

## APPENDIX C: Surgical discharge MS-DRGs

### *Surgical discharge MS-DRGs: (SURGI2R)*

01	Heart transplant or implant of heart assist system with MCC	478	Biopsies of musculoskeletal system and connective tissue with CC
02	Heart transplant or implant of heart assist system without MCC	479	Biopsies of musculoskeletal system and connective tissue without CC/MCC
03	ECMO or tracheostomy with MV >96 hours or principal diagnosis except face, mouth and neck with major O.R. procedures	480	Hip and femur procedures except major joint with MCC
04	Tracheostomy with MV >96 hours or principal diagnosis except face, mouth and neck without major O.R. procedures	481	Hip and femur procedures except major joint with CC
05	Liver transplant with MCC or intestinal transplant	482	Hip and femur procedures except major joint without CC/MCC
06	Liver transplant without MCC	483	Major joint or limb reattachment procedures of upper extremities
07	Lung transplant	485	Knee procedures with principal diagnosis of infection with MCC
08	Simultaneous pancreas and kidney transplant	486	Knee procedures with principal diagnosis of infection with CC
010	Pancreas transplant	487	Knee procedures with principal diagnosis of infection without CC/MCC
011	Tracheostomy for face, mouth and neck diagnoses or laryngectomy with MCC	488	Knee procedures without principal diagnosis of infection with CC/MCC
012	Tracheostomy for face, mouth and neck diagnoses or laryngectomy with CC	489	Knee procedures without principal diagnosis of infection without CC/MCC
013	Tracheostomy for face, mouth and neck diagnoses or laryngectomy without CC/MCC	492	Lower extremity and humerus procedures except hip, foot and femur with MCC
019	Simultaneous pancreas and kidney transplant with hemodialysis	493	Lower extremity and humerus procedures except hip, foot and femur with CC
020	Intracranial vascular procedures with principal diagnosis hemorrhage with MCC	494	Lower extremity and humerus procedures except hip, foot and femur without CC/MCC

021	Intracranial vascular procedures with principal diagnosis hemorrhage with CC	495	Local excision and removal of internal fixation devices except hip and femur with MCC
022	Intracranial vascular procedures with principal diagnosis hemorrhage without CC/MCC	496	Local excision and removal of internal fixation devices except hip and femur with CC
023	Craniotomy with major device implant or acute complex CNS principal diagnosis with MCC or chemotherapy implant or epilepsy with ne	497	Local excision and removal of internal fixation devices except hip and femur without CC/MCC
024	Craniotomy with major device implant or acute complex CNS principal diagnosis without MCC	498	Local excision and removal of internal fixation devices of hip and femur with CC/MCC
025	Craniotomy and endovascular intracranial procedures with MCC	499	Local excision and removal of internal fixation devices of hip and femur without CC/MCC
026	Craniotomy and endovascular intracranial procedures with CC	500	Soft tissue procedures with MCC
027	Craniotomy and endovascular intracranial procedures without CC/MCC	501	Soft tissue procedures with CC
028	Spinal procedures with MCC	502	Soft tissue procedures without CC/MCC
029	Spinal procedures with CC or spinal neurostimulators	503	Foot procedures with MCC
030	Spinal procedures without CC/MCC	504	Foot procedures with CC
031	Ventricular shunt procedures with MCC	505	Foot procedures without CC/MCC
032	Ventricular shunt procedures with CC	506	Major thumb or joint procedures
033	Ventricular shunt procedures without CC/MCC	507	Major shoulder or elbow joint procedures with CC/MCC
034	Carotid artery stent procedures with MCC	508	Major shoulder or elbow joint procedures without CC/MCC
035	Carotid artery stent procedures with CC	509	Arthroscopy
036	Carotid artery stent procedures without CC/MCC	510	Shoulder, elbow or forearm procedures, except major joint procedures with MCC
037	Extracranial procedures with MCC	511	Shoulder, elbow or forearm procedures, except major joint procedures with CC
038	Extracranial procedures with CC	512	Shoulder, elbow or forearm procedures, except major joint procedures without CC/MCC

039	Extracranial procedures without CC/MCC	513	Hand or wrist procedures, except major thumb or joint procedures with CC/MCC
040	Peripheral, cranial nerve and other nervous system procedures with MCC	514	Hand or wrist procedures, except major thumb or joint procedures without CC/MCC
041	Peripheral, cranial nerve and other nervous system procedures with CC or peripheral neurostimulator	515	Other musculoskeletal system and connective tissue O.R. procedures with MCC
042	Peripheral, cranial nerve and other nervous system procedures without CC/MCC	516	Other musculoskeletal system and connective tissue O.R. procedures with CC
113	Orbital procedures with CC/MCC	517	Other musculoskeletal system and connective tissue O.R. procedures without CC/MCC
114	Orbital procedures without CC/MCC	518	Back and neck procedures except spinal fusion with MCC or disc device or neurostimulator
115	Extraocular procedures except orbit	519	Back and neck procedures except spinal fusion with CC
116	Intraocular procedures with CC/MCC	520	Back and neck procedures except spinal fusion without CC/MCC
117	Intraocular procedures without CC/MCC	521	Hip replacement with principal diagnosis of hip fracture with MCC
129	Major head and neck procedures with CC/MCC or major device	522	Hip replacement with principal diagnosis of hip fracture without MCC
130	Major head and neck procedures without CC/MCC	570	Skin debridement with MCC
131	Cranial and facial procedures with CC/MCC	571	Skin debridement with CC
132	Cranial and facial procedures without CC/MCC	572	Skin debridement without CC/MCC
133	Other ear, nose, mouth and throat O.R. procedures with CC/MCC	573	Skin graft for skin ulcer or cellulitis with MCC
134	Other ear, nose, mouth and throat O.R. procedures without CC/MCC	574	Skin graft for skin ulcer or cellulitis with CC
135	Sinus and mastoid procedures with CC/MCC	575	Skin graft for skin ulcer or cellulitis without CC/MCC
136	Sinus and mastoid procedures without CC/MCC	576	Skin graft except for skin ulcer or cellulitis with MCC
137	Mouth procedures with CC/MCC	577	Skin graft except for skin ulcer or cellulitis with CC

138	Mouth procedures without CC/MCC	578	Skin graft except for skin ulcer or cellulitis without CC/MCC
139	Salivary gland procedures	579	Other skin, subcutaneous tissue and breast procedures with MCC
140	Major head and neck procedures with MCC	580	Other skin, subcutaneous tissue and breast procedures with CC
141	Major head and neck procedures with CC	581	Other skin, subcutaneous tissue and breast procedures without CC/MCC
142	Major head and neck procedures without CC/MCC	582	Mastectomy for malignancy with CC/MCC
143	Other ear, nose, mouth and throat O.R. procedures with MCC	583	Mastectomy for malignancy without CC/MCC
144	Other ear, nose, mouth and throat O.R. procedures with CC	584	Breast biopsy, local excision and other breast procedures with CC/MCC
145	Other ear, nose, mouth and throat O.R. procedures without CC/MCC	585	Breast biopsy, local excision and other breast procedures without CC/MCC
163	Major chest procedures with MCC	614	Adrenal and pituitary procedures with CC/MCC
164	Major chest procedures with CC	615	Adrenal and pituitary procedures without CC/MCC
165	Major chest procedures without CC/MCC	616	Amputation of lower limb for endocrine, nutritional and metabolic disorders with MCC
166	Other respiratory system O.R. procedures with MCC	617	Amputation of lower limb for endocrine, nutritional and metabolic disorders with CC
167	Other respiratory system O.R. procedures with CC	618	Amputation of lower limb for endocrine, nutritional and metabolic disorders without CC/MCC
168	Other respiratory system O.R. procedures without CC/MCC	619	O.R. procedures for obesity with MCC
215	Other heart assist system implant	620	O.R. procedures for obesity with CC
216	Cardiac valve and other major cardiothoracic procedures with cardiac catheterization with MCC	621	O.R. procedures for obesity without CC/MCC
217	Cardiac valve and other major cardiothoracic procedures with cardiac catheterization with CC	622	Skin grafts and wound debridement for endocrine, nutritional and metabolic disorders with MCC
218	Cardiac valve and other major cardiothoracic procedures with cardiac catheterization without CC/MCC	623	Skin grafts and wound debridement for endocrine, nutritional and metabolic disorders with CC

219	Cardiac valve and other major cardiothoracic procedures without cardiac catheterization with MCC	624	Skin grafts and wound debridement for endocrine, nutritional and metabolic disorders without CC/MCC
220	Cardiac valve and other major cardiothoracic procedures without cardiac catheterization with CC	625	Thyroid, parathyroid and thyroglossal procedures with MCC
221	Cardiac valve and other major cardiothoracic procedures without cardiac catheterization without CC/MCC	626	Thyroid, parathyroid and thyroglossal procedures with CC
222	Cardiac defibrillator implant with cardiac catheterization with AMI, hf or shock with MCC	627	Thyroid, parathyroid and thyroglossal procedures without CC/MCC
223	Cardiac defibrillator implant with cardiac catheterization with AMI, hf or shock without MCC	628	Other endocrine, nutritional and metabolic O.R. procedures with MCC
224	Cardiac defibrillator implant with cardiac catheterization without AMI, hf or shock with MCC	629	Other endocrine, nutritional and metabolic O.R. procedures with CC
225	Cardiac defibrillator implant with cardiac catheterization without AMI, hf or shock without MCC	630	Other endocrine, nutritional and metabolic O.R. procedures without CC/MCC
226	Cardiac defibrillator implant without cardiac catheterization with MCC	650	Kidney transplant with hemodialysis with MCC
227	Cardiac defibrillator implant without cardiac catheterization without MCC	651	Kidney transplant with hemodialysis without MCC
228	Other cardiothoracic procedures with MCC	652	Kidney transplant
229	Other cardiothoracic procedures without MCC	653	Major bladder procedures with MCC
230	Other cardiothoracic procedures without CC/MCC	654	Major bladder procedures with CC
231	Coronary bypass with PTCA with MCC	655	Major bladder procedures without CC/MCC
232	Coronary bypass with PTCA without MCC	656	Kidney and ureter procedures for neoplasm with MCC
233	Coronary bypass with cardiac catheterization with MCC	657	Kidney and ureter procedures for neoplasm with CC
234	Coronary bypass with cardiac catheterization without MCC	658	Kidney and ureter procedures for neoplasm without CC/MCC
235	Coronary bypass without cardiac catheterization with MCC	659	Kidney and ureter procedures for non-neoplasm with MCC
236	Coronary bypass without cardiac catheterization without MCC	660	Kidney and ureter procedures for non-neoplasm with CC

239	Amputation for circulatory system disorders except upper limb and toe with MCC	661	Kidney and ureter procedures for non-neoplasm without CC/MCC
240	Amputation for circulatory system disorders except upper limb and toe with CC	662	Minor bladder procedures with MCC
241	Amputation for circulatory system disorders except upper limb and toe without CC/MCC	663	Minor bladder procedures with CC
242	Permanent cardiac pacemaker implant with MCC	664	Minor bladder procedures without CC/MCC
243	Permanent cardiac pacemaker implant with CC	665	Prostatectomy with MCC
244	Permanent cardiac pacemaker implant without CC/MCC	666	Prostatectomy with CC
245	AICD generator procedures	667	Prostatectomy without CC/MCC
246	Percutaneous cardiovascular procedures with drug-eluting stent with MCC or 4+ arteries or stents	668	Transurethral procedures with MCC
247	Percutaneous cardiovascular procedures with drug-eluting stent without MCC	669	Transurethral procedures with CC
248	Percutaneous cardiovascular procedures with non-drug-eluting stent with MCC or 4+ arteries or stents	670	Transurethral procedures without CC/MCC
249	Percutaneous cardiovascular procedures with non-drug-eluting stent without MCC	671	Urethral procedures with CC/MCC
250	Percutaneous cardiovascular procedures without coronary artery stent with MCC	672	Urethral procedures without CC/MCC
251	Percutaneous cardiovascular procedures without coronary artery stent without MCC	673	Other kidney and urinary tract procedures with MCC
252	Other vascular procedures with MCC	674	Other kidney and urinary tract procedures with CC
253	Other vascular procedures with CC	675	Other kidney and urinary tract procedures without CC/MCC
254	Other vascular procedures without CC/MCC	707	Major male pelvic procedures with CC/MCC
255	Upper limb and toe amputation for circulatory system disorders with MCC	708	Major male pelvic procedures without CC/MCC

256	Upper limb and toe amputation for circulatory system disorders with CC	709	Penis procedures with CC/MCC
257	Upper limb and toe amputation for circulatory system disorders without CC/MCC	710	Penis procedures without CC/MCC
258	Cardiac pacemaker device replacement with MCC	711	Testes procedures with CC/MCC
259	Cardiac pacemaker device replacement without MCC	712	Testes procedures without CC/MCC
260	Cardiac pacemaker revision except device replacement with MCC	713	Transurethral prostatectomy with CC/MCC
261	Cardiac pacemaker revision except device replacement with CC	714	Transurethral prostatectomy without CC/MCC
262	Cardiac pacemaker revision except device replacement without CC/MCC	715	Other male reproductive system O.R. procedures for malignancy with CC/MCC
263	Vein ligation and stripping	716	Other male reproductive system O.R. procedures for malignancy without CC/MCC
264	Other circulatory system O.R. procedures	717	Other male reproductive system O.R. procedures except malignancy with CC/MCC
265	AICD lead procedures	718	Other male reproductive system O.R. procedures except malignancy without CC/MCC
266	Endovascular cardiac valve replacement and supplement procedures with MCC	734	Pelvic evisceration, radical hysterectomy and radical vulvectomy with CC/MCC
267	Endovascular cardiac valve replacement and supplement procedures without MCC	735	Pelvic evisceration, radical hysterectomy and radical vulvectomy without CC/MCC
268	Aortic and heart assist procedures except pulsation balloon with MCC	736	Uterine and adnexa procedures for ovarian or adnexal malignancy with MCC
269	Aortic and heart assist procedures except pulsation balloon without MCC	737	Uterine and adnexa procedures for ovarian or adnexal malignancy with CC
270	Other major cardiovascular procedures with MCC	738	Uterine and adnexa procedures for ovarian or adnexal malignancy without CC/MCC
271	Other major cardiovascular procedures with CC	739	Uterine and adnexa procedures for non-ovarian and non-adnexal malignancy with MCC

272	Other major cardiovascular procedures without CC/MCC	740	Uterine and adnexa procedures for non-ovarian and non-adnexal malignancy with CC
273	Percutaneous and other intracardiac procedures with MCC	741	Uterine and adnexa procedures for non-ovarian and non-adnexal malignancy without CC/MCC
274	Percutaneous and other intracardiac procedures without MCC	742	Uterine and adnexa procedures for non-malignancy with CC/MCC
319	Other endovascular cardiac valve procedures with MCC	743	Uterine and adnexa procedures for non-malignancy without CC/MCC
320	Other endovascular cardiac valve procedures without MCC	744	D&C, conization, laparoscopy and tubal interruption with CC/MCC
326	Stomach, esophageal and duodenal procedures with MCC	745	D&C, conization, laparoscopy and tubal interruption without CC/MCC
327	Stomach, esophageal and duodenal procedures with CC	746	Vagina, cervix and vulva procedures with CC/MCC
328	Stomach, esophageal and duodenal procedures without CC/MCC	747	Vagina, cervix and vulva procedures without CC/MCC
329	Major small and large bowel procedures with MCC	748	Female reproductive system reconstructive procedures
330	Major small and large bowel procedures with CC	749	Other female reproductive system O.R. procedures with CC/MCC
331	Major small and large bowel procedures without CC/MCC	750	Other female reproductive system O.R. procedures without CC/MCC
332	Rectal resection with MCC	765	Cesarean section with CC/MCC
333	Rectal resection with CC	766	Cesarean section without CC/MCC
334	Rectal resection without CC/MCC	767	Vaginal delivery with sterilization and/or D&C
335	Peritoneal adhesiolysis with MCC	768	Vaginal delivery with O.R. procedures except sterilization and/or D&C
336	Peritoneal adhesiolysis with CC	769	Postpartum and post abortion diagnoses with O.R. procedures
337	Peritoneal adhesiolysis without CC/MCC	770	Abortion with D&C, aspiration curettage or hysterotomy
338	Appendectomy with complicated principal diagnosis with MCC	783	Cesarean section with sterilization with MCC
339	Appendectomy with complicated principal diagnosis with CC	784	Cesarean section with sterilization with CC
340	Appendectomy with complicated principal diagnosis without CC/MCC	785	Cesarean section with sterilization without CC/MCC
341	Appendectomy without complicated principal diagnosis with MCC	786	Cesarean section without sterilization with MCC



342	Appendectomy without complicated principal diagnosis with CC	787	Cesarean section without sterilization with CC
343	Appendectomy without complicated principal diagnosis without CC/MCC	788	Cesarean section without sterilization without CC/MCC
344	Minor small and large bowel procedures with MCC	796	Vaginal delivery with sterilization and/or D&C with MCC
345	Minor small and large bowel procedures with CC	797	Vaginal delivery with sterilization and/or D&C with CC
346	Minor small and large bowel procedures without CC/MCC	798	Vaginal delivery with sterilization and/or D&C without CC/MCC
347	Anal and stomal procedures with MCC	799	Splenectomy with MCC
348	Anal and stomal procedures with CC	800	Splenectomy with CC
349	Anal and stomal procedures without CC/MCC	801	Splenectomy without CC/MCC
350	Inguinal and femoral hernia procedures with MCC	802	Other O.R. procedures of the blood and blood forming organs with MCC
351	Inguinal and femoral hernia procedures with CC	803	Other O.R. procedures of the blood and blood forming organs with CC
352	Inguinal and femoral hernia procedures without CC/MCC	804	Other O.R. procedures of the blood and blood forming organs without CC/MCC
353	Hernia procedures except inguinal and femoral with MCC	817	Other antepartum diagnoses with O.R. procedures with MCC
354	Hernia procedures except inguinal and femoral with CC	818	Other antepartum diagnoses with O.R. procedures with CC
355	Hernia procedures except inguinal and femoral without CC/MCC	819	Other antepartum diagnoses with O.R. procedures without CC/MCC
356	Other digestive system O.R. procedures with MCC	820	Lymphoma and leukemia with major O.R. procedures with MCC
357	Other digestive system O.R. procedures with CC	821	Lymphoma and leukemia with major O.R. procedures with CC
358	Other digestive system O.R. procedures without CC/MCC	822	Lymphoma and leukemia with major O.R. procedures without CC/MCC
405	Pancreas, liver and shunt procedures with MCC	823	Lymphoma and non-acute leukemia with other procedures with MCC
406	Pancreas, liver and shunt procedures with CC	824	Lymphoma and non-acute leukemia with other procedures with CC
407	Pancreas, liver and shunt procedures without CC/MCC	825	Lymphoma and non-acute leukemia with other procedures without CC/MCC
408	Biliary tract procedures except only cholecystectomy with or without C.D.E. with MCC	826	Myeloproliferative disorders or poorly differentiated neoplasms with major O.R. procedures with MCC

409	Biliary tract procedures except only cholecystectomy with or without C.D.E. with CC	827	Myeloproliferative disorders or poorly differentiated neoplasms with major O.R. procedures with CC
410	Biliary tract procedures except only cholecystectomy with or without C.D.E. without CC/MCC	828	Myeloproliferative disorders or poorly differentiated neoplasms with major O.R. procedures without CC/MCC
411	Cholecystectomy with C.D.E. with MCC	829	Myeloproliferative disorders or poorly differentiated neoplasms with other procedures with CC/MCC
412	Cholecystectomy with C.D.E. with CC	830	Myeloproliferative disorders or poorly differentiated neoplasms with other procedures without CC/MCC
413	Cholecystectomy with C.D.E. without CC/MCC	853	Infectious and parasitic diseases with O.R. procedures with MCC
414	Cholecystectomy except by laparoscope without C.D.E. with MCC	854	Infectious and parasitic diseases with O.R. procedures with CC
415	Cholecystectomy except by laparoscope without C.D.E. with CC	855	Infectious and parasitic diseases with O.R. procedures without CC/MCC
416	Cholecystectomy except by laparoscope without C.D.E. without CC/MCC	856	Postoperative or post-traumatic infections with O.R. procedures with MCC
417	Laparoscopic cholecystectomy without C.D.E. with MCC	857	Postoperative or post-traumatic infections with O.R. procedures with CC
418	Laparoscopic cholecystectomy without C.D.E. with CC	858	Postoperative or post-traumatic infections with O.R. procedures without CC/MCC
419	Laparoscopic cholecystectomy without C.D.E. without CC/MCC	876	O.R. procedures with principal diagnosis of mental illness
420	Hepatobiliary diagnostic procedures with MCC	901	Wound debridements for injuries with MCC
421	Hepatobiliary diagnostic procedures with CC	902	Wound debridements for injuries with CC
422	Hepatobiliary diagnostic procedures without CC/MCC	903	Wound debridements for injuries without CC/MCC
423	Other hepatobiliary or pancreas O.R. procedures with MCC	904	Skin grafts for injuries with CC/MCC
424	Other hepatobiliary or pancreas O.R. procedures with CC	905	Skin grafts for injuries without CC/MCC
425	Other hepatobiliary or pancreas O.R. procedures without CC/MCC	906	Hand procedures for injuries
453	Combined anterior and posterior spinal fusion with MCC	907	Other O.R. procedures for injuries with MCC

454	Combined anterior and posterior spinal fusion with CC	908	Other O.R. procedures for injuries with CC
455	Combined anterior and posterior spinal fusion without CC/MCC	909	Other O.R. procedures for injuries without CC/MCC
456	Spinal fusion except cervical with spinal curvature, malignancy, infection or extensive fusions with MCC	927	Extensive burns or full thickness burns with MV >96 hours with skin graft
457	Spinal fusion except cervical with spinal curvature, malignancy, infection or extensive fusions with CC	928	Full thickness burn with skin graft or inhalation injury with CC/MCC
458	Spinal fusion except cervical with spinal curvature, malignancy, infection or extensive fusions without CC/MCC	929	Full thickness burn with skin graft or inhalation injury without CC/MCC
459	Spinal fusion except cervical with MCC	939	O.R. procedures with diagnoses of other contact with health services with MCC
460	Spinal fusion except cervical without MCC	940	O.R. procedures with diagnoses of other contact with health services with CC
461	Bilateral or multiple major joint procedures of lower extremity with MCC	941	O.R. procedures with diagnoses of other contact with health services without CC/MCC
462	Bilateral or multiple major joint procedures of lower extremity without MCC	955	Craniotomy for multiple significant trauma
463	Wound debridement and skin graft except hand for musculoskeletal and connective tissue disorders with MCC	956	Limb reattachment, hip and femur procedures for multiple significant trauma
464	Wound debridement and skin graft except hand for musculoskeletal and connective tissue disorders with CC	957	Other O.R. procedures for multiple significant trauma with MCC
465	Wound debridement and skin graft except hand for musculoskeletal and connective tissue disorders without CC/MCC	958	Other O.R. procedures for multiple significant trauma with CC
466	Revision of hip or knee replacement with MCC	959	Other O.R. procedures for multiple significant trauma without CC/MCC
467	Revision of hip or knee replacement with CC	969	HIV with extensive O.R. procedures with MCC
468	Revision of hip or knee replacement without CC/MCC	970	HIV with extensive O.R. procedures without MCC
469	Major hip and knee joint replacement or reattachment of lower extremity with MCC or total ankle replacement	981	Extensive O.R. procedures unrelated to principal diagnosis with MCC

470	Major hip and knee joint replacement or reattachment of lower extremity without MCC	982	Extensive O.R. procedures unrelated to principal diagnosis with CC
471	Cervical spinal fusion with MCC	983	Extensive O.R. procedures unrelated to principal diagnosis without CC/MCC
472	Cervical spinal fusion with CC	984	Prostatic O.R. procedure unrelated to principal diagnosis with MCC
473	Cervical spinal fusion without CC/MCC	985	Prostatic O.R. procedure unrelated to principal diagnosis with CC
474	Amputation for musculoskeletal system and connective tissue disorders with MCC	986	Prostatic O.R. procedure unrelated to principal diagnosis without CC/MCC
475	Amputation for musculoskeletal system and connective tissue disorders with CC	987	Non-Extensive O.R. procedures unrelated to principal diagnosis with MCC
476	Amputation for musculoskeletal system and connective tissue disorders without CC/MCC	988	Non-Extensive O.R. procedures unrelated to principal diagnosis with CC
477	Biopsies of musculoskeletal system and connective tissue with MCC	989	Non-Extensive O.R. procedures unrelated to principal diagnosis without CC/MCC

***Fiscal Year Dependent Surgical MS-DRGs for prior to FY2021: (SURGI2R\_PREV)***

014	Allogeneic bone marrow transplant	017	Autologous bone marrow transplant without CC/MCC
016	Autologous bone marrow transplant with CC/MCC		