				

ing payment for overpriced services. In 2011, CMS identified coronary stenting as possibly being overpriced and required that it be revalued. The value of a service depends on the time required to perform it and, to a lesser extent, the intensity of the work. The SCAI/ACC knew that invasive cardiologists were reimbursed for 4 hours of work per stent case since 1994 and that procedural times might have shortened since then. Thus, a revaluation could significantly decrease the RVUs paid for a coronary stenting procedure.

Interventional cardiologists were also keenly aware of problems with the existing coronary intervention codes (Table 1). Reimbursement for an emergency middle-of-the-night ST-elevation myocardial infarction (STEMI) stent procedure was the same as for elective stenting of a healthy patient at noon. Stenting of complex left anterior descending (LAD) bifurcation lesions requiring three stents was valued the same as stenting of a type A lesion requiring one short stent. The SCAI/ACC experts decided that if interventional procedures were to be revalued, it was time to develop codes that recognized and reimbursed physicians for the extra work of performing complex coronary interventions.

The SCAI/ACC experts developed a new set of codes that describe interventional procedures with greater detail (Table 2) and gained their approval by the AMA Current Procedural Terminology (CPT) panel. The codes then had to be valued, which required several steps. The first step was a survey of practicing interventionists to estimate physician work and time required for each new coronary intervention code. Practicing cardiologists estimated the skin-to-skin time required

for coronary stenting to be much less than the 1994 estimate of 2 hours; 45 minutes to be exact. Without the new codes, reimbursement for coronary stenting would likely have been reduced proportionately by more than 50%. Fortunately, the SCAI/ACC experts convinced the American Medical Association Relative Value Update Committee to recommend to CMS that the new complex coronary intervention codes be reimbursed at rates higher (by up to 25%) than simple coronary stenting. Overall, reimbursement for the family of coronary intervention procedures will decrease 18% to 20%, much less than the 50% that might have occurred without the new codes.

NEW CORONARY INTERVENTION CODES TO SOLVE OLD PROBLEMS

The new codes solve several long-standing problems. For a decade, interventionists have complained that they are not reimbursed for the intensity of STEMI PCI. Now, they are. The Resource-Based Relative Value Scale rates intensity using units of RVUs per minute of procedure time. The intensity of seeing patients in clinic rates .03, coronary bypass surgery rates .10, and emergency tracheostomy rates .26. Coronary intervention codes were previously rated at .10, but the new code for STEMI PCI has an intensity rating of .18. The intensity of other new coronary intervention codes has been raised to the .13 to .15 range. The extra work and stress involved with PCI of grafts and chronic total occlusions is now recognized, and reimbursement compared to simple stenting is higher by 10% and 25%, respectively. Furthermore, stenting preceded by

TABLE 2. NEW CORONARY INTERVENTION CPT CODES VALID AS OF JANUARY 1, 2013					
Procedure	New CPT Code	Procedure and Old CPT Code it Replaces	RVUs Recommended by AMA Relative Value Update Committee 2013	RVUs Assigned by CMS 2013	Intensity (RVUs per minute)
Balloon angioplasty[a]	92920	92982, angioplasty	9.00	10.10	.13
Balloon angioplasty, each additional branch[b]	92921	No previous code; work was included in 92982	4.00	0	.13
Atherectomy[a]	92924	92995, atherectomy	11.00	11.99	.14
Atherectomy, each additional branch[b]	92925	No previous code; work was included in 92995	5.00	0	.11
Stenting[a]	92928	92980, stenting	10.49	11.21	.15
Stenting, each additional branch[b]	92929	No previous code; work was included in 92980	4.44	0	.17
Atherectomy with stenting[a]	92933	92980, stenting	12.32	12.54	.15
Atherectomy with stenting, each additional branch[b]	92934	No previous code; work was included in 92980	5.50	0	.12
PCI of or through bypass graft (includes angioplasty, atherectomy, or stenting)[a]	92937	92982, 92995, or 92980	10.49	11.20	.16
PCI of or through bypass graft (includes angioplasty, atherectomy, or stenting), each additional branch[b]	92938	No previous code; work was included in the base code	6.00	12.56	.08
PCI of acute total/subtotal lesion (eg, STEMI) (includes angioplasty, atherectomy, or stenting)[a]	92941	92982, 92995, or 92980	12.32	12.56	.18
PCI of chronic total occlusion (includes angioplasty, atherectomy, or stenting)[a]	92943	92982, 92995, or 92980	12.32	12.56	.14
PCI of chronic total occlusion (includes angioplasty, atherectomy, or stenting), each additional branch, vessel, or graft[b]	92944	No previous code for branches; it replaces 92984/92996/92981 for separate vessels	6.00	0	.10
[a]Base codes. [b]Add-on codes.					

atherectomy is now reimbursed at a higher rate (by 12%) than stenting alone. Previously, there was no differential.

The additional work of performing PCI on multiple branches of a single artery is now recognized with separate codes. CMS refuses to pay for these, and the SCAI/ACC are lobbying CMS to reverse this decision. The good news is that the CMS decision does not limit reimbursement because CMS bundled the value of the additional branch codes into payment for the

Interventional Coding Examples to Illustrate Basic Principles

Problem: Coronary angiography is followed by ad hoc coronary stenting of the right and circumflex coronary arteries.
Solution: 93454 (coronary angiography), 92928 (stenting single coronary), and 92928 again (stenting circumflex).
Principles: As before, catheterization is coded using the separate cardiac cath codes, which are paid at 50% when performed with coronary intervention. Also, the base code for coronary stenting (92928) is used for both vessels, whereas previously, the base code was used once along with each additional vessel code, which was retired in 2013.

Problem: Stenting of the circumflex is performed followed by atherectomy and stenting of the ramus.
Solution: 92928 (stenting single coronary), 92933 (atherectomy and stenting single coronary).
Principles: Previously, CMS recognized and reimbursed for procedures in only three arteries (the LAD, circumflex, and right coronary) and might have denied reimbursement for PCI of the ramus arteries. Starting in 2013, CMS recognizes two additional arteries (the left main and ramus arteries) and will reimburse for PCI in all of them. Also, use the new atherectomy plus stenting code (92933) offers greater reimbursement than the stent code (92928).

Problem: A non-STEMI patient undergoes stenting of a 99% lesion with slow flow.
Solution: 92941 (stenting of subtotal/total occlusion causing acute MI).
Principle: This code can be used for any acute MI patient (STEMI or non-STEMI) with a total or subtotal lesion. CPT does not provide a definition of total or subtotal, so if the code is used, an accurate description of the lesion to support this code should be included in the procedural report.

Problem: Bifurcation stenting of the LAD is performed with PTCA of the side branch ostium and stenting of the parent vessel. Distally, a separate diagonal side branch is rotationally atherectomized.
Solution: 92928 (stenting of the LAD), 92921 (angioplasty, additional branch for the LAD diagonal bifurcation), 92925 (atherectomy, additional branch).
Principles: PTCA of the diagonal as part of the bifurcation stenting is now recognized. When a separate branch is treated, use a second additional branch code.

Problem: Intravascular ultrasound shows a significant left main lesion extending into the proximal LAD, which is stented. Fractional flow reserve across a distal lesion is measured and is not significant.
Solution: 92928 (stenting of the left main/LAD), 92978 (intravascular ultrasound), 93571 (fractional flow reserve).
Principle: As before, intravascular ultrasound and fractional flow reserve codes are used as add-on codes in addition to the base coronary intervention codes. When a single stent is used to treat a lesion in the left main extending into the LAD or circumflex, it is coded with only one code.

base codes. The SCAI/ACC still recommends (and CMS agrees) that the additional branch codes be used because some private payers may choose to reimburse them.

SUMMARY

Effective advocacy by the SCAI/ACC optimized reimbursement for PCI procedures for the past 2 decades. When CMS required revaluation of the PCI codes, the SCAI/ACC developed a new set of PCI codes that allows for more accurate reimbursement for more complex codes, mitigating the inevitable decrease in reimbursement for the simplest PCI codes. Interventionists and coding personnel must become familiar not only with the new codes, but also with the complex coding policies listed in the CPT manual[6] that govern the appropriate use of these new codes. ■

James C. Blankenship, MACC, FSCAI, is Director of Cardiology and Cardiac Catheterization Laboratories, Geisinger Medical Center in Danville, Pennsylvania. He has disclosed that he has no financial interests related to this article, but that he is a member of the AMA/ Specialty Society Relative Value Update Committee (RUC) representing the American College of Cardiology. He also chairs the SCAI Advocacy Committee. Dr. Blankenship may be reached at jblankenship@geisinger. edu.

Clifford J. Kavinsky, FACC, FSCAI, is Associate Professor of Medicine and Director, Coronary Care Unit, Rush University Medical Center in Chicago, Illinois. He has disclosed that he has no financial interests related to this article, but that he is the RUC Advisory Committee member representing the Society for Cardiovascular Angiography and Interventions. Dr. Kavinsky may be reached at clifford_j_kavinsky@rush.edu.

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