

## Supplemental Material

Table 1: Definition of features used for initial feature selection stage.

Feature	Data Type	Description
AdmissionAge	Integer	Age of patient at admission.
AdmittedOnWeekend_Flag	Binary	1 if admitted on weekend, 0 otherwise
Anxiety_drugs_Flag	Binary	1 if ICD10 diagnosis = Y47 (Drugs for anxiety), 0 otherwise
Anxiety_organic_Flag	Binary	1 if ICD10 diagnosis = F064 (Organic anxiety disorder), 0 otherwise
Anxiety_other_Flag	Binary	1 if ICD10 diagnosis = F41 (Other anxiety disorders), 0 otherwise
Anxiety_phobic_childhood_Flag	Binary	1 if ICD10 diagnosis = F931 (Phobic anxiety disorder of childhood), 0 otherwise
Anxiety_phobic_Flag	Binary	1 if ICD10 diagnosis = F40 (Phobic anxiety disorders), 0 otherwise
Anxiety_separation_childhood_Flag	Binary	1 if ICD10 diagnosis = F930 (Separation anxiety disorder of childhood), 0 otherwise
Anxiety_social_childhood_Flag	Binary	1 if ICD10 diagnosis = F932 (Social anxiety disorder of childhood), 0 otherwise
Anxiety_various_Flag	Binary	1 if ICD10 diagnosis = Y47,F41,F40,F93[0-2],F064, 0 otherwise
BirthCountry_Europe_Flag	Binary	1 if place of birth was in Europe, 0 otherwise
BirthRegion_Africa	Binary	1 if born in Africa Region, 0 otherwise
BirthRegion_Americas	Binary	1 if born in Americas Region, 0 otherwise
BirthRegion_Asia	Binary	1 if born in Asia Region, 0 otherwise
BirthRegion_Europe	Binary	1 if born in Europe Region, 0 otherwise
BirthRegion_Polar	Binary	1 if born in Polar Region, 0 otherwise
BirthRegion_Undefined	Binary	1 if born in Undefined Region, 0 otherwise
BirthSubRegion_Caribbean	Binary	1 if born in Caribbean, 0 otherwise
BirthSubRegion_Central America	Binary	1 if born in Central America, 0 otherwise
BirthSubRegion_Central Asia	Binary	1 if born in Central Asia, 0 otherwise
BirthSubRegion_Eastern Africa	Binary	1 if born in Eastern Africa, 0 otherwise
BirthSubRegion_Eastern Asia	Binary	1 if born in Eastern Asia, 0 otherwise
BirthSubRegion_Eastern Europe	Binary	1 if born in Eastern Europe, 0 otherwise
BirthSubRegion_Melanesia	Binary	1 if born in Melanesia, 0 otherwise
BirthSubRegion_Micronesia	Binary	1 if born in Micronesia, 0 otherwise
BirthSubRegion_Middle Africa	Binary	1 if born in Middle Africa, 0 otherwise
BirthSubRegion_Northern Africa	Binary	1 if born in Northern Africa, 0 otherwise
BirthSubRegion_Northern America	Binary	1 if born in Northern America, 0 otherwise
BirthSubRegion_Northern Europe	Binary	1 if born in Northern Europe, 0 otherwise
BirthSubRegion_Polar	Binary	1 if born in Polar, 0 otherwise
BirthSubRegion_Polynesia	Binary	1 if born in Polynesia, 0 otherwise
BirthSubRegion_South America	Binary	1 if born in South America, 0 otherwise
BirthSubRegion_South-Eastern Asia	Binary	1 if born in South-Eastern Asia, 0 otherwise
BirthSubRegion_Southern Africa	Binary	1 if born in Southern Africa, 0 otherwise
BirthSubRegion_Southern Asia	Binary	1 if born in Southern Asia, 0 otherwise
BirthSubRegion_Southern Europe	Binary	1 if born in Southern Europe, 0 otherwise
BirthSubRegion_Undefined	Binary	1 if born in Undefined, 0 otherwise
BirthSubRegion_Western Africa	Binary	1 if born in Western Africa, 0 otherwise
BirthSubRegion_Western Asia	Binary	1 if born in Western Asia, 0 otherwise
BirthSubRegion_Western Europe	Binary	1 if born in Western Europe, 0 otherwise
ChronicCascad_AffectiveDis_AIHW_1	Binary	1 if ICD diagnosis = (F25, F31, F34, F38, F39)
ChronicCascad_Agina_ACSC_2020	Binary	1 if ICD diagnosis = (I20, I240, I248, I249)
ChronicCascad_Anxiety_AIHW_1	Binary	1 if ICD diagnosis = (F40, F41)

Feature	Data Type	Description
ChronicCascad_Arthritis_NH_Both_1	Binary	1 if ICD diagnosis = (M13, M08, M09, U862)
ChronicCascad_Asthma_NH_Both_1	Binary	1 if ICD diagnosis = (J45, J46, J82, U833)
ChronicCascad_Bronch_NH_Both_1	Binary	1 if ICD diagnosis = (J47, U834)
ChronicCascad_CAH_NH_1	Binary	1 if ICD diagnosis = (K703, K746, K701)
ChronicCascad_Cancer_DHHSVic_1	Binary	1 if ICD diagnosis = (C, D00, D01, D02, D03, D04, D05, D06, D07, D08, D09, D37, D38, D39, D40, D41, D42, D43, D44, D45, D46, D47, D48)
ChronicCascad_CerebP_NH_Both_1	Binary	1 if ICD diagnosis = (G80, U804)
ChronicCascad_CHF_ACSC_Both_2020	Binary	1 if ICD diagnosis = (I50, J81, I110, U822)
ChronicCascad_COPD_NH_Both_1	Binary	1 if ICD diagnosis = (J20, J40, J41, J42, J43, J44, U832)
ChronicCascad_CRF_NH_Both_1	Binary	1 if ICD diagnosis = (J96, P285, U835)
ChronicCascad_Crohns_NH_Both_1	Binary	1 if ICD diagnosis = (K50, U841)
ChronicCascad_Cystic_NH_Both_1	Binary	1 if ICD diagnosis = (E84, U782)
ChronicCascad_Dement_NH_Both_1	Binary	1 if ICD diagnosis = (F00, U791)
ChronicCascad_Depr_NH_Both_1	Binary	1 if ICD diagnosis = (F0633, F32, F33, U793)
ChronicCascad_Diabetes_NH_1	Binary	1 if ICD diagnosis = (E10, E11, E13, E14)
ChronicCascad_DID_NH_Both_1	Binary	1 if ICD diagnosis = (F84, U794)
ChronicCascad_DOPA_NH_1	Binary	1 if ICD diagnosis = (K85, K86)
ChronicCascad_DOPL_NH_1	Binary	1 if ICD diagnosis = (J90, J91, J92, J93, J94) AND (C45)
ChronicCascad_DownSynd_NH_Both_1	Binary	1 if ICD diagnosis = (Q90, U882)
ChronicCascad_Emphy_NH_Both_1	Binary	1 if ICD diagnosis = (J43, U831)
ChronicCascad_Epilepsy_NH_Both_1	Binary	1 if ICD diagnosis = (G40, U803)
ChronicCascad_Gout_AIHW_1	Binary	1 if ICD diagnosis = (M10)
ChronicCascad_Hemip_NH_Both_1	Binary	1 if ICD diagnosis = (G81, U805)
ChronicCascad_HF_NH_1	Binary	1 if ICD diagnosis = (I42, I43, I50)
ChronicCascad_HypertenD_ACSC_Both_1	Binary	1 if ICD diagnosis = (I10, I119, U823)
ChronicCascad_IHD_NH_Both_1	Binary	1 if ICD diagnosis = (I20, I21, I22, I23, I24, I25, U821)
ChronicCascad_KD_NH_Both_1	Binary	1 if ICD diagnosis = (N00, N01, N02, N03, N04, N05, N06, N07, N08, N09, N10, N11, N12, N13, N14, N15, N16, N17, N18, N19, I131, I132, I139, I12, U871)
ChronicCascad_LiverFailure_NH_Both_1	Binary	1 if ICD diagnosis = (K71, U843)
ChronicCascad_Lupus_NH_Both_1	Binary	1 if ICD diagnosis = (L93, M32, U863)
ChronicCascad_MS_NH_Both_1	Binary	1 if ICD diagnosis = (G35, U802)
ChronicCascad_NIEC_NH_1	Binary	1 if ICD diagnosis = (K50, K51, K52)
ChronicCascad_Obes_NH_Both_1	Binary	1 if ICD diagnosis = (E66, U781)
ChronicCascad_Osteoa_NH_1	Binary	1 if ICD diagnosis = (M15, M16, M17, M18, M19, M47)
ChronicCascad_Osteop_Both_1	Binary	1 if ICD diagnosis = (M80, M81, M82, U864)
ChronicCascad_Parkinson_NH_1	Binary	1 if ICD diagnosis = (G20, U801)
ChronicCascad_RheuA_NH_Both_1	Binary	1 if ICD diagnosis = (M05, M06, M45, M080, U861)
ChronicCascad_RheuHD_ACSC_2020	Binary	1 if ICD diagnosis = (I00, I01, I02, I05, I06, I07, I08, I09)
ChronicCascad_Schizo_NH_Both_1	Binary	1 if ICD diagnosis = (F20, U792)
ChronicCascad_SpinaB_NH_Both_1	Binary	1 if ICD diagnosis = (Q05, U881)
ChronicCascad_Stroke_NH_1	Binary	1 if ICD diagnosis = (I60, I61, I62, I63, I64)
ChronicCascad_SubstandDis_AIHW_1	Binary	1 if ICD diagnosis = (F55, F19)
ChronicCascad_Ulcerative_NH_Both_1	Binary	1 if ICD diagnosis = (K51, U842)
Comorb_Charlson_Weighted	Integer	Weighted Charlson score (1)
Comorb_Elixhauser_Weighted	Integer	Weighted Elixhauser score (1)
ComplexityWithCCC	Integer	Number of body system treated in episode with total number of body systems impacted by cascading chronic conditions
Depression_episode_Flag	Binary	Depressive episode, 1 if icd10 diagnosis =F32, 0 otherwise

Feature	Data Type	Description
Depression_organic_Flag	Binary	Organic depressive disorder, 1 if icd10 diagnosis =F0633, 0 otherwise
Depression_post_schizo_Flag	Binary	Post-schizophrenic depression, 1 if icd10 diagnosis =F204, 0 otherwise
Depression_recurrent_Flag	Binary	Recurrent depressive disorder, 1 if icd10 diagnosis =F33, 0 otherwise
Depression_various_Flag	Binary	Depressive conditions, 1 if icd10 diagnosis =F204,F3[2-3],F33,F0633, 0 otherwise
ExpectedLOS_LOS_var_<=-3 to <-1	Binary	1 if actual LOS of episode is between -3 and -1 standard deviations from expected LOS for given condition, 0 otherwise.
ExpectedLOS_LOS_var_<=1 to <3	Binary	1 if actual LOS of episode is between 1 and 3 standard deviations from expected LOS for given condition, 0 otherwise.
ExpectedLOS_LOS_var_<=3	Binary	1 if actual LOS of episode is less than 3 standard deviations from expected LOS for given condition, 0 otherwise.
ExpectedLOS_LOS_var_>=3	Binary	1 if actual LOS of episode is equal or greater than 3 standard deviations from expected LOS for given condition, 0 otherwise.
HAC_total	Integer	Number of Hospital Acquired Complications in episode
MaritalStatus_DevelopedWidowedSeparated_Flag	Binary	1 if divorced, widowed or separated, 0 otherwise.
NumOf_Past_Unplanned_HLCC_None_001_0to180Days	Integer	Number of clinically related unplanned admissions 180 days prior to index admission for Chest Pain (CRG 001)
NumOf_Past_Unplanned_HLCC_None_001_0to30Days	Integer	Number of clinically related unplanned admissions 30 days prior to index admission for Chest Pain (CRG 001)
NumOf_Past_Unplanned_HLCC_None_001_0to365Days	Integer	Number of clinically related unplanned admissions 365 days prior to index admission for Chest Pain (CRG 001)
NumOf_Past_Unplanned_HLCC_None_001_0to7Days	Integer	Number of clinically related unplanned admissions 7 days prior to index admission for Chest Pain (CRG 001)
NumOf_Past_Unplanned_HLCC_None_001_181to270Days	Integer	Number of clinically related unplanned admissions between 181 to 270 days prior to index admission for Chest Pain (CRG 001)
NumOf_Past_Unplanned_HLCC_None_001_271to365Days	Integer	Number of clinically related unplanned admissions between 271 to 365 days prior to index admission for Chest Pain (CRG 001)
NumOf_Past_Unplanned_HLCC_None_001_91to180Days	Integer	Number of clinically related unplanned admissions between 91 to 180 days prior to index admission for Chest Pain (CRG 001)
NumOf_Past_Unplanned_HLCC_None_004_0to180Days	Integer	Number of clinically related unplanned admissions 180 days prior to index admission for Arrhythmia, Cardiac Arrest & Conduction Disorders (CRG 004)
NumOf_Past_Unplanned_HLCC_None_004_0to30Days	Integer	Number of clinically related unplanned admissions 30 days prior to index admission for Arrhythmia, Cardiac Arrest & Conduction Disorders (CRG 004)
NumOf_Past_Unplanned_HLCC_None_004_0to365Days	Integer	Number of clinically related unplanned admissions 365 days prior to index admission for Arrhythmia, Cardiac Arrest & Conduction Disorders (CRG 004)
NumOf_Past_Unplanned_HLCC_None_004_0to7Days	Integer	Number of clinically related unplanned admissions 7 days prior to index admission for Arrhythmia, Cardiac Arrest & Conduction Disorders (CRG 004)
NumOf_Past_Unplanned_HLCC_None_004_181to270Days	Integer	Number of clinically related unplanned admissions between 181 to 270 days prior to index admission for Arrhythmia, Cardiac Arrest & Conduction Disorders (CRG 004)
NumOf_Past_Unplanned_HLCC_None_004_271to365Days	Integer	Number of clinically related unplanned admissions between 271 to 365 days prior to index admission for Arrhythmia, Cardiac Arrest & Conduction Disorders (CRG 004)
NumOf_Past_Unplanned_HLCC_None_004_91to180Days	Integer	Number of clinically related unplanned admissions between 91 to 180 days prior to index admission for Arrhythmia, Cardiac Arrest & Conduction Disorders (CRG 004)
NumOf_Past_Unplanned_HLCC_None_005_0to180Days	Integer	Number of clinically related unplanned admissions 180 days prior to index admission for Invasive Procedure W/O AMI (CRG 005)
NumOf_Past_Unplanned_HLCC_None_005_0to30Days	Integer	Number of clinically related unplanned admissions 30 days prior to index admission for Invasive Procedure W/O AMI (CRG 005)
NumOf_Past_Unplanned_HLCC_None_005_0to365Days	Integer	Number of clinically related unplanned admissions 365 days prior to index admission for Invasive Procedure W/O AMI (CRG 005)
NumOf_Past_Unplanned_HLCC_None_005_0to7Days	Integer	Number of clinically related unplanned admissions 7 days prior to index admission for Invasive Procedure W/O AMI (CRG 005)
NumOf_Past_Unplanned_HLCC_None_005_181to270Days	Integer	Number of clinically related unplanned admissions between 181 to 270 days prior to index admission for Invasive Procedure W/O AMI (CRG 005)

Feature	Data Type	Description
NumOf_Past_Unplanned_HLCC_None_005_271to365Days	Integer	Number of clinically related unplanned admissions between 271 to 365 days prior to index admission for Invasive Procedure W/O AMI (CRG 005)
NumOf_Past_Unplanned_HLCC_None_005_91to180Days	Integer	Number of clinically related unplanned admissions between 91 to 180 days prior to index admission for Invasive Procedure W/O AMI (CRG 005)
NumOf_Past_Unplanned_HLCC_None_006_0to180Days	Integer	Number of clinically related unplanned admissions 180 days prior to index admission for Other Clinical Cardiology (CRG 006)
NumOf_Past_Unplanned_HLCC_None_006_0to30Days	Integer	Number of clinically related unplanned admissions 30 days prior to index admission for Other Clinical Cardiology (CRG 006)
NumOf_Past_Unplanned_HLCC_None_006_0to365Days	Integer	Number of clinically related unplanned admissions 365 days prior to index admission for Other Clinical Cardiology (CRG 006)
NumOf_Past_Unplanned_HLCC_None_006_0to7Days	Integer	Number of clinically related unplanned admissions 7 days prior to index admission for Other Clinical Cardiology (CRG 006)
NumOf_Past_Unplanned_HLCC_None_006_181to270Days	Integer	Number of clinically related unplanned admissions between 181 to 270 days prior to index admission for Other Clinical Cardiology (CRG 006)
NumOf_Past_Unplanned_HLCC_None_006_271to365Days	Integer	Number of clinically related unplanned admissions between 271 to 365 days prior to index admission for Other Clinical Cardiology (CRG 006)
NumOf_Past_Unplanned_HLCC_None_006_91to180Days	Integer	Number of clinically related unplanned admissions between 91 to 180 days prior to index admission for Other Clinical Cardiology (CRG 006)
NumOf_Past_Unplanned_HLCC_None_007_0to180Days	Integer	Number of clinically related unplanned admissions 180 days prior to index admission for Invasive Cardiac Investigative Procedures with AMI (CRG 007)
NumOf_Past_Unplanned_HLCC_None_007_0to30Days	Integer	Number of clinically related unplanned admissions 30 days prior to index admission for Invasive Cardiac Investigative Procedures with AMI (CRG 007)
NumOf_Past_Unplanned_HLCC_None_007_0to365Days	Integer	Number of clinically related unplanned admissions 365 days prior to index admission for Invasive Cardiac Investigative Procedures with AMI (CRG 007)
NumOf_Past_Unplanned_HLCC_None_007_0to7Days	Integer	Number of clinically related unplanned admissions 7 days prior to index admission for Invasive Cardiac Investigative Procedures with AMI (CRG 007)
NumOf_Past_Unplanned_HLCC_None_007_181to270Days	Integer	Number of clinically related unplanned admissions between 181 to 270 days prior to index admission for Invasive Cardiac Investigative Procedures with AMI (CRG 007)
NumOf_Past_Unplanned_HLCC_None_007_271to365Days	Integer	Number of clinically related unplanned admissions between 271 to 365 days prior to index admission for Invasive Cardiac Investigative Procedures with AMI (CRG 007)
NumOf_Past_Unplanned_HLCC_None_007_91to180Days	Integer	Number of clinically related unplanned admissions between 91 to 180 days prior to index admission for Invasive Cardiac Investigative Procedures with AMI (CRG 007)
NumOf_Past_Unplanned_HLCC_None_I50_0to180Days	Integer	Number of clinically related unplanned admissions 180 days prior to index admission for Invasive Cardiac Investigative Procedures with Heart Failure (I50 ICD10 3-char)
NumOf_Past_Unplanned_HLCC_None_I50_0to30Days	Integer	Number of clinically related unplanned admissions 30 days prior to index admission for Invasive Cardiac Investigative Procedures with Heart Failure (I50 ICD10 3-char)
NumOf_Past_Unplanned_HLCC_None_I50_0to365Days	Integer	Number of clinically related unplanned admissions 365 days prior to index admission for Invasive Cardiac Investigative Procedures with Heart Failure (I50 ICD10 3-char)
NumOf_Past_Unplanned_HLCC_None_I50_0to7Days	Integer	Number of clinically related unplanned admissions 7 days prior to index admission for Invasive Cardiac Investigative Procedures with Heart Failure (I50 ICD10 3-char)
NumOf_Past_Unplanned_HLCC_None_I50_181to270Days	Integer	Number of clinically related unplanned admissions between 181 to 270 days prior to index admission for Invasive Cardiac Investigative Procedures with Heart Failure (I50 ICD10 3-char)
NumOf_Past_Unplanned_HLCC_None_I50_271to365Days	Integer	Number of clinically related unplanned admissions between 271 to 365 days prior to index admission for Invasive Cardiac Investigative Procedures with Heart Failure (I50 ICD10 3-char)
NumOf_Past_Unplanned_HLCC_None_I50_91to180Days	Integer	Number of clinically related unplanned admissions between 91 to 180 days prior to index admission for Invasive Cardiac Investigative Procedures with Heart Failure (I50 ICD10 3-char)
NumOfED_NonAdmitted_180Days	Integer	Calculated for past 180 days from discharge
NumOfED_NonAdmitted_270Days	Integer	Calculated for past 270 days from discharge
NumOfED_NonAdmitted_30Days	Integer	Calculated for past 30 days from discharge

Feature	Data Type	Description
NumOfED_NonAdmitted_365Days	Integer	Calculated for past 365 days from discharge
NumOfED_NonAdmitted_3Days	Integer	Calculated for past 3 days from discharge
NumOfED_NonAdmitted_60Days	Integer	Calculated for past 60 days from discharge
NumOfED_NonAdmitted_7Days	Integer	Calculated for past 7 days from discharge
NumOfED_NonAdmitted_90Days	Integer	Calculated for past 90 days from discharge
NumOfHIPs_CHSP_12Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP), Commonwealth Home Support Program (CHSP) stream for past 12 months
NumOfHIPs_CHSP_6Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP), Commonwealth Home Support Program (CHSP) stream for past 6 months
NumOfHIPs_DuringSep_CHSP	Integer	Number of HIP, Commonwealth Home Support Program (CHSP) stream patient was on during unplanned episode.
NumOfHIPs_DuringSep_HACC	Integer	Number of HIP, Home and Community Care (HACC) stream patient was on during unplanned episode.
NumOfHIPs_DuringSep_HARP	Integer	Number of HIP, Hospital Admission Risk Programs (HARP) stream patient was on during unplanned episode.
NumOfHIPs_DuringSep_NDIS	Integer	Number of HIP, National Disability Insurance Scheme (NDIS) stream patient was on during unplanned episode.
NumOfHIPs_DuringSep_PAC	Integer	Number of HIP, Post Acute Care (PAC) stream patient was on during unplanned episode.
NumOfHIPs_DuringSep_ResidentialInReach	Integer	Number of HIP, Residential In Reach stream patient was on during unplanned episode
NumOfHIPs_DuringSep_SACS	Integer	Number of HIP, Sub Acute Ambulatory Care Services (SACS) stream patient was on during unplanned episode
NumOfHIPs_DuringSep_Total	Integer	Total Number of HIP patient was on during unplanned episode
NumOfHIPs_HACC_12Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP), Home and Community Care (HACC) stream for past 12 months
NumOfHIPs_HACC_6Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP), Home and Community Care (HACC) stream for past 6 months
NumOfHIPs_HARP_12Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP), Hospital Admission Risk Programs (HARP) stream for past 12 months
NumOfHIPs_HARP_6Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP), Hospital Admission Risk Programs (HARP) stream for past 6 months
NumOfHIPs_NDIS_12Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP), National Disability Insurance Scheme (NDIS) stream for past 12 months
NumOfHIPs_NDIS_6Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP), National Disability Insurance Scheme (NDIS) stream for past 6 months
NumOfHIPs_PAC_12Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP), Post Acute Care (PAC) stream for past 12 months
NumOfHIPs_PAC_6Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP), Post Acute Care (PAC) stream for past 6 months
NumOfHIPs_ResidentialInReach_12Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP), Residential Inreach Program stream for past 12 months
NumOfHIPs_ResidentialInReach_6Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP), Residential Inreach Program stream for past 6 months
NumOfHIPs_SACS_12Month_0Lag	Integer	Number of enrolments in any Sub Acute Ambulatory Care Services (SACS) stream for past 12 months
NumOfHIPs_SACS_6Month_0Lag	Integer	Number of enrolments in any Sub Acute Ambulatory Care Services (SACS) stream for past 6 months
NumOfHIPs_Total_12Month_0Lag	Integer	Total Number of enrolments in HIP in past 12 months
NumOfHIPs_Total_6Month_0Lag	Integer	Number of enrolments in any Hospital Independence Program (HIP) group for past 180 days
NumOfOutpatientAttended_180Days	Integer	In past 180 days from IP discharge.
NumOfOutpatientAttended_270Days	Integer	In past 270 days from IP discharge.
NumOfOutpatientAttended_30Days	Integer	In past 30 days from IP discharge.
NumOfOutpatientAttended_365Days	Integer	In past 365 days from IP discharge.
NumOfOutpatientAttended_60Days	Integer	In past 60 days from IP discharge.
NumOfOutpatientAttended_90Days	Integer	In past 90 days from IP discharge.

Feature	Data Type	Description
Outpatient_FailedToAttendRatio_180Days	Float	Calculated for past 180 days from discharge.
Outpatient_FailedToAttendRatio_270Days	Float	Calculated for past 270 days from discharge.
Outpatient_FailedToAttendRatio_30Days	Float	Calculated for past 30 days from discharge.
Outpatient_FailedToAttendRatio_365Days	Float	Calculated for past 365 days from discharge.
Outpatient_FailedToAttendRatio_60Days	Float	Calculated for past 60 days from discharge.
Outpatient_FailedToAttendRatio_90Days	Float	Calculated for past 90 days from discharge.
Outpatient_NeverBooked_180Days	Binary	No OP bookings in past 180 days.
Outpatient_NeverBooked_365Days	Binary	No OP bookings in past year.
PatientUsualAccomm_AgeCare_Alone_Flag	Binary	Living in Age Care or Alone.
Pot_Avoidable_Emergency_Admit	Binary	Patient had avoidable emergency admission according to set of ICD10 diagnosis code defined in (2)
SEIFA_Decile_Within_Australia	Integer	ABS Socio-Economic Index For Advantage, Index of Relative Socio-economic Advantage and Disadvantage (0-poor, 10-wealthy)
surgflag	Binary	Patient had surgery during episode.
TotalLOSDays_Unplanned_PastDisch_skip0days_14dayswindow	Integer	Calculated for past 14days from discharge.
TotalLOSDays_Unplanned_PastDisch_skip0days_180dayswindow	Integer	Calculated for past 180days from discharge.
TotalLOSDays_Unplanned_PastDisch_skip0days_270dayswindow	Integer	Calculated for past 270days from discharge.
TotalLOSDays_Unplanned_PastDisch_skip0days_30dayswindow	Integer	Calculated for past 30days from discharge.
TotalLOSDays_Unplanned_PastDisch_skip0days_365dayswindow	Integer	Calculated for past 365days from discharge.
TotalLOSDays_Unplanned_PastDisch_skip0days_3dayswindow	Integer	Calculated for past 3days from discharge.
TotalLOSDays_Unplanned_PastDisch_skip0days_60dayswindow	Integer	Calculated for past 60days from discharge.
TotalLOSDays_Unplanned_PastDisch_skip0days_7dayswindow	Integer	Calculated for past 7days from discharge.
TotalLOSDays_Unplanned_PastDisch_skip0days_90dayswindow	Integer	Calculated for past 90days from discharge.

## References

1. Gasparini A. comorbidity: An R package for computing comorbidity scores. *J Open Source Softw.* 2018 Mar 30;3(23):648.
2. Martin C, Stockman K, Hinkley N, Campbell D. Multimorbidity and Acute Potentially Preventable Diagnoses in HealthLinks Chronic Care (HLCC) Dandenong Cohort. A work in evolution. *Int J Integr Care.* 2021 Feb 26;20(3):173.