

Note, fields in **green** are new in v2.9x, fields in **yellow** are added or changed from the v2.81 definition

PART 1 (PROCID 1 through 4)				
Variable Short Name/Seq #	Isolated CAB (ProcID=1)	Isolated AVR (ProcID=2)	Isolated MVR** (ProcID=3)	AVR + CAB (ProcID=4)
OpCAB/2120	<ul style="list-style-type: none"> • Yes, planned • Yes, unplanned due to unsuspected disease or anatomy 	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 	<ul style="list-style-type: none"> • Yes, planned • Yes, unplanned due to unsuspected disease or anatomy •
OpCAB	OpCAB in(3,5)	OpCab in (NULL, 2,4)	OpCab in (NULL, 2,4)	OpCAB in(3,5)
OpValve/2125	<Not used in this calculation>	• Yes	• Yes	• Yes
OpValve		Opvalve eq 1	Opvalve eq 1	Opvalve eq 1
VSAV/3390	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 	<ul style="list-style-type: none"> • Yes, planned • Yes, unplanned due to unsuspected disease or anatomy 	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 	<ul style="list-style-type: none"> • Yes, planned • Yes, unplanned due to unsuspected disease or anatomy
VSAV	VSAV in (NULL, 2,4)	VSAV in (3,5)	VSAV in (NULL, 2,4)	VSAV in (3,5)
VSAVPr/3395	<Not used in this calculation>	• Replacement	<Not used in this calculation>	• Replacement
VSAVPr		VSAVPr eq 1		VSAVPr eq 1
VSMV/3495	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 	<ul style="list-style-type: none"> • Yes, planned • Yes, unplanned due to unsuspected disease or anatomy 	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing
VSMV	VSMV in (NULL, 2,4)	VSMV in (NULL, 2,4)	VSMV in (3,5)	VSMV in (NULL, 2,4)
VSMVPr/3500	<Not used in this calculation>	<Not used in this calculation>	• Replacement	<Not used in this calculation>
VSMVPr			VSMVPr eq 2	
OCarCongProc1/6515	<ul style="list-style-type: none"> • Missing • PFO, Primary closure • Anomalous origin of coronary artery from pulmonary artery repair • Anomalous aortic origin of coronary artery from aorta (AAOCA) repair 	<ul style="list-style-type: none"> • Missing • PFO, Primary closure 	<ul style="list-style-type: none"> • Missing • PFO, Primary closure • ASD repair, Primary closure • ASD repair, Patch 	<ul style="list-style-type: none"> • Missing • PFO, Primary closure • Anomalous origin of coronary artery from pulmonary artery repair • Anomalous aortic origin of coronary artery from aorta (AAOCA) repair

OCarCongProc1	Ocarconproc1 in (NULL,10,1291,1305)	Ocarconproc1 in (NULL,10)	Ocarconproc1 in (NULL,10,20,30)	Ocarconproc1 in (NULL,10,1291,1305)
OCarCongProc2/ 6520	<ul style="list-style-type: none"> Missing PFO, Primary closure Anomalous origin of coronary artery from pulmonary artery repair Anomalous aortic origin of coronary artery from aorta (AAOCA) repair 	<ul style="list-style-type: none"> Missing PFO, Primary closure 	<ul style="list-style-type: none"> Missing PFO, Primary closure ASD repair, Primary closure ASD repair, Patch 	<ul style="list-style-type: none"> Missing PFO, Primary closure Anomalous origin of coronary artery from pulmonary artery repair Anomalous aortic origin of coronary artery from aorta (AAOCA) repair
OCarCongProc2	Ocarconproc2 in (NULL,10,1291,1305)	Ocarconproc2 in (NULL,10)	Ocarconproc2 in (NULL,10,20,30)	Ocarconproc2 in (NULL,10,1291,1305)
OCarCongProc3/ 6525	<ul style="list-style-type: none"> Missing PFO, Primary closure Anomalous origin of coronary artery from pulmonary artery repair Anomalous aortic origin of coronary artery from aorta (AAOCA) repair 	<ul style="list-style-type: none"> Missing PFO, Primary closure 	<ul style="list-style-type: none"> Missing PFO, Primary closure ASD repair, Primary closure ASD repair, Patch 	<ul style="list-style-type: none"> Missing PFO, Primary closure Anomalous origin of coronary artery from pulmonary artery repair Anomalous aortic origin of coronary artery from aorta (AAOCA) repair
OCarCongProc3	Ocarconproc3 in (NULL,10,1291,1305)	Ocarconproc3 in (NULL,10)	Ocarconproc3 in (NULL,10,20,30)	Ocarconproc3 in (NULL,10,1291,1305)
Tricuspid Procedures: VSTV VSTrReplace VSTrValvec 3640, 3650, 3653	<p>Unplanned Surgical Complications ONLY</p> <p>VSTV is one of :</p> <ul style="list-style-type: none"> No Yes, unplanned due to surgical complication Missing 	<p>Unplanned Surgical Complications ONLY</p> <p>VSTV is one of :</p> <ul style="list-style-type: none"> No Yes, unplanned due to surgical complication Missing 	<p>All tricuspid repairs are allowed. Tricuspid replacements and valvecotomies are only allowed if the tricuspid procedure was unplanned due to surgical complications. Must satisfy at least one of (1) or (2):</p> <p>1. VSTrReplace:</p> <ul style="list-style-type: none"> No Missing <p>AND VSTrValvec:</p> <ul style="list-style-type: none"> No Missing <p>2. VSTV</p>	<p>Unplanned Surgical Complications ONLY</p> <p>VSTV is one of :</p> <ul style="list-style-type: none"> No Yes, unplanned due to surgical complication Missing

			<ul style="list-style-type: none"> • Yes, unplanned due to surgical complication”] 	
Tricuspid Procedures: VSTV VSTrReplace VSTrValvec	VSTV in (NULL, 2,4)	VSTV in (NULL, 2,4)	[VSTrReplace in (NULL, 2) and VSTrValvec in (NULL,2)] OR VSTV eq 4	VSTV in (NULL, 2,4)
VSPV/3685	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 			
VSPV	VSPV in (NULL, 2,4)			
PrevVADExp/ 3825	<ul style="list-style-type: none"> • Yes, not during this procedure • No • Missing 			
PrevVADExp	PrevVADExp in (NULL, 1,3)			
VADImpTmg/ 3845	<ul style="list-style-type: none"> • Pre-Operative (during same hospitalization but not same OR trip as CV surgical procedure) • In conjunction with CV surgical procedure (same trip to the OR)- unplanned • Post-Operative (after surgical procedure during reoperation) • Missing 			
VADImpTmg	VADImpTmg in (NULL, 1, 4, 5)			
VADImpTmg2/ 3900	<ul style="list-style-type: none"> • Pre-Operative (during same hospitalization but not same OR trip as CV surgical procedure) • In conjunction with CV surgical procedure (same trip to the OR)- unplanned • Post-Operative (after surgical procedure during reoperation) • Missing 			
VADImpTmg2	VADImpTmg2 in (NULL, 1, 4, 5)			
VADImpTmg3/ 3955	<ul style="list-style-type: none"> • Pre-Operative (during same hospitalization but not same OR trip as CV surgical procedure) • In conjunction with CV surgical procedure (same trip to the OR)- unplanned • Post-Operative (after surgical procedure during reoperation) • Missing 			
VADImpTmg3	VADImpTmg3 in (NULL, 1, 4, 5)			
VExp/3875	<ul style="list-style-type: none"> • Yes, not during this procedure • No • Missing 			
VExp	VExp in (NULL, 3, 2)			
VExp2/3930	<ul style="list-style-type: none"> • Yes, not during this procedure • No • Missing 			
VExp2	VExp2 in (NULL, 3, 2)			

VExp3/3985	<ul style="list-style-type: none"> • Yes, not during this procedure <ul style="list-style-type: none"> • No • Missing 			
VExp3	VExp3 in (NULL, 3, 2)			
OCarLVA/4075	<ul style="list-style-type: none"> • No • Missing 			
OCarLVA	OCarLVA in (NULL, 2)			
OCarVSD/4130	<ul style="list-style-type: none"> • No • Missing 			
OCarVSD	OCarVSD in (NULL, 2)			
AortProc/2125	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 			
AortProc	Aortproc in (NULL, 2,4)			
EndovasProc/5066	<ul style="list-style-type: none"> • No • Missing 			
EndovasProc	EndovasProc in (NULL, 2)			
OCarAFibIntraLes/4040	<ul style="list-style-type: none"> • No • Missing 	<ul style="list-style-type: none"> • No • Missing 	<Not used in this calculation>	<ul style="list-style-type: none"> • No • Missing
OCarAFibIntraLes	OCarAFibIntraLes in (NULL, 2)	OCarAFibIntraLes in (NULL, 2)		OCarAFibIntraLes in (NULL, 2)
OCarAFibLesLoc/4191	<ul style="list-style-type: none"> • Primarily epicardial • Missing 	<ul style="list-style-type: none"> • Primarily epicardial • Missing 	<Not used in this calculation>	<ul style="list-style-type: none"> • Primarily epicardial • Missing
OCarAFibLesLoc	OCarAFibLesLoc ne 2	OCarAFibLesLoc ne 2		OCarAFibLesLoc ne 2
OCarASDSec/4035	<ul style="list-style-type: none"> • No • Missing 	<ul style="list-style-type: none"> • No • Missing 	<Not used in this calculation>	<ul style="list-style-type: none"> • No • Missing
OCarASDSec	OCarASDSec in (NULL, 2)	OCarASDSec in (NULL, 2)		OCarASDSec in (NULL, 2)
OCarACD/4055	<Not used in this calculation>	<Not used in this calculation>	<ul style="list-style-type: none"> • No • Missing • Permanent Pacemaker 	<Not used in this calculation>
OCarACD			OCarACD in (NULL, 1, 2)	
OCarACDLE/4065	<ul style="list-style-type: none"> • Yes, unplanned due to surgical complication • No • Missing 			

OCarACDLE	OCarACDLE in (NULL, 2,4)			
OCarLasr/4110	<Not used in this calculation>	<Not used in this calculation>	<ul style="list-style-type: none"> • No • Missing 	<Not used in this calculation>
OCarLasr			OCarLasr in (NULL, 2)	
OCPulThromDis/4085			<ul style="list-style-type: none"> • No • Missing 	
OCPulThromDis	OCPulThromDis in (NULL, 1)			
OCarSubaStenRes/4090			<ul style="list-style-type: none"> • No • Missing 	
OCarSubaStenRes	OCarSubaStenRes in (NULL, 2)			
OCarSVR/4105			<ul style="list-style-type: none"> • No • Missing 	
OCarSVR	OCarSVR in (NULL, 2)			
OCarCrTx/4120			<ul style="list-style-type: none"> • No • Missing 	
OCarCrTx	OCarCrTx in (NULL, 2)			
OCarTrma/4125			<ul style="list-style-type: none"> • No • Missing 	
OCarTrma	OCarTrma in (NULL, 2)			
OCTumor/4115			<ul style="list-style-type: none"> • No • Missing 	
OCTumor	OCTumor in (NULL, 1)			
OCarOthr/4135			<ul style="list-style-type: none"> • No • Missing 	
OCarOthr	OCarOthr in (NULL, 2)			
VSTCV/3400			<ul style="list-style-type: none"> • No • Missing 	
VSTCV	VSTCV in (NULL, 2)			
VSTCVMit/3610			<ul style="list-style-type: none"> • No • Missing 	
VSTCVMit	VSTCVMit in (NULL, 2)			
VSTCVTri/3652			<ul style="list-style-type: none"> • No • Missing 	
VSTCVTri	VSTCVTri in (NULL, 2)			
VSTCVPu/3695			<ul style="list-style-type: none"> • No • Missing 	
VSTCVPu	VSTCVPu in (NULL, 2)			

CCancCase/2050	<ul style="list-style-type: none"> • No • Missing
CCancCase	CCancCase in (NULL, 2)
ONCCarEn/6530	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing
ONCCarEn	ONCCarEn in (NULL, 2, 4)
ONCOVasc/6535	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing
ONCOVasc	ONCOVasc in (NULL, 2, 4)
ONCOThor/6540	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing
ONCOThor	ONCOThor in (NULL, 2, 4)
ONCOther/6545	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing
ONCOther	ONCOther in (NULL, 2, 4)

PART 2 (PROCID 5 through 8)				
Variable Short Name	MVR + CAB** (ProcID=5)	AVR + MVR** (ProcID=6)	MV Repair** (ProcID=7)	MV Repair + CAB** (ProcID=8)
OpCAB/2120	<ul style="list-style-type: none"> • Yes, planned • Yes, unplanned due to unsuspected disease or anatomy 	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 	<ul style="list-style-type: none"> • Yes, planned • Yes, unplanned due to unsuspected disease or anatomy
OpCAB	OpCAB in(3,5)	OpCab in (NULL, 2,4)	OpCab in (NULL, 2,4)	OpCAB in(3,5)
OpValve/2125	• Yes	• Yes	• Yes	• Yes
OpValve	Opvalve eq 1	Opvalve eq 1	Opvalve eq 1	Opvalve eq 1
VSAV/3390	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 	<ul style="list-style-type: none"> • Yes, planned • Yes, unplanned due to unsuspected disease or anatomy 	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing
VSAV	VSAV in (NULL, 2,4)	VSAV in (3,5)	VSAV in (NULL, 2,4)	VSAV in (NULL, 2,4)
VSAVPr/3395	<Not used in this calculation>	• Replacement	<Not used in this calculation>	<Not used in this calculation>
VSAVPr		VSAVPr eq 1		
VSMV/3495	<ul style="list-style-type: none"> • Yes, planned • Yes, unplanned due to unsuspected disease or anatomy 	<ul style="list-style-type: none"> • Yes, planned • Yes, unplanned due to unsuspected disease or anatomy 	<ul style="list-style-type: none"> • Yes, planned • Yes, unplanned due to unsuspected disease or anatomy 	<ul style="list-style-type: none"> • Yes, planned • Yes, unplanned due to unsuspected disease or anatomy
VSMV	VSMV in (3,5)	VSMV in (3,5)	VSMV in (3,5)	VSMV in (3,5)
VSMVPr/3500	• Replacement	• Replacement	• Repair	• Repair
VSMVPr	VSMVPr eq 2	VSMVPr eq 2	VSMVPr eq 1	VSMVPr eq 1
OCarCongProc1/6515	<ul style="list-style-type: none"> • Missing • PFO, Primary closure • Anomalous origin of coronary artery from pulmonary artery repair • Anomalous aortic origin of coronary artery from aorta (AAOCA) repair • ASD repair, Primary closure • ASD repair, Patch 	<ul style="list-style-type: none"> • Missing • PFO, Primary closure • ASD repair, Primary closure • ASD repair, Patch 	<ul style="list-style-type: none"> • Missing • PFO, Primary closure • ASD repair, Primary closure • ASD repair, Patch 	<ul style="list-style-type: none"> • Missing • PFO, Primary closure • Anomalous origin of coronary artery from pulmonary artery repair • Anomalous aortic origin of coronary artery from aorta (AAOCA) repair • ASD repair, Primary closure • ASD repair, Patch
OCarCongProc1	Ocarconproc1 in (NULL,10,20,30,1291,1305)	Ocarconproc1 in (NULL,10,20,30)	Ocarconproc1 in (NULL,10,20,30)	Ocarconproc1 in (NULL,10,20,30,1291,1305)
OCarCongProc2/6520	<ul style="list-style-type: none"> • Missing • PFO, Primary closure • Anomalous origin of coronary artery from pulmonary artery repair 	<ul style="list-style-type: none"> • Missing • PFO, Primary closure • ASD repair, Primary closure • ASD repair, Patch 	<ul style="list-style-type: none"> • Missing • PFO, Primary closure • ASD repair, Primary closure • ASD repair, Patch 	<ul style="list-style-type: none"> • Missing • PFO, Primary closure • Anomalous origin of coronary artery from pulmonary artery repair

PART 2 (PROCID 5 through 8)				
Variable Short Name	MVR + CAB** (ProcID=5)	AVR + MVR** (ProcID=6)	MV Repair** (ProcID=7)	MV Repair + CAB** (ProcID=8)
	<ul style="list-style-type: none"> Anomalous aortic origin of coronary artery from aorta (AAOCA) repair ASD repair, Primary closure ASD repair, Patch 			<ul style="list-style-type: none"> Anomalous aortic origin of coronary artery from aorta (AAOCA) repair ASD repair, Primary closure ASD repair, Patch
OCarCongProc2	Ocarconproc2 in (NULL,10, 20, 30,1291,1305)	Ocarconproc2 in (NULL,10,20,30)	Ocarconproc2 in (NULL,10,20,30)	Ocarconproc2 in (NULL,10, 20, 30,1291,1305)
OCarCongProc3/6525	<ul style="list-style-type: none"> Missing PFO, Primary closure Anomalous origin of coronary artery from pulmonary artery repair Anomalous aortic origin of coronary artery from aorta (AAOCA) repair ASD repair, Primary closure ASD repair, Patch 	<ul style="list-style-type: none"> Missing PFO, Primary closure ASD repair, Primary closure ASD repair, Patch 	<ul style="list-style-type: none"> Missing PFO, Primary closure ASD repair, Primary closure ASD repair, Patch 	<ul style="list-style-type: none"> Missing PFO, Primary closure Anomalous origin of coronary artery from pulmonary artery repair Anomalous aortic origin of coronary artery from aorta (AAOCA) repair ASD repair, Primary closure ASD repair, Patch
OCarCongProc3	Ocarconproc3 in (NULL,10, 20, 30,1291,1305)	Ocarconproc3 in (NULL,10,20,30)	Ocarconproc3 in (NULL,10,20,30)	Ocarconproc3 in (NULL,10, 20, 30,1291,1305)
Tricuspid Procedures: VSTV VSTrReplace VSTrValvec/ 3640, 3650, 3653	<p>All tricuspid repairs are allowed. Tricuspid replacements and valvecotomies are only allowed if the tricuspid procedure was unplanned due to surgical complications. Must satisfy at least one of (1) or (2):</p> <p>1. VSTrReplace:</p> <ul style="list-style-type: none"> No Missing <p>AND</p> <p>VSTrValvec:</p> <ul style="list-style-type: none"> No Missing <p>2. VSTV</p>	<p>All tricuspid repairs are allowed. Tricuspid replacements and valvecotomies are only allowed if the tricuspid procedure was unplanned due to surgical complications. Must satisfy at least one of (1) or (2):</p> <p>1. VSTrReplace:</p> <ul style="list-style-type: none"> No Missing <p>AND</p> <p>VSTrValvec:</p> <ul style="list-style-type: none"> No Missing <p>2. VSTV</p>	<p>All tricuspid repairs are allowed. Tricuspid replacements and valvecotomies are only allowed if the tricuspid procedure was unplanned due to surgical complications. Must satisfy at least one of (1) or (2):</p> <p>1. VSTrReplace:</p> <ul style="list-style-type: none"> No Missing <p>AND</p> <p>VSTrValvec:</p> <ul style="list-style-type: none"> No Missing <p>2. VSTV</p>	<p>All tricuspid repairs are allowed. Tricuspid replacements and valvecotomies are only allowed if the tricuspid procedure was unplanned due to surgical complications. Must satisfy at least one of (1) or (2):</p> <p>1. VSTrReplace:</p> <ul style="list-style-type: none"> No Missing <p>AND</p> <p>VSTrValvec:</p> <ul style="list-style-type: none"> No Missing <p>2. VSTV</p>

PART 2 (PROCID 5 through 8)				
Variable Short Name	MVR + CAB** (ProcID=5)	AVR + MVR** (ProcID=6)	MV Repair** (ProcID=7)	MV Repair + CAB** (ProcID=8)
	• Yes, unplanned due to surgical complication”]	• Yes, unplanned due to surgical complication”]	• Yes, unplanned due to surgical complication”]	• Yes, unplanned due to surgical complication”]
Tricuspid Procedures VSTV VSTrReplace VSTrValvec	[VSTrReplace in (NULL, 2) and VSTrValvec in (NULL,2)] OR VSTV eq 4	[VSTrReplace in (NULL, 2) and VSTrValvec in (NULL,2)] OR VSTV eq 4	[VSTrReplace in (NULL, 2) and VSTrValvec in (NULL,2)] OR VSTV eq 4	[VSTrReplace in (NULL, 2) and VSTrValvec in (NULL,2)] OR VSTV eq 4
VSPV/3685	<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 			
VSPV	VSPV in (NULL, 2,4)			
PrevVADExp/ 3825	<ul style="list-style-type: none"> • Yes, not during this procedure • No • Missing 			
PrevVADExp	PrevVADExp in (NULL, 1,3)			
VADImpTmg/ 3845	<ul style="list-style-type: none"> • Pre-Operative (during same hospitalization but not same OR trip as CV surgical procedure) • In conjunction with CV surgical procedure (same trip to the OR)- unplanned • Post-Operative (after surgical procedure during reoperation) • Missing 			
VADImpTmg	VADImpTmg in (NULL, 1, 4, 5)			
VADImpTmg2/ 3900	<ul style="list-style-type: none"> • Pre-Operative (during same hospitalization but not same OR trip as CV surgical procedure) • In conjunction with CV surgical procedure (same trip to the OR)- unplanned • Post-Operative (after surgical procedure during reoperation) • Missing 			
VADImpTmg2	VADImpTmg2 in (NULL, 1, 4, 5)			
VADImpTmg3/ 3955	<ul style="list-style-type: none"> • Pre-Operative (during same hospitalization but not same OR trip as CV surgical procedure) • In conjunction with CV surgical procedure (same trip to the OR)- unplanned • Post-Operative (after surgical procedure during reoperation) • Missing 			
VADImpTmg3	VADImpTmg3 in (NULL, 1, 4, 5)			
VExp/3875	<ul style="list-style-type: none"> • Yes, not during this procedure • No • Missing 			
VExp	VExp in (NULL, 3, 2)			
VExp2/3930	<ul style="list-style-type: none"> • Yes, not during this procedure 			

PART 2 (PROCID 5 through 8)				
Variable Short Name	MVR + CAB** (ProcID=5)	AVR + MVR** (ProcID=6)	MV Repair** (ProcID=7)	MV Repair + CAB** (ProcID=8)
			<ul style="list-style-type: none"> • No • Missing 	
VExp2			VExp2 in (NULL, 3, 2)	
VExp3/3985			<ul style="list-style-type: none"> • Yes, not during this procedure • No • Missing 	
VExp3			VExp3 in (NULL, 3, 2)	
OCarLVA/4075			<ul style="list-style-type: none"> • No • Missing 	
OCarLVA			OCarLVA in (NULL, 2)	
OCarVSD/4130			<ul style="list-style-type: none"> • No • Missing 	
OCarVSD			OCarVSD in (NULL, 2)	
AortProc/2125			<ul style="list-style-type: none"> • No • Yes, unplanned due to surgical complication • Missing 	
AortProc			Aortproc in (NULL, 2,4)	
EndovasProc/5066			<ul style="list-style-type: none"> • No • Missing 	
EndovasProc			EndovasProc in (NULL, 2)	
OCarAFibIntraLes 4040	<Not used in this calculation>	<Not used in this calculation>	<Not used in this calculation>	<Not used in this calculation>
OCarAFibIntraLes				
OCarAFibLesLoc 4191	<Not used in this calculation>	<Not used in this calculation>	<Not used in this calculation>	<Not used in this calculation>
OCarAFibLesLoc				
OCarASDSec 4035	<Not used in this calculation>	<Not used in this calculation>	<Not used in this calculation>	<Not used in this calculation>
OCarASDSec				
OCarACD 4055	<ul style="list-style-type: none"> • No • Missing • Permanent Pacemaker 	<ul style="list-style-type: none"> • No • Missing • Permanent Pacemaker 	<ul style="list-style-type: none"> • No • Missing • Permanent Pacemaker 	<ul style="list-style-type: none"> • No • Missing • Permanent Pacemaker
OCarACD	OCarACD in (NULL, 1, 2)	OCarACD in (NULL, 1, 2)	OCarACD in (NULL, 1, 2)	OCarACD in (NULL, 1, 2)
OCarACDLE/4065			<ul style="list-style-type: none"> • Yes, unplanned due to surgical complication • No 	

PART 2 (PROCID 5 through 8)				
Variable Short Name	MVR + CAB** (ProcID=5)	AVR + MVR** (ProcID=6)	MV Repair** (ProcID=7)	MV Repair + CAB** (ProcID=8)
				• Missing
OCarACDLE				OCarACDLE in (NULL, 2,4)
OCarLasr/4110	• No • Missing	• No • Missing	• No • Missing	• No • Missing
OCarLasr	OCarLasr in (NULL, 2)	OCarLasr in (NULL, 2)	OCarLasr in (NULL, 2)	OCarLasr in (NULL, 2)
OCPulThromDis/4085				• No • Missing
OCPulThromDis				OCPulThromDis in (NULL, 1)
OCarSubaStenRes/4090				• No • Missing
OCarSubaStenRes				OCarSubaStenRes in (NULL, 2)
OCarSVR/4105				• No • Missing
OCarSVR				• OCarSVR in (NULL, 2)
OCarCrTx/4120				• No • Missing
OCarCrTx				• OCarCrTx in (NULL, 2)
OCarTrma/4125				• No • Missing
OCarTrma				• OCarTrma in (NULL, 2)
OCTumor/4115				• No • Missing
OCTumor				• OCTumor in (NULL, 1)
OCarOthr/4135				• No • Missing
OCarOthr				• OCarOthr in (NULL, 2)
VSTCV/3400				• No • Missing
VSTCV				• VSTCV in (NULL, 2)
VSTCVMit/3610				• No • Missing
VSTCVMit				• VSTCVMit in (NULL, 2)
VSTCVTri/3652				• No • Missing

PART 2 (PROCID 5 through 8)				
Variable Short Name	MVR + CAB** (ProcID=5)	AVR + MVR** (ProcID=6)	MV Repair** (ProcID=7)	MV Repair + CAB** (ProcID=8)
VSTCVTri				• VSTCVTri in (NULL, 2)
VSTCVPu/3695				• No • Missing
VSTCVPu				• VSTCVPu in (NULL, 2)
CCancCase/2050				• No • Missing
CCancCase				• CCancCase in (NULL, 2)
ONCCarEn/6530				• No • Yes, unplanned due to surgical complication • Missing
ONCCarEn				• ONCCarEn in (NULL, 2, 4)
ONCOVasc/6535				• No • Yes, unplanned due to surgical complication • Missing
ONCOVasc				• ONCOVasc in (NULL, 2, 4)
ONCOTHor/6540				• No • Yes, unplanned due to surgical complication • Missing
ONCOTHor				• ONCOTHor in (NULL, 2, 4)
ONCOther/6545				• No • Yes, unplanned due to surgical complication • Missing
ONCOther				• ONCOther in (NULL, 2, 4)

****For Version 2.9 - Please note that the ProcID algorithms for all Mitral Valve Procedures now also include intracardiac lesions and tricuspid repairs. Since it is common practice to do a full Maze procedure and/or an occasional tricuspid repair STS Leadership wanted to keep these cases in the MV Risk Algorithms.**

The following fields are no longer collected:

AortProcTEVAR – replaced by EndovascProc

OpTricus – replaced by VSTrRepair, VSTrReplace, and VSTrValvec

