



South African Society of Cardiovascular Intervention

SASCI CODING HANDBOOK 2014 10

Principal Author for SASCI Executive: Dr JP Theron SASCI: Drs Farrel Hellig, Len Steingo and Mark Abelson SA Heart Association: Dr Makoali Makatoko and Andrew Jankelow CASSA: Dr Andrew Thornton SAMA: Me Leonie Maritz



1. TERMS AND CONDITIONS OF USE

This Coding Guideline is based on a scientific and professional analysis of the various professional acts, which duly registered professionals are by law entitled to undertake in terms of their registration under the Health Professions Act, 1974, and the Ethical Rules, and which acts are translated into codes that serves as a "short-hand" description of such acts.

2.	DISCL	AIMER	2
3.	WHAT IS THE PURPOSE OF THIS DOCUMENT? CAN YOU HELP?		
4.	DEVICE IMPLANTATION		
	4.1 4.1 4.1	NERAL ISSUES .1. HOSPITAL CONSULTATION FEES .2. RULE E .3. RULE G .4. IMPORTANT MODIFIERS	4 4 4 5
	4.2 4.2 4.2 4.2 4.2	 ECIFIC PROCEDURES .1. SUBCLAVIAN VENOGRAPHY .2. TEMPORARY PACEMAKER UNRESOLVED ISSUES EXAMPLE OF CODING FOR ILR .4. SINGLE CHAMBER PACEMAKER (SCPM) UNRESOLVED ISSUES EXAMPLE OF CODING FOR SCPM .5. DUAL CHAMBER PACEMAKER (DCPM) UNRESOLVED ISSUES EXAMPLE OF CODING FOR DCPM .6. IMPLANTABLE CARDIOVERTER DEFIBRILLATOR (ICD) UNRESOLVED ISSUES EXAMPLER OF CODING FOR AN ICD .7. BIVENTRICULAR PACEMAKER (BIVPM) UNRESOLVED ISSUES EXAMPLE OF CODING FOR A BIVPM 	6 6 6 6 6 7 7 7 7 7 7 8 8 8 8
	4.3 4.3 [E2 [E2 [E2	AD EXTRACTIONS 1. GENERAL ISSUES 4.3.1.1. HOSPITAL CONSULTATION FEES 4.3.1.2. RULE E 4.3.1.3. RULE G 4.3.1.4. VENOGRAPHY 4.3.1.5. TEMPORARY PACEMAKER 2. LEAD EXTRACTION UNRESOLVED ISSUES EXAMPLE OF CODING FOR LEAD EXTRACTION DEVICE REVISIONS GENERAL ISSUES KAMPLE UPGRADING TO DCPM] KAMPLE UPGRADING TO BIVPM WITH ICD FUNCTIONALITY] KAMPLE UPGRADING TO BIVPM WITHOUT ICD FUNCTIONALITY]	10 10 10 10 10 10 10 10 10 10 10 10 10 1

1

ble of conten	5	ע
of conter		
of conter	(D
onter		5
onter	(
.er		5
	C	D
S	-	2

	4.4.	 INVASIVE DIAGNOSTIC CARDIOLOGY (DIAGNOSTIC HEART AND CORONARY CATHETERISATION WITH ASSOCIATED DIAGNOSTIC PROCEDURES) 4.4.1. GENERAL ISSUES 4.4.2. HOSPITAL CONSULTATION FEES (DIAGNOSTIC PROCEDURES ONLY) 4.4.3. RULE E 4.4.4. RULE G 4.4.5. UNRESOLVED ISSUES 4.4.6. LIST OF CODES 4.4.7. IMPORTANT MODIFIERS 4.4.8. CORONARY ANGIOGRAM WITH OR WITHOUT LEFT HEART CATHETERISATION 4.4.9. AORTOGRAM IN COMBINATION WITH CORONARY ANGIOGRAM 4.4.10. RIGHT HEART CATHETERISATION 4.4.11. CATHETERISATION OF PULMONARY ARTERYS 4.4.12. CATHETERISATION OF CORONARY ARTERY BYPASS GRAFTS 4.4.13. RENAL ANGIOGRAM 	12 12 12 12 12 12 12 12 12 13 13 13 13 14 14 14 14	
5.	FRACTIONAL FLOW RESERVE, INSTANEOUS WAVE-FREE FLOV AND INTRAVASCULAR IMAGING			
	5.2. 5.3.	INTRAVASCULAR ULTRASOUND AND OPTICAL COHERANCE TOMOGRAPHY ADDITIONAL CODES FFR AND IFR SOME EXAMPLES OF FFR AND IMAGING	16 17 18 19	
6.	PRC	VOCATION TESTING	20	
7.	INT	RA CARDIAC ECHOCARDIOGRAPHY	21	
8.	INT	ERVENTIONAL CARDIAC PROCEDURES	22	
	8.2. 8.3. 8.4. 8.6. 8.7. 8.8. 8.9.	GENERAL ISSUES 8.1.1. HOSPITAL CONSULTATION FEES (INTERVENTIONAL PROCEDURES ONLY) 8.1.2. RULE E 8.1.3. RULE G 8.1.4. UNRESOLVED ISSUES 8.1.5. LIST OF CODES 8.1.6. IMPORTANT MODIFIERS ANGIOPLASTY DRUG ELUTING BALLOON STENTING THROMBUS ASPIRATION ATHERECTOMY MICROCATHETER USAGE DISTAL PROTECTION DEVICES SECONDARY OPERATORS	22 22 22 22 22 23 24 25 26 27 28 29 30 31	
9.	TO I	BE INCLUDED IN SUBSEQUENT EDITIONS	32	
		STRUCTURAL HEART DISEASE NON CARDIAC INTERVENTIONS	33 33	



Evidence-based medicine and the extent and nature of professional acts are by their varying nature, based on consensus amongst appropriately qualified, trained and experienced healthcare professionals. As a body representing healthcare professional's practising in the field of cardiovascular intervention, SASCI hereby publishes this Guideline to guide professionals, funders and other stakeholders as to the appropriate coding of professional acts.

This Coding Guideline is based on a scientific and professional analysis of the various professional acts, which duly registered professionals are by law entitled to undertake in terms of their registration under the Health Professions Act, 1974, and the Ethical Rules, and which acts are translated into codes that serves as a "shorthand" description of such acts.

The Guideline aims to connect the professional acts to the nature, scope, extent and inter-relatedness of various professional acts to codes.

This Guideline does not address and should not be construed as providing any guidance on fees, or as setting any fees or fee structure, neither does it attempt to make any pronouncements as to the reimbursement levels to be set by medical schemes in relation to the codes.

This Guideline does, however, constitute the professional opinion as expressed by the members of SASCI in relation to the professional acts of its members, in light of the provisions of the Health Professions Act and the ethical rules. This coding system constitutes what would be deemed to be professional acts within the context of evidence-based medicine, as defined in medical schemes legislation. It therefore gives effect to professional acts as separate and interrelated actions that would be professionally appropriate and for which a practitioner would be entitled to code and charge.

SASCI takes no responsibility for the manner in which this Guideline is used. It offers no guarantee or warranties to professionals or other stakeholders relating to reimbursement of the codes by schemes, other third party payers or patients. Practitioners are urged to refrain from discussing any prices or fees to be attached to the codes outlined in this Guideline, and SASCI actively distances itself from the use of this Guide for any conduct that might be deemed anti-competitive.

Each practitioner have to make his/her own business- and professional decisions. SASCI's assistance and/or intervention in coding matters will be limited to an assessment of each specific situation referred to it. In that, SASCI will look at the application of professional conduct rules as translated into codes within the context of evidence-based medicine.

Practitioners should ensure that they Code honestly, and that the provisions of regulations 5 and 6 to the Medical Schemes Act are adhered to. In terms of regulation 6, schemes that regards a particular code or coding practice as erroneous, have to inform the practitioner of that assessment within 30 days after receiving a claim. The scheme must provide the reasons for its assessment of the coding as erroneous.

Practitioners should in all circumstances (apart from emergencies) obtain informed consent for all care provided, ensuring that patients understand that such care is translated into codes, to which the practitioner attach a fee. It is recommended that cost estimates and generally charged fees be provided to all patients, as is required by legislation and ethics. SASCI understands that currently the state of coding amongst cardiologists varies widely. In an attempt to reduce the number of queries with medical funders, to encourage transparency and debate we would like to encourage a coding standard regarding common cardiology procedures. The purpose is not to force cardiologists to follow the guideline but rather to encourage similar coding practices which we as a small group of professionals generally regard as ethical, fair and defensible.

We would also like to invite medical funders to enter into debate with our societies so that we can resolve differences in opinion amicably and fairly regarding coding issues. We would also encourage cardiologists that have specific codes rejected to contact SASCI so that we can take the matters up further with medical funders.

It should also be understood that this document is far from complete and should be regarded as a work in progress. There are glaring omissions and other issues which need to be resolved. The document will be periodically updated to reflect changes and decisions by SAMA and medical funders where appropriate.

CAN YOU HELP?

This is a daunting task and I appreciate all the help and assistance I can get. If you can help whether it be with proof reading, editing, working on updating specific sections I would gladly delegate. The major omissions currently involve is structural heart disease, non-invasive cardiac procedures, and hospital and room consultations. Please contact the SASCI Office (sasci@sasci.co.za) if you wish to get involved or have specific queries and suggestions.

4.1. GENERAL ISSUES

4.1.1. HOSPITAL CONSULTATION FEES

- It is appropriate to code for a hospital consultation (0173+0145) on the day of device implant provided the patient is evaluated before and after the procedure. This is appropriate as most cardiology patients are complex and require clinical evaluation before and after the procedure.
- If the procedure is performed electively the appropriate add on code to 0173 is 0145. See below.
- If the procedure is performed during hospital follow up the appropriate code is 0109 (hospital follow up).
- Note 0109 (hospital follow up) cannot be coded post operatively.
- It is appropriate to perform an ECG on the day of implant. Use code 1230 if this is performed.
- It is appropriate to perform an ECG the following day after a device implant, but due to rule G and the classification of implant procedures as 'surgical' any codes claimed up to 30 days after such a procedure will be rejected.
- Note that code 1230 (ECG interpretation) cannot be combined with any ICU code (1204, 1205, 1206, 1208 or 1209). Any ECG performed while a patient is in ICU is regarding as part of standard ICU care according to SAMA and the MDCM.
- With regard to ILR it is probably inappropriate to code for an ECG interpretation on the day of the procedure (1230) as one of the reasons for the ILR implant is a negative ECG work up prior to implantation.

4.1.2. RULE E

- Rule E concerns pre-operative care and states that the routine pre-operative hospital visit is included in the global fee for the surgical procedure.
- Medical funders may use this rule not to compensate coding for hospital consultation fees as described above.
- For the moment the current status quo is that cardiologists continue to code for hospital visits on the day of the procedure.
- Should you experience rejections or a threat of audit regarding this please contact SA Heart Association or CASSA so that it can be taken up directly with the fund administrator.

4.1.3. RULE G

- Rule G applies to all ILR; pacemaker; ICD and BiVPM implants.
- One cannot code for any follow up visits including a hospital visits should the patient be kept overnight for a period of 30 days post operatively.
- Patient follow up is included in the procedure up to and including 30 days post implant. This is because pacemaker implants fall under the 'surgical' category of procedures.
- Note that this means that any follow up within the 30 day period is included with the original implant coding.
- The general cardiology community does not agree with this but it is an issue that has been dealt with before. SASCI's opinion is that this should be taken up with fund administrators again in the future. The general cardiology patient cannot be compared to a patient undergoing an elective surgical procedure. Device therapy should not fall under the same rules as general surgical procedures.

4.1.4. IMPORTANT MODIFIERS

M0005

Multiple procedures and operations under the same anaesthetic: (a) Multiple procedures/operations: Unless where otherwise identified in the structure, when multiple procedures/operations add significant time and/or complexity, and when each procedure/operation is clearly identified and defined, the following values shall prevail: 100% (full value) for the first or major procedure/operation, 75% for the second procedure/operation, 50% for the third procedure/operation, 25% for the fourth procedure/operation. See MDCM for additional points. THIS DOES NOT APPLY TO PACEMAKER OR TEMPORARY PACEMAKER IMPLANTS. IN MOST CARDIOLOGY PROCEDURES THIS RULE DOES NOT APPLY.

M0011

UNDER REVIEW: Emergency procedures: Any bona fide, justifiable emergency procedure (all hours) undertaken in an operating theatre and/or in another setting in lieu of an operating theatre, will attract an additional 12,00 clinical procedure units per half-hour or part thereof of the operating time for all members of the surgical team. Modifier 0011 does not apply in respect of patients on scheduled lists. It is seldom that a permanent pacemaker is implanted under emergency conditions but should a permanent or temporary pacemaker be inserted as an emergency we would encourage its use.

M0018

Surgical modifier for persons with a BMI higher than 35. This modifier adds 50% of the clinical unit value to the surgical/procedure codes if used. When used you need to state the mass, height and BMI on the invoice. Obesity adds significant risk to percutaneous procedures and we encourage the use of this code. Note that height and weight needs to be indicated on the invoice.

4.2. SPECIFIC PROCEDURES

4.2.1. SUBCLAVIAN VENOGRAPHY

- Sometimes it is necessary or even preferable to perform subclavian venography via the brachial vein to assess
 the axillary, cephalic and subclavian veins prior to implant. When this is performed it is a separate procedure
 and should be coded appropriately.
- Code 3545 (venography: per limb) and code 3563 (direct intravenous for limb: ADD). Code 3563 is for contrast injection.
- Do not code for 3545+3563 if subclavian venography is not performed. Ensure you capture runs of the venogram for reference.

4.2.2. TEMPORARY PACEMAKER

• If a temporary pacemaker is used during the procedure use code 1273. Temporary pacing is not routinely performed during permanent pacemaker implant and therefore this cannot be regarded as unbundling.

4.2.3. IMPLANTABLE LOOP RECORDER (ILR)

UNRESOLVED ISSUES

• The main problem with ILR is that there is no RPL code for ILR implant. The consensus is that ILR implant is a simple procedure and that we will use code 1273 as a surrogate for implant AND removal. The fee for implant (1273) includes the fee for removal. Therefore do not code for removal. We should continue with this practice until an acceptable ILR specific code exists.

NOTE: The reason for changing code 1258 to 1273 is the fact that the newer devices are small and very easy to implant e.g. Reveal LINQ. It is appropriate to code 1258 for the older devices where internal suturing is required.

EXAMPLE OF CODING FOR ILR

Standard codes

- 0173 First hospital consultation
- 0145 For consultation/visit away from Drs home or rooms. ADD ON CODE
- 1273 Insertion of temporary pacemaker (M0005 not applicable)
- 1230 ECG interpretation

Follow up

Use code 1268 for interrogation of an ILR during follow up in rooms.

4.2.4. SINGLE CHAMBER PACEMAKER (SCPM)

UNRESOLVED ISSUES

• The main unresolved issue regarding SCPM implant is the coding 1270 for device programming. The description of code 1270 is 'Programming of atrio-ventricular sequential pacemaker'. Technically a SCPM is not an AV sequential pacemaker and medical funders could use this as a reason not to reimburse code 1270. On the other hand there is no code for programming a SCPM and we recommend members continue to use code 1270 and refer non-payment to the SA Heart Association or CASSA.

EXAMPLE OF CODING FOR SCPM

Standard codes

- 0173 First hospital consultation
- + 0145 For consultation/visit away from Drs home or rooms. ADD ON CODE
- 1258 Pacemaker: permanent single chamber
- 1268 Threshold testing (RV)
- 1270 Programming atrio-ventricular sequential pacemaker
- 1230 ECG interpretation

Add on codes

- 1273 Insertion temporary pacemaker (modifier 005 not applicable)
- 1268 Threshold testing (temporary pacemaker if used during procedure)
- 3545 Venography: per limb
- 3563 Direct intravenous for limb: ADD

Follow up

Use codes 1268 \pm 1270 for interrogation and programming of a SCPM in rooms.

4.2.5. DUAL CHAMBER PACEMAKER (DCPM)

UNRESOLVED ISSUES

- Multiple use of code 1268. There is some difference in opinion regarding the interpretation of this code. The
 main point is that in a 'fee for service structure' it is ethical to code for a procedure provided that it was actually
 performed. Code 1268 is described as 'threshold testing' but does not clarify further. Many cardiologists are
 coding multiple times for 1268 depending on the number of leads inserted. For example, with a dual chamber
 pacemaker the code would be applied twice and in the case of a BiVPM the code would be applied three times.
- In addition to the above multiple use of code 1268 provides a small distinction between interrogation and programming of devices with different complexity.
- Other cardiologists have been coding 1268 once no matter how many leads are tested. We would recommend that we continue to code 1268 once for a SCPM; twice for a DCPM; and three times for a BiVPM. In addition add 1268 for threshold testing with a temporary pacemaker (when inserted). When doing this it is important to specify a description of the lead tested adjacent to the code. If you have rejections based on multiple use of code 1268 please refer it to SASCI.
- Should you have any rejections regarding this practice with the description "duplicate codes" please refer the issue to SA Heart, CASSA or SASCI so that it can be taken further with the medical funders. To be updated

EXAMPLE OF CODING FOR DCPM Standard codes

- 0173 First hospital consultation
- 0145 For consultation/visit away from Drs home or rooms. ADD ON CODE
- 1259 Pacemaker: permanent dual chamber
- 1268 Threshold testing (RV)
- 1268 Threshold testing (RA) (NOT ALWAYS REIMBURSED ACCORDINLY)
- 1270 Programming atrio-ventricular sequential pacemaker
- 1230 ECG interpretation

Add on codes

- 1273 Insertion temporary pacemaker (modifier 005 not applicable)
- 1268 Threshold testing (temp. pacemaker)
- 3545 Venography: per limb
- 3563 Direct intravenous for limb: ADD

Follow up

Use 1270 + 1268(RV) + 1268(RA) for interrogation and programming a DCPM in rooms. To be updated

4.2.6. IMPLANTABLE CARDIOVERTER DEFIBRILLATOR (ICD)

UNRESOLVED ISSUES

- Unit differential between dual and single chamber ICD. There is a 74 unit differential between a single and a dual chamber pacemaker but there exists only a single code for ICD therefore there is no additional remuneration for a dual chamber ICD versus a single chamber ICD. We need a new code to differentiate between a single lead ICD and dual lead ICD.
- Code 1264 test for implantable cardioverter defibrillator. Most cardiologists would use this code when
 performing a defibrillation threshold test (DFT). The description of the code does not mention a defibrillation
 threshold test specifically, and it only refers to a 'test'. Some cardiologists therefore think it is correct to use
 this code in every ICD implant regardless of whether a DFT is performed or not. We would agree to code for
 1264 routinely whether or not a DFT has been performed.

EXAMPLER OF CODING FOR AN ICD

Standard codes

- 0173 First hospital consultation
- 0145 For consultation/visit away from Drs home or rooms. ADD ON CODE
- 1263 Insertion of implantable cardioverter defibrillator
- 1268 Threshold testing (RV)
- 1268 Threshold testing (RA) (if a dual chamber ICD is implanted) (NOT ALWAYS REIMBURSED ACCORDINGLY)
- 1270 Programming atrio-ventricular sequential pacemaker
- 1264 Test for implantable cardioverter defibrillator
- 1230 ECG interpretation.

Add on codes

- 1273 Insertion temporary pacemaker (modifier 005 not applicable)
- 1268 Threshold testing (temp. pacemaker)
- 3545 Venography: per limb
- 3563 Direct intravenous for limb: ADD

Follow up

Use 0170 + 1268(RV) + 1268(RA) for interrogation and programming a dual chamber ICD in rooms. Use 1270 + 1268 for a single chamber ICD.

4.2.7. BIVENTRICULAR PACEMAKER (BiVPM)

UNRESOLVED ISSUES

- LV lead placement. Currently the only code that exists for coronary sinus lead placement is 1272. This code is still 'under review' (for several years) and is only worth 120.6 units which is equivalent to a temporary lead placement. When a code is 'under review' it is marked as a Z code in the MDCM. The idea of this is to see if the code is actually used in the real world. The problem is that if a Z code is used on an invoice medical funders reject it automatically with a comment of 'under review'. This means a motivation needs to be written. This obviously discourages cardiologists from using new codes. We DO NOT recommend that this code is used for 2 reasons: firstly it has been under review since 2009 or longer and it has the same clinical unit value as a temporary pacemaker.
- Electrophysiological mapping. Use of this code as part of BiVPM implantation is endorsed by CASSA and SA Heart. Code 1262 is for electrophysiological mapping but used as a surrogate code for LV lead implant and cannulation of the coronary sinus. Continue to use this code until a suitable alternative is available. Report any non-payment or request for motivation to CASSA, SA Heart or SASCI Exco.

EXAMPLE OF CODING FOR A BiVPM

Standard codes WITHOUT ICD functionality

- 0173 First hospital consultation
- + 0145 For consultation/visit away from Drs home or rooms. ADD ON CODE
- 1259 Pacemaker: permanent dual chamber
- 1262 Electrophysiological mapping
- 3559 Selective first order catheterisation (of coronary sinus)
- 1268 Threshold testing (RV)
- 1268 Threshold testing (RA) (NOT ALWAYS REIMBURSED ACCORDINGLY)
- 1268 Threshold testing (LV) (NOT ALWAYS REIMBURSED ACCORDINGLY)
- 1270 Programming atrio-ventricular sequential pacemaker
- 1230 ECG interpretation

Note if no RA lead is placed (for example: chronic AF) change code 1259 to 1258 and delete 1268 (RA).

device implimentation

Standard codes WITH ICD functionality

- 0173 First hospital consultation
- 0145 For consultation/visit away from Drs home or rooms. ADD ON CODE
- 1259 Pacemaker: permanent dual chamber
- 1262 Electrophysiological mapping
- 1263 Selective first order catheterisation (of coronary sinus)
- 1268 Threshold testing (RV)
- 1268 Threshold testing (RA) (NOT ALWAYS REIMBURSED ACCORDINGLY)
- 1268 Threshold testing (LV) (NOT ALWAYS REIMBURSED ACCORDINGLY)
- 1270 Programming atrio-ventricular sequential pacemaker
- 1264 Test for implantable cardioverter defibrillator (if DFT is performed)
- 1230 ECG interpretation

Note if no RA lead is placed (for example: chronic AF) delete 1268 (RA).

Add on codes

- 1273 Insertion temporary pacemaker (modifier 005 not applicable) (if used usually RV lead is used as a 'temporary' pacing lead)
- 1268 Threshold testing for temporary pacemaker
- 3545 Venography: per limb
- 3563 Direct intravenous for limb: ADD

Follow up

Use 1270 + 1268(RA) + 1268(RV) + 1268(LV) when coding for interrogation and programming a BiVPM in rooms. Delete 1268(RA) if no atrial lead is present or tested.

4.3. LEAD EXTRACTIONS

4.3.1. GENERAL ISSUES

4.3.1.1. HOSPITAL CONSULTATION FEES

- As for Device Implants above.
- Considering the high risk nature of lead extraction post extraction transthoracic echocardiography and category 2 ICU management post operatively for 1 day is appropriate.
- Therefore code 0173+0145+1205.
- If an additional specialist is involved for another reason use category 3.

4.3.1.2. RULE E

- Rule E concerns pre-operative care and states that the routine pre-operative hospital visit is included in the global fee for the surgical procedure.
- Medical funders may use this rule not to compensate coding for hospital consultation fees as described above.
- For the moment we suggest that cardiologists continue to code for hospital visits on the day of the procedure.

4.3.1.3. RULE G

- Rule G is a grey area regarding lead extraction but considering no device is implanted Rule G SHOULD NOT apply.
- · Coding for hospital follow up is appropriate as is coding for follow up echocardiography.

4.3.1.4. VENOGRAPHY

- If venography is required during the procedure then it should be coded for accordingly.
- Code 3545 (venography: per limb) and code 3563 (direct intravenous for limb: ADD). Code 3563 is for contrast injection.

4.3.1.5. TEMPORARY PACEMAKER

• If a temporary pacemaker is used during the procedure use code 1273.

4.3.2 LEAD EXTRACTION UNRESOLVED ISSUES

There are serious coding issues with lead extractions. This is a very risky procedure in many cases and there is no coding mechanism at this stage. In addition there is no differentiation between the method and route used for lead extraction. At this stage the remuneration provided for lead extraction does not reflect the risk or difficulty level of this procedure. To be updated

EXAMPLE OF CODING FOR LEAD EXTRACTION

- 0173 First hospital consultation
- 0145 For consultation/visit away from Drs home or rooms. ADD ON CODE. 1205 Intensive care category 2
- 1205 Day CAT 2 ICU care
- 1266 Resitting pacemaker generator
- 1267 Repositioning catheter electrode
- 3620 Echo: colour flow mapping
- 3621 Echo: M-mode
- 3622 Echo: 2D
- 3625 Echo: Doppler
- 1230 ECG interpretation

Note if the generator is replaced for a new generator then replace code 1266 with 1265 (renewal of pacemaker unit only). Code 1206 for the following day.

DEVICE REVISIONS

General Issues

• As for Device Implantation.

[Example upgrading to DCPM]

[Example upgrading to ICD]

[Example upgrading to BiVPM with ICD functionality]

[Example upgrading to BiVPM without ICD functionality]

[NOTE: Need more information from CASSA]

[End of section devices] To be updated

4.4. INVASIVE DIAGNOSTIC CARDIOLOGY

(diagnostic heart and coronary catheterisation with associated diagnostic procedures).

4.4.1. GENERAL ISSUES

4.4.2. HOSPITAL CONSULTATION FEES (diagnostic procedures only)

- It is appropriate to code for a hospital consultation (0173) on the day of coronary angiography provided the patient is evaluated before and after the procedure. This is appropriate as most cardiology patients are complex and require clinical evaluation before and after the procedure.
- If the procedure is performed electively the appropriate add on code to 0173 is 0145. See below.
- If the procedure is performed during hospital follow up the appropriate code is 0109 (hospital follow up).
- Note 0109 (hospital follow up) and ICU codes CAN BE coded for post angiography as coronary angiography and PCI are not regarded as surgical procedures.
- It is appropriate to perform an ECG on the day of implant. Use code 1230 if this is performed.
- It is appropriate to perform an ECG the following day after a device implant.
- Note that code 1230 cannot be combined with an ICU code and if you are coding 1204, 1205, 1206, 1209 or 1210 any ECG performed is regarding as part of ICU care according to SAMA and the MDCM.

4.4.3. RULE E

• Rule E concerns pre-operative care and is not applicable to percutaneous cardiac procedures diagnostic or interventional.

4.4.4. RULE G

Rule G regarding post-operative is not applicable to percutaneous cardiac procedures; diagnostic or interventional.

4.4.5. UNRESOLVED ISSUES

• Code 1250 for endomyocardial biopsy excludes code 1252 or 1253. Considering the risk involved with endomyocardial biopsy and the fact it is usually performed in centres where heart transplantation is performed this should be ignored. Code 1250 can be used in combination with 1252 or 1253.

4.4.6. List of Codes

- 1250 Endomyocardial biopsy
- 1252 Left heart catheterisation with or without coronary angiography
- 1253 Right heart catheterisation
- 1254 Catheterisation of coronary artery bypass grafts and/or internal mammary artery
- 1296 Fractional flow reserve (FFR): first vessel (add on code)
- 1298 Fractional flow reserve (FFR): each additional vessel (add on code)
- 3557 Catheterisation of the aorta/veno cava, any level, any route with aortogram/venogram
- 3559 Selective first order catheterisation, arterial or venous, with angiogram/venogram
- 3560 Selective second order catheterisation, arterial or venous, with angiogram/venogram
- 3562 Selective third order catheterisation, arterial or venous, with angiogram/venogram
- 3564 DISCONTINUED 2014: Item 3564 [Direct femoral, arterial, venous or jugular venous puncture] has been discontinued
- 5117 Diagnostic intravascular ultrasound (IVUS) imaging or wave wire mapping (without accompanying angioplasty). May be used once per angiographic procedure
- 5118 Diagnostic intravascular ultrasound (IVUS) imaging or wave wire mapping (with accompanying angioplasty or accompanying intravascular ultrasound imaging or wave wire mapping in a different coronary artery [LAD; circumflex or right coronary artery]). May be used twice per angiographic procedure

4.4.7. IMPORTANT MODIFIERS

M0005

Multiple procedures and operations under the same anaesthetic: (a) Multiple procedures/operations: Unless where otherwise identified in the structure, when multiple procedures/operations add significant time and/or complexity, and when each procedure/operation is clearly identified and defined, the following values shall prevail: 100% (full value) for the first or major procedure/operation, 75% for the second procedure/operation, 50% for the third procedure/operation. See MDCM for additional points.

M0011

UNDER REVIEW (since 2014): Emergency procedures: Any bona fide, justifiable emergency procedure even if out of office hours. It is reserved for actual emergencies and the specific start and end time needs to be noted. In addition it only applies to codes specifically associated with the procedure.

M0018

Surgical modifier for persons with a BMI higher than 35. This modifier adds 50% of the clinical unit value to the surgical/procedure codes if used. When used you need to state the mass, height and BMI on the invoice. It applies to surgical procedures but anaesthetists use it during coronary procedures as well. Patients BMI adds considerable risk to a femoral cardiac catheterisation and we would therefore encourage the use of M0018 when catheterising obese patients.

M6305

When multiple catheterisation procedures are used (items 3557, 3559, 3560 and 3562) and an angiogram investigation is performed at each level, the unit value of each such multiple procedure will be reduced by 20 radiological units for each procedure after initial catheterisation. The first catheterisation is charged at 100% of the unit value.

M6305 is VERY important when using codes 3559 (selective first order catheterisation); 3560 (selective second order catheterisation); 3562 (selective third order catheterisation). When these codes are duplicated then the modifier M6305 needs to be applied to the duplicate codes.

4.4.8. CORONARY ANGIOGRAM WITH OR WITHOUT LEFT HEART CATHETERISATION

- Code 1252 is the standard code used for left heart catheterisation and coronary angiogram. It comprises 140 units broken down into 70 units for left heart catheterisation and 70 units for coronary angiogram.
- There is no code for separate left heart catheterisation or coronary angiogram as in the CPT14 so if coronary angiogram is performed without LV gram and LV pressures code 1252 still applies.

4.4.9. AORTOGRAM IN COMBINATION WITH CORONARY ANGIOGRAM

- Code 3557 should be used in conjunction with 1252 when the clinical need arises, such as: aortic regurgitation, aortoannular ectasia, vascular complications of the aorta, and difficulty in cannulating the coronary arteries, difficulty in cannulating grafts.
- The MDCM states that 3557 may not be coded as an en passant procedure on the way to selective angiography and it should, therefore, not be used routinely.
- It should be understood that medical funders will interpret 'en passant' to meant that 3557 should not be used under ANY circumstances together with 1252. This is incorrect – 3557 should not be coded for if it is not done or the aortogram is performed 'in passing'. If there is a legitimate clinical reason to peform an ascending aortogram (including searching for unmarked and unknown bypass grafts) 3557 SHOULD BE CODED FOR.

4.4.10. RIGHT HEART CATHETERISATION

- Code 1253 encompasses right heart catheterisation. It includes all procedures related to this except endomyocardial biopsy. Whether or not right heart injection is included is unclear at this point.
- Note that pressure tracings are regarded as proof for right heart catheterisation.
- There should be no issues with application of this code.
- [Need opinions regarding injections into the right heart and pulmonary arteries, injections into right ventricle, right atrium, also awaiting feedback regarding appropriate use for code 1288]. Codes are available in CPT 14 but not SAMA DBM.

4.4.11. CATHETERISATION OF PULMONARY ARTERYS

- Catheterisation of the pulmonary arteries can be seen as selective catheterisation with arteriogram. Therefore codes 3559, 3560 and 3562 would apply. SASCI suggests using 3559 for the left and right pulmonary artery and 3560 and 3562 when injections are made into specific branches.
- Remember to apply modifier M6305 to multiple uses of vascular codes. There is no specific code for the main pulmonary artery and if specifically injected I would consider using 3559 as a code for the MPA.

4.4.12. CATHETERISATION OF CORONARY ARTERY BYPASS GRAFTS

- The intention of code 1254 is to code for catheterisation of ALL coronary artery bypass grafts including multiple venous grafts, arterial grafts and left or right internal mammary grafts. The unit value for this is only 40 units.
- To place this in perspective consider that a typical coronary bypass case has 2-3 venous grafts which are
 essentially first order vessels and a LIMA to LAD which is a second order vessel. If one had to code according
 to the vascular surgery or radiological system that would equate to 3559; 3559+M6305; 3560 for a 2 venous
 grafts and a LIMA to LAD. This comes to a unit value of 279 units (95+75+109).
- Considering the above we encourage cardiologists to code 1254 for venous grafts plus 3560 for LIMA or RIMA to LAD. If both RIMA and LIMA are catheterised then 3560 should be applied twice with modifier M6305 applied to the second code.
- Usually when the LIMA is catheterised the subclavian artery is also injected to exclude subclavian stenosis and steal syndrome. In this case code 3559 would be used for the subclavian artery.
- When a LIMA (or RIMA) is injected to assess prior to surgery then code 3560 is appropriate.

EXAMPLES OF CODING FOR CORONARY ARTERY BYPASS GRAFTS:

- 1. LIMA LAD; subclavian artery; 2 venous grafts: 1254; 3559 (subclavian); 3560 (LIMA).
- 2. Three venous grafts only: 1254.
- 3. RIMA to RCA; LIMA to LAD and 3 venous grafts: 1254; 3560 (LIMA); 3560+M6305 (RIMA).

4.4.13. RENAL ANGIOGRAM

- Sometimes during a cardiac catheterisation a renal angiogram is performed during the same procedure. If this
 practice is performed we would encourage there to be evidence of uncontrolled hypertension, hypertensive
 heart disease or severe hypertension during the cardiac catheterisation. In addition use ICD10 code I10
 (hypertension), E11.9 (hypertensive heart disease without heart failure) or E11.0 (hypertensive heart disease
 with heart failure) as secondary diagnostic codes.
- For example if a cardiac catheterisation is performed for possible stable angina (ICD10 code I20.8) and a renal angiogram is performed for severe hypertension with LV hypertrophy the secondary code will be E11.9.
- When a renal angiogram is performed two first order vessels are catheterised: the left AND right renal arteries. The correct coding for this according to the eMDCM is 3559 (left renal artery) and 3559+M6305 (right renal artery). Remember that each time you apply a duplicate angiography code you need to use M6305 with the second and subsequent codes.
- We would discourage the practice of 'en passant' renal angiography without clinical indication.

device implimentation

4.4.14. VASCULAR CLOSURE

- Vascular closure is now commonly performed since the 1990s yet it remains a contentious issue with medical funders. It is not a risk free procedure and carries risk including bleeding, ischaemia and infection. With the active closure devices the puncture site and common femoral artery needs to be accurately assessed. Prior to puncture fluoroscopy or ultrasound is often required to increase the accuracy of the puncture site.
- Currently no code exists for a vascular closure and medical funders insist that this procedure is 'included' in code 1252 even though this is a unilateral decision. We would encourage the use if code 3559 (right common femoral artery) when performing closure with an ACTIVE device. We would recommend against coding for a femoral artery angiogram if it is not performed.

SOME EXAMPLES CODING FOR RENAL ANGIOGRAPHY AND VASCULAR CLOSURE:

- 1. Renal angiogram alone: 3559 (LRA); 3559 + M6305 (RRA).
- 2. Renal angiogram with vascular closure: 3559 (LRA); 3559 + M6305 (RRA); 3559 + M6305 (RCFA).
- 3. Vascular closure alone: 3559 (RCFA).

5.1. INTRAVASCULAR ULTRASOUND AND OPTICAL COHERANCE TOMOGRAPHY

- When performing an IVUS there are two codes which may be applied. The first is 5117 which is for a diagnostic procedure only. Use 5117 when NO angioplasty; stent is performed. It carries twice the value as the interventional ultrasound code (88 units) but may only be used ONCE per angiography procedure even if more than one vessel is applied.
- An example of use of code 5117 would be when assessing a lesion with IVUS and then deciding not to stent.
- When an angioplasty or stent is performed then code 5118 should be used. This applies specifically to IVUS during angioplasty or stenting. It is half the value of 5117 and may be applied TWICE per angiographic procedure if performed in more than one vessel.
- There is no code for optical coherence tomography but the procedure is identical to IVUS and we therefore encourage using the same codes for OCT.

The above coding method is not in line with CPT12 or CPT14. SASCI suggests members use a simpler coding method which is similar to the CPT14 system but using the SAMA DBM codes.

- Use 5117 when IVUS is performed irrespective of whether or not a PCI is performed. It may only be used once per procedure.
- Use code 5118 when IVUS is performed in additional vessels. The vessels should be major named branches and the code can only be applied twice per angiographic procedure.

5.2. ADDITIONAL CODES

- 3619 is a coronary specific code and valued at 30 units. It describes IVUS performed to guide insertion of a coronary stent. It is, therefore, less than the code generally used at the moment 5118 (44 units). We discourage its use due to its diminished value.
- 3596 is a non-coronary specific code valued at 30 units similar to the above but does not specify coronary vessels. Similarly we would discourage its use.

5.3. FFR AND IFR

- Up to now we have been using IVUS codes interchangeably with IVUS and FFR/IFR. This is acceptable when ONLY FFR/IFR or IVUS/OCT are performed but sometimes these procedures are performed in tandem.
- In cases where FFR/IFR are performed together with IVUS/OCT we would encourage the use of add on codes for FFR. These codes are 1296 for the first vessel where FFR is performed and 1299 for any additional vessels.
- It is important to note that these codes are under review and that they will be rejected. We would suggest a standard motivation letter when FFR/IFR is performed in combination with IVUS.

5.4. SOME EXAMPLES OF FFR AND IMAGING:

EXAMPLES FOR CODING FOR IVUS OR OCT (WITHOUT FFR)

IVUS of LAD only: 5117 (88 units).
 IVUS of LAD and RCA: 5117 (88 units) + 5118 (44 units).
 IVUS of LAD, RCA and LCX: 5117 (88 units) + 5118 (44 units) + 5118 (44 units).

EXAMPLES OF FFR/IFR

FFR LAD only: 5117.
 FFR LAD and IVUS LAD: 5117+1296.
 FFR/IVUS LAD; FFR/IVUS LCX; IVUS RCA: 5117+1296+5118+1299+5118.
 FFR only of LAD and RCA: 5118+5117.
 FFR only of LAD, RCA and LCX: 5117+5118+5118.

Remember 5117 can only be applied once and 5118 twice per angiographic procedure. The long term plan is to motivate for codes similar to the CPT14 system which will be applied in a similar fashion to IVUS/OCT and not as add on codes.

Awaiting feedback from SASCI

No codes available.

8.1. GENERAL ISSUES

8.1.1. HOSPITAL CONSULTATION FEES (interventional procedures only)

- It is appropriate to code for a hospital consultation (0173 + 0145) on the day of cardiac catheterisation.
- If the patient is stented it is appropriate to code 1205 (category 2 ICU) on the day of the procedure and 1204 (category 1 ICU/high care) on day 2.
- It is not unusual to perform an ECG on the day of cardiac catheterisation and code 1230 may be coded. Follow up ECGs may not be coded for.
- If the patient is kept in hospital longer the 2 days additional hospital visits (0109) may be billed as required.
- If the patient needs additional ICU care code for the appropriate level of care as indicated.

8.1.2. RULE E

 Rule E concerns pre-operative care and is not applicable to percutaneous cardiac procedures diagnostic or interventional.

8.1.3. RULE G

• Rule G regarding post-operative is not applicable to percutaneous cardiac procedures; diagnostic or interventional.

8.1.4. UNRESOLVED ISSUES

• The main unresolved issue with interventional procedures is the limitation on the use of coronary stenting 'per vessel'. It is discussed in detail in the stenting section.

8.1.5. LIST OF CODES

- 1274 Percutaneous transluminal thrombectomy for clot extraction in native coronary arteries or and venous and arterial bypass grafts
- 1276 Percutaneous transluminal angioplasty: First cardiologist: Single lesion
- 1277 Percutaneous transluminal angioplasty: Second cardiologist: Single lesion
- 1278 Percutaneous transluminal angioplasty: First cardiologist: Second lesion
- 1279 Percutaneous transluminal angioplasty: Second cardiologist: Second lesion
- 1280 Percutaneous transluminal angioplasty: First cardiologist: Third and subsequent lesions
- · 1281 Percutaneous transluminal angioplasty: Second cardiologist: Third and subsequent lesions
- 1284 Atherectomy: Single lesion: First cardiologist
- 1285 Atherectomy: Single lesion: Second cardiologist
- 1286 Insertion of an intravascular stent: First cardiologist
- 1287 Insertion of an intravascular stent: Second cardiologist
- 5014 Atherectomy: per vessel
- 5016 Aspiration thrombectomy: per vessel

8.1.6. IMPORTANT MODIFIERS

M0005

Multiple procedures and operations under the same anaesthetic: (a) Multiple procedures/operations: Unless where otherwise identified in the structure, when multiple procedures/operations add significant time and/or complexity, and when each procedure/operation is clearly identified and defined, the following values shall prevail: 100% (full value) for the first or major procedure/operation, 75% for the second procedure/operation, 50% for the third procedure/operation, 25% for the fourth procedure/operation. See MDCM for additional points. SHOULD NOT APPLY TO MOST PCI CASES.

M0011

UNDER REVIEW (since 2014): Emergency procedures: Any bona fide, justifiable emergency procedure (all hours) undertaken in an operating theatre and/or in another setting in lieu of an operating theatre, will attract an additional 12 clinical procedure units per half-hour or part thereof of the operating time for all members of the surgical team. Modifier 0011 does not apply in respect of patients on scheduled lists. PLEASE DO USE. REMEMBER TO INDICATE THE TIME OF THE PROCEDURE. ONLY APPLIES TO PROCEDURE CODES (NOT ICU CODES ETC.).

M0018

Surgical modifier for persons with a BMI higher than 35. This modifier adds 50% of the clinical unit value to the surgical/procedure codes if used. When used you need to state the mass, height and BMI on the invoice. It applies to surgical procedures but anaesthetists use it during coronary procedures as well. Patients BMI adds considerable risk to a femoral cardiac catheterisation and we would therefore encourage the use of M0018 when catheterising obese patients. ENCOURAGE USE.

M6305

When multiple catheterisation procedures are used (items 3557, 3559, 3560 and 3562) and an angiogram investigation is performed at each level, the unit value of each such multiple procedure will be reduced by 20 radiological units for each procedure after initial catheterisation. The first catheterisation is charged at 100% of the unit value. AS WITH DIAGNOSTIC PROCEDURES.

8.2. ANGIOPLASTY

- Codes 1276, 1278 and 1280 include the codes used for angioplasty whether alone or with pre-dilation/post dilation. An important point regarding angioplasty for coronary disease is that the description clearly states the words 'per lesion'. This means that unlike stenting angioplasty can be applied multiple times during a single angiographic procedure.
- This does not mean that it can be applied multiple times for a single lesion. If an LAD is stented after pre dilation and the stent is post dilated the angioplasty code can only be applied once for that lesion.
- For example if a LAD-D1 bifurcation and proximal RCA is stented the angioplasty codes would be 1276 (LAD); 1278 (D1); 1280 (RCA).
- If angioplasty is performed on a long lesion encompassing more than one vessel segment this does not mean that one can code for more than one lesion. If a single balloon is used the code should only be applied once.
- When angioplasty be applied to more than 3 lesions code 1280 needs to be applied multiple times with descriptions of the lesion according to vessel segment. For example: 1276 (LAD); 1278 (LCX); 1280 (proximal RCA); 1280 (distal RCA).
- The surgical modifier M0005 DOES NOT apply with multiple instances of 1280 as 1280 is already a reduced code AND PCI is regarded as a medical procedure. * It is not appropriate to code 1276 or 1278 multiple times. Code 1276 and 1278 can only be coded for once per angiographic procedure. When more than 2 lesions are treated with PTCA 1280 can be coded for multiple times.

interventional cardiac procedures

8.3. DRUG ELUTING BALLOON

- The issue of drug eluting balloons has been previously discussed with medical funders. Application of a drug eluting balloon is regarded as an implant by funders and therefore the consensus with medical funders is that cardiologists should code for an intracoronary stent when coding for use of a drug eluting balloon. Since application of drug eluting balloon is considered as a 'stent' the same rules regarding stenting apply. (See stenting below).
- When PTCA is performed and a drug eluting balloon is used the appropriate codes for the first vessel would be: 1276+1286.

8.4. STENTING

- Stenting remains a contentious issue and is in a constant state of flux. Even the medical funders cannot seem to consequently apply the rules.
- The main issue with stenting is the fact that the description includes the words "per vessel". We interpret per vessel to mean any of the main coronary arteries and their segments and significant branches. A significant branch would be defined as a vessel at least 1.5mm in diameter with a reasonable distal vascular bed.
- SAMA defines "per vessel" as only the LAD; LCX and RCA. When the left main artery is stented SAMA regards the left main as part of either the LCX or LAD. In other words if a left main is stented as well as LAD SAMA regards it as incorrect to code for a stent in the LMCA as well as the LAD.
- Previously stenting was usually only performed for one or two vessels. Today complex bifurcation lesions, chronic total occlusions and stenting for three vessel disease is routinely performed. We strongly feel that the current state of affairs does not reflect the complexity, time and risk of procedures performed.
- Note modifier M0005 DOES NOT APPLY to stenting (1286) as this is an add on code.
- We suggest that cardiologists code per lesion as with angioplasty above and add the description of the vessel stented. This is perfectly ethical as long as coding is performed for procedures done. This may result in payment or non-payment.
- NOTE that the only way to guarantee payment when using code 1286 is not to use the code more than 3 times per procedure and not to use it more than once for the LCX, LAD or RCA.

8.5. EXAMPLES OF ANGIOPLASTY AND STENTING

- 1. PTCA distal RCA and stent LAD: 1276+1286 (LAD); 1278 (RCA).
- 2. Bifurcation stent LAD-D1 (2 stent) and PTCA distal PDA and distal RCA. DEB on distal LCX: 1276+1286 (stent LAD); 1278+1286 (stent D1); 1280+1286 (DEB LCX); 1280 (distal PDA); 1280 (distal RCA).
- 3. Stent mid LMCA and mid LAD: 1276+1286 (mid LMCA); 1278+1286 (mid LAD).

* NOTE: the only way to guarantee payment from medical funders is to follow the three stent rule as per SAMA DBM and CPT which states that code 1286 (and 1287 for a secondary cardiologist) may only be applied once for LAD (and/or LMCA); LCX (and/or LMCA); and RCA.

EXAMPLE FOR STENTING ALL THREE MAJOR CORONARY VESSELS:

1276+1286 (LAD); 1278+1286 (LCX); 1280+1286 (RCA). If more lesions are stented or treated with PTCA multiple additions of code 1280 may be added. In all cases where multiple codes are used it is best to describe the segments in the coding.

8.6. THROMBUS ASPIRATION

- Thrombus aspiration is an additional procedure commonly performed in a modern catheterisation lab especially in cases of acute myocardial infarction. There are two codes available for use.
- 5016 is not a coronary specific code and valued at 219 units. It is the code commonly used currently. It specifies "per vessel".
- 1274 is a coronary specific code and valued at 260 units. This code does not specify per vessel. Considering aspiration is commonly only coded for once per angiographic procedure we encourage the use of code 1274 because it is NOT under review, is coronary specific AND the unit value is higher.
- The reason for a higher unit value with code 1274 over 5016 is that thrombus aspiration carries substantially more risk and requires a significant more expertise to perform than in a large non-mobile artery for example.
- Notes pertaining to 5016 state that it is applicable to each named vessel. In cardiology cases 1274 will
 generally be used once.
- SASCI encourages use of 1274 once per procedure where thrombus aspiration is performed regardless of method (manual or Angiojet).

8.7. ATHERECTOMY

- A similar situation exists with atherectomy (Rotablation). Multiple codes exist; 5014; 1284 and 1285.
- Code 5014 is similar to code 5016 and is a non-coronary specific code for atherectomy which carries a value of 341 units.
- Code 1284 is a coronary specific code which carries the value of 300 units.
- We encourage consistency and considering 1284 best describes atherectomy performed in coronary arteries we encourage the use of 1284 when performing Rotablation.
- Code 1284 carries the description "Single lesion". SAMA and SASCIs interpretation of the code description is that it may be applied per major coronary artery or branches provided this is not abused by practitioners. We would suggest that 1284 and 1285 are applied once per vessel in which Rotablation is performed. Note the modifier M0005 may apply.
- Notes pertaining to Code 5014 say that the code is applicable to each named vessel or stented segment.
- An additional advantage of code 1284 is that it is associated with a second cardiologist code 1285 which can be used when the procedure is carried out with two operators. Code 1285 carries a unit value of 180 units.
- Currently we encourage use of 1284 for first operator and 1285 for second operator. We also encourage multiple use of the code up to 3 times per procedure if it is performed more than once in different main vessels (e.g. LAD and LCX or LAD and RCA).

8.8. MICROCATHETER USAGE

- Microcatheter usage has become routine in certain complex coronary cases including chronic total occlusions whether via the anterograde approach or retrograde approach. In addition microcatheters can be used to reclassify a grade 5 thrombus.
- Microcatheters are also used to hold position in vessels while wires are exchanged particularly with Rotablation use.
- In these instances it is appropriate to code for microcatheter usage with code 3570. The code is only applied once per vessel.
- Please note that at this stage code 3570 only pertains to cerebral and pulmonary vessels. SASCI and SA Heart are working towards having coronary vessels included in the notes. It is inappropriate and unethical that radiologists are compensated for microcatheter usage in intracranial and pulmonary vessels and cardiologists are not compensated for microcatheter usage in coronary arteries.
- SASCI encourages use of 3570 when a microcatheter is used (regardless of type) per vessel (generally once per Rotablation or anterograde CTO and twice with retrograde CTO).

* Note that if code 3570 is applied twice code M0005 may be applied (multiple procedures).

interventional cardiac procedures

8.9. DISTAL PROTECTION DEVICES

Currently there is no code in the SAMA DBM for distal protection devices. CPT14 is no help in this case as distal protection devices are bundled with procedures on coronary artery bypass grafts. In the meantime SASCI recommends the use of a microcatheter code 3570 when performing a PCI on a graft and a distal protection device is used.

8.10 SECONDARY OPERATORS

- Today many coronary procedures are complex requiring more than one operator. In some cases second operator codes exist and should be applied when appropriate.
- For coronary angioplasty codes 1277; 1279 and 1281 are used for first, second and subsequent lesions.
- Code 1287 is used when a stent is implanted and a second operator is present.
- Atherectomy has a second operator code which may be applied 1285.
- One practical method to distribute codes between operators is to list all the codes for the procedure including second operator codes and then to split the codes between operators proportional to the amount of involvement.
- When using the above method the first operator needs to send codes to the medical funder first before the second operator can do so otherwise the medical funder will reject the claim.

9.1. STRUCTURAL HEART DISEASE

- ASD closure and VSD closure.
- · Septal artery embolization for hypertrophic cardiomyopathy.
- Left atrial appendage occlusion device.
- Patent foramen ovale closure.
- Paravalvular leak closure.
- TAVI.
- (Mitra Clip).

9.2. NON CARDIAC INTERVENTIONS

- Renal denervation.
- Renal artery stenting.
- Carotid artery stenting.

9.3. NON INTERVENTIONAL CARDIAC PROCEDURE

- ECG; stress ECG; Holter ECG; ambulatory BP; tilt testing.
- Transthoracic echocardiography; transoesophageal echocardiography; stress echocardiography; intracardiac echocardiography.
- Carotid artery echocardiography.
- Outpatient and emergency department consultation coding.
- Inpatient consultation coding; Intensive care coding.