Guidelines for reporting CRT-D pacemaker implantation

By Michele Wilson

Cardiac resynchronization therapy defibrillator (CRT-D) implantation is a technology that prolongs and improves quality of life, exercise capacity, and functional status of heart failure patients with a prolonged QRS interval resistant to optimal therapy.

But it's also an expensive technology, costing approximately $24,000–$30,000 per device, plus more for hospital time and personnel.

Guidance in late 2008 from the American Hospital Association's (AHA) Coding Clinic changed aspects of inpatient coding and reimbursement for CRT-D under MS-DRGs.

Previously, coders could use ICD-9-CM procedure code 88.52 (angiocardiography of right heart structures) to denote an angiography of the coronary sinus usually performed to place the left ventricular lead. Now, they must use code 88.63, phlebography of other intrathoracic veins using contrast material.

As a result, many hospitals could lose $10,000–$14,000 of MS-DRG reimbursement per inpatient case admitted with heart failure or myocardial infarction and $7,000–$9,000 for those admitted with other cardiac diagnoses, says James S. Kennedy, MD, CCS, director at FTI Healthcare in Atlanta.

"Unless the coding world understands this, changes their coding habits, and addresses documentation and coding with physicians, facilities will face compliance and revenue risks when they provide this service," Kennedy says.

Specifics of the new guidance

Implanting most ordinary defibrillators or pacemakers requires placing two leads, one in the right atrium and one in the right ventricle. In CRT-D procedures, the physician places a third lead near the left ventricle through the coronary sinus (also known as the coronary vein). To ensure proper placement of this left ventricular lead, the physician will commonly use dye as a guide, says Kennedy.

Cardiologists do not always document the use of this dye—which means coders can’t code it—because many of these physicians consider this step integral to ensuring appropriate placement of a left ventricular lead. However, says Kennedy, Coding Clinic, third quarter 2008, clearly states that it is not.

The guidance reads, “Neither an angiogram nor a venogram is inherent to cardiac
resynchronization defibrillator (CRT-D) placement. If an angiogram or venogram is carried out in conjunction with CRT-D placement, it should be coded as such.” Consequently, when a physician documents the performance of a coronary sinus angiography, coders must now assign secondary procedure code 88.63.

A short history lesson

DRG reimbursement for this CRT-D implantation has a complicated history. For a long time, payment for this procedure generally covered only the price of the device but didn’t account for overhead costs. So many hospitals lost money when their physicians implanted CRT-D devices on inpatients.

All of this changed when the AHA published advice in its first quarter 2007 Coding Clinic that allowed for the reporting of an additional ICD-9-CM procedure code, code 88.52, when a physician documented coronary sinus angiography. Code 88.52 qualified as a cardiac catheterization under MS-DRGs, so hospitals collected thousands of dollars of additional inpatient reimbursement per patient when physicians properly documented coronary sinus angiography and coders properly coded it. This made CRT-D implantations more financially viable.

The AHA revised its advice about this issue once again. New guidance in the third quarter 2008 Coding Clinic (effective for discharges after September 19, 2008) stated that coders must report code 88.63 instead of 88.52 to denote an angiography of the coronary sinus. For most cases, this guidance effectively changed the DRG to one without a cardiac catheterization.

What spurred the change? Kennedy says it’s because the AHA designated the coronary sinus as an intrathoracic vein rather than a cardiac structure and followed ICD-9-CM Manual’s procedural index, which defines angiography of a vein as phlebography. As a result, coronary sinus (vein) angiography is classified in the procedural index as follows:

- Angiography (arterial)—see also Arteriography 88.40
- vein—see Phlebography
- Phlebography (contrast) (retrograde) 88.60
- intrathoracic NEC 88.63

The effect on MS-DRGs

As mentioned above, under MS-DRGs, code 88.52 falls into a cardiac catheterization DRG (under appropriate circumstances). Code 88.63 does not. The table below illustrates the discrepancy in reimbursement when using one code versus the other.

Coders must use code 88.63 when a physician documents placing dye in the coronary sinus. However, there are occasions in which coders may report an angiocardiogram in addition to 88.63, such as when a cardiologist performs and documents both:

1. A coronary sinus angiogram

2. Any angiogram of a right cardiac structure, such as the right atrium, right ventricle, or pulmonary valve (code 88.52) or left heart structure (codes 88.53–88.58)

“If you perform a right atrial angiogram or right ventriculogram with CRT-D implantation, you’ve got to tell us in your documentation,” Kennedy says, referring to how to relay this message to physicians. “If you don’t document it, you didn’t do it.”
Kennedy says hospitals should ensure that coders report the appropriate codes for this procedure because it could be a Recovery Audit Contractor (RAC) target area once the program rolls out nationwide. (For an update on RACs, see the article on p. 6.)

“Expect Recovery Audit Contractor software to be looking for 88.52 in association with CRT-D implantations, to determine whether these were coded correctly based on physician documentation,” he says.

Explain the importance of documenting each step in this process because it could make a significant financial difference for this service line. “If the doctors document it and the coders capture it, then we’re better able to provide this life-saving service to patients who may not otherwise be able to afford it,” Kennedy says.