

TABLE OF CONTENTS

1 INTRODUCTION.....	7
MEDICARE PROGRAM OVERVIEW & PAYMENT SYSTEMS	8
MEDICARE PAYMENT SYSTEMS	8
RESOURCES	15
FEDERAL REGISTER.....	15
NATIONAL COVERAGE DETERMINATIONS	16
LOCAL COVERAGE DETERMINATIONS (LCDs).....	17
MEDICARE ADMINISTRATIVE CONTRACTORS	18
OTHER PAYER POLICIES.....	20
CMS INTERNET ONLY MANUALS (IOMs).....	20
OTHER CMS RESOURCES	22
NATIONAL CORRECT CODING INITIATIVE	23
BUNDLING VERSUS PACKAGING	27
PHYSICIAN EXTENDERS.....	28
DOCUMENTATION REQUIREMENTS	33
DOCUMENTATION OF E/M SERVICES	34
ELECTRONIC HEALTH RECORDS	37
AUTHENTICATION	40
MEDICAL NECESSITY	43
APPROPRIATE USE CRITERIA.....	44
PATIENT RELATIONSHIP CATEGORIES.....	45
ABOUT CODING	47
HCPCS CODES	48
DIAGNOSIS CODES	49
MODIFIERS	50
2 ARTERIOGRAMS.....	59
INTRODUCTION TO ANGIOGRAPHY	60
AORTIC ARCH ANATOMY.....	63
HEAD AND NECK ARTERIOGRAMS.....	65
HEAD AND NECK CATHETERIZATION.....	76
UPPER EXTREMITIES.....	84
THORACIC AORTA	90
ABDOMEN	95
LOWER EXTREMITIES	105
PELVIS.....	110
3 PULMONARY SYSTEM	115
4 VENOUS CATHETERIZATION/IMAGING.....	119
VENOUS ORGAN BLOOD SAMPLING.....	126
CENTRAL VENOUS CATHETERS.....	127
TREATMENT OF VARICOSE VEINS.....	140
5 PORTAL SYSTEM.....	149
6 LYMPHATIC SYSTEM.....	153

7 TRANSCATHETER PROCEDURES.....	157
LOWER EXTREMITY REVASCLARIZATION	159
ILIAC REVASCLARIZATION.....	166
FEMORAL/POPLITEAL REVASCLARIZATION	170
TIBIAL/PERONEAL REVASCLARIZATION.....	173
OTHER ANGIOPLASTY	177
OTHER STENT PLACEMENT	181
OTHER ATHERECTOMY.....	190
PORTAL SHUNT PROCEDURES	192
EMBOLIZATION AND OCCLUSION.....	195
PERIPHERAL THROMBOLYTIC INFUSION.....	211
PROLONGED NON-THROMBOLYTIC ADMINISTRATION.....	217
MECHANICAL THROMBECTOMY	220
INTRACRANIAL THROMBECTOMY/THROMBOLYSIS.....	225
VENA CAVA FILTER PROCEDURES	228
DIALYSIS CIRCUIT PROCEDURES.....	231
RETRIEVAL OF INTRAVASCULAR FOREIGN BODY	241
TRANSCATHETER BIOPSY	243
INTRAVASCULAR ULTRASOUND	244
8 ENDOVASCULAR ANEURYSM REPAIR	245
REPAIR OF THORACIC AORTA.....	248
TEVAR WITH THORACIC BRANCH ENDOPROSTHESIS (TBE)	255
REPAIR OF VISCERAL AORTA.....	256
REPAIR OF VISCERAL AND INFRARENAL AORTA	259
REPAIR OF INFRARENAL AORTA.....	264
REPAIR OF ILIAC ARTERY.....	273
9 GASTROINTESTINAL SYSTEM.....	279
10 BILIARY SYSTEM	287
11 URINARY SYSTEM.....	301
12 SPINAL PROCEDURES	319
VERTEBROPLASTY	322
VERTEBRAL AUGMENTATION.....	324
SACROPLASTY	326
SACROILIAC (SI) JOINT FUSION (ARTHRODESIS).....	327
13 PAIN PROCEDURES.....	329
EPIDURAL INJECTIONS.....	329
TRANSFORAMINAL EPIDURAL INJECTIONS.....	332
EPIDURAL BLOOD PATCH.....	334
FACET JOINT INJECTIONS	335
SPINAL NEUROLYSIS	339
EPIDUROLYSIS	343
DISC PROCEDURES	344
TRIGGER POINT INJECTIONS	348
OTHER SOFT TISSUE INJECTIONS	350
JOINT INJECTIONS	353

PERIPHERAL NERVE BLOCKS	358
CRANIAL NERVE BLOCKS	359
OTHER SOMATIC NERVE BLOCKS.....	361
AUTONOMIC NERVE BLOCKS.....	366
PERIPHERAL NEUROLYSIS.....	368
14 BIOPSY, DRAINAGE AND ASPIRATION PROCEDURES	373
PERCUTANEOUS BIOPSY	374
ASPIRATION PROCEDURES	380
DRAINAGE PROCEDURES	383
15 OTHER PROCEDURES.....	391
TUMOR ABLATION	391
NON-VASCULAR SCLEROTHERAPY	396
LOCALIZATION PROCEDURES	398
APPENDIX A MODERATE SEDATION AND VR PATIENT PROCEDURAL DISSOCIATION.....	401
APPENDIX B UNLISTED CODES	407
APPENDIX C LINKS TO CMS RESOURCES.....	413
APPENDIX D ADDITIONAL CODING RESOURCES	415