

HOME HEALTH AGENCY PATIENT-RELATED CHARACTERISTICS REPORTS:
TECHNICAL DOCUMENTATION OF MEASURES

Revision 4.1

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Revision History

Original Publication: October 21, 2010

Revision 1: September 29, 2011 *[Note: Page numbers may have changed due to subsequent revisions.]*

1. On page 9, the descriptive measure name LOS from 121 to 365 days (%) was changed to LOS from 121 to 180 days (%), the short measure name HC_LOS_121_365 was changed to HC_LOS_121_180, the descriptive measure name LOS More than 365 days (%) was changed to LOS more than 180 days (%), and the short measure name HC_GT_365 was changed to HC_LOS_GT_180.
2. On page 35, in the calculation of Status most problematic stasis (0-3) (STAS_ULCR_STAT), instead of setting the measure to 0 when M1330_STAS_ULCR_PRSENT[1] = 03 (non-observable stasis ulcer only), the measure is instead set to MISSING.
3. On page 36, in the calculation of Status most problematic surg. (0-3) (SRGCL_WND_STAT), instead of setting the measure to 0 when M1340_SRGCL_WND_PRSENT[1] = 02 (non-observable surgical wound only), the measure is instead set to MISSING.
4. On page 67, in the calculation of Impaired ambulation/mobility (%) (CHRONIC_MOBILITY), in the third and ninth lines of pseudo-code the expression VALUE(M1840_CRNT_TOILTG [1]) > 1 is replaced by VALUE(M1850_CRNT_TRANSFRNG) > 1.

Revision 2: December 2012

1. On page 4 and page 23, changed the short measure name RISK_NONE under “Hospitalization Risks” to RISK_H_NONE. This eliminates duplication with RISK_NONE under “Other Risk Factors”.

Revision 3: September 2014

1. This revision of the specifications accommodates the transition to OASIS-C1/ICD-9 Version, slated to occur January 1, 2015, as well as the expected transition to ICD-10, currently scheduled for October 1, 2015. There are five separate sections to the transformation pseudo-code:
 - a. Specifications that apply when the start or resumption of care assessment is OASIS C.

- b. Specifications that apply when the start or resumption of care assessment is OASIS C or OASIS-C1/ICD-9 Version.
 - c. Specifications that apply when the start or resumption of care assessment is OASIS C1/ICD-9 Version or OASIS-C1/ICD-10 Version.
 - d. Specifications that apply when the start or resumption of care assessment is OASIS-C1/ICD-10 Version.
 - e. Specifications that apply to all episodes of care regardless of OASIS version.
1. Two measures, the home care diagnosis groups of “Pregnancy Problems” and “Congenital Anomalies,” have been removed from the report specifications, due to very low prevalence in the home health patient population.
 2. The home care diagnosis measure formerly named “Iatrogenic Conditions” has been changed to “Adverse Reactions and Complications,” which is a more accurate description of the diagnoses included in the group.
 3. Descriptive names of prior management of medications measures have been changed to reflect the correct range of values as (0-2) instead of (0-3).
 4. The following field names have been changed to conform to the most current data submission specifications (Version 2.10.1 for OASIS-C and Version 2.11.2 for OASIS-C1):

Old Field Name	New Field Name
M1332_NUM_STAS_ULCR	M1332_NBR_STAS_ULCR
M2200_THER_NEED_NUM	M2200_THER_NEED_NBR
M1800_CUR_GROOMING	M1800_CRNT_GROOMING
M1810_CUR_DRESS_UPPER	M1810_CRNT_DRESS_UPPER
M1820_CUR_DRESS_LOWER	M1820_CRNT_DRESS_LOWER
M1840_CUR_TOILTG	M1840_CRNT_TOILTG
M1845_CUR_TOILTG_HYGN	M1845_CRNT_TOILTG_HYGN
M1850_CUR_TRNSFRNG	M1850_CRNT_TRNSFRNG
M1870_CUR_FEEDING	M1870_CRNT_FEEDING
M1880_CUR_PREP_LT_MEALS	M1880_CRNT_PREP_LT_MEALS
M1890_CUR_PHONE_USE	M1890_CRNT_PHONE_USE

Revision 4: December 2016

1. This revision of the specifications accommodates the transition to OASIS-C2, slated to occur January 1, 2017. There are seven separate sections to the transformation pseudo-code:
 - a. Specifications that apply when the start or resumption of care assessment is OASIS C.
 - b. Specifications that apply when the start or resumption of care assessment is OASIS C or OASIS-C1/ICD-9 Version.
 - c. Specifications that apply when the start or resumption of care assessment is OASIS C1/ICD-9 Version or OASIS-C1/ICD-10 Version.
 - d. Specifications that apply when the start or resumption of care assessment is OASIS-C1/ICD-10 Version. or OASIS-C2.
 - e. Specifications that apply when the start or resumption of care assessment is OASIS-C2.
 - f. Specifications that apply to all episodes of care regardless of OASIS version.
2. In addition to the changes to OASIS items for OASIS-C2, the specifications include changes to ICD-10-CM codes effective for FY2017.

Revision 4.1: January 2017

1. Several OASIS items have been changed to conform to the latest version of the OASIS data submission specifications. OASIS-C2, effective January 1, 2017. Several items have been added in compliance with the IMPACT Act of 2014. The following table lists the new or changed items included in the OASIS C-2.

Old Field Name	New Field Name
n/a	M1028_ Active Diagnoses
n/a	M1060 Height and Weight
M1308_ Current Number of Unhealed Pressure Ulcers at Each Stage or Unstageable:	M1311_ Current Number of Unhealed Pressure Ulcers at Each Stage
M1309 Current Number of Unhealed Pressure Ulcers at Each Stage	M1313 Worsening in Pressure Ulcer Status since SOC/ROC
n/a	M1313 (a-c) Worsening in Pressure Ulcer Status since SOC/ROC (staging)
M1500 Symptoms in Heart Failure Patients	M1501 Symptoms in Heart Failure Patients
M1510 Heart Failure Follow Up	M1511 Heart Failure Follow Up

Old Field Name	New Field Name
n/a	GG0170C (Sect. GG) Functional Status SOC/ROC and discharge goal.
M2000 Drug Regimen Review	M2001 Drug Regimen Review
M2002 Medication Review	M2003 Medication Follow Up
M2004 Medication Intervention	M2005 Medication Intervention
M2015 Patient/Caregiver Drug Education Intervention	M2016 Patient/Caregiver Drug Education Intervention
M2300 Emergent Care	M2301 Emergent Care
M2400 Intervention Synopsis	M2401 Intervention Synopsis

Additional revisions to this document clarify the pseudo-code and item numbers for use with OASIS-C1 and OASIS-C2.

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HOME HEALTH AGENCY PATIENT-RELATED CHARACTERISTICS REPORTS: TECHNICAL DOCUMENTATION OF MEASURES

INTRODUCTION

This document provides definitions of measures that appear in the Home Health Agency Patient-Related Characteristics Reports, including detailed specifications for calculating these measures based on OASIS assessment data.

Episodes of Care Included in Home Health Agency Reports

The unit of analysis for outcome, potentially avoidable events, process quality, and patient-related characteristics reports is an episode of care, defined as starting with an admission to home health care (M0100 Reason for assessment = 01) or resumption of home health care after an inpatient facility stay (M0100 Reason for assessment = 03), and ending with a discharge from home health care, including discharge due to death, or admission to inpatient facility for 24 hours or more (M0100 Reason for assessment = 06, 07, 08, or 09). The data upon which these reports are based consist of OASIS assessments submitted by home health agencies to the states, which are then transmitted to a national OASIS repository residing on a secure database server maintained by CMS. Analysis records corresponding to episodes of care are constructed by matching up assessments for each individual served by a home health agency, sorting those assessments by effective date¹, then pairing up assessments that mark the beginning and end of an episode of care. Episodes of care for which either the beginning or end assessment is missing, or for which assessments are out of sequence, are not included in these reports.

The process of building episode-level records, including the calculation of an indicator to determine if the episode of care is a long term or short term episode of care, is as follows:

1. Sort assessments by home health agency ID, patient ID and effective date, latest to earliest. (When working with assessment records from the OASIS National Repository, home health agency ID is actually a combination of the two position state abbreviation and Facility Internal ID, and Patient ID is a combination of the state abbreviation and Resident Internal ID.)

¹ Effective date depends on the reason for assessment. If M0100_ASSMT_REASON = 01, effective date = M0030_START_CARE_DT. If M0100_ASSMT_REASON = 03, effective date = M0032_ROC_DATE. If M0100_ASSMT_REASON = 04 or 05, effective date = M0090_INFO_COMPLETET_DT. If M0100_ASSMT_REASON = 06, 07, 08, or 09, effective date = M0906_DC_TRAN_DTH_DT.

2. For each set of assessments having the same combination of home health agency ID and patient ID, step through the assessments to find the latest assessment with M0100_ASSMT_REASON = 06, 07, 08, or 09. Set ST-Episode = 1.
3. Continue stepping through earlier assessments, carrying over the value of ST_Episode from the later assessment.
4. If an assessment with M0100_ASSMT_REASON = 06, 07, 08, or 09 is found before an assessment with M0100_ASSMT_REASON = 01 or 03 is found, discard the episode being built and start over with step 2.
5. If an assessment with M0100_ASSMT_REASON = 04 or 05 is found before an assessment with M0100_ASSMT_REASON = 01 or 03 is found, set ST_Episode to 0 and continue stepping through assessments.
6. When an assessment with M0100_ASSMT_REASON = 01 or 03 is found, the episode is complete. Create an episode record with home health agency ID, patient ID, beginning assessment ID, ending assessment ID, begin and end dates for the episode and the ST_Episode indicator. If there are more assessments for this patient, start building a new episode beginning with step 2.
7. If no assessment with M0100_ASSMT_REASON = 01 or 03 is found before the assessments for this patient are exhausted, discard the episode being built.

Assumptions and Conventions

The following transformations result in measures with numeric values. For process and outcome measures, "1" indicates that the outcome event occurred or the process was followed, while "0" indicates the outcome event did not occur or the process was not followed. For the patient-related characteristics reports, three types of measures exist. For patient attribute measures, "1" indicates the presence of an attribute and "0" indicates its absence. For ordinal measures, zero indicates no measurable impairment or absence of a medical problem and higher numeric values indicate greater impairment or higher severity of a medical problem. For count measures, the numeric value of the measure indicates a count (e.g., of pressure ulcers). When the instructions indicate that a measure is to be set to "MISSING", the case is excluded from analysis for that particular measure, either because the measure is not applicable or because a data item on which that measure is based has been indicated as "unknown".

OASIS data items are referred to in this documentation using field names specified in OASIS Data Submission Specifications published by CMS. "[1]" is appended to the field name if the value is taken from the beginning assessment (Start or Resumption of Care), and "[2]" is appended if the value is to be taken from the ending assessment for an

episode (Discharge, Transfer, or Death). Specifications are included to accommodate three versions of OASIS, including OASIS-C, which is currently in use at the time of publication of this document, OASIS-C1 / ICD-9 Version, which is scheduled for implementation effective January 1, 2015, and OASIS-C1 / ICD-10 Version, which is planned for implementation October 1, 2015. It should be noted that, as of September 2014, the ICD-10 version of OASIS-C1 has not been cleared under the Paperwork Reduction Act by the Office of Management and Budget. Therefore, the transformation specifications that apply to the data set are subject to change based on OMB action.

Measures Included in Reports

Throughout the remainder of this document, measures are referred to as shown in the following table:

Patient-Related Characteristics Measure

Domain and Descriptive Measure Name

Short Measure Name

PATIENT HISTORY

Demographics

Age (years)

AGE

Gender: Female (%)

GENDER

Race: Black (%)

RACE_BLACK

Race: White (%)

RACE_WHITE

Race: Other (%)

RACE_OTHER

Payment Source

Any Medicare (%)

PAY_MCARE

Any Medicaid (%)

PAY_MCAID

Any HMO (%)

PAY_HMO

Medicare HMO (%)

PAY_MCHMO

Other (%)

PAY_OTHER

Episode Start

Episode timing : Early (%)

TIME_EARLY

Episode timing: Later (%)

TIME_LATER

Episode timing: Unknown (%)

TIME_UK

Inpatient Discharge / Medical Regimen Change

Long-term nursing facility (%)

INPT_LTC

Skilled nursing facility (%)

INPT_SNF

Short-stay acute hospital (%)

INPT_STHOSP

Long-term care hospital (%)

INPT_LTHOSP

Inpatient rehab hospital/unit (%)

INPT_REHAB

Psychiatric hospital/unit (%)

INPT_PSYCH

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name**

Medical regimen change (%)

Prior Conditions

Urinary incontinence (%)

Indwelling/suprapubic catheter (%)

Intractable pain (%)

Impaired decision-making (%)

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name**

Disruptive/Inappropriate behav. (%)

Memory loss (%)

None Listed (%)

No inpatient discharge / regimen change (%)

Therapies

IV/infusion therapy (%)

Parenteral nutrition (%)

Enteral nutrition (%)

GENERAL HEALTH STATUS**Hospitalization Risks**

Recent decline mental/emot/behav (%)

Multiple hospitalizations (%)

History of falls (%)

5 or more medications (%)

Frailty factors (%)

Other (%)

None (%)

Overall Status

Overall Status (0-3)

Unknown / Unclear (%)

Other Risk Factors

Smoking (%)

Obesity (%)

Alcohol dependency (%)

Drug dependency (%)

None (%)

LIVING ARRANGEMENT / ASSISTANCE**Current Situation**

Lives alone (%)

Short Measure Name

MED_REG_CHNG

P_UR_INCON

P_CATH

P_INTRACT_PAIN

P_IMPR_DECSN

Short Measure Name

P_DISRUPTIVE

P_MEM_LOSS

P_NONE

NO_INPAT_DC_REG_CHNG

IVTHER_IV

IVTHER_PAREN

IVTHER_ENTERAL

RISK_RCNT_DCLN

RISK_MLTPL_HOSPZTN

RISK_HSTRY_FALLS

RISK_5PLUS_MDCTN

RISK_FRAILTY

RISK_OTHR

RISK_H_NONE

OVERALL_STATUS

OVERALL_STATUS_UK

RISK_SMOKING

RISK_OBESITY

RISK_ALCOHOLISM

RISK_DRUGS

RISK_NONE

LIV_ALONE

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name**

Lives with others (%)

Lives in congregate situation (%)

Availability of Assistance

Around the clock (%)

Regular daytime (%)

Regular nighttime (%)

Occasional (%)

None (%)

Short Measure Name

LIV_OTHERS

LIV_CONGEGRATE

AVAIL_RTC

AVAIL_DAY

AVAIL_NIGHT

AVAIL_SOME

AVAIL_NONE

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name****CARE MANAGEMENT****ADLs**

None needed (%)

Caregiver currently provides (%)

Caregiver training needed (%)

Uncertain/Unlikely to be provided (%)

Needed, but not available (%)

Short Measure Name

ADL_NONE_NEEDED

ADL_CG_PROVIDES

ADL_NEED_TRAINING

ADL_CG_UNCERTAIN

ADL_CG_NONE

IADLs

None needed (%)

Caregiver currently provides (%)

Caregiver training needed (%)

Uncertain/Unlikely to be provided (%)

Needed, but not available (%)

Frequency of ADL / IADL assistance (1-5)

IADL_NONE_NEEDED

IADL_CG_PROVIDES

IADL_NEED_TRAINING

IADL_CG_UNCERTAIN

IADL_CG_NONE

FREQ_CG_ASSIST

Medication Administration

None needed (%)

Caregiver currently provides (%)

Caregiver training needed (%)

Uncertain/Unlikely to be provided (%)

Needed, but not available (%)

MDCTN_NONE_NEEDED

MDCTN_CG_PROVIDES

MDCTN_NEED_TRAINING

MDCTN_CG_UNCERTAIN

MDCTN_CG_NONE

Medical Procedures

None needed (%)

Caregiver currently provides (%)

Caregiver training needed (%)

Uncertain/Unlikely to be provided (%)

Needed, but not available (%)

PRCDR_NONE_NEEDED

PRCDR_CG_PROVIDES

PRCDR_NEED_TRAINING

PRCDR_CG_UNCERTAIN

PRCDR_CG_NONE

Management of Equipment

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name**

None needed (%)

Caregiver currently provides (%)

Caregiver training needed (%)

Uncertain/Unlikely to be provided (%)

Needed, but not available (%)

Supervision / Safety

None needed (%)

Caregiver currently provides (%)

Caregiver training needed (%)

Uncertain/Unlikely to be provided (%)

Needed, but not available (%)

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name****Advocacy**

None needed (%)

Caregiver currently provides (%)

Caregiver training needed (%)

Uncertain/Unlikely to be provided (%)

Needed, but not available (%)

SENSORY STATUS

Vision impairment (0-2)

Hearing impairment (0-2)

Verbal content understanding (0-3)

Speech/language (0-5)

Pain interfering with activity (0-4)

INTEGUMENTARY STATUS**Pressure Ulcers**

Pressure ulcer risk (%)

Pressure ulcer present (%)

Stage II pressure ulcer count (#)

Stage III pressure ulcer count (#)

Stage IV pressure ulcer count (#)

Unstageable pressure ulcer count (#)

Status most problematic PU (0-3)

Stage I pressure ulcer count (0-4)

Stage most problematic PU (1-4)

Short Measure Name

EQUIP_NONE_NEEDED

EQUIP_CG_PROVIDES

EQUIP_NEED_TRAINING

EQUIP_CG_UNCERTAIN

EQUIP_CG_NONE

SPRVSN_NONE_NEEDED

SPRVSN_CG_PROVIDES

SPRVSN_NEED_TRAINING

SPRVSN_CG_UNCERTAIN

SPRVSN_CG_NONE

Short Measure Name

ADVCY_NONE_NEEDED

ADVCY_CG_PROVIDES

ADVCY_NEED_TRAINING

ADVCY_CG_UNCERTAIN

ADVCY_CG_NONE

VISION

HEARING

VERBAL_UNDERSTAND

SPEECH

PAIN

PRES_ULC_RISK

PRES_ULC

PRES_ULC_STG2

PRES_ULC_STG3

PRES_ULC_STG4

PRES_ULC_NO_STG

PRES_ULC_STATUS

PRES_ULC_STG1

PRES_ULC_STG

**Patient-Related Characteristics Measure
Domain and Descriptive Measure Name**

Short Measure Name

Stasis Ulcers

Stasis ulcer indicator (%)

STAS_ULCR

Stasis ulcer count (0-4)

STAS_ULCR_CNT

Status most problematic stasis (0-3)

STAS_ULCR_STAT

Surgical Wounds

Surgical wound indicator (%)

SRGCL_WND

Status most problematic surg. (0-3)

SRGCL_WND_STAT

Other

Skin lesion with intervention (%)

WND_LESION

Respiratory

Dyspnea (0-4)

DYSPNEA

Oxygen therapy(%)

OXY_THERAPY

Ventilator therapy(%)

VENT_THERAPY

CPAP/BPAP therapy (%)

AIRPRESS_THERAPY

**Patient-Related Characteristics Measure
Domain and Descriptive Measure Name**

Short Measure Name

PHYSIOLOGICAL STATUS

Elimination Status

Urinary tract infection (%)

UTI

Urinary incontinence/catheter (%)

INCONT_CATH

Urinary incontinence frequency (0-4)

INCONT_FREQ

Bowel incontinence (0-5)

BOWEL_INCONT

Bowel ostomy (%)

OSTOMY

NEURO / EMOTIONAL / BEHAVIORAL

Cognition

Cognitive deficit (0-4)

COG_FUNC

Confusion frequency (0-4)

CONFUSION

Emotional

Anxiety level (0-3)

ANXIETY

Depression indicator (%)

DEPRESSION

PHQ-2: Interest / Pleasure (0-3)

PHQ2_INTEREST

PHQ-2: Down / Depressed (0-3)

PHQ2_DOWN

Behavioral

Memory deficit (%)

MEM_DEFICIT

Impaired decision-making (%)

IMPR_DECISN

Verbal disruption (%)

VERBAL_DISRUPT

Physical aggression (%)

AGGRESSION

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name**

Disruptive/inappropriate behavior (%)

Delusional, hallucinatory, etc. (%)

None demonstrated (%)

Frequency of behavior problems (0-5)

Psychiatric nursing (%)

ACTIVITIES OF DAILY LIVING**SOC / ROC Status**

Grooming (0-3)

Dress upper body (0-3)

Dress lower body (0-3)

Bathing (0-6)

Toilet Transfer (0-4)

Toileting Hygiene (0-3)

Bed Transferring (0-5)

Ambulation (0-6)

Eating (0-5)

Short Measure Name

INAPPRO_BHV

DELUSIONS

NOBHV

BEH_PROB_FREQ

PSYCH_NURS

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name****Status prior to SOC/ROC**

Prior Self-Care (0-2)

Prior Ambulation (0-2)

Prior Transfer (0-2)

IADLs, MEDICATIONS, OTHER**IADLs**

Light meal prep (0-2)

Phone use (0-5)

Prior Household (0-2)

Falls Risk

At risk for falls (%)

Medication Status

Drug regimen: problem found (%)

Mgmt oral medications at SOC/ROC (0-3)

Mgmt oral medications at SOC/ROC: NA (%)

Mgmt injected meds at SOC/ROC (0-3)

Mgmt injected meds at SOC/ROC: NA (%)

Prior mgmt oral medications (0-2)

Prior mgmt oral medications: NA (%)

Short Measure Name

P_SELF_CARE

P_AMBULATION

P_TRANSFER

MEAL_PREP

PHONE_USE

P_HOUSEHOLD

FALL_RISK

MED_PROBLEM

ORAL_MEDS

ORAL_MED_NA

INJECT_MEDS

INJECT_MED_NA

P_ORAL_MEDS

P_ORAL_MED_NA

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name**

Prior mgmt injected medication (0-2)

Prior mgmt injected medication: NA (%)

THERAPY / PLAN OF CARE**Therapy Visits**

Therapy visits indicated (#)

PATIENT DIAGNOSTIC INFORMATION**Acute Conditions**

Orthopedic (%)

Neurologic (%)

Open wounds/lesions (%)

Cardiac/peripheral vascular (%)

Pulmonary (%)

Diabetes mellitus (%)

Gastrointestinal disorder (%)

Contagious/communicable (%)

Urinary incont./catheter (%)

Mental/emotional (%)

Oxygen therapy (%)

Short Measure Name

P_INJECT_MEDS

P_INJECT_MED_NA

THERAPY_NEED

ACUTE_ORTHO

ACUTE_NEURO

ACUTE_WOUND

ACUTE_CARDIO

ACUTE_LUNG

ACUTE_DIABETES

ACUTE_GI

ACUTE_CONTAGIOUS

ACUTE_INCONT

ACUTE_PSYCH

ACUTE_O2

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name**

IV/infusion therapy (%)

Enteral/parenteral nutrition (%)

Ventilator (%)

Chronic Conditions

Dependence in living skills (%)

Dependence in personal care (%)

Impaired ambulation/mobility (%)

Urinary incontinence/catheter (%)

Dependence in med. admin. (%)

Chronic pain (%)

Cognitive/mental/behavioral (%)

Chronic pt. with caregiver (%)

Home Care Diagnoses

Infections/parasitic diseases (%)

Neoplasms (%)

Endocrine/nutrit./metabolic (%)

Blood diseases (%)

Short Measure Name

ACUTE_IV

ACUTE_ENT_PAR_NUTRI

ACUTE_VENT

CHRONIC_LIV_SKILL

CHRONIC_PERS_CARE

CHRONIC_MOBILITY

CHRONIC_INCONT_CATH

CHRONIC_MED_ADMIN

CHRONIC_PAIN

CHRONIC_MENT_BEHAV

CHRONIC_ANY_W_CG

HC_DX_INFECT

HC_DX_NEOPLASM

HC_DX_ENDOCRINE

HC_DX_BLOOD

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name**

Mental diseases (%)
Nervous system diseases (%)
Circulatory system diseases (%)
Respiratory system diseases (%)
Digestive system diseases (%)
Genitourinary sys. diseases (%)
Skin/subcutaneous diseases (%)
Musculoskeletal sys. diseases (%)
Ill-defined conditions (%)
Fractures (%)
Intracranial injury (%)
Other injury (%)
Adverse reactions and complications (%)

Short Measure Name

HC_DX_MENTAL
HC_DX_NERVOUS
HC_DX_CIRCULATORY
HC_DX_RESPIRATORY
HC_DX_DIGESTIVE
HC_DX_GEN_URINARY
HC_DX_SKIN
HC_DX_MUSCL_SKEL
HC_DX_ILL_DEFINED
HC_DX_FRACTURE
HC_DX_CRANIAL
HC_DX_INJURY_OTH
HC_DX_ADV_REACT

PATIENT DISCHARGE INFORMATION**Length of Stay**

LOS until discharge (in days)
LOS from 1 to 30 days (%)
LOS from 31 to 60 days (%)
LOS from 61 to 120 days (%)
LOS from 121 to 180 days (%)
LOS more than 180 days (%)

HC_LOS
HC_LOS_1_30
HC_LOS_31_60
HC_LOS_61_120
HC_LOS_121_180
HC_LOS_GT_180

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name****Reason for Emergent Care**

Improper medications (%)
Injury from fall (%)
Respiratory infection (%)
Other respiratory (%)
Heart failure (%)
Cardiac dysrhythmia (%)
Myocardial infarction (%)
Other heart disease (%)
Stroke (CVA) or TIA (%)
Hypo/Hyperglycemia (%)
GI bleeding, obstruction, etc. (%)
Dehydration, malnutrition (%)
Urinary tract infection (%)

Short Measure Name

EC_REASON_MEDS
EC_REASON_FALL
EC_REASON_RESP_INF
EC_REASON_RESP_OTHER
EC_REASON_HEART_FAIL
EC_REASON_DYSRHYTHMIA
EC_REASON_AMI
EC_REASON_HEART_OTHER
EC_REASON_STROKE_TIA
EC_REASON_HI_LO_BG
EC_REASON_GI
EC_REASON_NUTRITION
EC_REASON_UTI

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name**

IV catheter-related infection (%)
Wound infection (%)
Uncontrolled pain (%)
Acute mental/behav. problem (%)
Deep vein thrombosis (%)
Other (%)
No emergent care (%)

Reason for Hospitalization

Improper medication (%)
Injury from fall (%)
Respiratory infection (%)
Other respiratory (%)
Heart failure (%)
Cardiac dysrhythmia (%)
Myocardial infarction (%)
Other heart disease (%)
Stroke (CVA) or TIA (%)
Hypo/Hyperglycemia (%)
GI bleeding, obstruction, etc. (%)
Dehydration, malnutrition (%)

Short Measure Name

EC_REASON_IV_INFECT
EC_REASON_WOUND_INFCT
EC_REASON_PAIN
EC_REASON_MENTAL_BEHAV
EC_REASON_THROMBOSIS
EC_REASON_OTHER
NO_EMERGENT_CARE

HOSP_REASON_MEDS
HOSP_REASON_FALL
HOSP_REASON_RESP_INF
HOSP_REASON_RESP_OTHER
HOSP_REASON_HEART_FAIL
HOSP_REASON_DYSRHYTHMIA
HOSP_REASON_AMI
HOSP_REASON_HEART_OTHER
HOSP_REASON_STROKE_TIA
HOSP_REASON_HI_LO_BG
HOSP_REASON_GI
HOSP_REASON_NUTRITION

Patient-Related Characteristics Measure**Domain and Descriptive Measure Name**

Urinary tract infection (%)
IV catheter-related infection (%)
Wound infection (%)
Uncontrolled pain (%)
Acute mental/behav. problem (%)
Deep vein thrombosis (%)
Scheduled visit (%)
Other (%)
No hospitalization (%)

Short Measure Name

HOSP_REASON_UTI
HOSP_REASON_IV_INFECT
HOSP_REASON_WOUND_INFCT
HOSP_REASON_PAIN
HOSP_REASON_MENTAL_BEHAV
HOSP_REASON_THROMBOSIS
HOSP_REASON_SCHED_VISIT
HOSP_REASON_OTHER
NO_HOSPITALIZATION

PATIENT CHARACTERISTICS MEASURES TRANSFORMATION PSEUDO-CODE

Note: VALUE(FieldName) indicates conversion of a text field to a numeric value.

DATEVALUE(FieldName) indicates conversion of a text field to a numeric value representing a date.

TRANSFORMATIONS THAT APPLY WHEN THE START/RESUMPTION OF CARE ASSESSMENT IS OASIS-C

General Health Status

Hospitalization Risks

Recent decline mental/emot/behav (%)

IF M1032_HOSP_RISK_RCNT_DCLN = 1

THEN

RISK_RCNT_DCLN = 1

ELSE

RISK_RCNT_DCLN = 0

END IF

Multiple hospitalizations (%)

IF M1032_HOSP_RISK_MLTPL_HOSPZTN = 1

THEN

RISK_MLTPL_HOSPZTN = 1

ELSE

RISK_MLTPL_HOSPZTN = 0

END IF

History of falls (%)

IF M1032_HOSP_RISK_HSTRY_FALLS = 1

THEN

RISK_HSTRY_FALLS = 1

ELSE

RISK_HSTRY_FALLS = 0

END IF

5 or more medications (%)

```
M1032_HOSP_RISK_5PLUS_MDCTN
IF M1032_HOSP_RISK_5PLUS_MDCTN
THEN
    RISK_5PLUS_MDCTN = 1
ELSE
    RISK_5PLUS_MDCTN = 0
END IF
```

Frailty factors (%)

```
IF M1032_HOSP_RISK_FRAILTY = 1
THEN
    RISK_FRAILTY = 1
ELSE
    RISK_FRAILTY = 0
END IF
```

Note: OASIS-C item asks for “Frailty indicators, e.g., weight loss, self-reported exhaustion.” OASIS-C1 item has separate response options, “Unintentional weight loss of a total of 10 pounds or more in the past 12 months,” and “Currently reports exhaustion.”

Other (%)

```
IF M1032_HOSP_RISK_OTHR = 1
THEN
    RISK_OTHR = 1
ELSE
    RISK_OTHR = 0
END IF
```

None (%)

```
IF M1032_HOSP_RISK_NONE_ABOVE = 1
THEN
    RISK_H_NONE = 1
ELSE
    RISK_H_NONE = 0
END IF
```

ADLs

None needed (%)

```
IF M2100_CARE_TYPE_SRC_ADL[1] = 00
THEN
    ADL_ASSIST_NONE_NEEDED = 1
ELSE
    ADL_ASSIST_NONE_NEEDED = 0
END IF
```

Caregiver currently provides (%)

```
IF M2100_CARE_TYPE_SRC_ADL[1] = 01
THEN
    ADL_ASSIST_CG_PROVIDES = 1
ELSE
    ADL_ASSIST_CG_PROVIDES = 0
END IF
```

Caregiver training needed (%)

```
IF M2100_CARE_TYPE_SRC_ADL[1] = 02
THEN
    ADL_ASSIST_NEED_TRAINING = 1
ELSE
    ADL_ASSIST_NEED_TRAINING = 0
END IF
```

Uncertain/unlikely to be provided (%)

```
IF M2100_CARE_TYPE_SRC_ADL[1] = 03 OR M2100_CARE_TYPE_SRC_ADL[1] = 04
THEN
    ADL_ASSIST_CG_UNCERTAIN = 1
ELSE
    ADL_ASSIST_CG_UNCERTAIN = 0
END IF
```

Needed but not available (%)

```
IF M2100_CARE_TYPE_SRC_ADL[1] = 05
THEN
    ADL_CG_NONE = 1
ELSE
    ADL_CG_NONE = 0
END IF
```

IADLs

None needed (%)

```
IF M2100_CARE_TYPE_SRC_IADL[1] = 00  
THEN  
    IADL_ASSIST_NONE_NEEDED = 1  
ELSE  
    IADL_ASSIST_NONE_NEEDED = 0  
END IF
```

Caregiver currently provides (%)

```
IF M2100_CARE_TYPE_SRC_IADL[1] = 01  
THEN  
    IADL_CG_PROVIDES = 1  
ELSE  
    IADL_CG_PROVIDES = 0  
END IF
```

Caregiver training needed (%)

```
IF M2100_CARE_TYPE_SRC_IADL[1] = 02  
THEN  
    IADL_NEED_TRAINING = 1  
ELSE  
    IADL_NEED_TRAINING = 0  
END IF
```

Uncertain/unlikely to be provided (%)

```
IF M2100_CARE_TYPE_SRC_IADL[1] = 03 OR M2100_CARE_TYPE_SRC_IADL[1] = 04  
THEN  
    IADL_CG_UNCERTAIN = 1  
ELSE  
    IADL_CG_UNCERTAIN = 0  
END IF
```

Needed but not available (%)

```
IF M2100_CARE_TYPE_SRC_IADL[1] = 05  
THEN  
    IADL_CG_NONE = 1  
ELSE  
    IADL_CG_NONE = 0  
END IF
```

Medication Administration

None needed (%)

```
IF M2100_CARE_TYPE_SRC_MDCTN[1] = 00
THEN
    MDCTN_ASSIST_NONE_NEEDED = 1
ELSE
    MDCTN_ASSIST_NONE_NEEDED = 0
END IF
```

Caregiver currently provides (%)

```
IF M2100_CARE_TYPE_SRC_MDCTN[1] = 01
THEN
    MDCTN_CG_PROVIDES = 1
ELSE
    MDCTN_CG_PROVIDES = 0
END IF
```

Caregiver training needed (%)

```
IF M2100_CARE_TYPE_SRC_MDCTN[1] = 02
THEN
    MDCTN_NEED_TRAINING = 1
ELSE
    MDCTN_NEED_TRAINING = 0
END IF
```

Uncertain/unlikely to be provided (%)

```
IF M2100_CARE_TYPE_SRC_MDCTN[1] = 03
    OR M2100_CARE_TYPE_SRC_MDCTN[1] = 04
THEN
    MDCTN_CG_UNCERTAIN = 1
ELSE
    MDCTN_CG_UNCERTAIN = 0
END IF
```

Needed but not available (%)

```
IF M2100_CARE_TYPE_SRC_MDCTN[1] = 05
THEN
    MDCTN_CG_NONE = 1
ELSE
    MDCTN_CG_NONE = 0
```


END IF

Medical Procedures

None needed (%)

IF M2100_CARE_TYPE_SRC_PRCDR[1] = 00
THEN
 PRCDR_ASSIST_NONE_NEEDED = 1
ELSE
 PRCDR_ASSIST_NONE_NEEDED = 0
END IF

Caregiver currently provides (%)

IF M2100_CARE_TYPE_SRC_PRCDR[1] = 01
THEN
 PRCDR_CG_PROVIDES = 1
ELSE
 PRCDR_CG_PROVIDES = 0
END IF

Caregiver training needed (%)

IF M2100_CARE_TYPE_SRC_PRCDR[1] = 02
THEN
 PRCDR_NEED_TRAINING = 1
ELSE
 PRCDR_NEED_TRAINING = 0
END IF

Uncertain/unlikely to be provided (%)

IF M2100_CARE_TYPE_SRC_PRCDR[1] = 03 **OR** M2100_CARE_TYPE_SRC_PRCDR[1]
 = 04
THEN
 PRCDR_CG_UNCERTAIN = 1
ELSE
 PRCDR_CG_UNCERTAIN = 0
END IF

Needed but not available (%)

IF M2100_CARE_TYPE_SRC_PRCDR[1] = 05
THEN
 PRCDR_CG_NONE = 1

```
ELSE
    PRCDR_CG_NONE = 0
END IF
```

Management of Equipment

None needed (%)

```
IF M2100_CARE_TYPE_SRC_EQUIP[1] = 00
THEN
    EQUIP_ASSIST_NONE_NEEDED = 1
ELSE
    EQUIP_ASSIST_NONE_NEEDED = 0
END IF
```

Caregiver currently provides (%)

```
IF M2100_CARE_TYPE_SRC_EQUIP[1] = 01
THEN
    EQUIP_CG_PROVIDES = 1
ELSE
    EQUIP_CG_PROVIDES = 0
END IF
```

Caregiver training needed (%)

```
IF M2100_CARE_TYPE_SRC_EQUIP[1] = 02
THEN
    EQUIP_NEED_TRAINING = 1
ELSE
    EQUIP_NEED_TRAINING = 0
END IF
```

Uncertain/unlikely to be provided (%)

```
IF M2100_CARE_TYPE_SRC_EQUIP[1] = 03 OR M2100_CARE_TYPE_SRC_EQUIP[1] =
    04
THEN
    EQUIP_CG_UNCERTAIN = 1
ELSE
    EQUIP_CG_UNCERTAIN = 0
END IF
```

Needed but not available (%)

```
IF M2100_CARE_TYPE_SRC_EQUIP[1] = 05
THEN
    EQUIP_CG_NONE = 1
ELSE
    EQUIP_CG_NONE = 0
END IF
```

Supervision / Safety

None needed (%)

```
IF M2100_CARE_TYPE_SRC_SPRVSN[1] = 00
THEN
    SPRVSN_ASSIST_NONE_NEEDED = 1
ELSE
    SPRVSN_ASSIST_NONE_NEEDED = 0
END IF
```

Caregiver currently provides (%)

```
IF M2100_CARE_TYPE_SRC_SPRVSN[1] = 01
THEN
    SPRVSN_CG_PROVIDES = 1
ELSE
    SPRVSN_CG_PROVIDES = 0
END IF
```

Caregiver training needed (%)

```
IF M2100_CARE_TYPE_SRC_SPRVSN[1] = 02
THEN
    SPRVSN_NEED_TRAINING = 1
ELSE
    SPRVSN_NEED_TRAINING = 0
END IF
```

Uncertain/unlikely to be provided (%)

```
IF M2100_CARE_TYPE_SRC_SPRVSN[1] = 03
    OR M2100_CARE_TYPE_SRC_SPRVSN[1] = 04
THEN
    SPRVSN_CG_UNCERTAIN = 1
ELSE
    SPRVSN_CG_UNCERTAIN = 0
```

END IF

Needed but not available (%)

IF M2100_CARE_TYPE_SRC_SPRVSN[1] = 05

THEN

SPRVSN_CG_NONE = 1

ELSE

SPRVSN_CG_NONE = 0

END IF

Advocacy

None needed (%)

IF M2100_CARE_TYPE_SRC_ADV CY[1] = 00

THEN

ADV CY_ASSIST_NONE_NEEDED = 1

ELSE

ADV CY_ASSIST_NONE_NEEDED = 0

END IF

Caregiver currently provides (%)

IF M2100_CARE_TYPE_SRC_ADV CY[1] = 01

THEN

ADV CY_CG_PROVIDES = 1

ELSE

ADV CY_CG_PROVIDES = 0

END IF

Caregiver training needed (%)

IF M2100_CARE_TYPE_SRC_ADV CY[1] = 02

THEN

ADV CY_NEED_TRAINING = 1

ELSE

ADV CY_NEED_TRAINING = 0

END IF

Uncertain/unlikely to be provided (%)

IF M2100_CARE_TYPE_SRC_ADV CY[1] = 03

OR M2100_CARE_TYPE_SRC_ADV CY[1] = 04

THEN

ADV CY_CG_UNCERTAIN = 1

ELSE
 ADVCY_CG_UNCERTAIN = 0
END IF

Needed but not available (%)

IF M2100_CARE_TYPE_SRC_ADVCY[1] = 05
THEN
 ADVCY_CG_NONE = 1
ELSE
 ADVCY_CG_NONE = 0
END IF

TRANSFORMATIONS THAT APPLY WHEN THE START/RESUMPTION OF CARE ASSESSMENT IS OASIS-C OR OASIS-C1/ICD-9 VERSION

Inpatient Discharge / Change in Medical Regimen

Inpatient Discharge:

IF M1000_DC_NONE_14_DA[1] = 00
THEN
 INPAT_DC = 1
ELSE
 INPAT_DC = 0
END IF

Medical regimen change (%)

IF M1016_CHGREG_ICD_NA[1] = 1
THEN
 MED_REG_CHNG = 0
ELSE
 MED_REG_CHNG = 1
END IF

No inpatient discharge / regimen change (%)

IF M1016_CHGREG_ICD_NA[1] = 1 AND M1000_DC_NONE_14_DA[1] = 1
THEN
 NO_INPAT_DC_REG_CHNG = 1
ELSE
 NO_INPAT_DC_REG_CHNG = 0
END IF

Patient Diagnostic Information

Note: The following measures require calculation of several "intermediate" measures based on the raw OASIS data, that are then used to calculate the final measures for the patient characteristics report.

MID(FieldName,Start,Length) Selects characters from within the ICD-9-CM string, where Start is the position within the field of the first character to select, and Length is the number of characters to select. If the ICD-9-CM code is blank, the result is blank. Therefore, MID(FieldName,1,3) returns the inpatient diagnosis, medical regimen change diagnosis, or home care diagnosis code at the three digit level

Acute Conditions

```
INPAT_DIAG1 = MID(M1010_14_DAY_INP1_ICD[1],2,4)
INPAT_DIAG2 = MID(M1010_14_DAY_INP2_ICD[1],2,4)
INPAT_DIAG3 = MID(M1010_14_DAY_INP3_ICD[1],2,4)
INPAT_DIAG4 = MID(M1010_14_DAY_INP4_ICD[1],2,4)
INPAT_DIAG5 = MID(M1010_14_DAY_INP5_ICD[1],2,4)
INPAT_DIAG6 = MID(M1010_14_DAY_INP6_ICD[1],2,4)
MEDREG_DIAG1 = MID(M1016_CHGREG_ICD1[1],2,4)
MEDREG_DIAG2 = MID(M1016_CHGREG_ICD2[1],2,4)
MEDREG_DIAG3 = MID(M1016_CHGREG_ICD3[1],2,4)
MEDREG_DIAG4 = MID(M1016_CHGREG_ICD4[1],2,4)
MEDREG_DIAG5 = MID(M1016_CHGREG_ICD5[1],2,4)
MEDREG_DIAG6 = MID(M1016_CHGREG_ICD6[1],2,4)
```

Orthopedic (%)

```
IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
  ((INPAT_DIAG1 >= "170" AND INPAT_DIAG1 <= "171")
   OR (INPAT_DIAG2 >= "170" AND INPAT_DIAG2 <= "171")
   OR (INPAT_DIAG3 >= "170" AND INPAT_DIAG3 <= "171")
   OR (INPAT_DIAG4 >= "170" AND INPAT_DIAG4 <= "171")
   OR (INPAT_DIAG5 >= "170" AND INPAT_DIAG5 <= "171")
   OR (INPAT_DIAG6 >= "170" AND INPAT_DIAG6 <= "171")
   OR (MEDREG_DIAG1 >= "170" AND MEDREG_DIAG1 <= "171")
   OR (MEDREG_DIAG2 >= "170" AND MEDREG_DIAG2 <= "171")
   OR (MEDREG_DIAG3 >= "170" AND MEDREG_DIAG3 <= "171")
   OR (MEDREG_DIAG4 >= "170" AND MEDREG_DIAG4 <= "171")
   OR (MEDREG_DIAG5 >= "170" AND MEDREG_DIAG5 <= "171")
   OR (MEDREG_DIAG6 >= "170" AND MEDREG_DIAG6 <= "171")
   OR (INPAT_DIAG1 = "213") OR (INPAT_DIAG2 = "213")
   OR (INPAT_DIAG3 = "213") OR (INPAT_DIAG4 = "213"))
```

OR (INPAT_DIAG5 = "213") OR (INPAT_DIAG6 = "213")
 OR (MEDREG_DIAG1 = "213") OR (MEDREG_DIAG2 = "213")
 OR (MEDREG_DIAG3 = "213") OR (MEDREG_DIAG4 = "213")
 OR (MEDREG_DIAG5 = "213") OR (MEDREG_DIAG6 = "213")
 OR (INPAT_DIAG1 = "274") OR (INPAT_DIAG2 = "274")
 OR (INPAT_DIAG3 = "274") OR (INPAT_DIAG4 = "274")
 OR (INPAT_DIAG5 = "274") OR (INPAT_DIAG6 = "274")
 OR (MEDREG_DIAG1 = "274") OR (MEDREG_DIAG2 = "274")
 OR (MEDREG_DIAG3 = "274") OR (MEDREG_DIAG4 = "274")
 OR (MEDREG_DIAG5 = "274") OR (MEDREG_DIAG6 = "274")
 OR (INPAT_DIAG1 >= "710" AND INPAT_DIAG1 <= "739")
 OR (INPAT_DIAG2 >= "710" AND INPAT_DIAG2 <= "739")
 OR (INPAT_DIAG3 >= "710" AND INPAT_DIAG3 <= "739")
 OR (INPAT_DIAG4 >= "710" AND INPAT_DIAG4 <= "739")
 OR (INPAT_DIAG5 >= "710" AND INPAT_DIAG5 <= "739")
 OR (INPAT_DIAG6 >= "710" AND INPAT_DIAG6 <= "739")
 OR (MEDREG_DIAG1 >= "710" AND MEDREG_DIAG1 <= "739")
 OR (MEDREG_DIAG2 >= "710" AND MEDREG_DIAG2 <= "739")
 OR (MEDREG_DIAG3 >= "710" AND MEDREG_DIAG3 <= "739")
 OR (MEDREG_DIAG4 >= "710" AND MEDREG_DIAG4 <= "739")
 OR (MEDREG_DIAG5 >= "710" AND MEDREG_DIAG5 <= "739")
 OR (MEDREG_DIAG6 >= "710" AND MEDREG_DIAG6 <= "739")
 OR (INPAT_DIAG1 = "781") OR (INPAT_DIAG2 = "781")
 OR (INPAT_DIAG3 = "781") OR (INPAT_DIAG4 = "781")
 OR (INPAT_DIAG5 = "781") OR (INPAT_DIAG6 = "781")
 OR (MEDREG_DIAG1 = "781") OR (MEDREG_DIAG2 = "781")
 OR (MEDREG_DIAG3 = "781") OR (MEDREG_DIAG4 = "781")
 OR (MEDREG_DIAG5 = "781") OR (MEDREG_DIAG6 = "781")
 OR (INPAT_DIAG1 >= "800" AND INPAT_DIAG1 <= "848")
 OR (INPAT_DIAG2 >= "800" AND INPAT_DIAG2 <= "848")
 OR (INPAT_DIAG3 >= "800" AND INPAT_DIAG3 <= "848")
 OR (INPAT_DIAG4 >= "800" AND INPAT_DIAG4 <= "848")
 OR (INPAT_DIAG5 >= "800" AND INPAT_DIAG5 <= "848")
 OR (INPAT_DIAG6 >= "800" AND INPAT_DIAG6 <= "848")
 OR (MEDREG_DIAG1 >= "800" AND MEDREG_DIAG1 <= "848")
 OR (MEDREG_DIAG2 >= "800" AND MEDREG_DIAG2 <= "848")
 OR (MEDREG_DIAG3 >= "800" AND MEDREG_DIAG3 <= "848")
 OR (MEDREG_DIAG4 >= "800" AND MEDREG_DIAG4 <= "848")
 OR (MEDREG_DIAG5 >= "800" AND MEDREG_DIAG5 <= "848")
 OR (MEDREG_DIAG6 >= "800" AND MEDREG_DIAG6 <= "848")
 OR (INPAT_DIAG1 >= "885" AND INPAT_DIAG1 <= "887")

OR (INPAT_DIAG2 >= "885" AND INPAT_DIAG2 <= "887")
 OR (INPAT_DIAG3 >= "885" AND INPAT_DIAG3 <= "887")
 OR (INPAT_DIAG4 >= "885" AND INPAT_DIAG4 <= "887")
 OR (INPAT_DIAG5 >= "885" AND INPAT_DIAG5 <= "887")
 OR (INPAT_DIAG6 >= "885" AND INPAT_DIAG6 <= "887")
 OR (MEDREG_DIAG1 >= "885" AND MEDREG_DIAG1 <= "887")
 OR (MEDREG_DIAG2 >= "885" AND MEDREG_DIAG2 <= "887")
 OR (MEDREG_DIAG3 >= "885" AND MEDREG_DIAG3 <= "887")
 OR (MEDREG_DIAG4 >= "885" AND MEDREG_DIAG4 <= "887")
 OR (MEDREG_DIAG5 >= "885" AND MEDREG_DIAG5 <= "887")
 OR (MEDREG_DIAG6 >= "885" AND MEDREG_DIAG6 <= "887")
 OR (INPAT_DIAG1 >= "895" AND INPAT_DIAG1 <= "897")
 OR (INPAT_DIAG2 >= "895" AND INPAT_DIAG2 <= "897")
 OR (INPAT_DIAG3 >= "895" AND INPAT_DIAG3 <= "897")
 OR (INPAT_DIAG4 >= "895" AND INPAT_DIAG4 <= "897")
 OR (INPAT_DIAG5 >= "895" AND INPAT_DIAG5 <= "897")
 OR (INPAT_DIAG6 >= "895" AND INPAT_DIAG6 <= "897")
 OR (MEDREG_DIAG1 >= "895" AND MEDREG_DIAG1 <= "897")
 OR (MEDREG_DIAG2 >= "895" AND MEDREG_DIAG2 <= "897")
 OR (MEDREG_DIAG3 >= "895" AND MEDREG_DIAG3 <= "897")
 OR (MEDREG_DIAG4 >= "895" AND MEDREG_DIAG4 <= "897")
 OR (MEDREG_DIAG5 >= "895" AND MEDREG_DIAG5 <= "897")
 OR (MEDREG_DIAG6 >= "895" AND MEDREG_DIAG6 <= "897")
 OR (INPAT_DIAG1 = "905") OR (INPAT_DIAG2 = "905")
 OR (INPAT_DIAG3 = "905") OR (INPAT_DIAG4 = "905")
 OR (INPAT_DIAG5 = "905") OR (INPAT_DIAG6 = "905")
 OR (MEDREG_DIAG1 = "905") OR (MEDREG_DIAG2 = "905")
 OR (MEDREG_DIAG3 = "905") OR (MEDREG_DIAG4 = "905")
 OR (MEDREG_DIAG5 = "905") OR (MEDREG_DIAG6 = "905")
 OR (INPAT_DIAG1 >= "927" AND INPAT_DIAG1 <= "928")
 OR (INPAT_DIAG2 >= "927" AND INPAT_DIAG2 <= "928")
 OR (INPAT_DIAG3 >= "927" AND INPAT_DIAG3 <= "928")
 OR (INPAT_DIAG4 >= "927" AND INPAT_DIAG4 <= "928")
 OR (INPAT_DIAG5 >= "927" AND INPAT_DIAG5 <= "928")
 OR (INPAT_DIAG6 >= "927" AND INPAT_DIAG6 <= "928")
 OR (MEDREG_DIAG1 >= "927" AND MEDREG_DIAG1 <= "928")
 OR (MEDREG_DIAG2 >= "927" AND MEDREG_DIAG2 <= "928")
 OR (MEDREG_DIAG3 >= "927" AND MEDREG_DIAG3 <= "928")
 OR (MEDREG_DIAG4 >= "927" AND MEDREG_DIAG4 <= "928")
 OR (MEDREG_DIAG5 >= "927" AND MEDREG_DIAG5 <= "928")
 OR (MEDREG_DIAG6 >= "927" AND MEDREG_DIAG6 <= "928")


```

THEN
    ACUTE_ORTHO = 1
ELSE
    ACUTE_ORTHO = 0
END IF

```

Neurologic (%)

```

IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
    ((INPAT_DIAG1 >= "045" AND INPAT_DIAG1 <= "049")
    OR (INPAT_DIAG2 >= "045" AND INPAT_DIAG2 <= "049")
    OR (INPAT_DIAG3 >= "045" AND INPAT_DIAG3 <= "049")
    OR (INPAT_DIAG4 >= "045" AND INPAT_DIAG4 <= "049")
    OR (INPAT_DIAG5 >= "045" AND INPAT_DIAG5 <= "049")
    OR (INPAT_DIAG6 >= "045" AND INPAT_DIAG6 <= "049")
    OR (MEDREG_DIAG1 >= "045" AND MEDREG_DIAG1 <= "049")
    OR (MEDREG_DIAG2 >= "045" AND MEDREG_DIAG2 <= "049")
    OR (MEDREG_DIAG3 >= "045" AND MEDREG_DIAG3 <= "049")
    OR (MEDREG_DIAG4 >= "045" AND MEDREG_DIAG4 <= "049")
    OR (MEDREG_DIAG5 >= "045" AND MEDREG_DIAG5 <= "049")
    OR (MEDREG_DIAG6 >= "045" AND MEDREG_DIAG6 <= "049")
    OR (INPAT_DIAG1 >= "191" AND INPAT_DIAG1 <= "192")
    OR (INPAT_DIAG2 >= "191" AND INPAT_DIAG2 <= "192")
    OR (INPAT_DIAG3 >= "191" AND INPAT_DIAG3 <= "192")
    OR (INPAT_DIAG4 >= "191" AND INPAT_DIAG4 <= "192")
    OR (INPAT_DIAG5 >= "191" AND INPAT_DIAG5 <= "192")
    OR (INPAT_DIAG6 >= "191" AND INPAT_DIAG6 <= "192")
    OR (MEDREG_DIAG1 >= "191" AND MEDREG_DIAG1 <= "192")
    OR (MEDREG_DIAG2 >= "191" AND MEDREG_DIAG2 <= "192")
    OR (MEDREG_DIAG3 >= "191" AND MEDREG_DIAG3 <= "192")
    OR (MEDREG_DIAG4 >= "191" AND MEDREG_DIAG4 <= "192")
    OR (MEDREG_DIAG5 >= "191" AND MEDREG_DIAG5 <= "192")
    OR (MEDREG_DIAG6 >= "191" AND MEDREG_DIAG6 <= "192")
    OR (INPAT_DIAG1 = "225") OR (INPAT_DIAG2 = "225")
    OR (INPAT_DIAG3 = "225") OR (INPAT_DIAG4 = "225")
    OR (INPAT_DIAG5 = "225") OR (INPAT_DIAG6 = "225")
    OR (MEDREG_DIAG1 = "225") OR (MEDREG_DIAG2 = "225")
    OR (MEDREG_DIAG3 = "225") OR (MEDREG_DIAG4 = "225")
    OR (MEDREG_DIAG5 = "225") OR (MEDREG_DIAG6 = "225")
    OR (INPAT_DIAG1 >= "320" AND INPAT_DIAG1 <= "326")
    OR (INPAT_DIAG2 >= "320" AND INPAT_DIAG2 <= "326")
    OR (INPAT_DIAG3 >= "320" AND INPAT_DIAG3 <= "326")

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OR (INPAT_DIAG4 >= "320" AND INPAT_DIAG4 <= "326")
 OR (INPAT_DIAG5 >= "320" AND INPAT_DIAG5 <= "326")
 OR (INPAT_DIAG6 >= "320" AND INPAT_DIAG6 <= "326")
 OR (MEDREG_DIAG1 >= "320" AND MEDREG_DIAG1 <= "326")
 OR (MEDREG_DIAG2 >= "320" AND MEDREG_DIAG2 <= "326")
 OR (MEDREG_DIAG3 >= "320" AND MEDREG_DIAG3 <= "326")
 OR (MEDREG_DIAG4 >= "320" AND MEDREG_DIAG4 <= "326")
 OR (MEDREG_DIAG5 >= "320" AND MEDREG_DIAG5 <= "326")
 OR (MEDREG_DIAG6 >= "320" AND MEDREG_DIAG6 <= "326")
 OR (INPAT_DIAG1 >= "330" AND INPAT_DIAG1 <= "337")
 OR (INPAT_DIAG2 >= "330" AND INPAT_DIAG2 <= "337")
 OR (INPAT_DIAG3 >= "330" AND INPAT_DIAG3 <= "337")
 OR (INPAT_DIAG4 >= "330" AND INPAT_DIAG4 <= "337")
 OR (INPAT_DIAG5 >= "330" AND INPAT_DIAG5 <= "337")
 OR (INPAT_DIAG6 >= "330" AND INPAT_DIAG6 <= "337")
 OR (MEDREG_DIAG1 >= "330" AND MEDREG_DIAG1 <= "337")
 OR (MEDREG_DIAG2 >= "330" AND MEDREG_DIAG2 <= "337")
 OR (MEDREG_DIAG3 >= "330" AND MEDREG_DIAG3 <= "337")
 OR (MEDREG_DIAG4 >= "330" AND MEDREG_DIAG4 <= "337")
 OR (MEDREG_DIAG5 >= "330" AND MEDREG_DIAG5 <= "337")
 OR (MEDREG_DIAG6 >= "330" AND MEDREG_DIAG6 <= "337")
 OR (INPAT_DIAG1 = "338") OR (INPAT_DIAG2 = "338")
 OR (INPAT_DIAG3 = "338") OR (INPAT_DIAG4 = "338")
 OR (INPAT_DIAG5 = "338") OR (INPAT_DIAG6 = "338")
 OR (MEDREG_DIAG1 = "338") OR (MEDREG_DIAG2 = "338")
 OR (MEDREG_DIAG3 = "338") OR (MEDREG_DIAG4 = "338")
 OR (MEDREG_DIAG5 = "338") OR (MEDREG_DIAG6 = "338")
 OR (INPAT_DIAG1 >= "340" AND INPAT_DIAG1 <= "359")
 OR (INPAT_DIAG2 >= "340" AND INPAT_DIAG2 <= "359")
 OR (INPAT_DIAG3 >= "340" AND INPAT_DIAG3 <= "359")
 OR (INPAT_DIAG4 >= "340" AND INPAT_DIAG4 <= "359")
 OR (INPAT_DIAG5 >= "340" AND INPAT_DIAG5 <= "359")
 OR (INPAT_DIAG6 >= "340" AND INPAT_DIAG6 <= "359")
 OR (MEDREG_DIAG1 >= "340" AND MEDREG_DIAG1 <= "359")
 OR (MEDREG_DIAG2 >= "340" AND MEDREG_DIAG2 <= "359")
 OR (MEDREG_DIAG3 >= "340" AND MEDREG_DIAG3 <= "359")
 OR (MEDREG_DIAG4 >= "340" AND MEDREG_DIAG4 <= "359")
 OR (MEDREG_DIAG5 >= "340" AND MEDREG_DIAG5 <= "359")
 OR (MEDREG_DIAG6 >= "340" AND MEDREG_DIAG6 <= "359")
 OR (INPAT_DIAG1 >= "430" AND INPAT_DIAG1 <= "438")
 OR (INPAT_DIAG2 >= "430" AND INPAT_DIAG2 <= "438")

OR (INPAT_DIAG3 >= "430" AND INPAT_DIAG3 <= "438")
 OR (INPAT_DIAG4 >= "430" AND INPAT_DIAG4 <= "438")
 OR (INPAT_DIAG5 >= "430" AND INPAT_DIAG5 <= "438")
 OR (INPAT_DIAG6 >= "430" AND INPAT_DIAG6 <= "438")
 OR (MEDREG_DIAG1 >= "430" AND MEDREG_DIAG1 <= "438")
 OR (MEDREG_DIAG2 >= "430" AND MEDREG_DIAG2 <= "438")
 OR (MEDREG_DIAG3 >= "430" AND MEDREG_DIAG3 <= "438")
 OR (MEDREG_DIAG4 >= "430" AND MEDREG_DIAG4 <= "438")
 OR (MEDREG_DIAG5 >= "430" AND MEDREG_DIAG5 <= "438")
 OR (MEDREG_DIAG6 >= "430" AND MEDREG_DIAG6 <= "438")
 OR (INPAT_DIAG1 >= "850" AND INPAT_DIAG1 <= "854")
 OR (INPAT_DIAG2 >= "850" AND INPAT_DIAG2 <= "854")
 OR (INPAT_DIAG3 >= "850" AND INPAT_DIAG3 <= "854")
 OR (INPAT_DIAG4 >= "850" AND INPAT_DIAG4 <= "854")
 OR (INPAT_DIAG5 >= "850" AND INPAT_DIAG5 <= "854")
 OR (INPAT_DIAG6 >= "850" AND INPAT_DIAG6 <= "854")
 OR (MEDREG_DIAG1 >= "850" AND MEDREG_DIAG1 <= "854")
 OR (MEDREG_DIAG2 >= "850" AND MEDREG_DIAG2 <= "854")
 OR (MEDREG_DIAG3 >= "850" AND MEDREG_DIAG3 <= "854")
 OR (MEDREG_DIAG4 >= "850" AND MEDREG_DIAG4 <= "854")
 OR (MEDREG_DIAG5 >= "850" AND MEDREG_DIAG5 <= "854")
 OR (MEDREG_DIAG6 >= "850" AND MEDREG_DIAG6 <= "854")
 OR (INPAT_DIAG1 = "907") OR (INPAT_DIAG2 = "907")
 OR (INPAT_DIAG3 = "907") OR (INPAT_DIAG4 = "907")
 OR (INPAT_DIAG5 = "907") OR (INPAT_DIAG6 = "907")
 OR (MEDREG_DIAG1 = "907") OR (MEDREG_DIAG2 = "907")
 OR (MEDREG_DIAG3 = "907") OR (MEDREG_DIAG4 = "907")
 OR (MEDREG_DIAG5 = "907") OR (MEDREG_DIAG6 = "907")
 OR (INPAT_DIAG1 >= "950" AND INPAT_DIAG1 <= "957")
 OR (INPAT_DIAG2 >= "950" AND INPAT_DIAG2 <= "957")
 OR (INPAT_DIAG3 >= "950" AND INPAT_DIAG3 <= "957")
 OR (INPAT_DIAG4 >= "950" AND INPAT_DIAG4 <= "957")
 OR (INPAT_DIAG5 >= "950" AND INPAT_DIAG5 <= "957")
 OR (INPAT_DIAG6 >= "950" AND INPAT_DIAG6 <= "957")
 OR (MEDREG_DIAG1 >= "950" AND MEDREG_DIAG1 <= "957")
 OR (MEDREG_DIAG2 >= "950" AND MEDREG_DIAG2 <= "957")
 OR (MEDREG_DIAG3 >= "950" AND MEDREG_DIAG3 <= "957")
 OR (MEDREG_DIAG4 >= "950" AND MEDREG_DIAG4 <= "957")
 OR (MEDREG_DIAG5 >= "950" AND MEDREG_DIAG5 <= "957")
 OR (MEDREG_DIAG6 >= "950" AND MEDREG_DIAG6 <= "957"))

THEN

```

    ACUTE_NEURO = 1
ELSE
    ACUTE_NEURO = 0
END IF

```

Open wounds/lesions (%)

```

IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
  ((INPAT_DIAG1 = "707") OR (INPAT_DIAG2 = "707")
   OR (INPAT_DIAG3 = "707") OR (INPAT_DIAG4 = "707")
   OR (INPAT_DIAG5 = "707") OR (INPAT_DIAG6 = "707")
   OR (MEDREG_DIAG1 = "707") OR (MEDREG_DIAG2 = "707")
   OR (MEDREG_DIAG3 = "707") OR (MEDREG_DIAG4 = "707")
   OR (MEDREG_DIAG5 = "707") OR (MEDREG_DIAG6 = "707")
   OR (INPAT_DIAG1 >= "870" AND INPAT_DIAG1 <= "884")
   OR (INPAT_DIAG2 >= "870" AND INPAT_DIAG2 <= "884")
   OR (INPAT_DIAG3 >= "870" AND INPAT_DIAG3 <= "884")
   OR (INPAT_DIAG4 >= "870" AND INPAT_DIAG4 <= "884")
   OR (INPAT_DIAG5 >= "870" AND INPAT_DIAG5 <= "884")
   OR (INPAT_DIAG6 >= "870" AND INPAT_DIAG6 <= "884")
   OR (MEDREG_DIAG1 >= "870" AND MEDREG_DIAG1 <= "884")
   OR (MEDREG_DIAG2 >= "870" AND MEDREG_DIAG2 <= "884")
   OR (MEDREG_DIAG3 >= "870" AND MEDREG_DIAG3 <= "884")
   OR (MEDREG_DIAG4 >= "870" AND MEDREG_DIAG4 <= "884")
   OR (MEDREG_DIAG5 >= "870" AND MEDREG_DIAG5 <= "884")
   OR (MEDREG_DIAG6 >= "870" AND MEDREG_DIAG6 <= "884")
   OR (INPAT_DIAG1 >= "890" AND INPAT_DIAG1 <= "894")
   OR (INPAT_DIAG2 >= "890" AND INPAT_DIAG2 <= "894")
   OR (INPAT_DIAG3 >= "890" AND INPAT_DIAG3 <= "894")
   OR (INPAT_DIAG4 >= "890" AND INPAT_DIAG4 <= "894")
   OR (INPAT_DIAG5 >= "890" AND INPAT_DIAG5 <= "894")
   OR (INPAT_DIAG6 >= "890" AND INPAT_DIAG6 <= "894")
   OR (MEDREG_DIAG1 >= "890" AND MEDREG_DIAG1 <= "894")
   OR (MEDREG_DIAG2 >= "890" AND MEDREG_DIAG2 <= "894")
   OR (MEDREG_DIAG3 >= "890" AND MEDREG_DIAG3 <= "894")
   OR (MEDREG_DIAG4 >= "890" AND MEDREG_DIAG4 <= "894")
   OR (MEDREG_DIAG5 >= "890" AND MEDREG_DIAG5 <= "894")
   OR (MEDREG_DIAG6 >= "890" AND MEDREG_DIAG6 <= "894")
   OR (INPAT_DIAG1 >= "940" AND INPAT_DIAG1 <= "949")
   OR (INPAT_DIAG2 >= "940" AND INPAT_DIAG2 <= "949")
   OR (INPAT_DIAG3 >= "940" AND INPAT_DIAG3 <= "949")
   OR (INPAT_DIAG4 >= "940" AND INPAT_DIAG4 <= "949")

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OR (INPAT_DIAG5 >= "940" AND INPAT_DIAG5 <= "949")
OR (INPAT_DIAG6 >= "940" AND INPAT_DIAG6 <= "949")
OR (MEDREG_DIAG1 >= "940" AND MEDREG_DIAG1 <= "949")
OR (MEDREG_DIAG2 >= "940" AND MEDREG_DIAG2 <= "949")
OR (MEDREG_DIAG3 >= "940" AND MEDREG_DIAG3 <= "949")
OR (MEDREG_DIAG4 >= "940" AND MEDREG_DIAG4 <= "949")
OR (MEDREG_DIAG5 >= "940" AND MEDREG_DIAG5 <= "949")
OR (MEDREG_DIAG6 >= "940" AND MEDREG_DIAG6 <= "949"))
THEN
    ACUTE_WOUND = 1
ELSE
    ACUTE_WOUND = 0
END IF

```

Cardiac/peripheral vascular (%)

```

IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
    ((INPAT_DIAG1 = "391") OR (INPAT_DIAG2 = "391")
    OR (INPAT_DIAG3 = "391") OR (INPAT_DIAG4 = "391")
    OR (INPAT_DIAG5 = "391") OR (INPAT_DIAG6 = "391")
    OR (MEDREG_DIAG1 = "391") OR (MEDREG_DIAG2 = "391")
    OR (MEDREG_DIAG3 = "391") OR (MEDREG_DIAG4 = "391")
    OR (MEDREG_DIAG5 = "391") OR (MEDREG_DIAG6 = "391")
    OR (INPAT_DIAG1 >= "393" AND INPAT_DIAG1 <= "398")
    OR (INPAT_DIAG2 >= "393" AND INPAT_DIAG2 <= "398")
    OR (INPAT_DIAG3 >= "393" AND INPAT_DIAG3 <= "398")
    OR (INPAT_DIAG4 >= "393" AND INPAT_DIAG4 <= "398")
    OR (INPAT_DIAG5 >= "393" AND INPAT_DIAG5 <= "398")
    OR (INPAT_DIAG6 >= "393" AND INPAT_DIAG6 <= "398")
    OR (MEDREG_DIAG1 >= "393" AND MEDREG_DIAG1 <= "398")
    OR (MEDREG_DIAG2 >= "393" AND MEDREG_DIAG2 <= "398")
    OR (MEDREG_DIAG3 >= "393" AND MEDREG_DIAG3 <= "398")
    OR (MEDREG_DIAG4 >= "393" AND MEDREG_DIAG4 <= "398")
    OR (MEDREG_DIAG5 >= "393" AND MEDREG_DIAG5 <= "398")
    OR (MEDREG_DIAG6 >= "393" AND MEDREG_DIAG6 <= "398")
    OR (INPAT_DIAG1 >= "401" AND INPAT_DIAG1 <= "405")
    OR (INPAT_DIAG2 >= "401" AND INPAT_DIAG2 <= "405")
    OR (INPAT_DIAG3 >= "401" AND INPAT_DIAG3 <= "405")
    OR (INPAT_DIAG4 >= "401" AND INPAT_DIAG4 <= "405")
    OR (INPAT_DIAG5 >= "401" AND INPAT_DIAG5 <= "405")
    OR (INPAT_DIAG6 >= "401" AND INPAT_DIAG6 <= "405")
    OR (MEDREG_DIAG1 >= "401" AND MEDREG_DIAG1 <= "405"))

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OR (MEDREG_DIAG2 >= "401" AND MEDREG_DIAG2 <= "405")
 OR (MEDREG_DIAG3 >= "401" AND MEDREG_DIAG3 <= "405")
 OR (MEDREG_DIAG4 >= "401" AND MEDREG_DIAG4 <= "405")
 OR (MEDREG_DIAG5 >= "401" AND MEDREG_DIAG5 <= "405")
 OR (MEDREG_DIAG6 >= "401" AND MEDREG_DIAG6 <= "405")
 OR (INPAT_DIAG1 >= "410" AND INPAT_DIAG1 <= "417")
 OR (INPAT_DIAG2 >= "410" AND INPAT_DIAG2 <= "417")
 OR (INPAT_DIAG3 >= "410" AND INPAT_DIAG3 <= "417")
 OR (INPAT_DIAG4 >= "410" AND INPAT_DIAG4 <= "417")
 OR (INPAT_DIAG5 >= "410" AND INPAT_DIAG5 <= "417")
 OR (INPAT_DIAG6 >= "410" AND INPAT_DIAG6 <= "417")
 OR (MEDREG_DIAG1 >= "410" AND MEDREG_DIAG1 <= "417")
 OR (MEDREG_DIAG2 >= "410" AND MEDREG_DIAG2 <= "417")
 OR (MEDREG_DIAG3 >= "410" AND MEDREG_DIAG3 <= "417")
 OR (MEDREG_DIAG4 >= "410" AND MEDREG_DIAG4 <= "417")
 OR (MEDREG_DIAG5 >= "410" AND MEDREG_DIAG5 <= "417")
 OR (MEDREG_DIAG6 >= "410" AND MEDREG_DIAG6 <= "417")
 OR (INPAT_DIAG1 >= "420" AND INPAT_DIAG1 <= "429")
 OR (INPAT_DIAG2 >= "420" AND INPAT_DIAG2 <= "429")
 OR (INPAT_DIAG3 >= "420" AND INPAT_DIAG3 <= "429")
 OR (INPAT_DIAG4 >= "420" AND INPAT_DIAG4 <= "429")
 OR (INPAT_DIAG5 >= "420" AND INPAT_DIAG5 <= "429")
 OR (INPAT_DIAG6 >= "420" AND INPAT_DIAG6 <= "429")
 OR (MEDREG_DIAG1 >= "420" AND MEDREG_DIAG1 <= "429")
 OR (MEDREG_DIAG2 >= "420" AND MEDREG_DIAG2 <= "429")
 OR (MEDREG_DIAG3 >= "420" AND MEDREG_DIAG3 <= "429")
 OR (MEDREG_DIAG4 >= "420" AND MEDREG_DIAG4 <= "429")
 OR (MEDREG_DIAG5 >= "420" AND MEDREG_DIAG5 <= "429")
 OR (MEDREG_DIAG6 >= "420" AND MEDREG_DIAG6 <= "429")
 OR (INPAT_DIAG1 >= "440" AND INPAT_DIAG1 <= "448")
 OR (INPAT_DIAG2 >= "440" AND INPAT_DIAG2 <= "448")
 OR (INPAT_DIAG3 >= "440" AND INPAT_DIAG3 <= "448")
 OR (INPAT_DIAG4 >= "440" AND INPAT_DIAG4 <= "448")
 OR (INPAT_DIAG5 >= "440" AND INPAT_DIAG5 <= "448")
 OR (INPAT_DIAG6 >= "440" AND INPAT_DIAG6 <= "448")
 OR (MEDREG_DIAG1 >= "440" AND MEDREG_DIAG1 <= "448")
 OR (MEDREG_DIAG2 >= "440" AND MEDREG_DIAG2 <= "448")
 OR (MEDREG_DIAG3 >= "440" AND MEDREG_DIAG3 <= "448")
 OR (MEDREG_DIAG4 >= "440" AND MEDREG_DIAG4 <= "448")
 OR (MEDREG_DIAG5 >= "440" AND MEDREG_DIAG5 <= "448")
 OR (MEDREG_DIAG6 >= "440" AND MEDREG_DIAG6 <= "448")

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OR (INPAT_DIAG1 >= "451" AND INPAT_DIAG1 <= "455")
OR (INPAT_DIAG2 >= "451" AND INPAT_DIAG2 <= "455")
OR (INPAT_DIAG3 >= "451" AND INPAT_DIAG3 <= "455")
OR (INPAT_DIAG4 >= "451" AND INPAT_DIAG4 <= "455")
OR (INPAT_DIAG5 >= "451" AND INPAT_DIAG5 <= "455")
OR (INPAT_DIAG6 >= "451" AND INPAT_DIAG6 <= "455")
OR (MEDREG_DIAG1 >= "451" AND MEDREG_DIAG1 <= "455")
OR (MEDREG_DIAG2 >= "451" AND MEDREG_DIAG2 <= "455")
OR (MEDREG_DIAG3 >= "451" AND MEDREG_DIAG3 <= "455")
OR (MEDREG_DIAG4 >= "451" AND MEDREG_DIAG4 <= "455")
OR (MEDREG_DIAG5 >= "451" AND MEDREG_DIAG5 <= "455")
OR (MEDREG_DIAG6 >= "451" AND MEDREG_DIAG6 <= "455")
OR (INPAT_DIAG1 = "456") OR (INPAT_DIAG2 = "456")
OR (INPAT_DIAG3 = "456") OR (INPAT_DIAG4 = "456")
OR (INPAT_DIAG5 = "456") OR (INPAT_DIAG6 = "456")
OR (MEDREG_DIAG1 = "456") OR (MEDREG_DIAG2 = "456")
OR (MEDREG_DIAG3 = "456") OR (MEDREG_DIAG4 = "456")
OR (MEDREG_DIAG5 = "456") OR (MEDREG_DIAG6 = "456")
OR (INPAT_DIAG1 = "785") OR (INPAT_DIAG2 = "785")
OR (INPAT_DIAG3 = "785") OR (INPAT_DIAG4 = "785")
OR (INPAT_DIAG5 = "785") OR (INPAT_DIAG6 = "785")
OR (MEDREG_DIAG1 = "785") OR (MEDREG_DIAG2 = "785")
OR (MEDREG_DIAG3 = "785") OR (MEDREG_DIAG4 = "785")
OR (MEDREG_DIAG5 = "785") OR (MEDREG_DIAG6 = "785")
THEN
    ACUTE_CARDIO = 1
ELSE
    ACUTE_CARDIO = 0
END IF

```

Pulmonary (%)

```

IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
    ((INPAT_DIAG1 >= "011" AND INPAT_DIAG1 <= "012")
    OR (INPAT_DIAG2 >= "011" AND INPAT_DIAG2 <= "012")
    OR (INPAT_DIAG3 >= "011" AND INPAT_DIAG3 <= "012")
    OR (INPAT_DIAG4 >= "011" AND INPAT_DIAG4 <= "012")
    OR (INPAT_DIAG5 >= "011" AND INPAT_DIAG5 <= "012")
    OR (INPAT_DIAG6 >= "011" AND INPAT_DIAG6 <= "012")
    OR (MEDREG_DIAG1 >= "011" AND MEDREG_DIAG1 <= "012")
    OR (MEDREG_DIAG2 >= "011" AND MEDREG_DIAG2 <= "012")
    OR (MEDREG_DIAG3 >= "011" AND MEDREG_DIAG3 <= "012")

```

OR (MEDREG_DIAG4 >= "011" AND MEDREG_DIAG4 <= "012")
 OR (MEDREG_DIAG5 >= "011" AND MEDREG_DIAG5 <= "012")
 OR (MEDREG_DIAG6 >= "011" AND MEDREG_DIAG6 <= "012")
 OR (INPAT_DIAG1 >= "160" AND INPAT_DIAG1 <= "165")
 OR (INPAT_DIAG2 >= "160" AND INPAT_DIAG2 <= "165")
 OR (INPAT_DIAG3 >= "160" AND INPAT_DIAG3 <= "165")
 OR (INPAT_DIAG4 >= "160" AND INPAT_DIAG4 <= "165")
 OR (INPAT_DIAG5 >= "160" AND INPAT_DIAG5 <= "165")
 OR (INPAT_DIAG6 >= "160" AND INPAT_DIAG6 <= "165")
 OR (MEDREG_DIAG1 >= "160" AND MEDREG_DIAG1 <= "165")
 OR (MEDREG_DIAG2 >= "160" AND MEDREG_DIAG2 <= "165")
 OR (MEDREG_DIAG3 >= "160" AND MEDREG_DIAG3 <= "165")
 OR (MEDREG_DIAG4 >= "160" AND MEDREG_DIAG4 <= "165")
 OR (MEDREG_DIAG5 >= "160" AND MEDREG_DIAG5 <= "165")
 OR (MEDREG_DIAG6 >= "160" AND MEDREG_DIAG6 <= "165")
 OR (INPAT_DIAG1 = "197") OR (INPAT_DIAG2 = "197")
 OR (INPAT_DIAG3 = "197") OR (INPAT_DIAG4 = "197")
 OR (INPAT_DIAG5 = "197") OR (INPAT_DIAG6 = "197")
 OR (MEDREG_DIAG1 = "197") OR (MEDREG_DIAG2 = "197")
 OR (MEDREG_DIAG3 = "197") OR (MEDREG_DIAG4 = "197")
 OR (MEDREG_DIAG5 = "197") OR (MEDREG_DIAG6 = "197")
 OR (INPAT_DIAG1 = "212") OR (INPAT_DIAG2 = "212")
 OR (INPAT_DIAG3 = "212") OR (INPAT_DIAG4 = "212")
 OR (INPAT_DIAG5 = "212") OR (INPAT_DIAG6 = "212")
 OR (MEDREG_DIAG1 = "212") OR (MEDREG_DIAG2 = "212")
 OR (MEDREG_DIAG3 = "212") OR (MEDREG_DIAG4 = "212")
 OR (MEDREG_DIAG5 = "212") OR (MEDREG_DIAG6 = "212")
 OR (INPAT_DIAG1 = "231") OR (INPAT_DIAG2 = "231")
 OR (INPAT_DIAG3 = "231") OR (INPAT_DIAG4 = "231")
 OR (INPAT_DIAG5 = "231") OR (INPAT_DIAG6 = "231")
 OR (MEDREG_DIAG1 = "231") OR (MEDREG_DIAG2 = "231")
 OR (MEDREG_DIAG3 = "231") OR (MEDREG_DIAG4 = "231")
 OR (MEDREG_DIAG5 = "231") OR (MEDREG_DIAG6 = "231")
 OR (INPAT_DIAG1 >= "460" AND INPAT_DIAG1 <= "466")
 OR (INPAT_DIAG2 >= "460" AND INPAT_DIAG2 <= "466")
 OR (INPAT_DIAG3 >= "460" AND INPAT_DIAG3 <= "466")
 OR (INPAT_DIAG4 >= "460" AND INPAT_DIAG4 <= "466")
 OR (INPAT_DIAG5 >= "460" AND INPAT_DIAG5 <= "466")
 OR (INPAT_DIAG6 >= "460" AND INPAT_DIAG6 <= "466")
 OR (MEDREG_DIAG1 >= "460" AND MEDREG_DIAG1 <= "466")
 OR (MEDREG_DIAG2 >= "460" AND MEDREG_DIAG2 <= "466")

OR (MEDREG_DIAG3 >= "460" AND MEDREG_DIAG3 <= "466")
 OR (MEDREG_DIAG4 >= "460" AND MEDREG_DIAG4 <= "466")
 OR (MEDREG_DIAG5 >= "460" AND MEDREG_DIAG5 <= "466")
 OR (MEDREG_DIAG6 >= "460" AND MEDREG_DIAG6 <= "466")
 OR (INPAT_DIAG1 >= "470" AND INPAT_DIAG1 <= "478")
 OR (INPAT_DIAG2 >= "470" AND INPAT_DIAG2 <= "478")
 OR (INPAT_DIAG3 >= "470" AND INPAT_DIAG3 <= "478")
 OR (INPAT_DIAG4 >= "470" AND INPAT_DIAG4 <= "478")
 OR (INPAT_DIAG5 >= "470" AND INPAT_DIAG5 <= "478")
 OR (INPAT_DIAG6 >= "470" AND INPAT_DIAG6 <= "478")
 OR (MEDREG_DIAG1 >= "470" AND MEDREG_DIAG1 <= "478")
 OR (MEDREG_DIAG2 >= "470" AND MEDREG_DIAG2 <= "478")
 OR (MEDREG_DIAG3 >= "470" AND MEDREG_DIAG3 <= "478")
 OR (MEDREG_DIAG4 >= "470" AND MEDREG_DIAG4 <= "478")
 OR (MEDREG_DIAG5 >= "470" AND MEDREG_DIAG5 <= "478")
 OR (MEDREG_DIAG6 >= "470" AND MEDREG_DIAG6 <= "478")
 OR (INPAT_DIAG1 >= "480" AND INPAT_DIAG1 <= "487")
 OR (INPAT_DIAG2 >= "480" AND INPAT_DIAG2 <= "487")
 OR (INPAT_DIAG3 >= "480" AND INPAT_DIAG3 <= "487")
 OR (INPAT_DIAG4 >= "480" AND INPAT_DIAG4 <= "487")
 OR (INPAT_DIAG5 >= "480" AND INPAT_DIAG5 <= "487")
 OR (INPAT_DIAG6 >= "480" AND INPAT_DIAG6 <= "487")
 OR (MEDREG_DIAG1 >= "480" AND MEDREG_DIAG1 <= "487")
 OR (MEDREG_DIAG2 >= "480" AND MEDREG_DIAG2 <= "487")
 OR (MEDREG_DIAG3 >= "480" AND MEDREG_DIAG3 <= "487")
 OR (MEDREG_DIAG4 >= "480" AND MEDREG_DIAG4 <= "487")
 OR (MEDREG_DIAG5 >= "480" AND MEDREG_DIAG5 <= "487")
 OR (MEDREG_DIAG6 >= "480" AND MEDREG_DIAG6 <= "487")
 OR (INPAT_DIAG1 >= "490" AND INPAT_DIAG1 <= "496")
 OR (INPAT_DIAG2 >= "490" AND INPAT_DIAG2 <= "496")
 OR (INPAT_DIAG3 >= "490" AND INPAT_DIAG3 <= "496")
 OR (INPAT_DIAG4 >= "490" AND INPAT_DIAG4 <= "496")
 OR (INPAT_DIAG5 >= "490" AND INPAT_DIAG5 <= "496")
 OR (INPAT_DIAG6 >= "490" AND INPAT_DIAG6 <= "496")
 OR (MEDREG_DIAG1 >= "490" AND MEDREG_DIAG1 <= "496")
 OR (MEDREG_DIAG2 >= "490" AND MEDREG_DIAG2 <= "496")
 OR (MEDREG_DIAG3 >= "490" AND MEDREG_DIAG3 <= "496")
 OR (MEDREG_DIAG4 >= "490" AND MEDREG_DIAG4 <= "496")
 OR (MEDREG_DIAG5 >= "490" AND MEDREG_DIAG5 <= "496")
 OR (MEDREG_DIAG6 >= "490" AND MEDREG_DIAG6 <= "496")
 OR (INPAT_DIAG1 >= "500" AND INPAT_DIAG1 <= "508")

OR (INPAT_DIAG2 >= "500" AND INPAT_DIAG2 <= "508")
 OR (INPAT_DIAG3 >= "500" AND INPAT_DIAG3 <= "508")
 OR (INPAT_DIAG4 >= "500" AND INPAT_DIAG4 <= "508")
 OR (INPAT_DIAG5 >= "500" AND INPAT_DIAG5 <= "508")
 OR (INPAT_DIAG6 >= "500" AND INPAT_DIAG6 <= "508")
 OR (MEDREG_DIAG1 >= "500" AND MEDREG_DIAG1 <= "508")
 OR (MEDREG_DIAG2 >= "500" AND MEDREG_DIAG2 <= "508")
 OR (MEDREG_DIAG3 >= "500" AND MEDREG_DIAG3 <= "508")
 OR (MEDREG_DIAG4 >= "500" AND MEDREG_DIAG4 <= "508")
 OR (MEDREG_DIAG5 >= "500" AND MEDREG_DIAG5 <= "508")
 OR (MEDREG_DIAG6 >= "500" AND MEDREG_DIAG6 <= "508")
 OR (INPAT_DIAG1 >= "510" AND INPAT_DIAG1 <= "519")
 OR (INPAT_DIAG2 >= "510" AND INPAT_DIAG2 <= "519")
 OR (INPAT_DIAG3 >= "510" AND INPAT_DIAG3 <= "519")
 OR (INPAT_DIAG4 >= "510" AND INPAT_DIAG4 <= "519")
 OR (INPAT_DIAG5 >= "510" AND INPAT_DIAG5 <= "519")
 OR (INPAT_DIAG6 >= "510" AND INPAT_DIAG6 <= "519")
 OR (MEDREG_DIAG1 >= "510" AND MEDREG_DIAG1 <= "519")
 OR (MEDREG_DIAG2 >= "510" AND MEDREG_DIAG2 <= "519")
 OR (MEDREG_DIAG3 >= "510" AND MEDREG_DIAG3 <= "519")
 OR (MEDREG_DIAG4 >= "510" AND MEDREG_DIAG4 <= "519")
 OR (MEDREG_DIAG5 >= "510" AND MEDREG_DIAG5 <= "519")
 OR (MEDREG_DIAG6 >= "510" AND MEDREG_DIAG6 <= "519")
 OR (INPAT_DIAG1 = "786") OR (INPAT_DIAG2 = "786")
 OR (INPAT_DIAG3 = "786") OR (INPAT_DIAG4 = "786")
 OR (INPAT_DIAG5 = "786") OR (INPAT_DIAG6 = "786")
 OR (MEDREG_DIAG1 = "786") OR (MEDREG_DIAG2 = "786")
 OR (MEDREG_DIAG3 = "786") OR (MEDREG_DIAG4 = "786")
 OR (MEDREG_DIAG5 = "786") OR (MEDREG_DIAG6 = "786")
 OR (INPAT_DIAG1 >= "860" AND INPAT_DIAG1 <= "862")
 OR (INPAT_DIAG2 >= "860" AND INPAT_DIAG2 <= "862")
 OR (INPAT_DIAG3 >= "860" AND INPAT_DIAG3 <= "862")
 OR (INPAT_DIAG4 >= "860" AND INPAT_DIAG4 <= "862")
 OR (INPAT_DIAG5 >= "860" AND INPAT_DIAG5 <= "862")
 OR (INPAT_DIAG6 >= "860" AND INPAT_DIAG6 <= "862")
 OR (MEDREG_DIAG1 >= "860" AND MEDREG_DIAG1 <= "862")
 OR (MEDREG_DIAG2 >= "860" AND MEDREG_DIAG2 <= "862")
 OR (MEDREG_DIAG3 >= "860" AND MEDREG_DIAG3 <= "862")
 OR (MEDREG_DIAG4 >= "860" AND MEDREG_DIAG4 <= "862")
 OR (MEDREG_DIAG5 >= "860" AND MEDREG_DIAG5 <= "862")
 OR (MEDREG_DIAG6 >= "860" AND MEDREG_DIAG6 <= "862")

```

THEN
    ACUTE_LUNG = 1
ELSE
    ACUTE_LUNG = 0
END IF

```

Diabetes mellitus (%)

```

IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
    ((INPAT_DIAG1 = "250") OR (INPAT_DIAG2 = "250")
    OR (INPAT_DIAG3 = "250") OR (INPAT_DIAG4 = "250")
    OR (INPAT_DIAG5 = "250") OR (INPAT_DIAG6 = "250")
    OR (MEDREG_DIAG1 = "250") OR (MEDREG_DIAG2 = "250")
    OR (MEDREG_DIAG3 = "250") OR (MEDREG_DIAG4 = "250")
    OR (MEDREG_DIAG5 = "250") OR (MEDREG_DIAG6 = "250"))
THEN
    ACUTE_DIABETES = 1
ELSE
    ACUTE_DIABETES = 0
END IF

```

Gastrointestinal disorder (%)

```

IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
    (M1630_OSTOMY[1] = 02
    OR (INPAT_DIAG1 >= "001" AND INPAT_DIAG1 <= "009")
    OR (INPAT_DIAG2 >= "001" AND INPAT_DIAG2 <= "009")
    OR (INPAT_DIAG3 >= "001" AND INPAT_DIAG3 <= "009")
    OR (INPAT_DIAG4 >= "001" AND INPAT_DIAG4 <= "009")
    OR (INPAT_DIAG5 >= "001" AND INPAT_DIAG5 <= "009")
    OR (INPAT_DIAG6 >= "001" AND INPAT_DIAG6 <= "009")
    OR (MEDREG_DIAG1 >= "001" AND MEDREG_DIAG1 <= "009")
    OR (MEDREG_DIAG2 >= "001" AND MEDREG_DIAG2 <= "009")
    OR (MEDREG_DIAG3 >= "001" AND MEDREG_DIAG3 <= "009")
    OR (MEDREG_DIAG4 >= "001" AND MEDREG_DIAG4 <= "009")
    OR (MEDREG_DIAG5 >= "001" AND MEDREG_DIAG5 <= "009")
    OR (MEDREG_DIAG6 >= "001" AND MEDREG_DIAG6 <= "009")
    OR (INPAT_DIAG1 = "127") OR (INPAT_DIAG2 = "127")
    OR (INPAT_DIAG3 = "127") OR (INPAT_DIAG4 = "127")
    OR (INPAT_DIAG5 = "127") OR (INPAT_DIAG6 = "127")
    OR (MEDREG_DIAG1 = "127") OR (MEDREG_DIAG2 = "127")
    OR (MEDREG_DIAG3 = "127") OR (MEDREG_DIAG4 = "127")
    OR (MEDREG_DIAG5 = "127") OR (MEDREG_DIAG6 = "127"))

```

OR (INPAT_DIAG1 = "129") OR (INPAT_DIAG2 = "129")
 OR (INPAT_DIAG3 = "129") OR (INPAT_DIAG4 = "129")
 OR (INPAT_DIAG5 = "129") OR (INPAT_DIAG6 = "129")
 OR (MEDREG_DIAG1 = "129") OR (MEDREG_DIAG2 = "129")
 OR (MEDREG_DIAG3 = "129") OR (MEDREG_DIAG4 = "129")
 OR (MEDREG_DIAG5 = "129") OR (MEDREG_DIAG6 = "129")
 OR (INPAT_DIAG1 >= "150" AND INPAT_DIAG1 <= "154")
 OR (INPAT_DIAG2 >= "150" AND INPAT_DIAG2 <= "154")
 OR (INPAT_DIAG3 >= "150" AND INPAT_DIAG3 <= "154")
 OR (INPAT_DIAG4 >= "150" AND INPAT_DIAG4 <= "154")
 OR (INPAT_DIAG5 >= "150" AND INPAT_DIAG5 <= "154")
 OR (INPAT_DIAG6 >= "150" AND INPAT_DIAG6 <= "154")
 OR (MEDREG_DIAG1 >= "150" AND MEDREG_DIAG1 <= "154")
 OR (MEDREG_DIAG2 >= "150" AND MEDREG_DIAG2 <= "154")
 OR (MEDREG_DIAG3 >= "150" AND MEDREG_DIAG3 <= "154")
 OR (MEDREG_DIAG4 >= "150" AND MEDREG_DIAG4 <= "154")
 OR (MEDREG_DIAG5 >= "150" AND MEDREG_DIAG5 <= "154")
 OR (MEDREG_DIAG6 >= "150" AND MEDREG_DIAG6 <= "154")
 OR (INPAT_DIAG1 = "156") OR (INPAT_DIAG2 = "156")
 OR (INPAT_DIAG3 = "156") OR (INPAT_DIAG4 = "156")
 OR (INPAT_DIAG5 = "156") OR (INPAT_DIAG6 = "156")
 OR (MEDREG_DIAG1 = "156") OR (MEDREG_DIAG2 = "156")
 OR (MEDREG_DIAG3 = "156") OR (MEDREG_DIAG4 = "156")
 OR (MEDREG_DIAG5 = "156") OR (MEDREG_DIAG6 = "156")
 OR (INPAT_DIAG1 = "159") OR (INPAT_DIAG2 = "159")
 OR (INPAT_DIAG3 = "159") OR (INPAT_DIAG4 = "159")
 OR (INPAT_DIAG5 = "159") OR (INPAT_DIAG6 = "159")
 OR (MEDREG_DIAG1 = "159") OR (MEDREG_DIAG2 = "159")
 OR (MEDREG_DIAG3 = "159") OR (MEDREG_DIAG4 = "159")
 OR (MEDREG_DIAG5 = "159") OR (MEDREG_DIAG6 = "159")
 OR (INPAT_DIAG1 = "211") OR (INPAT_DIAG2 = "211")
 OR (INPAT_DIAG3 = "211") OR (INPAT_DIAG4 = "211")
 OR (INPAT_DIAG5 = "211") OR (INPAT_DIAG6 = "211")
 OR (MEDREG_DIAG1 = "211") OR (MEDREG_DIAG2 = "211")
 OR (MEDREG_DIAG3 = "211") OR (MEDREG_DIAG4 = "211")
 OR (MEDREG_DIAG5 = "211") OR (MEDREG_DIAG6 = "211")
 OR (INPAT_DIAG1 = "230") OR (INPAT_DIAG2 = "230")
 OR (INPAT_DIAG3 = "230") OR (INPAT_DIAG4 = "230")
 OR (INPAT_DIAG5 = "230") OR (INPAT_DIAG6 = "230")
 OR (MEDREG_DIAG1 = "230") OR (MEDREG_DIAG2 = "230")
 OR (MEDREG_DIAG3 = "230") OR (MEDREG_DIAG4 = "230")

OR (MEDREG_DIAG5 = "230") OR (MEDREG_DIAG6 = "230")
 OR (INPAT_DIAG1 >= "530" AND INPAT_DIAG1 <= "537")
 OR (INPAT_DIAG2 >= "530" AND INPAT_DIAG2 <= "537")
 OR (INPAT_DIAG3 >= "530" AND INPAT_DIAG3 <= "537")
 OR (INPAT_DIAG4 >= "530" AND INPAT_DIAG4 <= "537")
 OR (INPAT_DIAG5 >= "530" AND INPAT_DIAG5 <= "537")
 OR (INPAT_DIAG6 >= "530" AND INPAT_DIAG6 <= "537")
 OR (MEDREG_DIAG1 >= "530" AND MEDREG_DIAG1 <= "537")
 OR (MEDREG_DIAG2 >= "530" AND MEDREG_DIAG2 <= "537")
 OR (MEDREG_DIAG3 >= "530" AND MEDREG_DIAG3 <= "537")
 OR (MEDREG_DIAG4 >= "530" AND MEDREG_DIAG4 <= "537")
 OR (MEDREG_DIAG5 >= "530" AND MEDREG_DIAG5 <= "537")
 OR (MEDREG_DIAG6 >= "530" AND MEDREG_DIAG6 <= "537")
 OR (INPAT_DIAG1 = "538") OR (INPAT_DIAG2 = "538")
 OR (INPAT_DIAG3 = "538") OR (INPAT_DIAG4 = "538")
 OR (INPAT_DIAG5 = "538") OR (INPAT_DIAG6 = "538")
 OR (MEDREG_DIAG1 = "538") OR (MEDREG_DIAG2 = "538")
 OR (MEDREG_DIAG3 = "538") OR (MEDREG_DIAG4 = "538")
 OR (MEDREG_DIAG5 = "538") OR (MEDREG_DIAG6 = "538")
 OR (INPAT_DIAG1 >= "550" AND INPAT_DIAG1 <= "553")
 OR (INPAT_DIAG2 >= "550" AND INPAT_DIAG2 <= "553")
 OR (INPAT_DIAG3 >= "550" AND INPAT_DIAG3 <= "553")
 OR (INPAT_DIAG4 >= "550" AND INPAT_DIAG4 <= "553")
 OR (INPAT_DIAG5 >= "550" AND INPAT_DIAG5 <= "553")
 OR (INPAT_DIAG6 >= "550" AND INPAT_DIAG6 <= "553")
 OR (MEDREG_DIAG1 >= "550" AND MEDREG_DIAG1 <= "553")
 OR (MEDREG_DIAG2 >= "550" AND MEDREG_DIAG2 <= "553")
 OR (MEDREG_DIAG3 >= "550" AND MEDREG_DIAG3 <= "553")
 OR (MEDREG_DIAG4 >= "550" AND MEDREG_DIAG4 <= "553")
 OR (MEDREG_DIAG5 >= "550" AND MEDREG_DIAG5 <= "553")
 OR (MEDREG_DIAG6 >= "550" AND MEDREG_DIAG6 <= "553")
 OR (INPAT_DIAG1 >= "555" AND INPAT_DIAG1 <= "558")
 OR (INPAT_DIAG2 >= "555" AND INPAT_DIAG2 <= "558")
 OR (INPAT_DIAG3 >= "555" AND INPAT_DIAG3 <= "558")
 OR (INPAT_DIAG4 >= "555" AND INPAT_DIAG4 <= "558")
 OR (INPAT_DIAG5 >= "555" AND INPAT_DIAG5 <= "558")
 OR (INPAT_DIAG6 >= "555" AND INPAT_DIAG6 <= "558")
 OR (MEDREG_DIAG1 >= "555" AND MEDREG_DIAG1 <= "558")
 OR (MEDREG_DIAG2 >= "555" AND MEDREG_DIAG2 <= "558")
 OR (MEDREG_DIAG3 >= "555" AND MEDREG_DIAG3 <= "558")
 OR (MEDREG_DIAG4 >= "555" AND MEDREG_DIAG4 <= "558")

```

OR (MEDREG_DIAG5 >= "555" AND MEDREG_DIAG5 <= "558")
OR (MEDREG_DIAG6 >= "555" AND MEDREG_DIAG6 <= "558")
OR (INPAT_DIAG1 >= "560" AND INPAT_DIAG1 <= "579")
OR (INPAT_DIAG2 >= "560" AND INPAT_DIAG2 <= "579")
OR (INPAT_DIAG3 >= "560" AND INPAT_DIAG3 <= "579")
OR (INPAT_DIAG4 >= "560" AND INPAT_DIAG4 <= "579")
OR (INPAT_DIAG5 >= "560" AND INPAT_DIAG5 <= "579")
OR (INPAT_DIAG6 >= "560" AND INPAT_DIAG6 <= "579")
OR (MEDREG_DIAG1 >= "560" AND MEDREG_DIAG1 <= "579")
OR (MEDREG_DIAG2 >= "560" AND MEDREG_DIAG2 <= "579")
OR (MEDREG_DIAG3 >= "560" AND MEDREG_DIAG3 <= "579")
OR (MEDREG_DIAG4 >= "560" AND MEDREG_DIAG4 <= "579")
OR (MEDREG_DIAG5 >= "560" AND MEDREG_DIAG5 <= "579")
OR (MEDREG_DIAG6 >= "560" AND MEDREG_DIAG6 <= "579")
OR (INPAT_DIAG1 = "787") OR (INPAT_DIAG2 = "787")
OR (INPAT_DIAG3 = "787") OR (INPAT_DIAG4 = "787")
OR (INPAT_DIAG5 = "787") OR (INPAT_DIAG6 = "787")
OR (MEDREG_DIAG1 = "787") OR (MEDREG_DIAG2 = "787")
OR (MEDREG_DIAG3 = "787") OR (MEDREG_DIAG4 = "787")
OR (MEDREG_DIAG5 = "787") OR (MEDREG_DIAG6 = "787")
OR (INPAT_DIAG1 = "863") OR (INPAT_DIAG2 = "863")
OR (INPAT_DIAG3 = "863") OR (INPAT_DIAG4 = "863")
OR (INPAT_DIAG5 = "863") OR (INPAT_DIAG6 = "863")
OR (MEDREG_DIAG1 = "863") OR (MEDREG_DIAG2 = "863")
OR (MEDREG_DIAG3 = "863") OR (MEDREG_DIAG4 = "863")
OR (MEDREG_DIAG5 = "863") OR (MEDREG_DIAG6 = "863"))
THEN
    ACUTE_GI = 1
ELSE
    ACUTE_GI = 0
END IF

```

Contagious/communicable (%)

```

IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
    ((INPAT_DIAG1 >= "001" AND INPAT_DIAG1 <= "018")
    OR (INPAT_DIAG2 >= "001" AND INPAT_DIAG2 <= "018")
    OR (INPAT_DIAG3 >= "001" AND INPAT_DIAG3 <= "018")
    OR (INPAT_DIAG4 >= "001" AND INPAT_DIAG4 <= "018")
    OR (INPAT_DIAG5 >= "001" AND INPAT_DIAG5 <= "018")
    OR (INPAT_DIAG6 >= "001" AND INPAT_DIAG6 <= "018")
    OR (MEDREG_DIAG1 >= "001" AND MEDREG_DIAG1 <= "018"))

```

OR (MEDREG_DIAG2 >= "001" AND MEDREG_DIAG2 <= "018")
 OR (MEDREG_DIAG3 >= "001" AND MEDREG_DIAG3 <= "018")
 OR (MEDREG_DIAG4 >= "001" AND MEDREG_DIAG4 <= "018")
 OR (MEDREG_DIAG5 >= "001" AND MEDREG_DIAG5 <= "018")
 OR (MEDREG_DIAG6 >= "001" AND MEDREG_DIAG6 <= "018")
 OR (INPAT_DIAG1 >= "020" AND INPAT_DIAG1 <= "027")
 OR (INPAT_DIAG2 >= "020" AND INPAT_DIAG2 <= "027")
 OR (INPAT_DIAG3 >= "020" AND INPAT_DIAG3 <= "027")
 OR (INPAT_DIAG4 >= "020" AND INPAT_DIAG4 <= "027")
 OR (INPAT_DIAG5 >= "020" AND INPAT_DIAG5 <= "027")
 OR (INPAT_DIAG6 >= "020" AND INPAT_DIAG6 <= "027")
 OR (MEDREG_DIAG1 >= "020" AND MEDREG_DIAG1 <= "027")
 OR (MEDREG_DIAG2 >= "020" AND MEDREG_DIAG2 <= "027")
 OR (MEDREG_DIAG3 >= "020" AND MEDREG_DIAG3 <= "027")
 OR (MEDREG_DIAG4 >= "020" AND MEDREG_DIAG4 <= "027")
 OR (MEDREG_DIAG5 >= "020" AND MEDREG_DIAG5 <= "027")
 OR (MEDREG_DIAG6 >= "020" AND MEDREG_DIAG6 <= "027")
 OR (INPAT_DIAG1 >= "030" AND INPAT_DIAG1 <= "037")
 OR (INPAT_DIAG2 >= "030" AND INPAT_DIAG2 <= "037")
 OR (INPAT_DIAG3 >= "030" AND INPAT_DIAG3 <= "037")
 OR (INPAT_DIAG4 >= "030" AND INPAT_DIAG4 <= "037")
 OR (INPAT_DIAG5 >= "030" AND INPAT_DIAG5 <= "037")
 OR (INPAT_DIAG6 >= "030" AND INPAT_DIAG6 <= "037")
 OR (MEDREG_DIAG1 >= "030" AND MEDREG_DIAG1 <= "037")
 OR (MEDREG_DIAG2 >= "030" AND MEDREG_DIAG2 <= "037")
 OR (MEDREG_DIAG3 >= "030" AND MEDREG_DIAG3 <= "037")
 OR (MEDREG_DIAG4 >= "030" AND MEDREG_DIAG4 <= "037")
 OR (MEDREG_DIAG5 >= "030" AND MEDREG_DIAG5 <= "037")
 OR (MEDREG_DIAG6 >= "030" AND MEDREG_DIAG6 <= "037")
 OR (INPAT_DIAG1 >= "039" AND INPAT_DIAG1 <= "057")
 OR (INPAT_DIAG2 >= "039" AND INPAT_DIAG2 <= "057")
 OR (INPAT_DIAG3 >= "039" AND INPAT_DIAG3 <= "057")
 OR (INPAT_DIAG4 >= "039" AND INPAT_DIAG4 <= "057")
 OR (INPAT_DIAG5 >= "039" AND INPAT_DIAG5 <= "057")
 OR (INPAT_DIAG6 >= "039" AND INPAT_DIAG6 <= "057")
 OR (MEDREG_DIAG1 >= "039" AND MEDREG_DIAG1 <= "057")
 OR (MEDREG_DIAG2 >= "039" AND MEDREG_DIAG2 <= "057")
 OR (MEDREG_DIAG3 >= "039" AND MEDREG_DIAG3 <= "057")
 OR (MEDREG_DIAG4 >= "039" AND MEDREG_DIAG4 <= "057")
 OR (MEDREG_DIAG5 >= "039" AND MEDREG_DIAG5 <= "057")
 OR (MEDREG_DIAG6 >= "039" AND MEDREG_DIAG6 <= "057")

OR (INPAT_DIAG1 >= "060" AND INPAT_DIAG1 <= "066")
 OR (INPAT_DIAG2 >= "060" AND INPAT_DIAG2 <= "066")
 OR (INPAT_DIAG3 >= "060" AND INPAT_DIAG3 <= "066")
 OR (INPAT_DIAG4 >= "060" AND INPAT_DIAG4 <= "066")
 OR (INPAT_DIAG5 >= "060" AND INPAT_DIAG5 <= "066")
 OR (INPAT_DIAG6 >= "060" AND INPAT_DIAG6 <= "066")
 OR (MEDREG_DIAG1 >= "060" AND MEDREG_DIAG1 <= "066")
 OR (MEDREG_DIAG2 >= "060" AND MEDREG_DIAG2 <= "066")
 OR (MEDREG_DIAG3 >= "060" AND MEDREG_DIAG3 <= "066")
 OR (MEDREG_DIAG4 >= "060" AND MEDREG_DIAG4 <= "066")
 OR (MEDREG_DIAG5 >= "060" AND MEDREG_DIAG5 <= "066")
 OR (MEDREG_DIAG6 >= "060" AND MEDREG_DIAG6 <= "066")
 OR (INPAT_DIAG1 >= "070" AND INPAT_DIAG1 <= "088")
 OR (INPAT_DIAG2 >= "070" AND INPAT_DIAG2 <= "088")
 OR (INPAT_DIAG3 >= "070" AND INPAT_DIAG3 <= "088")
 OR (INPAT_DIAG4 >= "070" AND INPAT_DIAG4 <= "088")
 OR (INPAT_DIAG5 >= "070" AND INPAT_DIAG5 <= "088")
 OR (INPAT_DIAG6 >= "070" AND INPAT_DIAG6 <= "088")
 OR (MEDREG_DIAG1 >= "070" AND MEDREG_DIAG1 <= "088")
 OR (MEDREG_DIAG2 >= "070" AND MEDREG_DIAG2 <= "088")
 OR (MEDREG_DIAG3 >= "070" AND MEDREG_DIAG3 <= "088")
 OR (MEDREG_DIAG4 >= "070" AND MEDREG_DIAG4 <= "088")
 OR (MEDREG_DIAG5 >= "070" AND MEDREG_DIAG5 <= "088")
 OR (MEDREG_DIAG6 >= "070" AND MEDREG_DIAG6 <= "088")
 OR (INPAT_DIAG1 >= "090" AND INPAT_DIAG1 <= "104")
 OR (INPAT_DIAG2 >= "090" AND INPAT_DIAG2 <= "104")
 OR (INPAT_DIAG3 >= "090" AND INPAT_DIAG3 <= "104")
 OR (INPAT_DIAG4 >= "090" AND INPAT_DIAG4 <= "104")
 OR (INPAT_DIAG5 >= "090" AND INPAT_DIAG5 <= "104")
 OR (INPAT_DIAG6 >= "090" AND INPAT_DIAG6 <= "104")
 OR (MEDREG_DIAG1 >= "090" AND MEDREG_DIAG1 <= "104")
 OR (MEDREG_DIAG2 >= "090" AND MEDREG_DIAG2 <= "104")
 OR (MEDREG_DIAG3 >= "090" AND MEDREG_DIAG3 <= "104")
 OR (MEDREG_DIAG4 >= "090" AND MEDREG_DIAG4 <= "104")
 OR (MEDREG_DIAG5 >= "090" AND MEDREG_DIAG5 <= "104")
 OR (MEDREG_DIAG6 >= "090" AND MEDREG_DIAG6 <= "104")
 OR (INPAT_DIAG1 >= "110" AND INPAT_DIAG1 <= "118")
 OR (INPAT_DIAG2 >= "110" AND INPAT_DIAG2 <= "118")
 OR (INPAT_DIAG3 >= "110" AND INPAT_DIAG3 <= "118")
 OR (INPAT_DIAG4 >= "110" AND INPAT_DIAG4 <= "118")
 OR (INPAT_DIAG5 >= "110" AND INPAT_DIAG5 <= "118")


```

OR (INPAT_DIAG6 >= "110" AND INPAT_DIAG6 <= "118")
OR (MEDREG_DIAG1 >= "110" AND MEDREG_DIAG1 <= "118")
OR (MEDREG_DIAG2 >= "110" AND MEDREG_DIAG2 <= "118")
OR (MEDREG_DIAG3 >= "110" AND MEDREG_DIAG3 <= "118")
OR (MEDREG_DIAG4 >= "110" AND MEDREG_DIAG4 <= "118")
OR (MEDREG_DIAG5 >= "110" AND MEDREG_DIAG5 <= "118")
OR (MEDREG_DIAG6 >= "110" AND MEDREG_DIAG6 <= "118")
OR (INPAT_DIAG1 >= "120" AND INPAT_DIAG1 <= "136")
OR (INPAT_DIAG2 >= "120" AND INPAT_DIAG2 <= "136")
OR (INPAT_DIAG3 >= "120" AND INPAT_DIAG3 <= "136")
OR (INPAT_DIAG4 >= "120" AND INPAT_DIAG4 <= "136")
OR (INPAT_DIAG5 >= "120" AND INPAT_DIAG5 <= "136")
OR (INPAT_DIAG6 >= "120" AND INPAT_DIAG6 <= "136")
OR (MEDREG_DIAG1 >= "120" AND MEDREG_DIAG1 <= "136")
OR (MEDREG_DIAG2 >= "120" AND MEDREG_DIAG2 <= "136")
OR (MEDREG_DIAG3 >= "120" AND MEDREG_DIAG3 <= "136")
OR (MEDREG_DIAG4 >= "120" AND MEDREG_DIAG4 <= "136")
OR (MEDREG_DIAG5 >= "120" AND MEDREG_DIAG5 <= "136")
OR (MEDREG_DIAG6 >= "120" AND MEDREG_DIAG6 <= "136"))
THEN
    ACUTE_CONTAGIOUS = 1
ELSE
    ACUTE_CONTAGIOUS = 0
END IF

```

Home Care Diagnoses

MID(FieldName,Start,Length) = Selected characters from with the ICD-9-CM string, where Start is the beginning position within the field, and Length is the number of characters to select. If the ICD-9-CM code is blank, the result is blank.

```

IF M1020_PRIMARY_DIAG_SEVERITY[1] = 00
    AND MID(M1020_PRIMARY_DIAG_ICD[1],2,1) <> "V"
THEN
    HC_DIAG1 = BLANK
    HC_DIAG2 = BLANK
    HC_DIAG3 = BLANK
    HC_DIAG4 = BLANK
    HC_DIAG5 = BLANK
    HC_DIAG6 = BLANK
    PMT_DIAG1 = BLANK

```

```

PMT2_DIAG1 = BLANK
PMT_DIAG2 = BLANK
PMT2_DIAG2 = BLANK
PMT_DIAG3 = BLANK
PMT2_DIAG3 = BLANK
PMT_DIAG4 = BLANK
PMT2_DIAG4 = BLANK
PMT_DIAG5 = BLANK
PMT2_DIAG5 = BLANK
PMT_DIAG6 = BLANK
PMT2_DIAG6 = BLANK
ELSE
  HC_DIAG1 = MID(M1020_PRIMARY_DIAG_ICD[1],2,4)
  PMT_DIAG1 = MID(M1024_PMT_DIAG_ICD_A3[1],2,4)
  PMT2_DIAG1 = MID(M1024_PMT_DIAG_ICD_A4[1],2,4)
  IF M1022_OTH_DIAG1_SEVERITY[1] > 00
  THEN
    HC_DIAG2 = MID(M1022_OTH_DIAG1_ICD[1],2,4)
  ELSE
    HC_DIAG2 = BLANK
  END IF
  PMT_DIAG2 = MID(M1024_PMT_DIAG_ICD_B3 [1],2,4)
  PMT2_DIAG2 = MID(M1024_PMT_DIAG_ICD_B4[1],2,4)
  IF M1022_OTH_DIAG2_SEVERITY[1] > 00
  THEN
    HC_DIAG3 = MID(M1022_OTH_DIAG2_ICD[1],2,4)
  ELSE
    HC_DIAG3 = BLANK
  END IF
  PMT_DIAG3 = MID(M1024_PMT_DIAG_ICD_C3 [1],2,4)
  PMT2_DIAG3 = MID(M1024_PMT_DIAG_ICD_C4[1],2,4)
  IF M1022_OTH_DIAG3_SEVERITY[1] > 00
  THEN
    HC_DIAG4 = MID(M1022_OTH_DIAG3_ICD [1],2,4)
  ELSE
    HC_DIAG4 = BLANK
  END IF
  PMT_DIAG4 = MID(M1024_PMT_DIAG_ICD_D3 [1],2,4)
  PMT2_DIAG4 = MID(M1024_PMT_DIAG_ICD_D4[1],2,4)
  IF M1022_OTH_DIAG4_SEVERITY[1] > 00
  THEN

```

```

    HC_DIAG5 = MID(M1022_OTH_DIAG4_ICD[1],2,4)
ELSE
    HC_DIAG5 = BLANK
END IF
PMT_DIAG5 = MID(M1024_PMT_DIAG_ICD_E3[1],2,4)
PMT2_DIAG5 = MID(M1024_PMT_DIAG_ICD_E4[1],2,4)
IF M1022_OTH_DIAG5_SEVERITY[1] > 00
THEN
    HC_DIAG6 = MID(M1022_OTH_DIAG5_ICD[1],2,4)
ELSE
    HC_DIAG6 = BLANK
END IF
PMT_DIAG6 = MID(M1024_PMT_DIAG_ICD_F3[1],2,4)
PMT2_DIAG6 = MID(M1024_PMT_DIAG_ICD_F4[1],2,4)
END IF

```

Infections/parasitic diseases (%)

```

IF (HC_DIAG1 >= "001" and HC_DIAG1 <= "139")
    OR (PMT_DIAG1 >= "001" and PMT_DIAG1 <= "139")
    OR (PMT2_DIAG1 >= "001" and PMT2_DIAG1 <= "139")
    OR (HC_DIAG2 >= "001" and HC_DIAG2 <= "139")
    OR (PMT_DIAG2 >= "001" and PMT_DIAG2 <= "139")
    OR (PMT2_DIAG2 >= "001" and PMT2_DIAG2 <= "139")
    OR (HC_DIAG3 >= "001" and HC_DIAG3 <= "139")
    OR (PMT_DIAG3 >= "001" and PMT_DIAG3 <= "139")
    OR (PMT2_DIAG3 >= "001" and PMT2_DIAG3 <= "139")
    OR (HC_DIAG4 >= "001" and HC_DIAG4 <= "139")
    OR (PMT_DIAG4 >= "001" and PMT_DIAG4 <= "139")
    OR (PMT2_DIAG4 >= "001" and PMT2_DIAG4 <= "139")
    OR (HC_DIAG5 >= "001" and HC_DIAG5 <= "139")
    OR (PMT_DIAG5 >= "001" and PMT_DIAG5 <= "139")
    OR (PMT2_DIAG5 >= "001" and PMT2_DIAG5 <= "139")
    OR (HC_DIAG6 >= "001" and HC_DIAG6 <= "139")
    OR (PMT_DIAG6 >= "001" and PMT_DIAG6 <= "139")
    OR (PMT2_DIAG6 >= "001" and PMT2_DIAG6 <= "139")
THEN
    HC_DX_INFECT = 1
ELSE
    HC_DX_INFECT = 0
END IF

```

Neoplasms (%)

```
IF (HC_DIAG1 >= "140" AND HC_DIAG1 <= "239")
    OR (PMT_DIAG1 >= "140" AND PMT_DIAG1 <= "239")
    OR (PMT2_DIAG1 >= "140" AND PMT2_DIAG1 <= "239")
    OR (HC_DIAG2 >= "140" AND HC_DIAG2 <= "239")
    OR (PMT_DIAG2 >= "140" AND PMT_DIAG2 <= "239")
    OR (PMT2_DIAG2 >= "140" AND PMT2_DIAG2 <= "239")
    OR (HC_DIAG3 >= "140" AND HC_DIAG3 <= "239")
    OR (PMT_DIAG3 >= "140" AND PMT_DIAG3 <= "239")
    OR (PMT2_DIAG3 >= "140" AND PMT2_DIAG3 <= "239")
    OR (HC_DIAG4 >= "140" AND HC_DIAG4 <= "239")
    OR (PMT_DIAG4 >= "140" AND PMT_DIAG4 <= "239")
    OR (PMT2_DIAG4 >= "140" AND PMT2_DIAG4 <= "239")
    OR (HC_DIAG5 >= "140" AND HC_DIAG5 <= "239")
    OR (PMT_DIAG5 >= "140" AND PMT_DIAG5 <= "239")
    OR (PMT2_DIAG5 >= "140" AND PMT2_DIAG5 <= "239")
    OR (HC_DIAG6 >= "140" AND HC_DIAG6 <= "239")
    OR (PMT_DIAG6 >= "140" AND PMT_DIAG6 <= "239")
    OR (PMT2_DIAG6 >= "140" AND PMT2_DIAG6 <= "239")
THEN
    HC_DX_NEOPLASM = 1
ELSE
    HC_DX_NEOPLASM = 0
END IF
```

Endocrine/nutrit./metabolic (%)

```
IF (HC_DIAG1 >= "240" AND HC_DIAG1 <= "279")
    OR (PMT_DIAG1 >= "240" AND PMT_DIAG1 <= "279")
    OR (PMT2_DIAG1 >= "240" AND PMT2_DIAG1 <= "279")
    OR (HC_DIAG2 >= "240" AND HC_DIAG2 <= "279")
    OR (PMT_DIAG2 >= "240" AND PMT_DIAG2 <= "279")
    OR (PMT2_DIAG2 >= "240" AND PMT2_DIAG2 <= "279")
    OR (HC_DIAG3 >= "240" AND HC_DIAG3 <= "279")
    OR (PMT_DIAG3 >= "240" AND PMT_DIAG3 <= "279")
    OR (PMT2_DIAG3 >= "240" AND PMT2_DIAG3 <= "279")
    OR (HC_DIAG4 >= "240" AND HC_DIAG4 <= "279")
    OR (PMT_DIAG4 >= "240" AND PMT_DIAG4 <= "279")
    OR (PMT2_DIAG4 >= "240" AND PMT2_DIAG4 <= "279")
    OR (HC_DIAG5 >= "240" AND HC_DIAG5 <= "279")
    OR (PMT_DIAG5 >= "240" AND PMT_DIAG5 <= "279")
    OR (PMT2_DIAG5 >= "240" AND PMT2_DIAG5 <= "279")
```

```

OR (HC_DIAG6 >= "240" AND HC_DIAG6 <= "279")
OR (PMT_DIAG6 >= "240" AND PMT_DIAG6 <= "279")
OR (PMT2_DIAG6 >= "240" AND PMT2_DIAG6 <= "279")
THEN
    HC_DX_ENDOCRINE = 1
ELSE
    HC_DX_ENDOCRINE = 0
END IF

```

Blood diseases (%)

```

IF (HC_DIAG1 >= "280" AND HC_DIAG1 <= "289")
    OR (PMT_DIAG1 >= "280" AND PMT_DIAG1 <= "289")
    OR (PMT2_DIAG1 >= "280" AND PMT2_DIAG1 <= "289")
    OR (HC_DIAG2 >= "280" AND HC_DIAG2 <= "289")
    OR (PMT_DIAG2 >= "280" AND PMT_DIAG2 <= "289")
    OR (PMT2_DIAG2 >= "280" AND PMT2_DIAG2 <= "289")
    OR (HC_DIAG3 >= "280" AND HC_DIAG3 <= "289")
    OR (PMT_DIAG3 >= "280" AND PMT_DIAG3 <= "289")
    OR (PMT2_DIAG3 >= "280" AND PMT2_DIAG3 <= "289")
    OR (HC_DIAG4 >= "280" AND HC_DIAG4 <= "289")
    OR (PMT_DIAG4 >= "280" AND PMT_DIAG4 <= "289")
    OR (PMT2_DIAG4 >= "280" AND PMT2_DIAG4 <= "289")
    OR (HC_DIAG5 >= "280" AND HC_DIAG5 <= "289")
    OR (PMT_DIAG5 >= "280" AND PMT_DIAG5 <= "289")
    OR (PMT2_DIAG5 >= "280" AND PMT2_DIAG5 <= "289")
    OR (HC_DIAG6 >= "280" AND HC_DIAG6 <= "289")
    OR (PMT_DIAG6 >= "280" AND PMT_DIAG6 <= "289")
    OR (PMT2_DIAG6 >= "280" AND PMT2_DIAG6 <= "289")
THEN
    HC_DX_BLOOD = 1
ELSE
    HC_DX_BLOOD = 0
END IF

```

Mental diseases (%)

```

IF (HC_DIAG1 >= "290" AND HC_DIAG1 <= "319")
    OR (PMT_DIAG1 >= "290" AND PMT_DIAG1 <= "319")
    OR (PMT2_DIAG1 >= "290" AND PMT2_DIAG1 <= "319")
    OR (HC_DIAG2 >= "290" AND HC_DIAG2 <= "319")
    OR (PMT_DIAG2 >= "290" AND PMT_DIAG2 <= "319")
    OR (PMT2_DIAG2 >= "290" AND PMT2_DIAG2 <= "319")

```

```

OR (HC_DIAG3 >= "290" AND HC_DIAG3 <= "319")
OR (PMT_DIAG3 >= "290" AND PMT_DIAG3 <= "319")
OR (PMT2_DIAG3 >= "290" AND PMT2_DIAG3 <= "319")
OR (HC_DIAG4 >= "290" AND HC_DIAG4 <= "319")
OR (PMT_DIAG4 >= "290" AND PMT_DIAG4 <= "319")
OR (PMT2_DIAG4 >= "290" AND PMT2_DIAG4 <= "319")
OR (HC_DIAG5 >= "290" AND HC_DIAG5 <= "319")
OR (PMT_DIAG5 >= "290" AND PMT_DIAG5 <= "319")
OR (PMT2_DIAG5 >= "290" AND PMT2_DIAG5 <= "319")
OR (HC_DIAG6 >= "290" AND HC_DIAG6 <= "319")
OR (PMT_DIAG6 >= "290" AND PMT_DIAG6 <= "319")
OR (PMT2_DIAG6 >= "290" AND PMT2_DIAG6 <= "319")
THEN
    HC_DX_MENTAL = 1
ELSE
    HC_DX_MENTAL = 0
END IF

```

Nervous system diseases (%)

```

IF (HC_DIAG1 >= "320" AND HC_DIAG1 <= "389")
    OR (PMT_DIAG1 >= "320" AND PMT_DIAG1 <= "389")
    OR (PMT2_DIAG1 >= "320" AND PMT2_DIAG1 <= "389")
    OR (HC_DIAG2 >= "320" AND HC_DIAG2 <= "389")
    OR (PMT_DIAG2 >= "320" AND PMT_DIAG2 <= "389")
    OR (PMT2_DIAG2 >= "320" AND PMT2_DIAG2 <= "389")
    OR (HC_DIAG3 >= "320" AND HC_DIAG3 <= "389")
    OR (PMT_DIAG3 >= "320" AND PMT_DIAG3 <= "389")
    OR (PMT2_DIAG3 >= "320" AND PMT2_DIAG3 <= "389")
    OR (HC_DIAG4 >= "320" AND HC_DIAG4 <= "389")
    OR (PMT_DIAG4 >= "320" AND PMT_DIAG4 <= "389")
    OR (PMT2_DIAG4 >= "320" AND PMT2_DIAG4 <= "389")
    OR (HC_DIAG5 >= "320" AND HC_DIAG5 <= "389")
    OR (PMT_DIAG5 >= "320" AND PMT_DIAG5 <= "389")
    OR (PMT2_DIAG5 >= "320" AND PMT2_DIAG5 <= "389")
    OR (HC_DIAG6 >= "320" AND HC_DIAG6 <= "389")
    OR (PMT_DIAG6 >= "320" AND PMT_DIAG6 <= "389")
    OR (PMT2_DIAG6 >= "320" AND PMT2_DIAG6 <= "389")
THEN
    HC_DX_NERVOUS = 1
ELSE
    HC_DX_NERVOUS = 0

```

END IF

Circulatory system diseases (%)

```
IF (HC_DIAG1 >= "390" AND HC_DIAG1 <= "459")
  OR (PMT_DIAG1 >= "390" AND PMT_DIAG1 <= "459")
  OR (PMT2_DIAG1 >= "390" AND PMT2_DIAG1 <= "459")
  OR (HC_DIAG2 >= "390" AND HC_DIAG2 <= "459")
  OR (PMT_DIAG2 >= "390" AND PMT_DIAG2 <= "459")
  OR (PMT2_DIAG2 >= "390" AND PMT2_DIAG2 <= "459")
  OR (HC_DIAG3 >= "390" AND HC_DIAG3 <= "459")
  OR (PMT_DIAG3 >= "390" AND PMT_DIAG3 <= "459")
  OR (PMT2_DIAG3 >= "390" AND PMT2_DIAG3 <= "459")
  OR (HC_DIAG4 >= "390" AND HC_DIAG4 <= "459")
  OR (PMT_DIAG4 >= "390" AND PMT_DIAG4 <= "459")
  OR (PMT2_DIAG4 >= "390" AND PMT2_DIAG4 <= "459")
  OR (HC_DIAG5 >= "390" AND HC_DIAG5 <= "459")
  OR (PMT_DIAG5 >= "390" AND PMT_DIAG5 <= "459")
  OR (PMT2_DIAG5 >= "390" AND PMT2_DIAG5 <= "459")
  OR (HC_DIAG6 >= "390" AND HC_DIAG6 <= "459")
  OR (PMT_DIAG6 >= "390" AND PMT_DIAG6 <= "459")
  OR (PMT2_DIAG6 >= "390" AND PMT2_DIAG6 <= "459")
THEN
  HC_DX_CIRCULATORY = 1
ELSE
  HC_DX_CIRCULATORY = 0
END IF
```

Respiratory system diseases (%)

```
IF (HC_DIAG1 >= "460" AND HC_DIAG1 <= "519")
  OR (PMT_DIAG1 >= "460" AND PMT_DIAG1 <= "519")
  OR (PMT2_DIAG1 >= "460" AND PMT2_DIAG1 <= "519")
  OR (HC_DIAG2 >= "460" AND HC_DIAG2 <= "519")
  OR (PMT_DIAG2 >= "460" AND PMT_DIAG2 <= "519")
  OR (PMT2_DIAG2 >= "460" AND PMT2_DIAG2 <= "519")
  OR (HC_DIAG3 >= "460" AND HC_DIAG3 <= "519")
  OR (PMT_DIAG3 >= "460" AND PMT_DIAG3 <= "519")
  OR (PMT2_DIAG3 >= "460" AND PMT2_DIAG3 <= "519")
  OR (HC_DIAG4 >= "460" AND HC_DIAG4 <= "519")
  OR (PMT_DIAG4 >= "460" AND PMT_DIAG4 <= "519")
  OR (PMT2_DIAG4 >= "460" AND PMT2_DIAG4 <= "519")
  OR (HC_DIAG5 >= "460" AND HC_DIAG5 <= "519")
```

```

OR (PMT_DIAG5 >= "460" AND PMT_DIAG5 <= "519")
OR (PMT2_DIAG5 >= "460" AND PMT2_DIAG5 <= "519")
OR (HC_DIAG6 >= "460" AND HC_DIAG6 <= "519")
OR (PMT_DIAG6 >= "460" AND PMT_DIAG6 <= "519")
OR (PMT2_DIAG6 >= "460" AND PMT2_DIAG6 <= "519")
THEN
    HC_DX_RESPIRATORY = 1
ELSE
    HC_DX_RESPIRATORY = 0
END IF

```

Digestive system diseases (%)

```

IF (HC_DIAG1 >= "520" AND HC_DIAG1 <= "579")
    OR (PMT_DIAG1 >= "520" AND PMT_DIAG1 <= "579")
    OR (PMT2_DIAG1 >= "520" AND PMT2_DIAG1 <= "579")
    OR (HC_DIAG2 >= "520" AND HC_DIAG2 <= "579")
    OR (PMT_DIAG2 >= "520" AND PMT_DIAG2 <= "579")
    OR (PMT2_DIAG2 >= "520" AND PMT2_DIAG2 <= "579")
    OR (HC_DIAG3 >= "520" AND HC_DIAG3 <= "579")
    OR (PMT_DIAG3 >= "520" AND PMT_DIAG3 <= "579")
    OR (PMT2_DIAG3 >= "520" AND PMT2_DIAG3 <= "579")
    OR (HC_DIAG4 >= "520" AND HC_DIAG4 <= "579")
    OR (PMT_DIAG4 >= "520" AND PMT_DIAG4 <= "579")
    OR (PMT2_DIAG4 >= "520" AND PMT2_DIAG4 <= "579")
    OR (HC_DIAG5 >= "520" AND HC_DIAG5 <= "579")
    OR (PMT_DIAG5 >= "520" AND PMT_DIAG5 <= "579")
    OR (PMT2_DIAG5 >= "520" AND PMT2_DIAG5 <= "579")
    OR (HC_DIAG6 >= "520" AND HC_DIAG6 <= "579")
    OR (PMT_DIAG6 >= "520" AND PMT_DIAG6 <= "579")
    OR (PMT2_DIAG6 >= "520" AND PMT2_DIAG6 <= "579")
THEN
    HC_DX_DIGESTIVE = 1
ELSE
    HC_DX_DIGESTIVE = 0
END IF

```

Genitourinary sys. diseases (%)

```

IF (HC_DIAG1 >= "580" AND HC_DIAG1 <= "629")
    OR (PMT_DIAG1 >= "580" AND PMT_DIAG1 <= "629")
    OR (PMT2_DIAG1 >= "580" AND PMT2_DIAG1 <= "629")
    OR (HC_DIAG2 >= "580" AND HC_DIAG2 <= "629")

```



```

OR (PMT_DIAG2 >= "580" AND PMT_DIAG2 <= "629")
OR (PMT2_DIAG2 >= "580" AND PMT2_DIAG2 <= "629")
OR (HC_DIAG3 >= "580" AND HC_DIAG3 <= "629")
OR (PMT_DIAG3 >= "580" AND PMT_DIAG3 <= "629")
OR (PMT2_DIAG3 >= "580" AND PMT2_DIAG3 <= "629")
OR (HC_DIAG4 >= "580" AND HC_DIAG4 <= "629")
OR (PMT_DIAG4 >= "580" AND PMT_DIAG4 <= "629")
OR (PMT2_DIAG4 >= "580" AND PMT2_DIAG4 <= "629")
OR (HC_DIAG5 >= "580" AND HC_DIAG5 <= "629")
OR (PMT_DIAG5 >= "580" AND PMT_DIAG5 <= "629")
OR (PMT2_DIAG5 >= "580" AND PMT2_DIAG5 <= "629")
OR (HC_DIAG6 >= "580" AND HC_DIAG6 <= "629")
OR (PMT_DIAG6 >= "580" AND PMT_DIAG6 <= "629")
OR (PMT2_DIAG6 >= "580" AND PMT2_DIAG6 <= "629")
THEN
    HC_DX_GEN_URINARY = 1
ELSE
    HC_DX_GEN_URINARY = 0
END IF

```

Skin/subcutaneous diseases (%)

```

IF (HC_DIAG1 >= "680" AND HC_DIAG1 <= "709")
    OR (PMT_DIAG1 >= "680" AND PMT_DIAG1 <= "709")
    OR (PMT2_DIAG1 >= "680" AND PMT2_DIAG1 <= "709")
    OR (HC_DIAG2 >= "680" AND HC_DIAG2 <= "709")
    OR (PMT_DIAG2 >= "680" AND PMT_DIAG2 <= "709")
    OR (PMT2_DIAG2 >= "680" AND PMT2_DIAG2 <= "709")
    OR (HC_DIAG3 >= "680" AND HC_DIAG3 <= "709")
    OR (PMT_DIAG3 >= "680" AND PMT_DIAG3 <= "709")
    OR (PMT2_DIAG3 >= "680" AND PMT2_DIAG3 <= "709")
    OR (HC_DIAG4 >= "680" AND HC_DIAG4 <= "709")
    OR (PMT_DIAG4 >= "680" AND PMT_DIAG4 <= "709")
    OR (PMT2_DIAG4 >= "680" AND PMT2_DIAG4 <= "709")
    OR (HC_DIAG5 >= "680" AND HC_DIAG5 <= "709")
    OR (PMT_DIAG5 >= "680" AND PMT_DIAG5 <= "709")
    OR (PMT2_DIAG5 >= "680" AND PMT2_DIAG5 <= "709")
    OR (HC_DIAG6 >= "680" AND HC_DIAG6 <= "709")
    OR (PMT_DIAG6 >= "680" AND PMT_DIAG6 <= "709")
    OR (PMT2_DIAG6 >= "680" AND PMT2_DIAG6 <= "709")
THEN
    HC_DX_SKIN = 1

```

```

ELSE
    HC_DX_SKIN = 0
END IF

```

Musculoskeletal sys. diseases (%)

```

IF (HC_DIAG1 >= "710" AND HC_DIAG1 <= "739")
    OR (PMT_DIAG1 >= "710" AND PMT_DIAG1 <= "739")
    OR (PMT2_DIAG1 >= "710" AND PMT2_DIAG1 <= "739")
    OR (HC_DIAG2 >= "710" AND HC_DIAG2 <= "739")
    OR (PMT_DIAG2 >= "710" AND PMT_DIAG2 <= "739")
    OR (PMT2_DIAG2 >= "710" AND PMT2_DIAG2 <= "739")
    OR (HC_DIAG3 >= "710" AND HC_DIAG3 <= "739")
    OR (PMT_DIAG3 >= "710" AND PMT_DIAG3 <= "739")
    OR (PMT2_DIAG3 >= "710" AND PMT2_DIAG3 <= "739")
    OR (HC_DIAG4 >= "710" AND HC_DIAG4 <= "739")
    OR (PMT_DIAG4 >= "710" AND PMT_DIAG4 <= "739")
    OR (PMT2_DIAG4 >= "710" AND PMT2_DIAG4 <= "739")
    OR (HC_DIAG5 >= "710" AND HC_DIAG5 <= "739")
    OR (PMT_DIAG5 >= "710" AND PMT_DIAG5 <= "739")
    OR (PMT2_DIAG5 >= "710" AND PMT2_DIAG5 <= "739")
    OR (HC_DIAG6 >= "710" AND HC_DIAG6 <= "739")
    OR (PMT_DIAG6 >= "710" AND PMT_DIAG6 <= "739")
    OR (PMT2_DIAG6 >= "710" AND PMT2_DIAG6 <= "739")
THEN
    HC_DX_MUSCL_SKEL = 1
ELSE
    HC_DX_MUSCL_SKEL = 0
END IF

```

Ill-defined conditions (%)

```

IF (HC_DIAG1 >= "780" AND HC_DIAG1 <= "799")
    OR (PMT_DIAG1 >= "780" AND PMT_DIAG1 <= "799")
    OR (PMT2_DIAG1 >= "780" AND PMT2_DIAG1 <= "799")
    OR (HC_DIAG2 >= "780" AND HC_DIAG2 <= "799")
    OR (PMT_DIAG2 >= "780" AND PMT_DIAG2 <= "799")
    OR (PMT2_DIAG2 >= "780" AND PMT2_DIAG2 <= "799")
    OR (HC_DIAG3 >= "780" AND HC_DIAG3 <= "799")
    OR (PMT_DIAG3 >= "780" AND PMT_DIAG3 <= "799")
    OR (PMT2_DIAG3 >= "780" AND PMT2_DIAG3 <= "799")
    OR (HC_DIAG4 >= "780" AND HC_DIAG4 <= "799")
    OR (PMT_DIAG4 >= "780" AND PMT_DIAG4 <= "799")

```

```

OR (PMT2_DIAG4 >= "780" AND PMT2_DIAG4 <= "799")
OR (HC_DIAG5 >= "780" AND HC_DIAG5 <= "799")
OR (PMT_DIAG5 >= "780" AND PMT_DIAG5 <= "799")
OR (PMT2_DIAG5 >= "780" AND PMT2_DIAG5 <= "799")
OR (HC_DIAG6 >= "780" AND HC_DIAG6 <= "799")
OR (PMT_DIAG6 >= "780" AND PMT_DIAG6 <= "799")
OR (PMT2_DIAG6 >= "780" AND PMT2_DIAG6 <= "799")
THEN
    HC_DX_ILL_DEFINED = 1
ELSE
    HC_DX_ILL_DEFINED = 0
END IF

```

Fractures (%)

```

IF (HC_DIAG1 >= "800" AND HC_DIAG1 <= "848")
    OR (PMT_DIAG1 >= "800" AND PMT_DIAG1 <= "848")
    OR (PMT2_DIAG1 >= "800" AND PMT2_DIAG1 <= "848")
    OR (HC_DIAG2 >= "800" AND HC_DIAG2 <= "848")
    OR (PMT_DIAG2 >= "800" AND PMT_DIAG2 <= "848")
    OR (PMT2_DIAG2 >= "800" AND PMT2_DIAG2 <= "848")
    OR (HC_DIAG3 >= "800" AND HC_DIAG3 <= "848")
    OR (PMT_DIAG3 >= "800" AND PMT_DIAG3 <= "848")
    OR (PMT2_DIAG3 >= "800" AND PMT2_DIAG3 <= "848")
    OR (HC_DIAG4 >= "800" AND HC_DIAG4 <= "848")
    OR (PMT_DIAG4 >= "800" AND PMT_DIAG4 <= "848")
    OR (PMT2_DIAG4 >= "800" AND PMT2_DIAG4 <= "848")
    OR (HC_DIAG5 >= "800" AND HC_DIAG5 <= "848")
    OR (PMT_DIAG5 >= "800" AND PMT_DIAG5 <= "848")
    OR (PMT2_DIAG5 >= "800" AND PMT2_DIAG5 <= "848")
    OR (HC_DIAG6 >= "800" AND HC_DIAG6 <= "848")
    OR (PMT_DIAG6 >= "800" AND PMT_DIAG6 <= "848")
    OR (PMT2_DIAG6 >= "800" AND PMT2_DIAG6 <= "848")
THEN
    HC_DX_FRACTURE = 1
ELSE
    HC_DX_FRACTURE = 0
END IF

```

Intracranial injury (%)

```

IF (HC_DIAG1 >= "850" AND HC_DIAG1 <= "854")
    OR (PMT_DIAG1 >= "850" AND PMT_DIAG1 <= "854")

```

```

OR (PMT2_DIAG1 >= "850" AND PMT2_DIAG1 <= "854")
OR (HC_DIAG2 >= "850" AND HC_DIAG2 <= "854")
OR (PMT_DIAG2 >= "850" AND PMT_DIAG2 <= "854")
OR (PMT2_DIAG2 >= "850" AND PMT2_DIAG2 <= "854")
OR (HC_DIAG3 >= "850" AND HC_DIAG3 <= "854")
OR (PMT_DIAG3 >= "850" AND PMT_DIAG3 <= "854")
OR (PMT2_DIAG3 >= "850" AND PMT2_DIAG3 <= "854")
OR (HC_DIAG4 >= "850" AND HC_DIAG4 <= "854")
OR (PMT_DIAG4 >= "850" AND PMT_DIAG4 <= "854")
OR (PMT2_DIAG4 >= "850" AND PMT2_DIAG4 <= "854")
OR (HC_DIAG5 >= "850" AND HC_DIAG5 <= "854")
OR (PMT_DIAG5 >= "850" AND PMT_DIAG5 <= "854")
OR (PMT2_DIAG5 >= "850" AND PMT2_DIAG5 <= "854")
OR (HC_DIAG6 >= "850" AND HC_DIAG6 <= "854")
OR (PMT_DIAG6 >= "850" AND PMT_DIAG6 <= "854")
OR (PMT2_DIAG6 >= "850" AND PMT2_DIAG6 <= "854")
THEN
    HC_DX_CRANIAL = 1
ELSE
    HC_DX_CRANIAL = 0
END IF

```

Other injury (%)

```

IF (HC_DIAG1 >= "860" AND HC_DIAG1 <= "959")
    OR (PMT_DIAG1 >= "860" AND PMT_DIAG1 <= "959")
    OR (PMT2_DIAG1 >= "860" AND PMT2_DIAG1 <= "959")
OR (HC_DIAG2 >= "860" AND HC_DIAG2 <= "959")
    OR (PMT_DIAG2 >= "860" AND PMT_DIAG2 <= "959")
    OR (PMT2_DIAG2 >= "860" AND PMT2_DIAG2 <= "959")
OR (HC_DIAG3 >= "860" AND HC_DIAG3 <= "959")
    OR (PMT_DIAG3 >= "860" AND PMT_DIAG3 <= "959")
    OR (PMT2_DIAG3 >= "860" AND PMT2_DIAG3 <= "959")
OR (HC_DIAG4 >= "860" AND HC_DIAG4 <= "959")
    OR (PMT_DIAG4 >= "860" AND PMT_DIAG4 <= "959")
    OR (PMT2_DIAG4 >= "860" AND PMT2_DIAG4 <= "959")
OR (HC_DIAG5 >= "860" AND HC_DIAG5 <= "959")
    OR (PMT_DIAG5 >= "860" AND PMT_DIAG5 <= "959")
    OR (PMT2_DIAG5 >= "860" AND PMT2_DIAG5 <= "959")
OR (HC_DIAG6 >= "860" AND HC_DIAG6 <= "959")
    OR (PMT_DIAG6 >= "860" AND PMT_DIAG6 <= "959")
    OR (PMT2_DIAG6 >= "860" AND PMT2_DIAG6 <= "959")

```

```

THEN
    HC_DX_INJURY_OTH = 1
ELSE
    HC_DX_INJURY_OTH = 0
END IF

```

Adverse reactions and complications (%)

```

IF (HC_DIAG1 >= "960" AND HC_DIAG1 <= "999")
    OR (PMT_DIAG1 >= "960" AND PMT_DIAG1 <= "999")
    OR (PMT2_DIAG1 >= "960" AND PMT2_DIAG1 <= "999")
    OR (HC_DIAG2 >= "960" AND HC_DIAG2 <= "999")
    OR (PMT_DIAG2 >= "960" AND PMT_DIAG2 <= "999")
    OR (PMT2_DIAG2 >= "960" AND PMT2_DIAG2 <= "999")
    OR (HC_DIAG3 >= "960" AND HC_DIAG3 <= "999")
    OR (PMT_DIAG3 >= "960" AND PMT_DIAG3 <= "999")
    OR (PMT2_DIAG3 >= "960" AND PMT2_DIAG3 <= "999")
    OR (HC_DIAG4 >= "960" AND HC_DIAG4 <= "999")
    OR (PMT_DIAG4 >= "960" AND PMT_DIAG4 <= "999")
    OR (PMT2_DIAG4 >= "960" AND PMT2_DIAG4 <= "999")
    OR (HC_DIAG5 >= "960" AND HC_DIAG5 <= "999")
    OR (PMT_DIAG5 >= "960" AND PMT_DIAG5 <= "999")
    OR (PMT2_DIAG5 >= "960" AND PMT2_DIAG5 <= "999")
    OR (HC_DIAG6 >= "960" AND HC_DIAG6 <= "999")
    OR (PMT_DIAG6 >= "960" AND PMT_DIAG6 <= "999")
    OR (PMT2_DIAG6 >= "960" AND PMT2_DIAG6 <= "999")
THEN
    HC_DX_ADV_REACT = 1
ELSE
    HC_DX_ADV_REACT = 0
END IF

```

TRANSFORMATIONS THAT APPLY WHEN THE START/RESUMPTION OF CARE ASSESSMENT IS OASIS-C1/ICD-9 VERSION OR OASIS-C1/ICD-10 VERSION

Care Management

Medication Status

Drug regimen: problem found (%)

```

IF M2000_DRUG_RGMN_RVW[1] = 00 OR M2000_DRUG_RGMN_RVW[1] = NA
THEN

```

```

        MED_PROBLEM = MISSING
ELSEIF M2000_DRUG_RGMN_RVW[1] = 02
THEN
    MED_PROBLEM = 1
ELSE
    MED_PROBLEM = 0
END IF

```

General Health Status

Integumentary Status

Pressure Ulcers

Stage II pressure ulcer count (#)

```

IF M1306_UNHLD_STG2_PRSR_ULCR[1] = 0
THEN
    PRES_ULC_STG2 = 0
ELSE
    PRES_ULC_STG2 = VALUE(M1308_NBR_PRSULC_STG2[1])
END IF

```

Stage III pressure ulcer count (#)

```

IF M1306_UNHLD_STG2_PRSR_ULCR[1] = 0
THEN
    PRES_ULC_STG3 = 0
ELSE
    PRES_ULC_STG3 = VALUE(M1308_NBR_PRSULC_STG3[1])
END IF

```

Stage IV pressure ulcer count (#)

```

IF M1306_UNHLD_STG2_PRSR_ULCR[1] = 0
THEN
    PRES_ULC_STG4 = 0
ELSE
    PRES_ULC_STG4 = VALUE(M1308_NBR_PRSULC_STG4[1])
END IF

```

Unstageable pressure ulcer count (#)

```

IF M1306_UNHLD_STG2_PRSR_ULCR[1] = 0

```

```

THEN
    PRES_ULC_NO_STG = 0
ELSE
    PRES_ULC_NO_STG = VALUE(M1308_NSTG_DRSG[1]) +
        VALUE(M1308_NSTG_CVRG[1]) + VALUE(M1308_NSTG_DEEP_TISUE[1])
END IF

```

Reason for Emergent Care

Improper medications (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_MEDS = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_MEDS = MISSING
    ELSEIF M2310_ECR_MEDICATION[2] = 1
    THEN
        EC_REASON_MEDS = 1
    ELSE
        EC_REASON_MEDS = 0
    END IF
ELSE
    EC_REASON_MEDS = MISSING
END IF

```

Injury from fall (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_FALL = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_FALL = MISSING
    ELSEIF M2310_ECR_INJRY_BY_FALL[2] = 1

```

```

    THEN
        EC_REASON_FALL = 1
    ELSE
        EC_REASON_FALL = 0
    END IF
ELSE
    EC_REASON_FALL = MISSING
END IF

```

Respiratory infection (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_RESP_INF = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_RESP_INF = MISSING
    ELSEIF M2310_ECR_RSPRTRY_INFCTN[2] = 1
    THEN
        EC_REASON_RESP_INF = 1
    ELSE
        EC_REASON_RESP_INF = 0
    END IF
ELSE
    EC_REASON_RESP_INF = MISSING
END IF

```

Other respiratory (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_RESP_OTHER = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_RESP_OTHER = MISSING
    ELSEIF M2310_ECR_RSPRTRY_OTHR[2] = 1

```



```

    THEN
        EC_REASON_RESP_OTHER = 1
    ELSE
        EC_REASON_RESP_OTHER = 0
    END IF
ELSE
    EC_REASON_RESP_OTHER = MISSING
END IF

```

Heart failure (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_HEART_FAIL = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_HEART_FAIL = MISSING
    ELSEIF M2310_ECR_HRT_FAILR[2] = 1
    THEN
        EC_REASON_HEART_FAIL = 1
    ELSE
        EC_REASON_HEART_FAIL = 0
    END IF
ELSE
    EC_REASON_HEART_FAIL = MISSING
END IF

```

Cardiac dysrhythmia (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_DYSRYTHMIA = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_DYSRYTHMIA = MISSING
    ELSEIF M2310_ECR_CRDC_DSRTM[2] = 1

```

```

    THEN
        EC_REASON_DYSRHYTHMIA = 1
    ELSE
        EC_REASON_DYSRHYTHMIA = 0
    END IF
ELSE
    EC_REASON_DYSRHYTHMIA = MISSING
END IF

```

Myocardial infarction (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_AMI = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_AMI = MISSING
    ELSEIF M2310_ECR_MI_CHST_PAIN[2] = 1
    THEN
        EC_REASON_AMI = 1
    ELSE
        EC_REASON_AMI = 0
    END IF
ELSE
    EC_REASON_AMI = MISSING
END IF

```

Other heart disease (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_HEART_OTHER = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_HEART_OTHER = MISSING
    ELSEIF M2310_ECR_OTHR_HRT_DEASE[2] = 1

```

```

    THEN
        EC_REASON_HEART_OTHER = 1
    ELSE
        EC_REASON_HEART_OTHER = 0
    END IF
ELSE
    EC_REASON_HEART_OTHER = MISSING
END IF

```

Stroke (CVA) or TIA (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_STROKE_TIA = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_STROKE_TIA = MISSING
    ELSEIF M2310_ECR_STROKE_TIA[2] = 1
    THEN
        EC_REASON_STROKE_TIA = 1
    ELSE
        EC_REASON_STROKE_TIA = 0
    END IF
ELSE
    EC_REASON_STROKE_TIA = MISSING
END IF

```

Hypo/Hyperglycemia (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_HI_LO_BG = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_HI_LO_BG = MISSING
    ELSEIF M2310_ECR_HYPOGLYC[2] = 1

```

```

    THEN
        EC_REASON_HI_LO_BG = 1
    ELSE
        EC_REASON_HI_LO_BG = 0
    END IF
ELSE
    EC_REASON_HI_LO_BG = MISSING
END IF

```

GI bleeding, obstruction, etc. (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_GI = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_GI = MISSING
    ELSEIF M2310_ECR_GI_PRBLM[2] = 1
    THEN
        EC_REASON_GI = 1
    ELSE
        EC_REASON_GI = 0
    END IF
ELSE
    EC_REASON_GI = MISSING
END IF

```

Dehydration, malnutrition (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_NUTRITION = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_NUTRITION = MISSING
    ELSEIF M2310_ECR_DHYDRTN_MALNTR[2] = 1

```

```

    THEN
        EC_REASON_NUTRITION = 1
    ELSE
        EC_REASON_NUTRITION = 0
    END IF
ELSE
    EC_REASON_NUTRITION = MISSING
END IF

```

Urinary tract infection (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_UTI = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_UTI = MISSING
    ELSEIF M2310_ECR_UTI[2] = 1
    THEN
        EC_REASON_UTI = 1
    ELSE
        EC_REASON_UTI = 0
    END IF
ELSE
    EC_REASON_UTI = MISSING
END IF

```

IV catheter-related infection (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_IV_INFECT = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_IV_INFECT = MISSING
    ELSEIF M2310_ECR_CTHTR_CMPLCTN[2] = 1

```

```

    THEN
        EC_REASON_IV_INFECT = 1
    ELSE
        EC_REASON_IV_INFECT = 0
    END IF
ELSE
    EC_REASON_IV_INFECT = MISSING
END IF

```

Wound infection (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_WOUND_INFCT = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_WOUND_INFCT = MISSING
    ELSEIF M2310_ECR_WND_INFCTN_DTRORTN[2] = 1
    THEN
        EC_REASON_WOUND_INFCT = 1
    ELSE
        EC_REASON_WOUND_INFCT = 0
    END IF
ELSE
    EC_REASON_WOUND_INFCT = MISSING
END IF

```

Uncontrolled pain (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_PAIN = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_PAIN = MISSING
    ELSEIF M2310_ECR_UNCNTLD_PAIN[2] = 1

```

```

    THEN
        EC_REASON_PAIN = 1
    ELSE
        EC_REASON_PAIN = 0
    END IF
ELSE
    EC_REASON_PAIN = MISSING
END IF

```

Acute mental/behav. problem (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_MENTAL_BEHAV = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_MENTAL_BEHAV = MISSING
    ELSEIF M2310_ECR_MENTL_BHVRL_PRBLM[2] = 1
    THEN
        EC_REASON_MENTAL_BEHAV = 1
    ELSE
        EC_REASON_MENTAL_BEHAV = 0
    END IF
ELSE
    EC_REASON_MENTAL_BEHAV = MISSING
END IF

```

Deep vein thrombosis (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_THROMBOSIS = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_THROMBOSIS = MISSING
    ELSEIF M2310_ECR_DVT_PULMNRV[2] = 1

```

```

    THEN
        EC_REASON_THROMBOSIS = 1
    ELSE
        EC_REASON_THROMBOSIS = 0
    END IF
ELSE
    EC_REASON_THROMBOSIS = MISSING
END IF

```

Other (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_OTHER = MISSING
ELSEIF (M2300_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2300_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_OTHER = MISSING
    ELSEIF M2310_ECR_OTHER[2] = 1
    THEN
        EC_REASON_OTHER = 1
    ELSE
        EC_REASON_OTHER = 0
    END IF
ELSE
    EC_REASON_OTHER = MISSING
END IF

```

No emergent care (%)

```

IF M2300_EMER_USE_AFTR_LAST_ASMT[2] = UK OR M0100_ASSMT_REASON[2] =
    08
THEN
    NO_EMERGENT_CARE = MISSING
ELSEIF M2300_EMER_USE_AFTR_LAST_ASMT[2] = 00
THEN
    NO_EMERGENT_CARE = 1
ELSE
    NO_EMERGENT_CARE = 0
END IF

```


TRANSFORMATIONS THAT APPLY WHEN THE START/RESUMPTION OF CARE ASSESSMENT IS OASIS-C1/ICD-10 VERSION OR OASIS-C2

Hospitalization Risks

Note: Because the response options changed between OASIS-C and OASIS-C1, the equivalence of the measures is approximate. See notes for each measure.

Recent decline mental/emot/behav (%)

IF M1033_HOSP_RISK_MNTL_BHV_DCLN = 1

THEN

RISK_RCNT_DCLN = 1

ELSE

RISK_RCNT_DCLN = 0

END IF

Note: OASIS-C item says "recent decline." OASIS-C1 items says "decline in last 3 months."

Multiple hospitalizations (%)

IF M1033_HOSP_RISK_MLTPL_HOSPZTN = 1

THEN

RISK_MLTPL_HOSPZTN = 1

ELSE

RISK_MLTPL_HOSPZTN = 0

END IF

Note: OASIS-C item says "2 or more in the past 12 months." OASIS-C1 item says "2 or more in the past 6 months."

History of falls (%)

IF M1033_HOSP_RISK_HSTRY_FALLS = 1

THEN

RISK_HSTRY_FALLS = 1

ELSE

RISK_HSTRY_FALLS = 0

END IF

Note: OASIS-C item says "in the past year." OASIS-C1 item says "in the past 12 months."

5 or more medications (%)

IF M1033_HOSP_RISK_5PLUS_MDCTN = 1

THEN

RISK_5PLUS_MDCTN = 1

ELSE

RISK_5PLUS_MDCTN = 0

END IF

Frailty factors (%)

IF M1033_HOSP_RISK_WEIGHT_LOSS = 1
 OR M1033_HOSP_RISK_CRNT_EXHSTN = 1

THEN

 RISK_FRAILITY = 1

ELSE

 RISK_FRAILITY = 0

END IF

*Note: OASIS-C item asks for "Frailty indicators, e.g., weight loss, self-reported exhaustion."
OASIS-C1 item has separate response options, "Unintentional weight loss of a total of 10 pounds or more in the past 12 months," and "Currently reports exhaustion."*

Other (%)

IF M1033_HOSP_RISK_OTHR_RISK = 1
 OR M1033_HOSP_RISK_MLTPL_ED_VISIT = 1
 OR M1033_HOSP_RISK_COMPLIANCE = 1

THEN

 RISK_OTHR = 1

ELSE

 RISK_OTHR = 0

END IF

*Note: OASIS-C1 item has additional response options that are not in the OASIS-C item,
"Multiple emergency department visits (2 or more) in the past 6 months," and "Reported or
observed history of difficulty complying with any medical instructions (for example,
medications, diet, exercise) in the past 3 months."*

None (%)

IF M1033_HOSP_RISK_NONE_ABOVE = 1

THEN

 RISK_H_NONE = 1

ELSE

 RISK_H_NONE = 0

END IF

Care Management

ADLs

None needed (%)

```
IF M2102_CARE_TYPE_SRC_ADL[1] = 00
THEN
    ADL_ASSIST_NONE_NEEDED = 1
ELSE
    ADL_ASSIST_NONE_NEEDED = 0
END IF
```

Caregiver currently provides (%)

```
IF M2102_CARE_TYPE_SRC_ADL[1] = 01
THEN
    ADL_ASSIST_CG_PROVIDES = 1
ELSE
    ADL_ASSIST_CG_PROVIDES = 0
END IF
```

Caregiver training needed (%)

```
IF M2102_CARE_TYPE_SRC_ADL[1] = 02
THEN
    ADL_ASSIST_NEED_TRAINING = 1
ELSE
    ADL_ASSIST_NEED_TRAINING = 0
END IF
```

Uncertain/unlikely to be provided (%)

```
IF M2102_CARE_TYPE_SRC_ADL[1] = 03
THEN
    ADL_ASSIST_CG_UNCERTAIN = 1
ELSE
    ADL_ASSIST_CG_UNCERTAIN = 0
END IF
```

Needed but not available (%)

```
IF M2102_CARE_TYPE_SRC_ADL[1] = 04
THEN
    ADL_CG_NONE = 1
ELSE
```

ADL_CG_NONE = 0
END IF

Advocacy

None needed (%)

IF M2102_CARE_TYPE_SRC_ADV CY[1] = 00
THEN
ADV CY_ASSIST_NONE_NEEDED = 1
ELSE
ADV CY_ASSIST_NONE_NEEDED = 0
END IF

Caregiver currently provides (%)

IF M2102_CARE_TYPE_SRC_ADV CY[1] = 01
THEN
ADV CY_CG_PROVIDES = 1
ELSE
ADV CY_CG_PROVIDES = 0
END IF

Caregiver training needed (%)

IF M2102_CARE_TYPE_SRC_ADV CY[1] = 02
THEN
ADV CY_NEED_TRAINING = 1
ELSE
ADV CY_NEED_TRAINING = 0
END IF

Uncertain/unlikely to be provided (%)

IF M2102_CARE_TYPE_SRC_ADV CY[1] = 03
THEN
ADV CY_CG_UNCERTAIN = 1
ELSE
ADV CY_CG_UNCERTAIN = 0
END IF

Needed but not available (%)

```
IF M2102_CARE_TYPE_SRC_ADV CY[1] = 04
THEN
    ADV CY_CG_NONE = 1
ELSE
    ADV CY_CG_NONE = 0
END IF
```

IADLs

None needed (%)

```
IF M2102_CARE_TYPE_SRC_IADL[1] = 00
THEN
    IADL_ASSIST_NONE_NEEDED = 1
ELSE
    IADL_ASSIST_NONE_NEEDED = 0
END IF
```

Caregiver currently provides (%)

```
IF M2102_CARE_TYPE_SRC_IADL[1] = 01
THEN
    IADL_CG_PROVIDES = 1
ELSE
    IADL_CG_PROVIDES = 0
END IF
```

Caregiver training needed (%)

```
IF M2102_CARE_TYPE_SRC_IADL[1] = 02
THEN
    IADL_NEED_TRAINING = 1
ELSE
    IADL_NEED_TRAINING = 0
END IF
```

Uncertain/unlikely to be provided (%)

```
IF M2102_CARE_TYPE_SRC_IADL[1] = 03
THEN
    IADL_CG_UNCERTAIN = 1
ELSE
    IADL_CG_UNCERTAIN = 0
END IF
```

Needed but not available (%)

```
IF M2102_CARE_TYPE_SRC_IADL[1] = 04
THEN
    IADL_CG_NONE = 1
ELSE
    IADL_CG_NONE = 0
END IF
```

Medication Administration

None needed (%)

```
IF M2102_CARE_TYPE_SRC_MDCTN[1] = 00
THEN
    MDCTN_ASSIST_NONE_NEEDED = 1
ELSE
    MDCTN_ASSIST_NONE_NEEDED = 0
END IF
```

Caregiver currently provides (%)

```
IF M2102_CARE_TYPE_SRC_MDCTN[1] = 01
THEN
    MDCTN_CG_PROVIDES = 1
ELSE
    MDCTN_CG_PROVIDES = 0
END IF
```

Caregiver training needed (%)

```
IF M2102_CARE_TYPE_SRC_MDCTN[1] = 02
THEN
    MDCTN_NEED_TRAINING = 1
ELSE
    MDCTN_NEED_TRAINING = 0
END IF
```

Uncertain/unlikely to be provided (%)

```
IF M2102_CARE_TYPE_SRC_MDCTN[1] = 03
THEN
    MDCTN_CG_UNCERTAIN = 1
ELSE
    MDCTN_CG_UNCERTAIN = 0
```

END IF

Needed but not available (%)

IF M2102_CARE_TYPE_SRC_MDCTN[1] = 04

THEN

MDCTN_CG_NONE = 1

ELSE

MDCTN_CG_NONE = 0

END IF

Medical Procedures

None needed (%)

IF M2102_CARE_TYPE_SRC_PRCR[1] = 00

THEN

PRCR_ASSIST_NONE_NEEDED = 1

ELSE

PRCR_ASSIST_NONE_NEEDED = 0

END IF

Caregiver currently provides (%)

IF M2102_CARE_TYPE_SRC_PRCR[1] = 01

THEN

PRCR_CG_PROVIDES = 1

ELSE

PRCR_CG_PROVIDES = 0

END IF

Caregiver training needed (%)

IF M2102_CARE_TYPE_SRC_PRCR[1] = 02

THEN

PRCR_NEED_TRAINING = 1

ELSE

PRCR_NEED_TRAINING = 0

END IF

Uncertain/unlikely to be provided (%)

IF M2102_CARE_TYPE_SRC_PRCR[1] = 03

THEN

PRCR_CG_UNCERTAIN = 1

ELSE

PRCDR_CG_UNCERTAIN = 0
END IF

Needed but not available (%)

IF M2102_CARE_TYPE_SRC_PRCDR[1] = 04
THEN
PRCDR_CG_NONE = 1
ELSE
PRCDR_CG_NONE = 0
END IF

Management of Equipment

None needed (%)

IF M2102_CARE_TYPE_SRC_EQUIP[1] = 00
THEN
EQUIP_ASSIST_NONE_NEEDED = 1
ELSE
EQUIP_ASSIST_NONE_NEEDED = 0
END IF

Caregiver currently provides (%)

IF M2102_CARE_TYPE_SRC_EQUIP[1] = 01
THEN
EQUIP_CG_PROVIDES = 1
ELSE
EQUIP_CG_PROVIDES = 0
END IF

Caregiver training needed (%)

IF M2102_CARE_TYPE_SRC_EQUIP[1] = 02
THEN
EQUIP_NEED_TRAINING = 1
ELSE
EQUIP_NEED_TRAINING = 0
END IF

Uncertain/unlikely to be provided (%)

IF M2102_CARE_TYPE_SRC_EQUIP[1] = 03
THEN
EQUIP_CG_UNCERTAIN = 1

ELSE
 EQUIP_CG_UNCERTAIN = 0
END IF

Needed but not available (%)

IF M2102_CARE_TYPE_SRC_EQUIP[1] = 04
THEN
 EQUIP_CG_NONE = 1
ELSE
 EQUIP_CG_NONE = 0
END IF

Supervision / Safety

None needed (%)

IF M2102_CARE_TYPE_SRC_SPRVSN[1] = 00
THEN
 SPRVSN_ASSIST_NONE_NEEDED = 1
ELSE
 SPRVSN_ASSIST_NONE_NEEDED = 0
END IF

Caregiver currently provides (%)

IF M2102_CARE_TYPE_SRC_SPRVSN[1] = 01
THEN
 SPRVSN_CG_PROVIDES = 1
ELSE
 SPRVSN_CG_PROVIDES = 0
END IF

Caregiver training needed (%)

IF M2102_CARE_TYPE_SRC_SPRVSN[1] = 02
THEN
 SPRVSN_NEED_TRAINING = 1
ELSE
 SPRVSN_NEED_TRAINING = 0
END IF

Uncertain/unlikely to be provided (%)

IF M2102_CARE_TYPE_SRC_SPRVSN[1] = 03
THEN

```
        SPRVSN_CG_UNCERTAIN = 1
ELSE
        SPRVSN_CG_UNCERTAIN = 0
END IF
```

Needed but not available (%)

```
IF M2102_CARE_TYPE_SRC_SPRVSN[1] = 04
THEN
        SPRVSN_CG_NONE = 1
ELSE
        SPRVSN_CG_NONE = 0
END IF
```

Inpatient Discharge / Change in Medical Regimen

Inpatient Discharge

```
IF M1000_DC_NONE_14_DA[1] = 00
THEN
        INPAT_DC = 1
ELSE
        INPAT_DC = 0
END IF
```

Medical regimen change (%)

```
IF M1017_CHGREG_ICD_NA[1] = 1
THEN
        MED_REG_CHNG = 0
ELSE
        MED_REG_CHNG = 1
END IF
```

No inpatient discharge / regimen change (%)

```
IF M1017_CHGREG_ICD_NA[1] = 1 AND M1000_DC_NONE_14_DA[1] = 1
THEN
        NO_INPAT_DC_REG_CHNG = 1
ELSE
        NO_INPAT_DC_REG_CHNG = 0
END IF
```

Patient Diagnostic Information

Note: The following measures require calculation of several "intermediate" measures based on the raw OASIS data, that are then used to calculate the final measures for the patient characteristics report.

MID(FieldName,Start,Length) Selects characters from within a string, where Start is the position within the field of the first character to select, and Length is the number of characters to select. If the string is blank, the result is blank. Therefore, MID(FieldName,1,3) where FieldName is the name of an inpatient diagnosis, medical regimen change diagnosis, or home care diagnosis code, returns the ICD-10-CM code at the three digit level

Acute Conditions

Orthopedic (%)

IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
 ((MID(M1011_14_DAY_INP1_ICD[1],1,2) >= "S0" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP1_ICD[1],3,3) >= "2.0" AND
 MID(M1011_14_DAY_INP1_ICD[1],3,3) <= "3.9") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,2) = "S1" AND
 MID(M1011_14_DAY_INP1_ICD[1],3,3) = "6.1") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,2) >= "S2" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,2) <= "S3" AND
 MID(M1011_14_DAY_INP1_ICD[1],3,3) >= "9.0" AND
 MID(M1011_14_DAY_INP1_ICD[1],3,3) <= "9.3" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1) = "1") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,2) >= "S4" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP1_ICD[1],3,3) >= "6.0" AND
 MID(M1011_14_DAY_INP1_ICD[1],3,3) <= "6.9" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1) = "1") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,2) >= "S4" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP1_ICD[1],3,3) >= "9.0" AND
 MID(M1011_14_DAY_INP1_ICD[1],3,3) <= "9.3") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "C40" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "C41") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "C49") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "D16") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "M00" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "M99") OR

(MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "R25" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "R29") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "S47" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "S48") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "S57" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "S58") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "S67" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "S68") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "S77" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "S78") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "S87" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "S88") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "S97" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "S98") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,2) >= "S0" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP2_ICD[1],3,3) >= "2.0" AND
 MID(M1011_14_DAY_INP2_ICD[1],3,3) <= "3.9") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,2) = "S1" AND
 MID(M1011_14_DAY_INP2_ICD[1],3,3) = "6.1") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,2) >= "S2" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,2) <= "S3" AND
 MID(M1011_14_DAY_INP2_ICD[1],3,3) >= "9.0" AND
 MID(M1011_14_DAY_INP2_ICD[1],3,3) <= "9.3" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1) = "1") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,2) >= "S4" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP2_ICD[1],3,3) >= "6.0" AND
 MID(M1011_14_DAY_INP2_ICD[1],3,3) <= "6.9" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1) = "1") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,2) >= "S4" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP2_ICD[1],3,3) >= "9.0" AND
 MID(M1011_14_DAY_INP2_ICD[1],3,3) <= "9.3") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "C40" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "C41") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "C49") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "D16") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "M00" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "M99") OR

(MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "R25" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "R29") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "S47" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "S48") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "S57" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "S58") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "S67" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "S68") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "S77" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "S78") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "S87" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "S88") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "S97" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "S98") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,2) >= "S0" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP3_ICD[1],3,3) >= "2.0" AND
 MID(M1011_14_DAY_INP3_ICD[1],3,3) <= "3.9") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,2) = "S1" AND
 MID(M1011_14_DAY_INP3_ICD[1],3,3) = "6.1") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,2) >= "S2" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,2) <= "S3" AND
 MID(M1011_14_DAY_INP3_ICD[1],3,3) >= "9.0" AND
 MID(M1011_14_DAY_INP3_ICD[1],3,3) <= "9.3" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1) = "1") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,2) >= "S4" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP3_ICD[1],3,3) >= "6.0" AND
 MID(M1011_14_DAY_INP3_ICD[1],3,3) <= "6.9" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1) = "1") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,2) >= "S4" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP3_ICD[1],3,3) >= "9.0" AND
 MID(M1011_14_DAY_INP3_ICD[1],3,3) <= "9.3") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "C40" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "C41") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "C49") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "D16") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "M00" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "M99") OR

(MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "R25" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "R29") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "S47" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "S48") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "S57" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "S58") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "S67" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "S68") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "S77" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "S78") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "S87" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "S88") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "S97" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "S98") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,2) >= "S0" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP4_ICD[1],3,3) >= "2.0" AND
 MID(M1011_14_DAY_INP4_ICD[1],3,3) <= "3.9") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,2) = "S1" AND
 MID(M1011_14_DAY_INP4_ICD[1],3,3) = "6.1") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,2) >= "S2" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,2) <= "S3" AND
 MID(M1011_14_DAY_INP4_ICD[1],3,3) >= "9.0" AND
 MID(M1011_14_DAY_INP4_ICD[1],3,3) <= "9.3" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1) = "1") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,2) >= "S4" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP4_ICD[1],3,3) >= "6.0" AND
 MID(M1011_14_DAY_INP4_ICD[1],3,3) <= "6.9" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1) = "1") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,2) >= "S4" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP4_ICD[1],3,3) >= "9.0" AND
 MID(M1011_14_DAY_INP4_ICD[1],3,3) <= "9.3") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "C40" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "C41") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "C49") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "D16") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "M00" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "M99") OR

(MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "R25" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "R29") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "S47" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "S48") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "S57" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "S58") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "S67" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "S68") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "S77" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "S78") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "S87" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "S88") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "S97" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "S98") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,2) >= "S0" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP5_ICD[1],3,3) >= "2.0" AND
 MID(M1011_14_DAY_INP5_ICD[1],3,3) <= "3.9") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,2) = "S1" AND
 MID(M1011_14_DAY_INP5_ICD[1],3,3) = "6.1") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,2) >= "S2" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,2) <= "S3" AND
 MID(M1011_14_DAY_INP5_ICD[1],3,3) >= "9.0" AND
 MID(M1011_14_DAY_INP5_ICD[1],3,3) <= "9.3" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1) = "1") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,2) >= "S4" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP5_ICD[1],3,3) >= "6.0" AND
 MID(M1011_14_DAY_INP5_ICD[1],3,3) <= "6.9" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1) = "1") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,2) >= "S4" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP5_ICD[1],3,3) >= "9.0" AND
 MID(M1011_14_DAY_INP5_ICD[1],3,3) <= "9.3") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "C40" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "C41") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "C49") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "D16") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "M00" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "M99") OR

(MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "R25" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "R29") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "S47" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "S48") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "S57" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "S58") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "S67" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "S68") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "S77" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "S78") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "S87" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "S88") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "S97" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "S98") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,2) >= "S0" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP6_ICD[1],3,3) >= "2.0" AND
 MID(M1011_14_DAY_INP6_ICD[1],3,3) <= "3.9") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,2) = "S1" AND
 MID(M1011_14_DAY_INP6_ICD[1],3,3) = "6.1") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,2) >= "S2" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,2) <= "S3" AND
 MID(M1011_14_DAY_INP6_ICD[1],3,3) >= "9.0" AND
 MID(M1011_14_DAY_INP6_ICD[1],3,3) <= "9.3" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1) = "1") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,2) >= "S4" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP6_ICD[1],3,3) >= "6.0" AND
 MID(M1011_14_DAY_INP6_ICD[1],3,3) <= "6.9" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1) = "1") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,2) >= "S4" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,2) <= "S9" AND
 MID(M1011_14_DAY_INP6_ICD[1],3,3) >= "9.0" AND
 MID(M1011_14_DAY_INP6_ICD[1],3,3) <= "9.3") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "C40" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "C41") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "C49") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "D16") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "M00" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "M99") OR

(MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "R25" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "R29") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "S47" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "S48") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "S57" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "S58") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "S67" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "S68") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "S77" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "S78") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "S87" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "S88") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "S97" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "S98") OR
 (MID(M1017_CHGREG_ICD1[1],1,2) >= "S0" AND
 MID(M1017_CHGREG_ICD1[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD1[1],3,3) >= "2.0" AND
 MID(M1017_CHGREG_ICD1[1],3,3) <= "3.9") OR
 (MID(M1017_CHGREG_ICD1[1],1,2) = "S1" AND
 MID(M1017_CHGREG_ICD1[1],3,3) = "6.1") OR
 (MID(M1017_CHGREG_ICD1[1],1,2) >= "S2" AND
 MID(M1017_CHGREG_ICD1[1],1,2) <= "S3" AND
 MID(M1017_CHGREG_ICD1[1],3,3) >= "9.0" AND
 MID(M1017_CHGREG_ICD1[1],3,3) <= "9.3" AND
 MID(M1017_CHGREG_ICD1[1],6,1) = "1") OR
 (MID(M1017_CHGREG_ICD1[1],1,2) >= "S4" AND
 MID(M1017_CHGREG_ICD1[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD1[1],3,3) >= "6.0" AND
 MID(M1017_CHGREG_ICD1[1],3,3) <= "6.9" AND
 MID(M1017_CHGREG_ICD1[1],6,1) = "1") OR
 (MID(M1017_CHGREG_ICD1[1],1,2) >= "S4" AND
 MID(M1017_CHGREG_ICD1[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD1[1],3,3) >= "9.0" AND
 MID(M1017_CHGREG_ICD1[1],3,3) <= "9.3") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >= "C40" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <= "C41") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "C49") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "D16") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >= "M00" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <= "M99") OR

(MID(M1017_CHGREG_ICD1[1],1,3) >= "R25" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <= "R29") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >= "S47" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <= "S48") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >= "S57" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <= "S58") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >= "S67" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <= "S68") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >= "S77" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <= "S78") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >= "S87" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <= "S88") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >= "S97" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <= "S98") OR
 (MID(M1017_CHGREG_ICD2[1],1,2) >= "S0" AND
 MID(M1017_CHGREG_ICD2[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD2[1],3,3) >= "2.0" AND
 MID(M1017_CHGREG_ICD2[1],3,3) <= "3.9") OR
 (MID(M1017_CHGREG_ICD2[1],1,2) = "S1" AND
 MID(M1017_CHGREG_ICD2[1],3,3) = "6.1") OR
 (MID(M1017_CHGREG_ICD2[1],1,2) >= "S2" AND
 MID(M1017_CHGREG_ICD2[1],1,2) <= "S3" AND
 MID(M1017_CHGREG_ICD2[1],3,3) >= "9.0" AND
 MID(M1017_CHGREG_ICD2[1],3,3) <= "9.3" AND
 MID(M1017_CHGREG_ICD2[1],6,1) = "1") OR
 (MID(M1017_CHGREG_ICD2[1],1,2) >= "S4" AND
 MID(M1017_CHGREG_ICD2[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD2[1],3,3) >= "6.0" AND
 MID(M1017_CHGREG_ICD2[1],3,3) <= "6.9" AND
 MID(M1017_CHGREG_ICD2[1],6,1) = "1") OR
 (MID(M1017_CHGREG_ICD2[1],1,2) >= "S4" AND
 MID(M1017_CHGREG_ICD2[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD2[1],3,3) >= "9.0" AND
 MID(M1017_CHGREG_ICD2[1],3,3) <= "9.3") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >= "C40" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <= "C41") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "C49") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "D16") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >= "M00" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <= "M99") OR

(MID(M1017_CHGREG_ICD2[1],1,3) >= "R25" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <= "R29") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >= "S47" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <= "S48") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >= "S57" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <= "S58") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >= "S67" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <= "S68") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >= "S77" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <= "S78") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >= "S87" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <= "S88") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >= "S97" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <= "S98") OR
 (MID(M1017_CHGREG_ICD3[1],1,2) >= "S0" AND
 MID(M1017_CHGREG_ICD3[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD3[1],3,3) >= "2.0" AND
 MID(M1017_CHGREG_ICD3[1],3,3) <= "3.9") OR
 (MID(M1017_CHGREG_ICD3[1],1,2) = "S1" AND
 MID(M1017_CHGREG_ICD3[1],3,3) = "6.1") OR
 (MID(M1017_CHGREG_ICD3[1],1,2) >= "S2" AND
 MID(M1017_CHGREG_ICD3[1],1,2) <= "S3" AND
 MID(M1017_CHGREG_ICD3[1],3,3) >= "9.0" AND
 MID(M1017_CHGREG_ICD3[1],3,3) <= "9.3" AND
 MID(M1017_CHGREG_ICD3[1],6,1) = "1") OR
 (MID(M1017_CHGREG_ICD3[1],1,2) >= "S4" AND
 MID(M1017_CHGREG_ICD3[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD3[1],3,3) >= "6.0" AND
 MID(M1017_CHGREG_ICD3[1],3,3) <= "6.9" AND
 MID(M1017_CHGREG_ICD3[1],6,1) = "1") OR
 (MID(M1017_CHGREG_ICD3[1],1,2) >= "S4" AND
 MID(M1017_CHGREG_ICD3[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD3[1],3,3) >= "9.0" AND
 MID(M1017_CHGREG_ICD3[1],3,3) <= "9.3") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >= "C40" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "C41") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "C49") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "D16") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >= "M00" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "M99") OR

(MID(M1017_CHGREG_ICD3[1],1,3) >= "R25" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "R29") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >= "S47" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "S48") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >= "S57" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "S58") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >= "S67" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "S68") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >= "S77" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "S78") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >= "S87" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "S88") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >= "S97" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "S98") OR
 (MID(M1017_CHGREG_ICD4[1],1,2) >= "S0" AND
 MID(M1017_CHGREG_ICD4[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD4[1],3,3) >= "2.0" AND
 MID(M1017_CHGREG_ICD4[1],3,3) <= "3.9") OR
 (MID(M1017_CHGREG_ICD4[1],1,2) = "S1" AND
 MID(M1017_CHGREG_ICD4[1],3,3) = "6.1") OR
 (MID(M1017_CHGREG_ICD4[1],1,2) >= "S2" AND
 MID(M1017_CHGREG_ICD4[1],1,2) <= "S3" AND
 MID(M1017_CHGREG_ICD4[1],3,3) >= "9.0" AND
 MID(M1017_CHGREG_ICD4[1],3,3) <= "9.3" AND
 MID(M1017_CHGREG_ICD4[1],6,1) = "1") OR
 (MID(M1017_CHGREG_ICD4[1],1,2) >= "S4" AND
 MID(M1017_CHGREG_ICD4[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD4[1],3,3) >= "6.0" AND
 MID(M1017_CHGREG_ICD4[1],3,3) <= "6.9" AND
 MID(M1017_CHGREG_ICD4[1],6,1) = "1") OR
 (MID(M1017_CHGREG_ICD4[1],1,2) >= "S4" AND
 MID(M1017_CHGREG_ICD4[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD4[1],3,3) >= "9.0" AND
 MID(M1017_CHGREG_ICD4[1],3,3) <= "9.3") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >= "C40" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "C41") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "C49") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "D16") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >= "M00" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "M99") OR

(MID(M1017_CHGREG_ICD4[1],1,3) >= "R25" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "R29") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >= "S47" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "S48") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >= "S57" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "S58") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >= "S67" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "S68") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >= "S77" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "S78") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >= "S87" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "S88") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >= "S97" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "S98") OR
 (MID(M1017_CHGREG_ICD5[1],1,2) >= "S0" AND
 MID(M1017_CHGREG_ICD5[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD5[1],3,3) >= "2.0" AND
 MID(M1017_CHGREG_ICD5[1],3,3) <= "3.9") OR
 (MID(M1017_CHGREG_ICD5[1],1,2) = "S1" AND
 MID(M1017_CHGREG_ICD5[1],3,3) = "6.1") OR
 (MID(M1017_CHGREG_ICD5[1],1,2) >= "S2" AND
 MID(M1017_CHGREG_ICD5[1],1,2) <= "S3" AND
 MID(M1017_CHGREG_ICD5[1],3,3) >= "9.0" AND
 MID(M1017_CHGREG_ICD5[1],3,3) <= "9.3" AND
 MID(M1017_CHGREG_ICD5[1],6,1) = "1") OR
 (MID(M1017_CHGREG_ICD5[1],1,2) >= "S4" AND
 MID(M1017_CHGREG_ICD5[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD5[1],3,3) >= "6.0" AND
 MID(M1017_CHGREG_ICD5[1],3,3) <= "6.9" AND
 MID(M1017_CHGREG_ICD5[1],6,1) = "1") OR
 (MID(M1017_CHGREG_ICD5[1],1,2) >= "S4" AND
 MID(M1017_CHGREG_ICD5[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD5[1],3,3) >= "9.0" AND
 MID(M1017_CHGREG_ICD5[1],3,3) <= "9.3") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >= "C40" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "C41") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "C49") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "D16") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >= "M00" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "M99") OR

(MID(M1017_CHGREG_ICD5[1],1,3) >= "R25" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "R29") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >= "S47" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "S48") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >= "S57" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "S58") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >= "S67" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "S68") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >= "S77" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "S78") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >= "S87" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "S88") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >= "S97" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "S98") OR
 (MID(M1017_CHGREG_ICD6[1],1,2) >= "S0" AND
 MID(M1017_CHGREG_ICD6[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD6[1],3,3) >= "2.0" AND
 MID(M1017_CHGREG_ICD6[1],3,3) <= "3.9") OR
 (MID(M1017_CHGREG_ICD6[1],1,2) = "S1" AND
 MID(M1017_CHGREG_ICD6[1],3,3) = "6.1") OR
 (MID(M1017_CHGREG_ICD6[1],1,2) >= "S2" AND
 MID(M1017_CHGREG_ICD6[1],1,2) <= "S3" AND
 MID(M1017_CHGREG_ICD6[1],3,3) >= "9.0" AND
 MID(M1017_CHGREG_ICD6[1],3,3) <= "9.3" AND
 MID(M1017_CHGREG_ICD6[1],6,1) = "1") OR
 (MID(M1017_CHGREG_ICD6[1],1,2) >= "S4" AND
 MID(M1017_CHGREG_ICD6[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD6[1],3,3) >= "6.0" AND
 MID(M1017_CHGREG_ICD6[1],3,3) <= "6.9" AND
 MID(M1017_CHGREG_ICD6[1],6,1) = "1") OR
 (MID(M1017_CHGREG_ICD6[1],1,2) >= "S4" AND
 MID(M1017_CHGREG_ICD6[1],1,2) <= "S9" AND
 MID(M1017_CHGREG_ICD6[1],3,3) >= "9.0" AND
 MID(M1017_CHGREG_ICD6[1],3,3) <= "9.3") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) >= "C40" AND
 MID(M1017_CHGREG_ICD6[1],1,3) <= "C41") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "C49") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "D16") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) >= "M00" AND
 MID(M1017_CHGREG_ICD6[1],1,3) <= "M99") OR

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(MID(M1017_CHGREG_ICD6[1],1,3) >= "R25" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "R29") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "S47" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "S48") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "S57" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "S58") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "S67" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "S68") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "S77" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "S78") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "S87" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "S88") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "S97" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "S98") )
THEN
    ACUTE_ORTHO = 1
ELSE
    ACUTE_ORTHO = 0
END IF

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Neurologic (%)

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IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
((MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "A80" AND
MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "A89") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "A80" AND
MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "A89") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "A80" AND
MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "A89") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "A80" AND
MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "A89") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "A80" AND
MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "A89") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "A80" AND
MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "A89") OR
(MID(M1017_CHGREG_ICD1[1],1,3) >= "A80" AND
MID(M1017_CHGREG_ICD1[1],1,3) <= "A89") OR
(MID(M1017_CHGREG_ICD2[1],1,3) >= "A80" AND
MID(M1017_CHGREG_ICD2[1],1,3) <= "A89") OR
(MID(M1017_CHGREG_ICD3[1],1,3) >= "A80" AND

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MID(M1017_CHGREG_ICD3[1],1,3) <= "A89") OR
(MID(M1017_CHGREG_ICD4[1],1,3) >= "A80" AND
MID(M1017_CHGREG_ICD4[1],1,3) <= "A89") OR
(MID(M1017_CHGREG_ICD5[1],1,3) >= "A80" AND
MID(M1017_CHGREG_ICD5[1],1,3) <= "A89") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "A80" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "A89") OR
(MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "C70" AND
MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "C72") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "C70" AND
MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "C72") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "C70" AND
MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "C72") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "C70" AND
MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "C72") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "C70" AND
MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "C72") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "C70" AND
MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "C72") OR
(MID(M1017_CHGREG_ICD1[1],1,3) >= "C70" AND
MID(M1017_CHGREG_ICD1[1],1,3) <= "C72") OR
(MID(M1017_CHGREG_ICD2[1],1,3) >= "C70" AND
MID(M1017_CHGREG_ICD2[1],1,3) <= "C72") OR
(MID(M1017_CHGREG_ICD3[1],1,3) >= "C70" AND
MID(M1017_CHGREG_ICD3[1],1,3) <= "C72") OR
(MID(M1017_CHGREG_ICD4[1],1,3) >= "C70" AND
MID(M1017_CHGREG_ICD4[1],1,3) <= "C72") OR
(MID(M1017_CHGREG_ICD5[1],1,3) >= "C70" AND
MID(M1017_CHGREG_ICD5[1],1,3) <= "C72") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "C70" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "C72") OR
(MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "D32" AND
MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "D33") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "D32" AND
MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "D33") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "D32" AND
MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "D33") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "D32" AND
MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "D33") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "D32" AND

MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "D33") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "D32" AND
MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "D33") OR
(MID(M1017_CHGREG_ICD1[1],1,3) >= "D32" AND
MID(M1017_CHGREG_ICD1[1],1,3) <= "D33") OR
(MID(M1017_CHGREG_ICD2[1],1,3) >= "D32" AND
MID(M1017_CHGREG_ICD2[1],1,3) <= "D33") OR
(MID(M1017_CHGREG_ICD3[1],1,3) >= "D32" AND
MID(M1017_CHGREG_ICD3[1],1,3) <= "D33") OR
(MID(M1017_CHGREG_ICD4[1],1,3) >= "D32" AND
MID(M1017_CHGREG_ICD4[1],1,3) <= "D33") OR
(MID(M1017_CHGREG_ICD5[1],1,3) >= "D32" AND
MID(M1017_CHGREG_ICD5[1],1,3) <= "D33") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "D32" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "D33") OR
(MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "G00" AND
MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "G99") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "G00" AND
MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "G99") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "G00" AND
MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "G99") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "G00" AND
MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "G99") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "G00" AND
MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "G99") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "G00" AND
MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "G99") OR
(MID(M1017_CHGREG_ICD1[1],1,3) >= "G00" AND
MID(M1017_CHGREG_ICD1[1],1,3) <= "G99") OR
(MID(M1017_CHGREG_ICD2[1],1,3) >= "G00" AND
MID(M1017_CHGREG_ICD2[1],1,3) <= "G99") OR
(MID(M1017_CHGREG_ICD3[1],1,3) >= "G00" AND
MID(M1017_CHGREG_ICD3[1],1,3) <= "G99") OR
(MID(M1017_CHGREG_ICD4[1],1,3) >= "G00" AND
MID(M1017_CHGREG_ICD4[1],1,3) <= "G99") OR
(MID(M1017_CHGREG_ICD5[1],1,3) >= "G00" AND
MID(M1017_CHGREG_ICD5[1],1,3) <= "G99") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "G00" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "G99") OR
(MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "I60" AND

MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "I69") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "I60" AND
MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "I69") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "I60" AND
MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "I69") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "I60" AND
MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "I69") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "I60" AND
MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "I69") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "I60" AND
MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "I69") OR
(MID(M1017_CHGREG_ICD1[1],1,3) >= "I60" AND
MID(M1017_CHGREG_ICD1[1],1,3) <= "I69") OR
(MID(M1017_CHGREG_ICD2[1],1,3) >= "I60" AND
MID(M1017_CHGREG_ICD2[1],1,3) <= "I69") OR
(MID(M1017_CHGREG_ICD3[1],1,3) >= "I60" AND
MID(M1017_CHGREG_ICD3[1],1,3) <= "I69") OR
(MID(M1017_CHGREG_ICD4[1],1,3) >= "I60" AND
MID(M1017_CHGREG_ICD4[1],1,3) <= "I69") OR
(MID(M1017_CHGREG_ICD5[1],1,3) >= "I60" AND
MID(M1017_CHGREG_ICD5[1],1,3) <= "I69") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "I60" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "I69") OR
(MID(M1011_14_DAY_INP1_ICD[1],1,3) = "R52") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3) = "R52") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3) = "R52") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3) = "R52") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3) = "R52") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3) = "R52") OR
(MID(M1017_CHGREG_ICD1[1],1,3) = "R52") OR
(MID(M1017_CHGREG_ICD2[1],1,3) = "R52") OR
(MID(M1017_CHGREG_ICD3[1],1,3) = "R52") OR
(MID(M1017_CHGREG_ICD4[1],1,3) = "R52") OR
(MID(M1017_CHGREG_ICD5[1],1,3) = "R52") OR
(MID(M1017_CHGREG_ICD6[1],1,3) = "R52") OR
(MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S04") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S04") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S04") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S04") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S04") OR

(MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S04") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S04") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S04") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S04") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S04") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S04") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S04") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S06") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S06") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S06") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S06") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S06") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S06") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S06") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S06") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S06") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S06") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S06") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S06") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S14") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S14") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S14") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S14") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S14") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S14") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S14") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S14") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S14") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S14") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S14") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S14") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S24") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S24") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S24") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S24") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S24") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S24") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S24") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S24") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S24") OR

(MID(M1017_CHGREG_ICD4[1],1,3) = "S24") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S24") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S24") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S34") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S34") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S34") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S34") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S34") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S34") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S34") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S34") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S34") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S34") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S34") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S34") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S44") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S44") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S44") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S44") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S44") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S44") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S44") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S44") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S44") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S44") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S44") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S44") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S54") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S54") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S54") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S54") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S54") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S54") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S54") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S54") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S54") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S54") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S54") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S54") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S64") OR

(MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S64") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S64") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S64") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S64") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S64") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S64") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S64") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S64") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S64") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S64") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S64") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S74") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S74") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S74") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S74") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S74") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S74") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S74") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S74") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S74") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S74") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S74") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S74") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S84") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S84") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S84") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S84") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S84") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S84") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S84") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S84") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S84") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S84") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S84") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S84") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S94") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S94") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S94") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S94") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S94") OR

(MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S94") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S94") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S94") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S94") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S94") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S94") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S94") OR
 (M1011_14_DAY_INP1_ICD[1] >= "E08.40" AND
 M1011_14_DAY_INP1_ICD[1] <= "E08.49") OR
 (M1011_14_DAY_INP2_ICD[1] >= "E08.40" AND
 M1011_14_DAY_INP2_ICD[1] <= "E08.49") OR
 (M1011_14_DAY_INP3_ICD[1] >= "E08.40" AND
 M1011_14_DAY_INP3_ICD[1] <= "E08.49") OR
 (M1011_14_DAY_INP4_ICD[1] >= "E08.40" AND
 M1011_14_DAY_INP4_ICD[1] <= "E08.49") OR
 (M1011_14_DAY_INP5_ICD[1] >= "E08.40" AND
 M1011_14_DAY_INP5_ICD[1] <= "E08.49") OR
 (M1011_14_DAY_INP6_ICD[1] >= "E08.40" AND
 M1011_14_DAY_INP6_ICD[1] <= "E08.49") OR
 (M1017_CHGREG_ICD1[1] >= "E08.40" AND
 M1017_CHGREG_ICD1[1] <= "E08.49") OR
 (M1017_CHGREG_ICD2[1] >= "E08.40" AND
 M1017_CHGREG_ICD2[1] <= "E08.49") OR
 (M1017_CHGREG_ICD3[1] >= "E08.40" AND
 M1017_CHGREG_ICD3[1] <= "E08.49") OR
 (M1017_CHGREG_ICD4[1] >= "E08.40" AND
 M1017_CHGREG_ICD4[1] <= "E08.49") OR
 (M1017_CHGREG_ICD5[1] >= "E08.40" AND
 M1017_CHGREG_ICD5[1] <= "E08.49") OR
 (M1017_CHGREG_ICD6[1] >= "E08.40" AND
 M1017_CHGREG_ICD6[1] <= "E08.49") OR
 (M1011_14_DAY_INP1_ICD[1] >= "E09.40" AND
 M1011_14_DAY_INP1_ICD[1] <= "E09.49") OR
 (M1011_14_DAY_INP2_ICD[1] >= "E09.40" AND
 M1011_14_DAY_INP2_ICD[1] <= "E09.49") OR
 (M1011_14_DAY_INP3_ICD[1] >= "E09.40" AND
 M1011_14_DAY_INP3_ICD[1] <= "E09.49") OR
 (M1011_14_DAY_INP4_ICD[1] >= "E09.40" AND
 M1011_14_DAY_INP4_ICD[1] <= "E09.49") OR
 (M1011_14_DAY_INP5_ICD[1] >= "E09.40" AND

M1011_14_DAY_INP5_ICD[1] <= "E09.49") OR
(M1011_14_DAY_INP6_ICD[1] >= "E09.40" AND
M1011_14_DAY_INP6_ICD[1] <= "E09.49") OR
(M1017_CHGREG_ICD1[1] >= "E09.40" AND
M1017_CHGREG_ICD1[1] <= "E09.49") OR
(M1017_CHGREG_ICD2[1] >= "E09.40" AND
M1017_CHGREG_ICD2[1] <= "E09.49") OR
(M1017_CHGREG_ICD3[1] >= "E09.40" AND
M1017_CHGREG_ICD3[1] <= "E09.49") OR
(M1017_CHGREG_ICD4[1] >= "E09.40" AND
M1017_CHGREG_ICD4[1] <= "E09.49") OR
(M1017_CHGREG_ICD5[1] >= "E09.40" AND
M1017_CHGREG_ICD5[1] <= "E09.49") OR
(M1017_CHGREG_ICD6[1] >= "E09.40" AND
M1017_CHGREG_ICD6[1] <= "E09.49") OR
(M1011_14_DAY_INP1_ICD[1] >= "E10.40" AND
M1011_14_DAY_INP1_ICD[1] <= "E10.49") OR
(M1011_14_DAY_INP2_ICD[1] >= "E10.40" AND
M1011_14_DAY_INP2_ICD[1] <= "E10.49") OR
(M1011_14_DAY_INP3_ICD[1] >= "E10.40" AND
M1011_14_DAY_INP3_ICD[1] <= "E10.49") OR
(M1011_14_DAY_INP4_ICD[1] >= "E10.40" AND
M1011_14_DAY_INP4_ICD[1] <= "E10.49") OR
(M1011_14_DAY_INP5_ICD[1] >= "E10.40" AND
M1011_14_DAY_INP5_ICD[1] <= "E10.49") OR
(M1011_14_DAY_INP6_ICD[1] >= "E10.40" AND
M1011_14_DAY_INP6_ICD[1] <= "E10.49") OR
(M1017_CHGREG_ICD1[1] >= "E10.40" AND
M1017_CHGREG_ICD1[1] <= "E10.49") OR
(M1017_CHGREG_ICD2[1] >= "E10.40" AND
M1017_CHGREG_ICD2[1] <= "E10.49") OR
(M1017_CHGREG_ICD3[1] >= "E10.40" AND
M1017_CHGREG_ICD3[1] <= "E10.49") OR
(M1017_CHGREG_ICD4[1] >= "E10.40" AND
M1017_CHGREG_ICD4[1] <= "E10.49") OR
(M1017_CHGREG_ICD5[1] >= "E10.40" AND
M1017_CHGREG_ICD5[1] <= "E10.49") OR
(M1017_CHGREG_ICD6[1] >= "E10.40" AND
M1017_CHGREG_ICD6[1] <= "E10.49") OR
(M1011_14_DAY_INP1_ICD[1] >= "E11.40" AND

M1011_14_DAY_INP1_ICD[1] <= "E11.49") OR
(M1011_14_DAY_INP2_ICD[1] >= "E11.40" AND
M1011_14_DAY_INP2_ICD[1] <= "E11.49") OR
(M1011_14_DAY_INP3_ICD[1] >= "E11.40" AND
M1011_14_DAY_INP3_ICD[1] <= "E11.49") OR
(M1011_14_DAY_INP4_ICD[1] >= "E11.40" AND
M1011_14_DAY_INP4_ICD[1] <= "E11.49") OR
(M1011_14_DAY_INP5_ICD[1] >= "E11.40" AND
M1011_14_DAY_INP5_ICD[1] <= "E11.49") OR
(M1011_14_DAY_INP6_ICD[1] >= "E11.40" AND
M1011_14_DAY_INP6_ICD[1] <= "E11.49") OR
(M1017_CHGREG_ICD1[1] >= "E11.40" AND
M1017_CHGREG_ICD1[1] <= "E11.49") OR
(M1017_CHGREG_ICD2[1] >= "E11.40" AND
M1017_CHGREG_ICD2[1] <= "E11.49") OR
(M1017_CHGREG_ICD3[1] >= "E11.40" AND
M1017_CHGREG_ICD3[1] <= "E11.49") OR
(M1017_CHGREG_ICD4[1] >= "E11.40" AND
M1017_CHGREG_ICD4[1] <= "E11.49") OR
(M1017_CHGREG_ICD5[1] >= "E11.40" AND
M1017_CHGREG_ICD5[1] <= "E11.49") OR
(M1017_CHGREG_ICD6[1] >= "E11.40" AND
M1017_CHGREG_ICD6[1] <= "E11.49") OR
(M1011_14_DAY_INP1_ICD[1] >= "E13.40" AND
M1011_14_DAY_INP1_ICD[1] <= "E13.49") OR
(M1011_14_DAY_INP2_ICD[1] >= "E13.40" AND
M1011_14_DAY_INP2_ICD[1] <= "E13.49") OR
(M1011_14_DAY_INP3_ICD[1] >= "E13.40" AND
M1011_14_DAY_INP3_ICD[1] <= "E13.49") OR
(M1011_14_DAY_INP4_ICD[1] >= "E13.40" AND
M1011_14_DAY_INP4_ICD[1] <= "E13.49") OR
(M1011_14_DAY_INP5_ICD[1] >= "E13.40" AND
M1011_14_DAY_INP5_ICD[1] <= "E13.49") OR
(M1011_14_DAY_INP6_ICD[1] >= "E13.40" AND
M1011_14_DAY_INP6_ICD[1] <= "E13.49") OR
(M1017_CHGREG_ICD1[1] >= "E13.40" AND
M1017_CHGREG_ICD1[1] <= "E13.49") OR
(M1017_CHGREG_ICD2[1] >= "E13.40" AND
M1017_CHGREG_ICD2[1] <= "E13.49") OR
(M1017_CHGREG_ICD3[1] >= "E13.40" AND


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M1017_CHGREG_ICD3[1] <= "E13.49") OR
(M1017_CHGREG_ICD4[1] >= "E13.40" AND
M1017_CHGREG_ICD4[1] <= "E13.49") OR
(M1017_CHGREG_ICD5[1] >= "E13.40" AND
M1017_CHGREG_ICD5[1] <= "E13.49") OR
(M1017_CHGREG_ICD6[1] >= "E13.40" AND
M1017_CHGREG_ICD6[1] <= "E13.49") OR
(M1011_14_DAY_INP1_ICD[1] >= "M05.50" AND
M1011_14_DAY_INP1_ICD[1] <= "M05.59") OR
(M1011_14_DAY_INP2_ICD[1] >= "M05.50" AND
M1011_14_DAY_INP2_ICD[1] <= "M05.59") OR
(M1011_14_DAY_INP3_ICD[1] >= "M05.50" AND
M1011_14_DAY_INP3_ICD[1] <= "M05.59") OR
(M1011_14_DAY_INP4_ICD[1] >= "M05.50" AND
M1011_14_DAY_INP4_ICD[1] <= "M05.59") OR
(M1011_14_DAY_INP5_ICD[1] >= "M05.50" AND
M1011_14_DAY_INP5_ICD[1] <= "M05.59") OR
(M1011_14_DAY_INP6_ICD[1] >= "M05.50" AND
M1011_14_DAY_INP6_ICD[1] <= "M05.59") OR
(M1017_CHGREG_ICD1[1] >= "M05.50" AND
M1017_CHGREG_ICD1[1] <= "M05.59") OR
(M1017_CHGREG_ICD2[1] >= "M05.50" AND
M1017_CHGREG_ICD2[1] <= "M05.59") OR
(M1017_CHGREG_ICD3[1] >= "M05.50" AND
M1017_CHGREG_ICD3[1] <= "M05.59") OR
(M1017_CHGREG_ICD4[1] >= "M05.50" AND
M1017_CHGREG_ICD4[1] <= "M05.59") OR
(M1017_CHGREG_ICD5[1] >= "M05.50" AND
M1017_CHGREG_ICD5[1] <= "M05.59") OR
(M1017_CHGREG_ICD6[1] >= "M05.50" AND
M1017_CHGREG_ICD6[1] <= "M05.59"))
THEN
    ACUTE_NEURO = 1
ELSE
    ACUTE_NEURO = 0
END IF

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Open wounds/lesions (%)

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IF (INPAT_DC = 1 OR
    MED_REG_CHNG = 1) AND

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((MID(M1011_14_DAY_INP1_ICD[1],1,3) = "L89") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "L89") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "L89") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "L89") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "L89") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "L89") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "L89") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "L89") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "L89") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "L89") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "L89") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "L89") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "L97") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "L97") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "L97") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "L97") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "L97") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "L97") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "L97") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "L97") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "L97") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "L97") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "L97") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "L97") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S01") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S01") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S01") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S01") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S01") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S01") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S01") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S01") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S01") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S01") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S01") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S01") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S08") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S08") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S08") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S08") OR

(MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S08") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S08") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S08") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S08") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S08") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S08") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S08") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S08") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S11") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S11") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S11") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S11") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S11") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S11") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S11") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S11") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S11") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S11") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S11") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S11") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S21") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S21") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S21") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S21") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S21") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S21") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S21") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S21") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S21") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S21") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S21") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S21") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S31") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S31") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S31") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S31") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S31") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S31") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S31") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S31") OR

(MID(M1017_CHGREG_ICD3[1],1,3) = "S31") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S31") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S31") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S31") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S41") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S41") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S41") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S41") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S41") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S41") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S41") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S41") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S41") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S41") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S41") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S41") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S51") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S51") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S51") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S51") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S51") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S51") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S51") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S51") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S51") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S51") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S51") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S51") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S61") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S61") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S61") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S61") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S61") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S61") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S61") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S61") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S61") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S61") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S61") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S61") OR

(MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S71") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S71") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S71") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S71") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S71") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S71") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S71") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S71") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S71") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S71") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S71") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S71") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S81") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S81") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S81") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S81") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S81") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S81") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S81") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S81") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S81") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S81") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S81") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S81") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) = "S91") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) = "S91") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) = "S91") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) = "S91") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) = "S91") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) = "S91") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) = "S91") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) = "S91") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) = "S91") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) = "S91") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) = "S91") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) = "S91") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S02" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1 = "5") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S02" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1 = "5") OR

(MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S02" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1 = "5") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S02" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1 = "5") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S02" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1 = "5") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S02" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1 = "5") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S02" AND
 MID(M1017_CHGREG_ICD1[1],5,1 = "5") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "S02" AND
 MID(M1017_CHGREG_ICD2[1],5,1 = "5") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "S02" AND
 MID(M1017_CHGREG_ICD3[1],5,1 = "5") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S02" AND
 MID(M1017_CHGREG_ICD4[1],5,1 = "5") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S02" AND
 MID(M1017_CHGREG_ICD5[1],5,1 = "5") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "S02" AND
 MID(M1017_CHGREG_ICD6[1],5,1 = "5") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S03" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S03" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S03" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S03" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S03" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S03" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S03" AND
 MID(M1017_CHGREG_ICD1[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "S03" AND
 MID(M1017_CHGREG_ICD2[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "S03" AND
 MID(M1017_CHGREG_ICD3[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S03" AND
 MID(M1017_CHGREG_ICD4[1],5,1 = "2") OR

(MID(M1017_CHGREG_ICD5[1],1,3 = "S03" AND
 MID(M1017_CHGREG_ICD5[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "S03" AND
 MID(M1017_CHGREG_ICD6[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S05" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "2" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "7") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S05" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "2" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "7") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S05" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "2" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "7") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S05" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "2" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "7") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S05" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "2" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "7") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S05" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "2" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "7") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S05" AND
 MID(M1017_CHGREG_ICD1[1],5,1) >= "2" AND
 MID(M1017_CHGREG_ICD1[1],5,1) <= "7") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "S05" AND
 MID(M1017_CHGREG_ICD2[1],5,1) >= "2" AND
 MID(M1017_CHGREG_ICD2[1],5,1) <= "7") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "S05" AND
 MID(M1017_CHGREG_ICD3[1],5,1) >= "2" AND
 MID(M1017_CHGREG_ICD3[1],5,1) <= "7") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S05" AND
 MID(M1017_CHGREG_ICD4[1],5,1) >= "2" AND
 MID(M1017_CHGREG_ICD4[1],5,1) <= "7") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S05" AND
 MID(M1017_CHGREG_ICD5[1],5,1) >= "2" AND
 MID(M1017_CHGREG_ICD5[1],5,1) <= "7") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "S05" AND
 MID(M1017_CHGREG_ICD6[1],5,1) >= "2" AND
 MID(M1017_CHGREG_ICD6[1],5,1) <= "7") OR

(MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S09" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S09" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S09" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S09" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S09" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S09" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S09" AND
 MID(M1017_CHGREG_ICD1[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "S09" AND
 MID(M1017_CHGREG_ICD2[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "S09" AND
 MID(M1017_CHGREG_ICD3[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S09" AND
 MID(M1017_CHGREG_ICD4[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S09" AND
 MID(M1017_CHGREG_ICD5[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "S09" AND
 MID(M1017_CHGREG_ICD6[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S16" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S16" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S16" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S16" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S16" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S16" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S16" AND
 MID(M1017_CHGREG_ICD1[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "S16" AND
 MID(M1017_CHGREG_ICD2[1],5,1 = "2") OR

(MID(M1017_CHGREG_ICD3[1],1,3 = "S16" AND
 MID(M1017_CHGREG_ICD3[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S16" AND
 MID(M1017_CHGREG_ICD4[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S16" AND
 MID(M1017_CHGREG_ICD5[1],5,1 = "2") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "S16" AND
 MID(M1017_CHGREG_ICD6[1],5,1 = "2") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S28" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "1" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "2") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S28" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "1" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "2") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S28" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "1" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "2") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S28" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "1" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "2") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S28" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "1" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "2") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S28" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "1" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "2") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S28" AND
 MID(M1017_CHGREG_ICD1[1],5,1) >= "1" AND
 MID(M1017_CHGREG_ICD1[1],5,1) <= "2") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "S28" AND
 MID(M1017_CHGREG_ICD2[1],5,1) >= "1" AND
 MID(M1017_CHGREG_ICD2[1],5,1) <= "2") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "S28" AND
 MID(M1017_CHGREG_ICD3[1],5,1) >= "1" AND
 MID(M1017_CHGREG_ICD3[1],5,1) <= "2") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S28" AND
 MID(M1017_CHGREG_ICD4[1],5,1) >= "1" AND
 MID(M1017_CHGREG_ICD4[1],5,1) <= "2") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S28" AND
 MID(M1017_CHGREG_ICD5[1],5,1) >= "1" AND

MID(M1017_CHGREG_ICD5[1],5,1) <= "2") OR
(MID(M1017_CHGREG_ICD6[1],1,3 = "S28" AND
MID(M1017_CHGREG_ICD6[1],5,1) >= "1" AND
MID(M1017_CHGREG_ICD6[1],5,1) <= "2") OR
(MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S38" AND
MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "2" AND
MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "3") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S38" AND
MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "2" AND
MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "3") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S38" AND
MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "2" AND
MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "3") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S38" AND
MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "2" AND
MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "3") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S38" AND
MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "2" AND
MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "3") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S38" AND
MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "2" AND
MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "3") OR
(MID(M1017_CHGREG_ICD1[1],1,3 = "S38" AND
MID(M1017_CHGREG_ICD1[1],5,1) >= "2" AND
MID(M1017_CHGREG_ICD1[1],5,1) <= "3") OR
(MID(M1017_CHGREG_ICD2[1],1,3 = "S38" AND
MID(M1017_CHGREG_ICD2[1],5,1) >= "2" AND
MID(M1017_CHGREG_ICD2[1],5,1) <= "3") OR
(MID(M1017_CHGREG_ICD3[1],1,3 = "S38" AND
MID(M1017_CHGREG_ICD3[1],5,1) >= "2" AND
MID(M1017_CHGREG_ICD3[1],5,1) <= "3") OR
(MID(M1017_CHGREG_ICD4[1],1,3 = "S38" AND
MID(M1017_CHGREG_ICD4[1],5,1) >= "2" AND
MID(M1017_CHGREG_ICD4[1],5,1) <= "3") OR
(MID(M1017_CHGREG_ICD5[1],1,3 = "S38" AND
MID(M1017_CHGREG_ICD5[1],5,1) >= "2" AND
MID(M1017_CHGREG_ICD5[1],5,1) <= "3") OR
(MID(M1017_CHGREG_ICD6[1],1,3 = "S38" AND
MID(M1017_CHGREG_ICD6[1],5,1) >= "2" AND
MID(M1017_CHGREG_ICD6[1],5,1) <= "3") OR

(MID(M1011_14_DAY_INP1_ICD[1],1,3 = "I70" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "2" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "7" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1) >= "3" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1) <= "5") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "I70" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "2" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "7" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1) >= "3" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1) <= "5") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "I70" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "2" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "7" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1) >= "3" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1) <= "5") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "I70" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "2" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "7" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1) >= "3" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1) <= "5") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "I70" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "2" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "7" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1) >= "3" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1) <= "5") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "I70" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "2" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "7" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1) >= "3" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1) <= "5") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "I70" AND
 MID(M1017_CHGREG_ICD1[1],5,1) >= "2" AND
 MID(M1017_CHGREG_ICD1[1],5,1) <= "7" AND
 MID(M1017_CHGREG_ICD1[1],6,1) >= "3" AND
 MID(M1017_CHGREG_ICD1[1],6,1) <= "5") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "I70" AND
 MID(M1017_CHGREG_ICD2[1],5,1) >= "2" AND
 MID(M1017_CHGREG_ICD2[1],5,1) <= "7" AND
 MID(M1017_CHGREG_ICD2[1],6,1) >= "3" AND
 MID(M1017_CHGREG_ICD2[1],6,1) <= "5") OR

(MID(M1017_CHGREG_ICD3[1],1,3 = "I70" AND
 MID(M1017_CHGREG_ICD3[1],5,1) >= "2" AND
 MID(M1017_CHGREG_ICD3[1],5,1) <= "7" AND
 MID(M1017_CHGREG_ICD3[1],6,1) >= "3" AND
 MID(M1017_CHGREG_ICD3[1],6,1) <= "5") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "I70" AND
 MID(M1017_CHGREG_ICD4[1],5,1) >= "2" AND
 MID(M1017_CHGREG_ICD4[1],5,1) <= "7" AND
 MID(M1017_CHGREG_ICD4[1],6,1) >= "3" AND
 MID(M1017_CHGREG_ICD4[1],6,1) <= "5") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "I70" AND
 MID(M1017_CHGREG_ICD5[1],5,1) >= "2" AND
 MID(M1017_CHGREG_ICD5[1],5,1) <= "7" AND
 MID(M1017_CHGREG_ICD5[1],6,1) >= "3" AND
 MID(M1017_CHGREG_ICD5[1],6,1) <= "5") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "I70" AND
 MID(M1017_CHGREG_ICD6[1],5,1) >= "2" AND
 MID(M1017_CHGREG_ICD6[1],5,1) <= "7" AND
 MID(M1017_CHGREG_ICD6[1],6,1) >= "3" AND
 MID(M1017_CHGREG_ICD6[1],6,1) <= "5") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S09" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1 = "1" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1 = "2")) OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S09" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1 = "1" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1 = "2")) OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S09" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1 = "1" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1 = "2")) OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S09" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1 = "1" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1 = "2")) OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S09" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1 = "1" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1 = "2")) OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S09" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1 = "1" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1 = "2")) OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S09" AND
 MID(M1017_CHGREG_ICD1[1],5,1 = "1" AND

MID(M1017_CHGREG_ICD1[1],6,1 = "2") OR
(MID(M1017_CHGREG_ICD2[1],1,3 = "S09" AND
MID(M1017_CHGREG_ICD2[1],5,1 = "1" AND
MID(M1017_CHGREG_ICD2[1],6,1 = "2") OR
(MID(M1017_CHGREG_ICD3[1],1,3 = "S09" AND
MID(M1017_CHGREG_ICD3[1],5,1 = "1" AND
MID(M1017_CHGREG_ICD3[1],6,1 = "2") OR
(MID(M1017_CHGREG_ICD4[1],1,3 = "S09" AND
MID(M1017_CHGREG_ICD4[1],5,1 = "1" AND
MID(M1017_CHGREG_ICD4[1],6,1 = "2") OR
(MID(M1017_CHGREG_ICD5[1],1,3 = "S09" AND
MID(M1017_CHGREG_ICD5[1],5,1 = "1" AND
MID(M1017_CHGREG_ICD5[1],6,1 = "2") OR
(MID(M1017_CHGREG_ICD6[1],1,3 = "S09" AND
MID(M1017_CHGREG_ICD6[1],5,1 = "1" AND
MID(M1017_CHGREG_ICD6[1],6,1 = "2") OR
(MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S09" AND
MID(M1011_14_DAY_INP1_ICD[1],5,1 = "3" AND
MID(M1011_14_DAY_INP1_ICD[1],6,1 = "1") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S09" AND
MID(M1011_14_DAY_INP2_ICD[1],5,1 = "3" AND
MID(M1011_14_DAY_INP2_ICD[1],6,1 = "1") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S09" AND
MID(M1011_14_DAY_INP3_ICD[1],5,1 = "3" AND
MID(M1011_14_DAY_INP3_ICD[1],6,1 = "1") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S09" AND
MID(M1011_14_DAY_INP4_ICD[1],5,1 = "3" AND
MID(M1011_14_DAY_INP4_ICD[1],6,1 = "1") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S09" AND
MID(M1011_14_DAY_INP5_ICD[1],5,1 = "3" AND
MID(M1011_14_DAY_INP5_ICD[1],6,1 = "1") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S09" AND
MID(M1011_14_DAY_INP6_ICD[1],5,1 = "3" AND
MID(M1011_14_DAY_INP6_ICD[1],6,1 = "1") OR
(MID(M1017_CHGREG_ICD1[1],1,3 = "S09" AND
MID(M1017_CHGREG_ICD1[1],5,1 = "3" AND
MID(M1017_CHGREG_ICD1[1],6,1 = "1") OR
(MID(M1017_CHGREG_ICD2[1],1,3 = "S09" AND
MID(M1017_CHGREG_ICD2[1],5,1 = "3" AND
MID(M1017_CHGREG_ICD2[1],6,1 = "1") OR

(MID(M1017_CHGREG_ICD3[1],1,3 = "S09" AND
 MID(M1017_CHGREG_ICD3[1],5,1 = "3" AND
 MID(M1017_CHGREG_ICD3[1],6,1 = "1") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S09" AND
 MID(M1017_CHGREG_ICD4[1],5,1 = "3" AND
 MID(M1017_CHGREG_ICD4[1],6,1 = "1") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S09" AND
 MID(M1017_CHGREG_ICD5[1],5,1 = "3" AND
 MID(M1017_CHGREG_ICD5[1],6,1 = "1") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "S09" AND
 MID(M1017_CHGREG_ICD6[1],5,1 = "3" AND
 MID(M1017_CHGREG_ICD6[1],6,1 = "1") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S29" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S29" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S29" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S29" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S29" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S29" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S29" AND
 MID(M1017_CHGREG_ICD1[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD1[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD1[1],6,1 = "2") OR

(MID(M1017_CHGREG_ICD2[1],1,3 = "S29" AND
MID(M1017_CHGREG_ICD2[1],5,1) >= "0" AND
MID(M1017_CHGREG_ICD2[1],5,1) <= "9" AND
MID(M1017_CHGREG_ICD2[1],6,1 = "2") OR
(MID(M1017_CHGREG_ICD3[1],1,3 = "S29" AND
MID(M1017_CHGREG_ICD3[1],5,1) >= "0" AND
MID(M1017_CHGREG_ICD3[1],5,1) <= "9" AND
MID(M1017_CHGREG_ICD3[1],6,1 = "2") OR
(MID(M1017_CHGREG_ICD4[1],1,3 = "S29" AND
MID(M1017_CHGREG_ICD4[1],5,1) >= "0" AND
MID(M1017_CHGREG_ICD4[1],5,1) <= "9" AND
MID(M1017_CHGREG_ICD4[1],6,1 = "2") OR
(MID(M1017_CHGREG_ICD5[1],1,3 = "S29" AND
MID(M1017_CHGREG_ICD5[1],5,1) >= "0" AND
MID(M1017_CHGREG_ICD5[1],5,1) <= "9" AND
MID(M1017_CHGREG_ICD5[1],6,1 = "2") OR
(MID(M1017_CHGREG_ICD6[1],1,3 = "S29" AND
MID(M1017_CHGREG_ICD6[1],5,1) >= "0" AND
MID(M1017_CHGREG_ICD6[1],5,1) <= "9" AND
MID(M1017_CHGREG_ICD6[1],6,1 = "2") OR
(MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S39" AND
MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "0" AND
MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "9" AND
MID(M1011_14_DAY_INP1_ICD[1],6,1 = "2") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S39" AND
MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "0" AND
MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "9" AND
MID(M1011_14_DAY_INP2_ICD[1],6,1 = "2") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S39" AND
MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "0" AND
MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "9" AND
MID(M1011_14_DAY_INP3_ICD[1],6,1 = "2") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S39" AND
MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "0" AND
MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "9" AND
MID(M1011_14_DAY_INP4_ICD[1],6,1 = "2") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S39" AND
MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "0" AND
MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "9" AND
MID(M1011_14_DAY_INP5_ICD[1],6,1 = "2") OR

(MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S39" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S39" AND
 MID(M1017_CHGREG_ICD1[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD1[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD1[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "S39" AND
 MID(M1017_CHGREG_ICD2[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD2[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD2[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "S39" AND
 MID(M1017_CHGREG_ICD3[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD3[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD3[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S39" AND
 MID(M1017_CHGREG_ICD4[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD4[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD4[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S39" AND
 MID(M1017_CHGREG_ICD5[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD5[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD5[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "S39" AND
 MID(M1017_CHGREG_ICD6[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD6[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD6[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S46" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S46" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S46" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1 = "2") OR

(MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S46" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S46" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S46" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S46" AND
 MID(M1017_CHGREG_ICD1[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD1[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD1[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "S46" AND
 MID(M1017_CHGREG_ICD2[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD2[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD2[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "S46" AND
 MID(M1017_CHGREG_ICD3[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD3[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD3[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S46" AND
 MID(M1017_CHGREG_ICD4[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD4[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD4[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S46" AND
 MID(M1017_CHGREG_ICD5[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD5[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD5[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "S46" AND
 MID(M1017_CHGREG_ICD6[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD6[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD6[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S56" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1 = "2") OR

(MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S56" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S56" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S56" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S56" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S56" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S56" AND
 MID(M1017_CHGREG_ICD1[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD1[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD1[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "S56" AND
 MID(M1017_CHGREG_ICD2[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD2[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD2[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "S56" AND
 MID(M1017_CHGREG_ICD3[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD3[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD3[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S56" AND
 MID(M1017_CHGREG_ICD4[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD4[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD4[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S56" AND
 MID(M1017_CHGREG_ICD5[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD5[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD5[1],6,1 = "2") OR

(MID(M1017_CHGREG_ICD6[1],1,3 = "S56" AND
 MID(M1017_CHGREG_ICD6[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD6[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD6[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S66" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S66" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S66" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S66" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S66" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S66" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S66" AND
 MID(M1017_CHGREG_ICD1[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD1[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD1[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "S66" AND
 MID(M1017_CHGREG_ICD2[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD2[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD2[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "S66" AND
 MID(M1017_CHGREG_ICD3[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD3[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD3[1],6,1 = "2") OR

(MID(M1017_CHGREG_ICD4[1],1,3 = "S66" AND
 MID(M1017_CHGREG_ICD4[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD4[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD4[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S66" AND
 MID(M1017_CHGREG_ICD5[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD5[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD5[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "S66" AND
 MID(M1017_CHGREG_ICD6[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD6[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD6[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S76" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S76" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S76" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S76" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S76" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S76" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S76" AND
 MID(M1017_CHGREG_ICD1[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD1[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD1[1],6,1 = "2") OR

(MID(M1017_CHGREG_ICD2[1],1,3 = "S76" AND
 MID(M1017_CHGREG_ICD2[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD2[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD2[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "S76" AND
 MID(M1017_CHGREG_ICD3[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD3[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD3[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S76" AND
 MID(M1017_CHGREG_ICD4[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD4[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD4[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S76" AND
 MID(M1017_CHGREG_ICD5[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD5[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD5[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "S76" AND
 MID(M1017_CHGREG_ICD6[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD6[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD6[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S86" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S86" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S86" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S86" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S86" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1 = "2") OR

(MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S86" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S86" AND
 MID(M1017_CHGREG_ICD1[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD1[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD1[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "S86" AND
 MID(M1017_CHGREG_ICD2[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD2[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD2[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "S86" AND
 MID(M1017_CHGREG_ICD3[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD3[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD3[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S86" AND
 MID(M1017_CHGREG_ICD4[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD4[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD4[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S86" AND
 MID(M1017_CHGREG_ICD5[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD5[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD5[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "S86" AND
 MID(M1017_CHGREG_ICD6[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD6[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD6[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "S96" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "S96" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "S96" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1 = "2") OR

(MID(M1011_14_DAY_INP4_ICD[1],1,3 = "S96" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "S96" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "S96" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "0" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "9" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "S96" AND
 MID(M1017_CHGREG_ICD1[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD1[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD1[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "S96" AND
 MID(M1017_CHGREG_ICD2[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD2[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD2[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "S96" AND
 MID(M1017_CHGREG_ICD3[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD3[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD3[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "S96" AND
 MID(M1017_CHGREG_ICD4[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD4[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD4[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "S96" AND
 MID(M1017_CHGREG_ICD5[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD5[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD5[1],6,1 = "2") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "S96" AND
 MID(M1017_CHGREG_ICD6[1],5,1) >= "0" AND
 MID(M1017_CHGREG_ICD6[1],5,1) <= "9" AND
 MID(M1017_CHGREG_ICD6[1],6,1 = "2") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "E08" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "E13" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) >= "6" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1) <= "7" AND

MID(M1011_14_DAY_INP1_ICD[1],6,1 = "2" AND
MID(M1011_14_DAY_INP1_ICD[1],7,1) >= "1" AND
MID(M1011_14_DAY_INP1_ICD[1],7,1) <= "2") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "E08" AND
MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "E13" AND
MID(M1011_14_DAY_INP2_ICD[1],5,1) >= "6" AND
MID(M1011_14_DAY_INP2_ICD[1],5,1) <= "7" AND
MID(M1011_14_DAY_INP2_ICD[1],6,1 = "2" AND
MID(M1011_14_DAY_INP2_ICD[1],7,1) >= "1" AND
MID(M1011_14_DAY_INP2_ICD[1],7,1) <= "2") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "E08" AND
MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "E13" AND
MID(M1011_14_DAY_INP3_ICD[1],5,1) >= "6" AND
MID(M1011_14_DAY_INP3_ICD[1],5,1) <= "7" AND
MID(M1011_14_DAY_INP3_ICD[1],6,1 = "2" AND
MID(M1011_14_DAY_INP3_ICD[1],7,1) >= "1" AND
MID(M1011_14_DAY_INP3_ICD[1],7,1) <= "2") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "E08" AND
MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "E13" AND
MID(M1011_14_DAY_INP4_ICD[1],5,1) >= "6" AND
MID(M1011_14_DAY_INP4_ICD[1],5,1) <= "7" AND
MID(M1011_14_DAY_INP4_ICD[1],6,1 = "2" AND
MID(M1011_14_DAY_INP4_ICD[1],7,1) >= "1" AND
MID(M1011_14_DAY_INP4_ICD[1],7,1) <= "2") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "E08" AND
MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "E13" AND
MID(M1011_14_DAY_INP5_ICD[1],5,1) >= "6" AND
MID(M1011_14_DAY_INP5_ICD[1],5,1) <= "7" AND
MID(M1011_14_DAY_INP5_ICD[1],6,1 = "2" AND
MID(M1011_14_DAY_INP5_ICD[1],7,1) >= "1" AND
MID(M1011_14_DAY_INP5_ICD[1],7,1) <= "2") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "E08" AND
MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "E13" AND
MID(M1011_14_DAY_INP6_ICD[1],5,1) >= "6" AND
MID(M1011_14_DAY_INP6_ICD[1],5,1) <= "7" AND
MID(M1011_14_DAY_INP6_ICD[1],6,1 = "2" AND
MID(M1011_14_DAY_INP6_ICD[1],7,1) >= "1" AND
MID(M1011_14_DAY_INP6_ICD[1],7,1) <= "2") OR
(MID(M1017_CHGREG_ICD1[1],1,3) >= "E08" AND
MID(M1017_CHGREG_ICD1[1],1,3) <= "E13" AND

MID(M1017_CHGREG_ICD1[1],5,1) >= "6" AND
MID(M1017_CHGREG_ICD1[1],5,1) <= "7" AND
MID(M1017_CHGREG_ICD1[1],6,1 = "2" AND
MID(M1017_CHGREG_ICD1[1],7,1) >= "1" AND
MID(M1017_CHGREG_ICD1[1],7,1) <= "2") OR
(MID(M1017_CHGREG_ICD2[1],1,3) >= "E08" AND
MID(M1017_CHGREG_ICD2[1],1,3) <= "E13" AND
MID(M1017_CHGREG_ICD2[1],5,1) >= "6" AND
MID(M1017_CHGREG_ICD2[1],5,1) <= "7" AND
MID(M1017_CHGREG_ICD2[1],6,1 = "2" AND
MID(M1017_CHGREG_ICD2[1],7,1) >= "1" AND
MID(M1017_CHGREG_ICD2[1],7,1) <= "2") OR
(MID(M1017_CHGREG_ICD3[1],1,3) >= "E08" AND
MID(M1017_CHGREG_ICD3[1],1,3) <= "E13" AND
MID(M1017_CHGREG_ICD3[1],5,1) >= "6" AND
MID(M1017_CHGREG_ICD3[1],5,1) <= "7" AND
MID(M1017_CHGREG_ICD3[1],6,1 = "2" AND
MID(M1017_CHGREG_ICD3[1],7,1) >= "1" AND
MID(M1017_CHGREG_ICD3[1],7,1) <= "2") OR
(MID(M1017_CHGREG_ICD4[1],1,3) >= "E08" AND
MID(M1017_CHGREG_ICD4[1],1,3) <= "E13" AND
MID(M1017_CHGREG_ICD4[1],5,1) >= "6" AND
MID(M1017_CHGREG_ICD4[1],5,1) <= "7" AND
MID(M1017_CHGREG_ICD4[1],6,1 = "2" AND
MID(M1017_CHGREG_ICD4[1],7,1) >= "1" AND
MID(M1017_CHGREG_ICD4[1],7,1) <= "2") OR
(MID(M1017_CHGREG_ICD5[1],1,3) >= "E08" AND
MID(M1017_CHGREG_ICD5[1],1,3) <= "E13" AND
MID(M1017_CHGREG_ICD5[1],5,1) >= "6" AND
MID(M1017_CHGREG_ICD5[1],5,1) <= "7" AND
MID(M1017_CHGREG_ICD5[1],6,1 = "2" AND
MID(M1017_CHGREG_ICD5[1],7,1) >= "1" AND
MID(M1017_CHGREG_ICD5[1],7,1) <= "2") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "E08" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "E13" AND
MID(M1017_CHGREG_ICD6[1],5,1) >= "6" AND
MID(M1017_CHGREG_ICD6[1],5,1) <= "7" AND
MID(M1017_CHGREG_ICD6[1],6,1 = "2" AND
MID(M1017_CHGREG_ICD6[1],7,1) >= "1" AND
MID(M1017_CHGREG_ICD6[1],7,1) <= "2") OR

(MID(M1011_14_DAY_INP1_ICD[1],1,3 = "L98" AND
 MID(M1011_14_DAY_INP1_ICD[1],5,1 = "4" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1) >= "1" AND
 MID(M1011_14_DAY_INP1_ICD[1],6,1) <= "9" AND
 MID(M1011_14_DAY_INP1_ICD[1],7,1) >= "1" AND
 MID(M1011_14_DAY_INP1_ICD[1],7,1) <= "9") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "L98" AND
 MID(M1011_14_DAY_INP2_ICD[1],5,1 = "4" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1) >= "1" AND
 MID(M1011_14_DAY_INP2_ICD[1],6,1) <= "9" AND
 MID(M1011_14_DAY_INP2_ICD[1],7,1) >= "1" AND
 MID(M1011_14_DAY_INP2_ICD[1],7,1) <= "9") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "L98" AND
 MID(M1011_14_DAY_INP3_ICD[1],5,1 = "4" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1) >= "1" AND
 MID(M1011_14_DAY_INP3_ICD[1],6,1) <= "9" AND
 MID(M1011_14_DAY_INP3_ICD[1],7,1) >= "1" AND
 MID(M1011_14_DAY_INP3_ICD[1],7,1) <= "9") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "L98" AND
 MID(M1011_14_DAY_INP4_ICD[1],5,1 = "4" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1) >= "1" AND
 MID(M1011_14_DAY_INP4_ICD[1],6,1) <= "9" AND
 MID(M1011_14_DAY_INP4_ICD[1],7,1) >= "1" AND
 MID(M1011_14_DAY_INP4_ICD[1],7,1) <= "9") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "L98" AND
 MID(M1011_14_DAY_INP5_ICD[1],5,1 = "4" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1) >= "1" AND
 MID(M1011_14_DAY_INP5_ICD[1],6,1) <= "9" AND
 MID(M1011_14_DAY_INP5_ICD[1],7,1) >= "1" AND
 MID(M1011_14_DAY_INP5_ICD[1],7,1) <= "9") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "L98" AND
 MID(M1011_14_DAY_INP6_ICD[1],5,1 = "4" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1) >= "1" AND
 MID(M1011_14_DAY_INP6_ICD[1],6,1) <= "9" AND
 MID(M1011_14_DAY_INP6_ICD[1],7,1) >= "1" AND
 MID(M1011_14_DAY_INP6_ICD[1],7,1) <= "9") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "L98" AND
 MID(M1017_CHGREG_ICD1[1],5,1 = "4" AND
 MID(M1017_CHGREG_ICD1[1],6,1) >= "1" AND
 MID(M1017_CHGREG_ICD1[1],6,1) <= "9" AND

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MID(M1017_CHGREG_ICD1[1],7,1) >= "1" AND
MID(M1017_CHGREG_ICD1[1],7,1) <= "9") OR
(MID(M1017_CHGREG_ICD2[1],1,3 = "L98" AND
MID(M1017_CHGREG_ICD2[1],5,1 = "4" AND
MID(M1017_CHGREG_ICD2[1],6,1) >= "1" AND
MID(M1017_CHGREG_ICD2[1],6,1) <= "9" AND
MID(M1017_CHGREG_ICD2[1],7,1) >= "1" AND
MID(M1017_CHGREG_ICD2[1],7,1) <= "9") OR
(MID(M1017_CHGREG_ICD3[1],1,3 = "L98" AND
MID(M1017_CHGREG_ICD3[1],5,1 = "4" AND
MID(M1017_CHGREG_ICD3[1],6,1) >= "1" AND
MID(M1017_CHGREG_ICD3[1],6,1) <= "9" AND
MID(M1017_CHGREG_ICD3[1],7,1) >= "1" AND
MID(M1017_CHGREG_ICD3[1],7,1) <= "9") OR
(MID(M1017_CHGREG_ICD4[1],1,3 = "L98" AND
MID(M1017_CHGREG_ICD4[1],5,1 = "4" AND
MID(M1017_CHGREG_ICD4[1],6,1) >= "1" AND
MID(M1017_CHGREG_ICD4[1],6,1) <= "9" AND
MID(M1017_CHGREG_ICD4[1],7,1) >= "1" AND
MID(M1017_CHGREG_ICD4[1],7,1) <= "9") OR
(MID(M1017_CHGREG_ICD5[1],1,3 = "L98" AND
MID(M1017_CHGREG_ICD5[1],5,1 = "4" AND
MID(M1017_CHGREG_ICD5[1],6,1) >= "1" AND
MID(M1017_CHGREG_ICD5[1],6,1) <= "9" AND
MID(M1017_CHGREG_ICD5[1],7,1) >= "1" AND
MID(M1017_CHGREG_ICD5[1],7,1) <= "9") OR
(MID(M1017_CHGREG_ICD6[1],1,3 = "L98" AND
MID(M1017_CHGREG_ICD6[1],5,1 = "4" AND
MID(M1017_CHGREG_ICD6[1],6,1) >= "1" AND
MID(M1017_CHGREG_ICD6[1],6,1) <= "9" AND
MID(M1017_CHGREG_ICD6[1],7,1) >= "1" AND
MID(M1017_CHGREG_ICD6[1],7,1) <= "9"))
THEN
    ACUTE_WOUND = 1
ELSE
    ACUTE_WOUND = 0
END IF

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Cardiac/peripheral vascular (%)

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IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND

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((MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "I00" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "I59") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "I00" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "I59") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "I00" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "I59") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "I00" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "I59") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "I00" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "I59") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "I00" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "I59") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >= "I00" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <= "I59") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >= "I00" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <= "I59") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >= "I00" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "I59") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >= "I00" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "I59") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >= "I00" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "I59") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) >= "I00" AND
 MID(M1017_CHGREG_ICD6[1],1,3) <= "I59") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "I70" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "I99") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "I70" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "I99") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "I70" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "I99") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "I70" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "I99") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "I70" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "I99") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "I70" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "I99") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >= "I70" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <= "I99") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >= "I70" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <= "I99") OR

(MID(M1017_CHGREG_ICD3[1],1,3) >= "I70" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "I99") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >= "I70" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "I99") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >= "I70" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "I99") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) >= "I70" AND
 MID(M1017_CHGREG_ICD6[1],1,3) <= "I99") OR
 (M1011_14_DAY_INP1_ICD[1] = "A18.84 ") OR
 (M1011_14_DAY_INP2_ICD[1] = "A18.84 ") OR
 (M1011_14_DAY_INP3_ICD[1] = "A18.84 ") OR
 (M1011_14_DAY_INP4_ICD[1] = "A18.84 ") OR
 (M1011_14_DAY_INP5_ICD[1] = "A18.84 ") OR
 (M1011_14_DAY_INP6_ICD[1] = "A18.84 ") OR
 (M1017_CHGREG_ICD1[1] = "A18.84 ") OR
 (M1017_CHGREG_ICD2[1] = "A18.84 ") OR
 (M1017_CHGREG_ICD3[1] = "A18.84 ") OR
 (M1017_CHGREG_ICD4[1] = "A18.84 ") OR
 (M1017_CHGREG_ICD5[1] = "A18.84 ") OR
 (M1017_CHGREG_ICD6[1] = "A18.84 ") OR
 (M1011_14_DAY_INP1_ICD[1] >= "E08.51 " AND
 M1011_14_DAY_INP1_ICD[1] <= "E08.52 ") OR
 (M1011_14_DAY_INP2_ICD[1] >= "E08.51 " AND
 M1011_14_DAY_INP2_ICD[1] <= "E08.52 ") OR
 (M1011_14_DAY_INP3_ICD[1] >= "E08.51 " AND
 M1011_14_DAY_INP3_ICD[1] <= "E08.52 ") OR
 (M1011_14_DAY_INP4_ICD[1] >= "E08.51 " AND
 M1011_14_DAY_INP4_ICD[1] <= "E08.52 ") OR
 (M1011_14_DAY_INP5_ICD[1] >= "E08.51 " AND
 M1011_14_DAY_INP5_ICD[1] <= "E08.52 ") OR
 (M1011_14_DAY_INP6_ICD[1] >= "E08.51 " AND
 M1011_14_DAY_INP6_ICD[1] <= "E08.52 ") OR
 (M1017_CHGREG_ICD1[1] >= "E08.51 " AND
 M1017_CHGREG_ICD1[1] <= "E08.52 ") OR
 (M1017_CHGREG_ICD2[1] >= "E08.51 " AND
 M1017_CHGREG_ICD2[1] <= "E08.52 ") OR
 (M1017_CHGREG_ICD3[1] >= "E08.51 " AND
 M1017_CHGREG_ICD3[1] <= "E08.52 ") OR
 (M1017_CHGREG_ICD4[1] >= "E08.51 " AND
 M1017_CHGREG_ICD4[1] <= "E08.52 ") OR

(M1017_CHGREG_ICD5[1] >= "E08.51 " AND
 M1017_CHGREG_ICD5[1] <= "E08.52 ") OR
 (M1017_CHGREG_ICD6[1] >= "E08.51 " AND
 M1017_CHGREG_ICD6[1] <= "E08.52 ") OR
 (M1011_14_DAY_INP1_ICD[1] >= "E09.51 " AND
 M1011_14_DAY_INP1_ICD[1] <= "E09.52 ") OR
 (M1011_14_DAY_INP2_ICD[1] >= "E09.51 " AND
 M1011_14_DAY_INP2_ICD[1] <= "E09.52 ") OR
 (M1011_14_DAY_INP3_ICD[1] >= "E09.51 " AND
 M1011_14_DAY_INP3_ICD[1] <= "E09.52 ") OR
 (M1011_14_DAY_INP4_ICD[1] >= "E09.51 " AND
 M1011_14_DAY_INP4_ICD[1] <= "E09.52 ") OR
 (M1011_14_DAY_INP5_ICD[1] >= "E09.51 " AND
 M1011_14_DAY_INP5_ICD[1] <= "E09.52 ") OR
 (M1011_14_DAY_INP6_ICD[1] >= "E09.51 " AND
 M1011_14_DAY_INP6_ICD[1] <= "E09.52 ") OR
 (M1017_CHGREG_ICD1[1] >= "E09.51 " AND
 M1017_CHGREG_ICD1[1] <= "E09.52 ") OR
 (M1017_CHGREG_ICD2[1] >= "E09.51 " AND
 M1017_CHGREG_ICD2[1] <= "E09.52 ") OR
 (M1017_CHGREG_ICD3[1] >= "E09.51 " AND
 M1017_CHGREG_ICD3[1] <= "E09.52 ") OR
 (M1017_CHGREG_ICD4[1] >= "E09.51 " AND
 M1017_CHGREG_ICD4[1] <= "E09.52 ") OR
 (M1017_CHGREG_ICD5[1] >= "E09.51 " AND
 M1017_CHGREG_ICD5[1] <= "E09.52 ") OR
 (M1017_CHGREG_ICD6[1] >= "E09.51 " AND
 M1017_CHGREG_ICD6[1] <= "E09.52 ") OR
 (M1011_14_DAY_INP1_ICD[1] >= "E10.51 " AND
 M1011_14_DAY_INP1_ICD[1] <= "E10.52 ") OR
 (M1011_14_DAY_INP2_ICD[1] >= "E10.51 " AND
 M1011_14_DAY_INP2_ICD[1] <= "E10.52 ") OR
 (M1011_14_DAY_INP3_ICD[1] >= "E10.51 " AND
 M1011_14_DAY_INP3_ICD[1] <= "E10.52 ") OR
 (M1011_14_DAY_INP4_ICD[1] >= "E10.51 " AND
 M1011_14_DAY_INP4_ICD[1] <= "E10.52 ") OR
 (M1011_14_DAY_INP5_ICD[1] >= "E10.51 " AND
 M1011_14_DAY_INP5_ICD[1] <= "E10.52 ") OR
 (M1011_14_DAY_INP6_ICD[1] >= "E10.51 " AND
 M1011_14_DAY_INP6_ICD[1] <= "E10.52 ") OR

(M1017_CHGREG_ICD1[1] >= "E10.51 " AND
 M1017_CHGREG_ICD1[1] <= "E10.52 ") OR
 (M1017_CHGREG_ICD2[1] >= "E10.51 " AND
 M1017_CHGREG_ICD2[1] <= "E10.52 ") OR
 (M1017_CHGREG_ICD3[1] >= "E10.51 " AND
 M1017_CHGREG_ICD3[1] <= "E10.52 ") OR
 (M1017_CHGREG_ICD4[1] >= "E10.51 " AND
 M1017_CHGREG_ICD4[1] <= "E10.52 ") OR
 (M1017_CHGREG_ICD5[1] >= "E10.51 " AND
 M1017_CHGREG_ICD5[1] <= "E10.52 ") OR
 (M1017_CHGREG_ICD6[1] >= "E10.51 " AND
 M1017_CHGREG_ICD6[1] <= "E10.52 ") OR
 (M1011_14_DAY_INP1_ICD[1] >= "E11.51 " AND
 M1011_14_DAY_INP1_ICD[1] <= "E11.52 ") OR
 (M1011_14_DAY_INP2_ICD[1] >= "E11.51 " AND
 M1011_14_DAY_INP2_ICD[1] <= "E11.52 ") OR
 (M1011_14_DAY_INP3_ICD[1] >= "E11.51 " AND
 M1011_14_DAY_INP3_ICD[1] <= "E11.52 ") OR
 (M1011_14_DAY_INP4_ICD[1] >= "E11.51 " AND
 M1011_14_DAY_INP4_ICD[1] <= "E11.52 ") OR
 (M1011_14_DAY_INP5_ICD[1] >= "E11.51 " AND
 M1011_14_DAY_INP5_ICD[1] <= "E11.52 ") OR
 (M1011_14_DAY_INP6_ICD[1] >= "E11.51 " AND
 M1011_14_DAY_INP6_ICD[1] <= "E11.52 ") OR
 (M1017_CHGREG_ICD1[1] >= "E11.51 " AND
 M1017_CHGREG_ICD1[1] <= "E11.52 ") OR
 (M1017_CHGREG_ICD2[1] >= "E11.51 " AND
 M1017_CHGREG_ICD2[1] <= "E11.52 ") OR
 (M1017_CHGREG_ICD3[1] >= "E11.51 " AND
 M1017_CHGREG_ICD3[1] <= "E11.52 ") OR
 (M1017_CHGREG_ICD4[1] >= "E11.51 " AND
 M1017_CHGREG_ICD4[1] <= "E11.52 ") OR
 (M1017_CHGREG_ICD5[1] >= "E11.51 " AND
 M1017_CHGREG_ICD5[1] <= "E11.52 ") OR
 (M1017_CHGREG_ICD6[1] >= "E11.51 " AND
 M1017_CHGREG_ICD6[1] <= "E11.52 ") OR
 (M1011_14_DAY_INP1_ICD[1] >= "E13.51 " AND
 M1011_14_DAY_INP1_ICD[1] <= "E13.52 ") OR
 (M1011_14_DAY_INP2_ICD[1] >= "E13.51 " AND
 M1011_14_DAY_INP2_ICD[1] <= "E13.52 ") OR

(M1011_14_DAY_INP3_ICD[1] >= "E13.51 " AND
 M1011_14_DAY_INP3_ICD[1] <= "E13.52 ") OR
 (M1011_14_DAY_INP4_ICD[1] >= "E13.51 " AND
 M1011_14_DAY_INP4_ICD[1] <= "E13.52 ") OR
 (M1011_14_DAY_INP5_ICD[1] >= "E13.51 " AND
 M1011_14_DAY_INP5_ICD[1] <= "E13.52 ") OR
 (M1011_14_DAY_INP6_ICD[1] >= "E13.51 " AND
 M1011_14_DAY_INP6_ICD[1] <= "E13.52 ") OR
 (M1017_CHGREG_ICD1[1] >= "E13.51 " AND
 M1017_CHGREG_ICD1[1] <= "E13.52 ") OR
 (M1017_CHGREG_ICD2[1] >= "E13.51 " AND
 M1017_CHGREG_ICD2[1] <= "E13.52 ") OR
 (M1017_CHGREG_ICD3[1] >= "E13.51 " AND
 M1017_CHGREG_ICD3[1] <= "E13.52 ") OR
 (M1017_CHGREG_ICD4[1] >= "E13.51 " AND
 M1017_CHGREG_ICD4[1] <= "E13.52 ") OR
 (M1017_CHGREG_ICD5[1] >= "E13.51 " AND
 M1017_CHGREG_ICD5[1] <= "E13.52 ") OR
 (M1017_CHGREG_ICD6[1] >= "E13.51 " AND
 M1017_CHGREG_ICD6[1] <= "E13.52 ") OR
 (M1011_14_DAY_INP1_ICD[1] >= "R00.0 " AND
 M1011_14_DAY_INP1_ICD[1] <= "R03.1 ") OR
 (M1011_14_DAY_INP2_ICD[1] >= "R00.0 " AND
 M1011_14_DAY_INP2_ICD[1] <= "R03.1 ") OR
 (M1011_14_DAY_INP3_ICD[1] >= "R00.0 " AND
 M1011_14_DAY_INP3_ICD[1] <= "R03.1 ") OR
 (M1011_14_DAY_INP4_ICD[1] >= "R00.0 " AND
 M1011_14_DAY_INP4_ICD[1] <= "R03.1 ") OR
 (M1011_14_DAY_INP5_ICD[1] >= "R00.0 " AND
 M1011_14_DAY_INP5_ICD[1] <= "R03.1 ") OR
 (M1011_14_DAY_INP6_ICD[1] >= "R00.0 " AND
 M1011_14_DAY_INP6_ICD[1] <= "R03.1 ") OR
 (M1017_CHGREG_ICD1[1] >= "R00.0 " AND
 M1017_CHGREG_ICD1[1] <= "R03.1 ") OR
 (M1017_CHGREG_ICD2[1] >= "R00.0 " AND
 M1017_CHGREG_ICD2[1] <= "R03.1 ") OR
 (M1017_CHGREG_ICD3[1] >= "R00.0 " AND
 M1017_CHGREG_ICD3[1] <= "R03.1 ") OR
 (M1017_CHGREG_ICD4[1] >= "R00.0 " AND
 M1017_CHGREG_ICD4[1] <= "R03.1 ") OR


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(M1017_CHGREG_ICD5[1] >= "R00.0 " AND
M1017_CHGREG_ICD5[1] <= "R03.1 ") OR
(M1017_CHGREG_ICD6[1] >= "R00.0 " AND
M1017_CHGREG_ICD6[1] <= "R03.1 "))
THEN
    ACUTE_CARDIO = 1
ELSE
    ACUTE_CARDIO = 0
END IF

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Pulmonary (%)

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IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
    ((MID(M1011_14_DAY_INP1_ICD[1],1,3 = "A15") OR
    (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "A15") OR
    (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "A15") OR
    (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "A15") OR
    (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "A15") OR
    (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "A15") OR
    (MID(M1017_CHGREG_ICD1[1],1,3 = "A15") OR
    (MID(M1017_CHGREG_ICD2[1],1,3 = "A15") OR
    (MID(M1017_CHGREG_ICD3[1],1,3 = "A15") OR
    (MID(M1017_CHGREG_ICD4[1],1,3 = "A15") OR
    (MID(M1017_CHGREG_ICD5[1],1,3 = "A15") OR
    (MID(M1017_CHGREG_ICD6[1],1,3 = "A15") OR
    (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "C30" AND
    MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "C39") OR
    (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "C30" AND
    MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "C39") OR
    (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "C30" AND
    MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "C39") OR
    (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "C30" AND
    MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "C39") OR
    (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "C30" AND
    MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "C39") OR
    (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "C30" AND
    MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "C39") OR
    (MID(M1017_CHGREG_ICD1[1],1,3) >= "C30" AND
    MID(M1017_CHGREG_ICD1[1],1,3) <= "C39") OR
    (MID(M1017_CHGREG_ICD2[1],1,3) >= "C30" AND
    MID(M1017_CHGREG_ICD2[1],1,3) <= "C39") OR

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(MID(M1017_CHGREG_ICD3[1],1,3) >= "C30" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "C39") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >= "C30" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "C39") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >= "C30" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "C39") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) >= "C30" AND
 MID(M1017_CHGREG_ICD6[1],1,3) <= "C39") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "C78") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "C78") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "C78") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "C78") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "C78") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "C78") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "C78") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "C78") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "C78") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "C78") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "C78") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "C78") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "D02") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "D02") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "D02") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "D02") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "D02") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "D02") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "D02") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "D02") OR
 (MID(M1017_CHGREG_ICD3[1],1,3 = "D02") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "D02") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "D02") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "D02") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3 = "D14") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3 = "D14") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3 = "D14") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3 = "D14") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3 = "D14") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3 = "D14") OR
 (MID(M1017_CHGREG_ICD1[1],1,3 = "D14") OR
 (MID(M1017_CHGREG_ICD2[1],1,3 = "D14") OR

(MID(M1017_CHGREG_ICD3[1],1,3 = "D14") OR
 (MID(M1017_CHGREG_ICD4[1],1,3 = "D14") OR
 (MID(M1017_CHGREG_ICD5[1],1,3 = "D14") OR
 (MID(M1017_CHGREG_ICD6[1],1,3 = "D14") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "J00" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "J99") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "J00" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "J99") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "J00" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "J99") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "J00" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "J99") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "J00" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "J99") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "J00" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "J99") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >= "J00" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <= "J99") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >= "J00" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <= "J99") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >= "J00" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <= "J99") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >= "J00" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <= "J99") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >= "J00" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <= "J99") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) >= "J00" AND
 MID(M1017_CHGREG_ICD6[1],1,3) <= "J99") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "R04" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "R09") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "R04" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "R09") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "R04" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "R09") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "R04" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "R09") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "R04" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "R09") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "R04" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "R09") OR

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(MID(M1017_CHGREG_ICD1[1],1,3) >= "R04" AND
MID(M1017_CHGREG_ICD1[1],1,3) <= "R09") OR
(MID(M1017_CHGREG_ICD2[1],1,3) >= "R04" AND
MID(M1017_CHGREG_ICD2[1],1,3) <= "R09") OR
(MID(M1017_CHGREG_ICD3[1],1,3) >= "R04" AND
MID(M1017_CHGREG_ICD3[1],1,3) <= "R09") OR
(MID(M1017_CHGREG_ICD4[1],1,3) >= "R04" AND
MID(M1017_CHGREG_ICD4[1],1,3) <= "R09") OR
(MID(M1017_CHGREG_ICD5[1],1,3) >= "R04" AND
MID(M1017_CHGREG_ICD5[1],1,3) <= "R09") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "R04" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "R09") )
THEN
    ACUTE_LUNG = 1
ELSE
    ACUTE_LUNG = 0
END IF

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Diabetes mellitus (%)

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IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
    ( (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "E10" AND
      MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "E11") OR
      (MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "E10" AND
      MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "E11") OR
      (MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "E10" AND
      MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "E11") OR
      (MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "E10" AND
      MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "E11") OR
      (MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "E10" AND
      MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "E11") OR
      (MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "E10" AND
      MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "E11") OR
      (MID(M1017_CHGREG_ICD1[1],1,3) >= "E10" AND
      MID(M1017_CHGREG_ICD1[1],1,3) <= "E11") OR
      (MID(M1017_CHGREG_ICD2[1],1,3) >= "E10" AND
      MID(M1017_CHGREG_ICD2[1],1,3) <= "E11") OR
      (MID(M1017_CHGREG_ICD3[1],1,3) >= "E10" AND
      MID(M1017_CHGREG_ICD3[1],1,3) <= "E11") OR
      (MID(M1017_CHGREG_ICD4[1],1,3) >= "E10" AND
      MID(M1017_CHGREG_ICD4[1],1,3) <= "E11") OR

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(MID(M1017_CHGREG_ICD5[1],1,3) >= "E10" AND
MID(M1017_CHGREG_ICD5[1],1,3) <= "E11") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "E10" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "E11") OR
(MID(M1011_14_DAY_INP1_ICD[1],1,3 = "E13") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3 = "E13") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3 = "E13") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3 = "E13") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3 = "E13") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3 = "E13") OR
(MID(M1017_CHGREG_ICD1[1],1,3 = "E13") OR
(MID(M1017_CHGREG_ICD2[1],1,3 = "E13") OR
(MID(M1017_CHGREG_ICD3[1],1,3 = "E13") OR
(MID(M1017_CHGREG_ICD4[1],1,3 = "E13") OR
(MID(M1017_CHGREG_ICD5[1],1,3 = "E13") OR
(MID(M1017_CHGREG_ICD6[1],1,3 = "E13"))
THEN
    ACUTE_DIABETES = 1
ELSE
    ACUTE_DIABETES = 0
END IF

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Gastrointestinal disorder (%)

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IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
    (M1630_OSTOMY[1] = 02 OR
    ( (MID(M1011_14_DAY_INP1_ICD[1],1,3) >="A00" AND
MID(M1011_14_DAY_INP1_ICD[1],1,3) <="A09") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3) >="A00" AND
MID(M1011_14_DAY_INP2_ICD[1],1,3) <="A09") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3) >="A00" AND
MID(M1011_14_DAY_INP3_ICD[1],1,3) <="A09") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3) >="A00" AND
MID(M1011_14_DAY_INP4_ICD[1],1,3) <="A09") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3) >="A00" AND
MID(M1011_14_DAY_INP5_ICD[1],1,3) <="A09") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3) >="A00" AND
MID(M1011_14_DAY_INP6_ICD[1],1,3) <="A09") OR
(MID(M1017_CHGREG_ICD1[1],1,3) >="A00" AND
MID(M1017_CHGREG_ICD1[1],1,3) <="A09") OR

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(MID(M1017_CHGREG_ICD2[1],1,3) >="A00" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <="A09") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >="A00" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <="A09") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >="A00" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <="A09") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >="A00" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <="A09") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) >="A00" AND
 MID(M1017_CHGREG_ICD6[1],1,3) <="A09") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >="B65" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <="B83") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >="B65" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <="B83") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >="B65" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <="B83") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >="B65" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <="B83") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >="B65" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <="B83") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >="B65" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <="B83") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >="B65" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <="B83") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >="B65" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <="B83") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >="B65" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <="B83") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >="B65" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <="B83") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >="B65" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <="B83") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) >="B65" AND
 MID(M1017_CHGREG_ICD6[1],1,3) <="B83") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >="C15" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <="C26") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >="C15" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <="C26") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >="C15" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <="C26") OR

(MID(M1011_14_DAY_INP4_ICD[1],1,3) >="C15" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <="C26") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >="C15" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <="C26") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >="C15" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <="C26") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >="C15" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <="C26") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >="C15" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <="C26") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >="C15" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <="C26") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >="C15" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <="C26") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >="C15" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <="C26") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) >="C15" AND
 MID(M1017_CHGREG_ICD6[1],1,3) <="C26") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >="D00" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <="D01") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >="D00" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <="D01") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >="D00" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <="D01") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >="D00" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <="D01") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >="D00" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <="D01") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >="D00" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <="D01") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >="D00" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <="D01") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >="D00" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <="D01") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >="D00" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <="D01") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >="D00" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <="D01") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >="D00" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <="D01") OR

(MID(M1017_CHGREG_ICD6[1],1,3) >="D00" AND
 MID(M1017_CHGREG_ICD6[1],1,3) <="D01") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3="D13") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3="D13") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3="D13") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3="D13") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3="D13") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3="D13") OR
 (MID(M1017_CHGREG_ICD1[1],1,3="D13") OR
 (MID(M1017_CHGREG_ICD2[1],1,3="D13") OR
 (MID(M1017_CHGREG_ICD3[1],1,3="D13") OR
 (MID(M1017_CHGREG_ICD4[1],1,3="D13") OR
 (MID(M1017_CHGREG_ICD5[1],1,3="D13") OR
 (MID(M1017_CHGREG_ICD6[1],1,3="D13") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >="K20" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <="K31") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >="K20" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <="K31") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >="K20" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <="K31") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >="K20" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <="K31") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >="K20" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <="K31") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >="K20" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <="K31") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >="K20" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <="K31") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >="K20" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <="K31") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >="K20" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <="K31") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >="K20" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <="K31") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >="K20" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <="K31") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) >="K20" AND
 MID(M1017_CHGREG_ICD6[1],1,3) <="K31") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >="K38" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <="K94") OR

(MID(M1011_14_DAY_INP2_ICD[1],1,3) >="K38" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <="K94") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >="K38" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <="K94") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >="K38" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <="K94") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >="K38" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <="K94") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >="K38" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <="K94") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >="K38" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <="K94") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >="K38" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <="K94") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >="K38" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <="K94") OR
 (MID(M1017_CHGREG_ICD4[1],1,3) >="K38" AND
 MID(M1017_CHGREG_ICD4[1],1,3) <="K94") OR
 (MID(M1017_CHGREG_ICD5[1],1,3) >="K38" AND
 MID(M1017_CHGREG_ICD5[1],1,3) <="K94") OR
 (MID(M1017_CHGREG_ICD6[1],1,3) >="K38" AND
 MID(M1017_CHGREG_ICD6[1],1,3) <="K94") OR
 (MID(M1011_14_DAY_INP1_ICD[1],1,3) >="R10" AND
 MID(M1011_14_DAY_INP1_ICD[1],1,3) <="R19") OR
 (MID(M1011_14_DAY_INP2_ICD[1],1,3) >="R10" AND
 MID(M1011_14_DAY_INP2_ICD[1],1,3) <="R19") OR
 (MID(M1011_14_DAY_INP3_ICD[1],1,3) >="R10" AND
 MID(M1011_14_DAY_INP3_ICD[1],1,3) <="R19") OR
 (MID(M1011_14_DAY_INP4_ICD[1],1,3) >="R10" AND
 MID(M1011_14_DAY_INP4_ICD[1],1,3) <="R19") OR
 (MID(M1011_14_DAY_INP5_ICD[1],1,3) >="R10" AND
 MID(M1011_14_DAY_INP5_ICD[1],1,3) <="R19") OR
 (MID(M1011_14_DAY_INP6_ICD[1],1,3) >="R10" AND
 MID(M1011_14_DAY_INP6_ICD[1],1,3) <="R19") OR
 (MID(M1017_CHGREG_ICD1[1],1,3) >="R10" AND
 MID(M1017_CHGREG_ICD1[1],1,3) <="R19") OR
 (MID(M1017_CHGREG_ICD2[1],1,3) >="R10" AND
 MID(M1017_CHGREG_ICD2[1],1,3) <="R19") OR
 (MID(M1017_CHGREG_ICD3[1],1,3) >="R10" AND
 MID(M1017_CHGREG_ICD3[1],1,3) <="R19") OR

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(MID(M1017_CHGREG_ICD4[1],1,3) >="R10" AND
MID(M1017_CHGREG_ICD4[1],1,3) <="R19") OR
(MID(M1017_CHGREG_ICD5[1],1,3) >="R10" AND
MID(M1017_CHGREG_ICD5[1],1,3) <="R19") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >="R10" AND
MID(M1017_CHGREG_ICD6[1],1,3) <="R19") OR
(MID(M1011_14_DAY_INP1_ICD[1],1,3="S36") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3="S36") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3="S36") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3="S36") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3="S36") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3="S36") OR
(MID(M1017_CHGREG_ICD1[1],1,3="S36") OR
(MID(M1017_CHGREG_ICD2[1],1,3="S36") OR
(MID(M1017_CHGREG_ICD3[1],1,3="S36") OR
(MID(M1017_CHGREG_ICD4[1],1,3="S36") OR
(MID(M1017_CHGREG_ICD5[1],1,3="S36") OR
(MID(M1017_CHGREG_ICD6[1],1,3="S36") )
THEN
    ACUTE_GI = 1
ELSE
    ACUTE_GI = 0
END IF

```

Contagious/communicable (%)

```

IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
( (MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "A00" AND
MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "B89") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "A00" AND
MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "B89") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "A00" AND
MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "B89") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "A00" AND
MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "B89") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "A00" AND
MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "B89") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "A00" AND
MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "B89") OR
(MID(M1017_CHGREG_ICD1[1],1,3) >= "A00" AND
MID(M1017_CHGREG_ICD1[1],1,3) <= "B89") OR

```

```

(MID(M1017_CHGREG_ICD2[1],1,3) >= "A00" AND
MID(M1017_CHGREG_ICD2[1],1,3) <= "B89") OR
(MID(M1017_CHGREG_ICD3[1],1,3) >= "A00" AND
MID(M1017_CHGREG_ICD3[1],1,3) <= "B89") OR
(MID(M1017_CHGREG_ICD4[1],1,3) >= "A00" AND
MID(M1017_CHGREG_ICD4[1],1,3) <= "B89") OR
(MID(M1017_CHGREG_ICD5[1],1,3) >= "A00" AND
MID(M1017_CHGREG_ICD5[1],1,3) <= "B89") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "A00" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "B89") OR
(MID(M1011_14_DAY_INP1_ICD[1],1,3) >= "B95" AND
MID(M1011_14_DAY_INP1_ICD[1],1,3) <= "B99") OR
(MID(M1011_14_DAY_INP2_ICD[1],1,3) >= "B95" AND
MID(M1011_14_DAY_INP2_ICD[1],1,3) <= "B99") OR
(MID(M1011_14_DAY_INP3_ICD[1],1,3) >= "B95" AND
MID(M1011_14_DAY_INP3_ICD[1],1,3) <= "B99") OR
(MID(M1011_14_DAY_INP4_ICD[1],1,3) >= "B95" AND
MID(M1011_14_DAY_INP4_ICD[1],1,3) <= "B99") OR
(MID(M1011_14_DAY_INP5_ICD[1],1,3) >= "B95" AND
MID(M1011_14_DAY_INP5_ICD[1],1,3) <= "B99") OR
(MID(M1011_14_DAY_INP6_ICD[1],1,3) >= "B95" AND
MID(M1011_14_DAY_INP6_ICD[1],1,3) <= "B99") OR
(MID(M1017_CHGREG_ICD1[1],1,3) >= "B95" AND
MID(M1017_CHGREG_ICD1[1],1,3) <= "B99") OR
(MID(M1017_CHGREG_ICD2[1],1,3) >= "B95" AND
MID(M1017_CHGREG_ICD2[1],1,3) <= "B99") OR
(MID(M1017_CHGREG_ICD3[1],1,3) >= "B95" AND
MID(M1017_CHGREG_ICD3[1],1,3) <= "B99") OR
(MID(M1017_CHGREG_ICD4[1],1,3) >= "B95" AND
MID(M1017_CHGREG_ICD4[1],1,3) <= "B99") OR
(MID(M1017_CHGREG_ICD5[1],1,3) >= "B95" AND
MID(M1017_CHGREG_ICD5[1],1,3) <= "B99") OR
(MID(M1017_CHGREG_ICD6[1],1,3) >= "B95" AND
MID(M1017_CHGREG_ICD6[1],1,3) <= "B99") )
THEN
    ACUTE_CONTAGIOUS = 1
ELSE
    ACUTE_CONTAGIOUS = 0
END IF

```

Home Care Diagnoses

*Note: Several intermediate variables are calculated for use in the calculation of these measures.
Only home care diagnoses with a severity rating greater than zero (asymptomatic) are used.*

IF M1021_PRIMARY_DIAG_SEVERITY[1] = 00

THEN

HC_DIAG1 = BLANK

HC_DIAG2 = BLANK

HC_DIAG3 = BLANK

HC_DIAG4 = BLANK

HC_DIAG5 = BLANK

HC_DIAG6 = BLANK

OPT_DIAG1 = BLANK

OPT2_DIAG1 = BLANK

OPT_DIAG2 = BLANK

OPT2_DIAG2 = BLANK

OPT_DIAG3 = BLANK

OPT2_DIAG3 = BLANK

OPT_DIAG4 = BLANK

OPT2_DIAG4 = BLANK

OPT_DIAG5 = BLANK

OPT2_DIAG5 = BLANK

OPT_DIAG6 = BLANK

OPT2_DIAG6 = BLANK

ELSE

HC_DIAG1 = M1021_PRIMARY_DIAG_ICD[1]

OPT_DIAG1 = M1025_OPT_DIAG_ICD_A3[1]

OPT2_DIAG1 = M1025_OPT_DIAG_ICD_A4[1]

IF M1023_OTH_DIAG1_SEVERITY[1] > 00

THEN

HC_DIAG2 = M1023_OTH_DIAG1_ICD[1]

ELSE

HC_DIAG2 = BLANK

END IF

OPT_DIAG2 = M1025_OPT_DIAG_ICD_B3 [1]

OPT2_DIAG2 = M1025_OPT_DIAG_ICD_B4[1]

IF M1023_OTH_DIAG2_SEVERITY[1] > 00

THEN

HC_DIAG3 = M1023_OTH_DIAG2_ICD[1]

ELSE

HC_DIAG3 = BLANK

```

END IF
OPT_DIAG3 = M1025_OPT_DIAG_ICD_C3 [1]
OPT2_DIAG3 = M1025_OPT_DIAG_ICD_C4[1]
IF M1023_OTH_DIAG3_SEVERITY[1] > 00
THEN
    HC_DIAG4 = M1023_OTH_DIAG3_ICD [1]
ELSE
    HC_DIAG4 = BLANK
END IF
OPT_DIAG4 = M1025_OPT_DIAG_ICD_D3 [1]
OPT2_DIAG4 = M1025_OPT_DIAG_ICD_D4[1]
IF M1023_OTH_DIAG4_SEVERITY[1] > 00
THEN
    HC_DIAG5 = M1023_OTH_DIAG4_ICD[1]
ELSE
    HC_DIAG5 = BLANK
END IF
OPT_DIAG5 = M1025_OPT_DIAG_ICD_E3 [1]
OPT2_DIAG5 = M1025_OPT_DIAG_ICD_E4[1]
IF M1023_OTH_DIAG5_SEVERITY[1] > 00
THEN
    HC_DIAG6 = M1023_OTH_DIAG5_ICD[1]
ELSE
    HC_DIAG6 = BLANK
END IF
OPT_DIAG6 = M1025_OPT_DIAG_ICD_F3 [1]
OPT2_DIAG6 = M1025_OPT_DIAG_ICD_F4[1]
END IF

```

Infections/parasitic diseases (%)

```

IF (MID(HC_DIAG1,1,3) >= "A00" AND MID(HC_DIAG1,1,3) <= "B99") OR
(MID(HC_DIAG2,1,3) >= "A00" AND MID(HC_DIAG2,1,3) <= "B99") OR
(MID(HC_DIAG3,1,3) >= "A00" AND MID(HC_DIAG3,1,3) <= "B99") OR
(MID(HC_DIAG4,1,3) >= "A00" AND MID(HC_DIAG4,1,3) <= "B99") OR
(MID(HC_DIAG5,1,3) >= "A00" AND MID(HC_DIAG5,1,3) <= "B99") OR
(MID(HC_DIAG6,1,3) >= "A00" AND MID(HC_DIAG6,1,3) <= "B99") OR
(MID(OPT_DIAG1,1,3) >= "A00" AND MID(OPT_DIAG1,1,3) <= "B99") OR
(MID(OPT2_DIAG1,1,3) >= "A00" AND MID(OPT2_DIAG1,1,3) <= "B99") OR
(MID(OPT_DIAG2,1,3) >= "A00" AND MID(OPT_DIAG2,1,3) <= "B99") OR
(MID(OPT2_DIAG2,1,3) >= "A00" AND MID(OPT2_DIAG2,1,3) <= "B99") OR

```

```

(MID(OPT_DIAG3,1,3) >= "A00" AND MID(OPT_DIAG3,1,3) <= "B99") OR
(MID(OPT2_DIAG3,1,3) >= "A00" AND MID(OPT2_DIAG3,1,3) <= "B99") OR
(MID(OPT_DIAG4,1,3) >= "A00" AND MID(OPT_DIAG4,1,3) <= "B99") OR
(MID(OPT2_DIAG4,1,3) >= "A00" AND MID(OPT2_DIAG4,1,3) <= "B99") OR
(MID(OPT_DIAG5,1,3) >= "A00" AND MID(OPT_DIAG5,1,3) <= "B99") OR
(MID(OPT2_DIAG5,1,3) >= "A00" AND MID(OPT2_DIAG5,1,3) <= "B99") OR
(MID(OPT_DIAG6,1,3) >= "A00" AND MID(OPT_DIAG6,1,3) <= "B99") OR
(MID(OPT2_DIAG6,1,3) >= "A00" AND MID(OPT2_DIAG6,1,3) <= "B99")
THEN
    HC_DX_INFECT = 1
ELSE
    HC_DX_INFECT = 0
END IF

```

Neoplasms (%)

```

IF (MID(HC_DIAG1,1,3) >= "C00" AND MID(HC_DIAG1,1,3) <= "D49") OR
(MID(HC_DIAG2,1,3) >= "C00" AND MID(HC_DIAG2,1,3) <= "D49") OR
(MID(HC_DIAG3,1,3) >= "C00" AND MID(HC_DIAG3,1,3) <= "D49") OR
(MID(HC_DIAG4,1,3) >= "C00" AND MID(HC_DIAG4,1,3) <= "D49") OR
(MID(HC_DIAG5,1,3) >= "C00" AND MID(HC_DIAG5,1,3) <= "D49") OR
(MID(HC_DIAG6,1,3) >= "C00" AND MID(HC_DIAG6,1,3) <= "D49") OR
(MID(OPT_DIAG1,1,3) >= "C00" AND MID(OPT_DIAG1,1,3) <= "D49") OR
(MID(OPT2_DIAG1,1,3) >= "C00" AND MID(OPT2_DIAG1,1,3) <= "D49") OR
(MID(OPT_DIAG2,1,3) >= "C00" AND MID(OPT_DIAG2,1,3) <= "D49") OR
(MID(OPT2_DIAG2,1,3) >= "C00" AND MID(OPT2_DIAG2,1,3) <= "D49") OR
(MID(OPT_DIAG3,1,3) >= "C00" AND MID(OPT_DIAG3,1,3) <= "D49") OR
(MID(OPT2_DIAG3,1,3) >= "C00" AND MID(OPT2_DIAG3,1,3) <= "D49") OR
(MID(OPT_DIAG4,1,3) >= "C00" AND MID(OPT_DIAG4,1,3) <= "D49") OR
(MID(OPT2_DIAG4,1,3) >= "C00" AND MID(OPT2_DIAG4,1,3) <= "D49") OR
(MID(OPT_DIAG5,1,3) >= "C00" AND MID(OPT_DIAG5,1,3) <= "D49") OR
(MID(OPT2_DIAG5,1,3) >= "C00" AND MID(OPT2_DIAG5,1,3) <= "D49") OR
(MID(OPT_DIAG6,1,3) >= "C00" AND MID(OPT_DIAG6,1,3) <= "D49") OR
(MID(OPT2_DIAG6,1,3) >= "C00" AND MID(OPT2_DIAG6,1,3) <= "D49")
THEN
    HC_DX_NEOPLASM = 1
ELSE
    HC_DX_NEOPLASM = 0
END IF

```

Endocrine/nutrit./metabolic (%)

IF (MID(HC_DIAG1,1,3) >= "D80" **AND** MID(HC_DIAG1,1,3) <= "E89") **OR**
(MID(HC_DIAG1,1,3) = "M10") **OR**
(MID(HC_DIAG1,1,3) = "M1A") **OR**
(MID(HC_DIAG2,1,3) >= "D80" **AND** MID(HC_DIAG2,1,3) <= "E89") **OR**
(MID(HC_DIAG2,1,3) = "M10") **OR**
(MID(HC_DIAG2,1,3) = "M1A") **OR**
(MID(HC_DIAG3,1,3) >= "D80" **AND** MID(HC_DIAG3,1,3) <= "E89") **OR**
(MID(HC_DIAG3,1,3) = "M10") **OR**
(MID(HC_DIAG3,1,3) = "M1A") **OR**
(MID(HC_DIAG4,1,3) >= "D80" **AND** MID(HC_DIAG4,1,3) <= "E89") **OR**
(MID(HC_DIAG4,1,3) = "M10") **OR**
(MID(HC_DIAG4,1,3) = "M1A") **OR**
(MID(HC_DIAG5,1,3) >= "D80" **AND** MID(HC_DIAG5,1,3) <= "E89") **OR**
(MID(HC_DIAG5,1,3) = "M10") **OR**
(MID(HC_DIAG5,1,3) = "M1A") **OR**
(MID(HC_DIAG6,1,3) >= "D80" **AND** MID(HC_DIAG6,1,3) <= "E89") **OR**
(MID(HC_DIAG6,1,3) = "M10") **OR**
(MID(HC_DIAG6,1,3) = "M1A") **OR**
(MID(OPT_DIAG1,1,3) >= "D80" **AND** MID(OPT_DIAG1,1,3) <= "E89") **OR**
(MID(OPT_DIAG1,1,3) = "M10") **OR**
(MID(OPT_DIAG1,1,3) = "M1A") **OR**
(MID(OPT2_DIAG1,1,3) >= "D80" **AND** MID(OPT2_DIAG1,1,3) <= "E89") **OR**
(MID(OPT2_DIAG1,1,3) = "M10") **OR**
(MID(OPT2_DIAG1,1,3) = "M1A") **OR**
(MID(OPT_DIAG2,1,3) >= "D80" **AND** MID(OPT_DIAG2,1,3) <= "E89") **OR**
(MID(OPT_DIAG2,1,3) = "M10") **OR**
(MID(OPT_DIAG2,1,3) = "M1A") **OR**
(MID(OPT2_DIAG2,1,3) >= "D80" **AND** MID(OPT2_DIAG2,1,3) <= "E89") **OR**
(MID(OPT2_DIAG2,1,3) = "M10") **OR**
(MID(OPT2_DIAG2,1,3) = "M1A") **OR**
(MID(OPT_DIAG3,1,3) >= "D80" **AND** MID(OPT_DIAG3,1,3) <= "E89") **OR**
(MID(OPT_DIAG3,1,3) = "M10") **OR**
(MID(OPT_DIAG3,1,3) = "M1A") **OR**
(MID(OPT2_DIAG3,1,3) >= "D80" **AND** MID(OPT2_DIAG3,1,3) <= "E89") **OR**
(MID(OPT2_DIAG3,1,3) = "M10") **OR**
(MID(OPT2_DIAG3,1,3) = "M1A") **OR**
(MID(OPT_DIAG4,1,3) >= "D80" **AND** MID(OPT_DIAG4,1,3) <= "E89") **OR**
(MID(OPT_DIAG4,1,3) = "M10") **OR**
(MID(OPT_DIAG4,1,3) = "M1A") **OR**

```

(MID(OPT2_DIAG4,1,3) >= "D80" AND MID(OPT2_DIAG4,1,3) <= "E89") OR
(MID(OPT2_DIAG4,1,3) = "M10") OR
(MID(OPT2_DIAG4,1,3) = "M1A") OR
(MID(OPT_DIAG5,1,3) >= "D80" AND MID(OPT_DIAG5,1,3) <= "E89") OR
(MID(OPT_DIAG5,1,3) = "M10") OR
(MID(OPT_DIAG5,1,3) = "M1A") OR
(MID(OPT2_DIAG5,1,3) >= "D80" AND MID(OPT2_DIAG5,1,3) <= "E89") OR
(MID(OPT2_DIAG5,1,3) = "M10") OR
(MID(OPT2_DIAG5,1,3) = "M1A") OR
(MID(OPT_DIAG6,1,3) >= "D80" AND MID(OPT_DIAG6,1,3) <= "E89") OR
(MID(OPT_DIAG6,1,3) = "M10") OR
(MID(OPT_DIAG6,1,3) = "M1A") OR
(MID(OPT2_DIAG6,1,3) >= "D80" AND MID(OPT2_DIAG6,1,3) <= "E89") OR
(MID(OPT2_DIAG6,1,3) = "M10") OR
(MID(OPT2_DIAG6,1,3) = "M1A")
THEN
    HC_DX_ENDOCRINE = 1
ELSE
    HC_DX_ENDOCRINE = 0
END IF

```

Blood diseases (%)

```

IF (MID(HC_DIAG1,1,3) >= "D50" AND MID(HC_DIAG1,1,3) <= "D79") OR
(MID(HC_DIAG2,1,3) >= "D50" AND MID(HC_DIAG2,1,3) <= "D79") OR
(MID(HC_DIAG3,1,3) >= "D50" AND MID(HC_DIAG3,1,3) <= "D79") OR
(MID(HC_DIAG4,1,3) >= "D50" AND MID(HC_DIAG4,1,3) <= "D79") OR
(MID(HC_DIAG5,1,3) >= "D50" AND MID(HC_DIAG5,1,3) <= "D79") OR
(MID(HC_DIAG6,1,3) >= "D50" AND MID(HC_DIAG6,1,3) <= "D79") OR
(MID(OPT_DIAG1,1,3) >= "D50" AND MID(OPT_DIAG1,1,3) <= "D79") OR
(MID(OPT2_DIAG1,1,3) >= "D50" AND MID(OPT2_DIAG1,1,3) <= "D79") OR
(MID(OPT_DIAG2,1,3) >= "D50" AND MID(OPT_DIAG2,1,3) <= "D79") OR
(MID(OPT2_DIAG2,1,3) >= "D50" AND MID(OPT2_DIAG2,1,3) <= "D79") OR
(MID(OPT_DIAG3,1,3) >= "D50" AND MID(OPT_DIAG3,1,3) <= "D79") OR
(MID(OPT2_DIAG3,1,3) >= "D50" AND MID(OPT2_DIAG3,1,3) <= "D79") OR
(MID(OPT_DIAG4,1,3) >= "D50" AND MID(OPT_DIAG4,1,3) <= "D79") OR
(MID(OPT2_DIAG4,1,3) >= "D50" AND MID(OPT2_DIAG4,1,3) <= "D79") OR
(MID(OPT_DIAG5,1,3) >= "D50" AND MID(OPT_DIAG5,1,3) <= "D79") OR
(MID(OPT2_DIAG5,1,3) >= "D50" AND MID(OPT2_DIAG5,1,3) <= "D79") OR
(MID(OPT_DIAG6,1,3) >= "D50" AND MID(OPT_DIAG6,1,3) <= "D79") OR
(MID(OPT2_DIAG6,1,3) >= "D50" AND MID(OPT2_DIAG6,1,3) <= "D79")

```



```

THEN
    HC_DX_BLOOD = 1
ELSE
    HC_DX_BLOOD = 0
END IF

```

Mental diseases (%)

```

IF (MID(HC_DIAG1,1,3) >= "F00" AND MID(HC_DIAG1,1,3) <= "F99") OR
   (MID(HC_DIAG2,1,3) >= "F00" AND MID(HC_DIAG2,1,3) <= "F99") OR
   (MID(HC_DIAG3,1,3) >= "F00" AND MID(HC_DIAG3,1,3) <= "F99") OR
   (MID(HC_DIAG4,1,3) >= "F00" AND MID(HC_DIAG4,1,3) <= "F99") OR
   (MID(HC_DIAG5,1,3) >= "F00" AND MID(HC_DIAG5,1,3) <= "F99") OR
   (MID(HC_DIAG6,1,3) >= "F00" AND MID(HC_DIAG6,1,3) <= "F99") OR
   (MID(OPT_DIAG1,1,3) >= "F00" AND MID(OPT_DIAG1,1,3) <= "F99") OR
   (MID(OPT2_DIAG1,1,3) >= "F00" AND MID(OPT2_DIAG1,1,3) <= "F99") OR
   (MID(OPT_DIAG2,1,3) >= "F00" AND MID(OPT_DIAG2,1,3) <= "F99") OR
   (MID(OPT2_DIAG2,1,3) >= "F00" AND MID(OPT2_DIAG2,1,3) <= "F99") OR
   (MID(OPT_DIAG3,1,3) >= "F00" AND MID(OPT_DIAG3,1,3) <= "F99") OR
   (MID(OPT2_DIAG3,1,3) >= "F00" AND MID(OPT2_DIAG3,1,3) <= "F99") OR
   (MID(OPT_DIAG4,1,3) >= "F00" AND MID(OPT_DIAG4,1,3) <= "F99") OR
   (MID(OPT2_DIAG4,1,3) >= "F00" AND MID(OPT2_DIAG4,1,3) <= "F99") OR
   (MID(OPT_DIAG5,1,3) >= "F00" AND MID(OPT_DIAG5,1,3) <= "F99") OR
   (MID(OPT2_DIAG5,1,3) >= "F00" AND MID(OPT2_DIAG5,1,3) <= "F99") OR
   (MID(OPT_DIAG6,1,3) >= "F00" AND MID(OPT_DIAG6,1,3) <= "F99") OR
   (MID(OPT2_DIAG6,1,3) >= "F00" AND MID(OPT2_DIAG6,1,3) <= "F99")
THEN
    HC_DX_MENTAL = 1
ELSE
    HC_DX_MENTAL = 0
END IF

```

Nervous system diseases (%)

```

IF ( (MID(HC_DIAG1,1,3) >= "G00" AND MID(HC_DIAG1,1,3) <= "H95") AND
    NOT ( (HC_DIAG1 >= "G45.0" AND HC_DIAG1 <= "G46.8") OR
          (HC_DIAG1 = "G47.00") OR
          (HC_DIAG1 = "G47.30") OR
          (HC_DIAG1 = "G93.3"))) OR
   (HC_DIAG1 >= "E08.311" AND HC_DIAG1 <= "E08.49") OR
   (HC_DIAG1 >= "E09.311" AND HC_DIAG1 <= "E09.49") OR
   (HC_DIAG1 >= "E10.311" AND HC_DIAG1 <= "E10.49") OR

```

(HC_DIAG1>= "E11.311" AND HC_DIAG1 <= "E11.49") OR
 (HC_DIAG1>= "E13.311" AND HC_DIAG1 <= "E13.49") OR
 (HC_DIAG1 = "R52.") OR
 ((MID(HC_DIAG2,1,3) >= "G00" AND MID(HC_DIAG2,1,3) <= "H95") AND
 NOT ((HC_DIAG2>= "G45.0" AND HC_DIAG2 <= "G46.8") OR
 (HC_DIAG2 = "G47.00") OR
 (HC_DIAG2 = "G47.30") OR
 (HC_DIAG2 = "G93.3")))) OR
 (HC_DIAG2>= "E08.311" AND HC_DIAG2 <= "E08.49") OR
 (HC_DIAG2>= "E09.311" AND HC_DIAG2 <= "E09.49") OR
 (HC_DIAG2>= "E10.311" AND HC_DIAG2 <= "E10.49") OR
 (HC_DIAG2>= "E11.311" AND HC_DIAG2 <= "E11.49") OR
 (HC_DIAG2>= "E13.311" AND HC_DIAG2 <= "E13.49") OR
 (HC_DIAG2 = "R52.") OR
 ((MID(HC_DIAG3,1,3) >= "G00" AND MID(HC_DIAG3,1,3) <= "H95") AND
 NOT ((HC_DIAG3>= "G45.0" AND HC_DIAG3 <= "G46.8") OR
 (HC_DIAG3 = "G47.00") OR
 (HC_DIAG3 = "G47.30") OR
 (HC_DIAG3 = "G93.3")))) OR
 (HC_DIAG3>= "E08.311" AND HC_DIAG3 <= "E08.49") OR
 (HC_DIAG3>= "E09.311" AND HC_DIAG3 <= "E09.49") OR
 (HC_DIAG3>= "E10.311" AND HC_DIAG3 <= "E10.49") OR
 (HC_DIAG3>= "E11.311" AND HC_DIAG3 <= "E11.49") OR
 (HC_DIAG3>= "E13.311" AND HC_DIAG3 <= "E13.49") OR
 (HC_DIAG3 = "R52.") OR
 ((MID(HC_DIAG4,1,3) >= "G00" AND MID(HC_DIAG4,1,3) <= "H95") AND
 NOT ((HC_DIAG4>= "G45.0" AND HC_DIAG4 <= "G46.8") OR
 (HC_DIAG4 = "G47.00") OR
 (HC_DIAG4 = "G47.30") OR
 (HC_DIAG4 = "G93.3")))) OR
 (HC_DIAG4>= "E08.311" AND HC_DIAG4 <= "E08.49") OR
 (HC_DIAG4>= "E09.311" AND HC_DIAG4 <= "E09.49") OR
 (HC_DIAG4>= "E10.311" AND HC_DIAG4 <= "E10.49") OR
 (HC_DIAG4>= "E11.311" AND HC_DIAG4 <= "E11.49") OR
 (HC_DIAG4>= "E13.311" AND HC_DIAG4 <= "E13.49") OR
 (HC_DIAG4 = "R52.") OR
 ((MID(HC_DIAG5,1,3) >= "G00" AND MID(HC_DIAG5,1,3) <= "H95") AND
 NOT ((HC_DIAG5>= "G45.0" AND HC_DIAG5 <= "G46.8") OR
 (HC_DIAG5 = "G47.00") OR
 (HC_DIAG5 = "G47.30") OR

(HC_DIAG5 = "G93.3")) OR
 (HC_DIAG5>= "E08.311" AND HC_DIAG5 <= "E08.49") OR
 (HC_DIAG5>= "E09.311" AND HC_DIAG5 <= "E09.49") OR
 (HC_DIAG5>= "E10.311" AND HC_DIAG5 <= "E10.49") OR
 (HC_DIAG5>= "E11.311" AND HC_DIAG5 <= "E11.49") OR
 (HC_DIAG5>= "E13.311" AND HC_DIAG5 <= "E13.49") OR
 (HC_DIAG5 = "R52.") OR
 ((MID(HC_DIAG6,1,3) >= "G00" AND MID(HC_DIAG6,1,3) <= "H95") AND
 NOT ((HC_DIAG6>= "G45.0" AND HC_DIAG6 <= "G46.8") OR
 (HC_DIAG6 = "G47.00") OR
 (HC_DIAG6 = "G47.30") OR
 (HC_DIAG6 = "G93.3")) OR
 (HC_DIAG6>= "E08.311" AND HC_DIAG6 <= "E08.49") OR
 (HC_DIAG6>= "E09.311" AND HC_DIAG6 <= "E09.49") OR
 (HC_DIAG6>= "E10.311" AND HC_DIAG6 <= "E10.49") OR
 (HC_DIAG6>= "E11.311" AND HC_DIAG6 <= "E11.49") OR
 (HC_DIAG6>= "E13.311" AND HC_DIAG6 <= "E13.49") OR
 (HC_DIAG6 = "R52.") OR
 ((MID(OPT_DIAG1,1,3) >= "G00" AND MID(OPT_DIAG1,1,3) <= "H95") AND
 NOT ((OPT_DIAG1>= "G45.0" AND OPT_DIAG1 <= "G46.8") OR
 (OPT_DIAG1 = "G47.00") OR
 (OPT_DIAG1 = "G47.30") OR
 (OPT_DIAG1 = "G93.3")) OR
 (OPT_DIAG1>= "E08.311" AND OPT_DIAG1 <= "E08.49") OR
 (OPT_DIAG1>= "E09.311" AND OPT_DIAG1 <= "E09.49") OR
 (OPT_DIAG1>= "E10.311" AND OPT_DIAG1 <= "E10.49") OR
 (OPT_DIAG1>= "E11.311" AND OPT_DIAG1 <= "E11.49") OR
 (OPT_DIAG1>= "E13.311" AND OPT_DIAG1 <= "E13.49") OR
 (OPT_DIAG1 = "R52.") OR
 ((MID(OPT2_DIAG1,1,3) >= "G00" AND MID(OPT2_DIAG1,1,3) <= "H95") AND
 NOT ((OPT2_DIAG1>= "G45.0" AND OPT2_DIAG1 <= "G46.8") OR
 (OPT2_DIAG1 = "G47.00") OR
 (OPT2_DIAG1 = "G47.30") OR
 (OPT2_DIAG1 = "G93.3")) OR
 (OPT2_DIAG1>= "E08.311" AND OPT2_DIAG1 <= "E08.49") OR
 (OPT2_DIAG1>= "E09.311" AND OPT2_DIAG1 <= "E09.49") OR
 (OPT2_DIAG1>= "E10.311" AND OPT2_DIAG1 <= "E10.49") OR
 (OPT2_DIAG1>= "E11.311" AND OPT2_DIAG1 <= "E11.49") OR
 (OPT2_DIAG1>= "E13.311" AND OPT2_DIAG1 <= "E13.49") OR
 (OPT2_DIAG1 = "R52.") OR

((MID(OPT_DIAG2,1,3) >= "G00" AND MID(OPT_DIAG2,1,3) <= "H95") AND
 NOT ((OPT_DIAG2>= "G45.0" AND OPT_DIAG2 <= "G46.8") OR
 (OPT_DIAG2 = "G47.00") OR
 (OPT_DIAG2 = "G47.30") OR
 (OPT_DIAG2 = "G93.3")))) OR
 (OPT_DIAG2>= "E08.311" AND OPT_DIAG2 <= "E08.49") OR
 (OPT_DIAG2>= "E09.311" AND OPT_DIAG2 <= "E09.49") OR
 (OPT_DIAG2>= "E10.311" AND OPT_DIAG2 <= "E10.49") OR
 (OPT_DIAG2>= "E11.311" AND OPT_DIAG2 <= "E11.49") OR
 (OPT_DIAG2>= "E13.311" AND OPT_DIAG2 <= "E13.49") OR
 (OPT_DIAG2 = "R52.") OR
 ((MID(OPT2_DIAG2,1,3) >= "G00" AND MID(OPT2_DIAG2,1,3) <= "H95") AND
 NOT ((OPT2_DIAG2>= "G45.0" AND OPT2_DIAG2 <= "G46.8") OR
 (OPT2_DIAG2 = "G47.00") OR
 (OPT2_DIAG2 = "G47.30") OR
 (OPT2_DIAG2 = "G93.3")))) OR
 (OPT2_DIAG2>= "E08.311" AND OPT2_DIAG2 <= "E08.49") OR
 (OPT2_DIAG2>= "E09.311" AND OPT2_DIAG2 <= "E09.49") OR
 (OPT2_DIAG2>= "E10.311" AND OPT2_DIAG2 <= "E10.49") OR
 (OPT2_DIAG2>= "E11.311" AND OPT2_DIAG2 <= "E11.49") OR
 (OPT2_DIAG2>= "E13.311" AND OPT2_DIAG2 <= "E13.49") OR
 (OPT2_DIAG2 = "R52.") OR
 ((MID(OPT_DIAG3,1,3) >= "G00" AND MID(OPT_DIAG3,1,3) <= "H95") AND
 NOT ((OPT_DIAG3>= "G45.0" AND OPT_DIAG3 <= "G46.8") OR
 (OPT_DIAG3 = "G47.00") OR
 (OPT_DIAG3 = "G47.30") OR
 (OPT_DIAG3 = "G93.3")))) OR
 (OPT_DIAG3>= "E08.311" AND OPT_DIAG3 <= "E08.49") OR
 (OPT_DIAG3>= "E09.311" AND OPT_DIAG3 <= "E09.49") OR
 (OPT_DIAG3>= "E10.311" AND OPT_DIAG3 <= "E10.49") OR
 (OPT_DIAG3>= "E11.311" AND OPT_DIAG3 <= "E11.49") OR
 (OPT_DIAG3>= "E13.311" AND OPT_DIAG3 <= "E13.49") OR
 (OPT_DIAG3 = "R52.") OR
 ((MID(OPT2_DIAG3,1,3) >= "G00" AND MID(OPT2_DIAG3,1,3) <= "H95") AND
 NOT ((OPT2_DIAG3>= "G45.0" AND OPT2_DIAG3 <= "G46.8") OR
 (OPT2_DIAG3 = "G47.00") OR
 (OPT2_DIAG3 = "G47.30") OR
 (OPT2_DIAG3 = "G93.3")))) OR
 (OPT2_DIAG3>= "E08.311" AND OPT2_DIAG3 <= "E08.49") OR
 (OPT2_DIAG3>= "E09.311" AND OPT2_DIAG3 <= "E09.49") OR

(OPT2_DIAG3>= "E10.311" AND OPT2_DIAG3 <= "E10.49") OR
 (OPT2_DIAG3>= "E11.311" AND OPT2_DIAG3 <= "E11.49") OR
 (OPT2_DIAG3>= "E13.311" AND OPT2_DIAG3 <= "E13.49") OR
 (OPT2_DIAG3 = "R52.") OR
 ((MID(OPT_DIAG4,1,3) >= "G00" AND MID(OPT_DIAG4,1,3) <= "H95") AND
 NOT ((OPT_DIAG4>= "G45.0" AND OPT_DIAG4 <= "G46.8") OR
 (OPT_DIAG4 = "G47.00") OR
 (OPT_DIAG4 = "G47.30") OR
 (OPT_DIAG4 = "G93.3")))) OR
 (OPT_DIAG4>= "E08.311" AND OPT_DIAG4 <= "E08.49") OR
 (OPT_DIAG4>= "E09.311" AND OPT_DIAG4 <= "E09.49") OR
 (OPT_DIAG4>= "E10.311" AND OPT_DIAG4 <= "E10.49") OR
 (OPT_DIAG4>= "E11.311" AND OPT_DIAG4 <= "E11.49") OR
 (OPT_DIAG4>= "E13.311" AND OPT_DIAG4 <= "E13.49") OR
 (OPT_DIAG4 = "R52.") OR
 ((MID(OPT2_DIAG4,1,3) >= "G00" AND MID(OPT2_DIAG4,1,3) <= "H95") AND
 NOT ((OPT2_DIAG4>= "G45.0" AND OPT2_DIAG4 <= "G46.8") OR
 (OPT2_DIAG4 = "G47.00") OR
 (OPT2_DIAG4 = "G47.30") OR
 (OPT2_DIAG4 = "G93.3")))) OR
 (OPT2_DIAG4>= "E08.311" AND OPT2_DIAG4 <= "E08.49") OR
 (OPT2_DIAG4>= "E09.311" AND OPT2_DIAG4 <= "E09.49") OR
 (OPT2_DIAG4>= "E10.311" AND OPT2_DIAG4 <= "E10.49") OR
 (OPT2_DIAG4>= "E11.311" AND OPT2_DIAG4 <= "E11.49") OR
 (OPT2_DIAG4>= "E13.311" AND OPT2_DIAG4 <= "E13.49") OR
 (OPT2_DIAG4 = "R52.") OR
 ((MID(OPT_DIAG5,1,3) >= "G00" AND MID(OPT_DIAG5,1,3) <= "H95") AND
 NOT ((OPT_DIAG5>= "G45.0" AND OPT_DIAG5 <= "G46.8") OR
 (OPT_DIAG5 = "G47.00") OR
 (OPT_DIAG5 = "G47.30") OR
 (OPT_DIAG5 = "G93.3")))) OR
 (OPT_DIAG5>= "E08.311" AND OPT_DIAG5 <= "E08.49") OR
 (OPT_DIAG5>= "E09.311" AND OPT_DIAG5 <= "E09.49") OR
 (OPT_DIAG5>= "E10.311" AND OPT_DIAG5 <= "E10.49") OR
 (OPT_DIAG5>= "E11.311" AND OPT_DIAG5 <= "E11.49") OR
 (OPT_DIAG5>= "E13.311" AND OPT_DIAG5 <= "E13.49") OR
 (OPT_DIAG5 = "R52.") OR
 ((MID(OPT2_DIAG5,1,3) >= "G00" AND MID(OPT2_DIAG5,1,3) <= "H95") AND
 NOT ((OPT2_DIAG5>= "G45.0" AND OPT2_DIAG5 <= "G46.8") OR
 (OPT2_DIAG5 = "G47.00") OR

```

( OPT2_DIAG5 = "G47.30") OR
( OPT2_DIAG5 = "G93.3")) OR
(OPT2_DIAG5>= "E08.311" AND OPT2_DIAG5 <= "E08.49") OR
(OPT2_DIAG5>= "E09.311" AND OPT2_DIAG5 <= "E09.49") OR
(OPT2_DIAG5>= "E10.311" AND OPT2_DIAG5 <= "E10.49") OR
(OPT2_DIAG5>= "E11.311" AND OPT2_DIAG5 <= "E11.49") OR
(OPT2_DIAG5>= "E13.311" AND OPT2_DIAG5 <= "E13.49") OR
(OPT2_DIAG5 = "R52.") OR
((MID(OPT_DIAG6,1,3) >= "G00" AND MID(OPT_DIAG6,1,3) <= "H95") AND
NOT ( (OPT_DIAG6>= "G45.0" AND OPT_DIAG6 <= "G46.8") OR
( OPT_DIAG6 = "G47.00") OR
( OPT_DIAG6 = "G47.30") OR
( OPT_DIAG6 = "G93.3")) OR
(OPT_DIAG6>= "E08.311" AND OPT_DIAG6 <= "E08.49") OR
(OPT_DIAG6>= "E09.311" AND OPT_DIAG6 <= "E09.49") OR
(OPT_DIAG6>= "E10.311" AND OPT_DIAG6 <= "E10.49") OR
(OPT_DIAG6>= "E11.311" AND OPT_DIAG6 <= "E11.49") OR
(OPT_DIAG6>= "E13.311" AND OPT_DIAG6 <= "E13.49") OR
(OPT_DIAG6 = "R52.") OR
((MID(OPT2_DIAG6,1,3) >= "G00" AND MID(OPT2_DIAG6,1,3) <= "H95") AND
NOT ( (OPT2_DIAG6>= "G45.0" AND OPT2_DIAG6 <= "G46.8") OR
( OPT2_DIAG6 = "G47.00") OR
( OPT2_DIAG6 = "G47.30") OR
( OPT2_DIAG6 = "G93.3")) OR
(OPT2_DIAG6>= "E08.311" AND OPT2_DIAG6 <= "E08.49") OR
(OPT2_DIAG6>= "E09.311" AND OPT2_DIAG6 <= "E09.49") OR
(OPT2_DIAG6>= "E10.311" AND OPT2_DIAG6 <= "E10.49") OR
(OPT2_DIAG6>= "E11.311" AND OPT2_DIAG6 <= "E11.49") OR
(OPT2_DIAG6>= "E13.311" AND OPT2_DIAG6 <= "E13.49") OR
(OPT2_DIAG6 = "R52.")
THEN
    HC_DX_NERVOUS = 1
ELSE
    HC_DX_NERVOUS = 0
END IF

```

Circulatory system diseases (%)

```

IF ( (MID(HC_DIAG1,1,3) >= "I00" AND MID(HC_DIAG1,1,3) <= "I99") AND
    NOT ( (HC_DIAG1 = "I96."))) OR
    (HC_DIAG1>= "E08.51" AND HC_DIAG1 <= "E08.59") OR

```

(HC_DIAG1>= "E09.51" AND HC_DIAG1 <= "E09.59") OR
 (HC_DIAG1>= "E10.51" AND HC_DIAG1 <= "E10.59") OR
 (HC_DIAG1>= "E11.51" AND HC_DIAG1 <= "E11.59") OR
 (HC_DIAG1>= "E13.51" AND HC_DIAG1 <= "E13.59") OR
 (HC_DIAG1>= "G45.0" AND HC_DIAG1 <= "G46.8") OR
 (HC_DIAG1 = "R00.1") OR
 ((MID(HC_DIAG2,1,3) >= "I00" AND MID(HC_DIAG2,1,3) <= "I99") AND
 NOT ((HC_DIAG2 = "I96."))) OR
 (HC_DIAG2>= "E08.51" AND HC_DIAG2 <= "E08.59") OR
 (HC_DIAG2>= "E09.51" AND HC_DIAG2 <= "E09.59") OR
 (HC_DIAG2>= "E10.51" AND HC_DIAG2 <= "E10.59") OR
 (HC_DIAG2>= "E11.51" AND HC_DIAG2 <= "E11.59") OR
 (HC_DIAG2>= "E13.51" AND HC_DIAG2 <= "E13.59") OR
 (HC_DIAG2>= "G45.0" AND HC_DIAG2 <= "G46.8") OR
 (HC_DIAG2 = "R00.1") OR
 ((MID(HC_DIAG3,1,3) >= "I00" AND MID(HC_DIAG3,1,3) <= "I99") AND
 NOT ((HC_DIAG3 = "I96."))) OR
 (HC_DIAG3>= "E08.51" AND HC_DIAG3 <= "E08.59") OR
 (HC_DIAG3>= "E09.51" AND HC_DIAG3 <= "E09.59") OR
 (HC_DIAG3>= "E10.51" AND HC_DIAG3 <= "E10.59") OR
 (HC_DIAG3>= "E11.51" AND HC_DIAG3 <= "E11.59") OR
 (HC_DIAG3>= "E13.51" AND HC_DIAG3 <= "E13.59") OR
 (HC_DIAG3>= "G45.0" AND HC_DIAG3 <= "G46.8") OR
 (HC_DIAG3 = "R00.1") OR
 ((MID(HC_DIAG4,1,3) >= "I00" AND MID(HC_DIAG4,1,3) <= "I99") AND
 NOT ((HC_DIAG4 = "I96."))) OR
 (HC_DIAG4>= "E08.51" AND HC_DIAG4 <= "E08.59") OR
 (HC_DIAG4>= "E09.51" AND HC_DIAG4 <= "E09.59") OR
 (HC_DIAG4>= "E10.51" AND HC_DIAG4 <= "E10.59") OR
 (HC_DIAG4>= "E11.51" AND HC_DIAG4 <= "E11.59") OR
 (HC_DIAG4>= "E13.51" AND HC_DIAG4 <= "E13.59") OR
 (HC_DIAG4>= "G45.0" AND HC_DIAG4 <= "G46.8") OR
 (HC_DIAG4 = "R00.1") OR
 ((MID(HC_DIAG5,1,3) >= "I00" AND MID(HC_DIAG5,1,3) <= "I99") AND
 NOT ((HC_DIAG5 = "I96."))) OR
 (HC_DIAG5>= "E08.51" AND HC_DIAG5 <= "E08.59") OR
 (HC_DIAG5>= "E09.51" AND HC_DIAG5 <= "E09.59") OR
 (HC_DIAG5>= "E10.51" AND HC_DIAG5 <= "E10.59") OR
 (HC_DIAG5>= "E11.51" AND HC_DIAG5 <= "E11.59") OR
 (HC_DIAG5>= "E13.51" AND HC_DIAG5 <= "E13.59") OR

(HC_DIAG5>= "G45.0" AND HC_DIAG5 <= "G46.8") OR
 (HC_DIAG5 = "R00.1") OR
 ((MID(HC_DIAG6,1,3) >= "I00" AND MID(HC_DIAG6,1,3) <= "I99") AND
 NOT ((HC_DIAG6 = "I96."))) OR
 (HC_DIAG6>= "E08.51" AND HC_DIAG6 <= "E08.59") OR
 (HC_DIAG6>= "E09.51" AND HC_DIAG6 <= "E09.59") OR
 (HC_DIAG6>= "E10.51" AND HC_DIAG6 <= "E10.59") OR
 (HC_DIAG6>= "E11.51" AND HC_DIAG6 <= "E11.59") OR
 (HC_DIAG6>= "E13.51" AND HC_DIAG6 <= "E13.59") OR
 (HC_DIAG6>= "G45.0" AND HC_DIAG6 <= "G46.8") OR
 (HC_DIAG6 = "R00.1") OR
 ((MID(OPT_DIAG1,1,3) >= "I00" AND MID(OPT_DIAG1,1,3) <= "I99") AND
 NOT ((OPT_DIAG1 = "I96."))) OR
 (OPT_DIAG1>= "E08.51" AND OPT_DIAG1 <= "E08.59") OR
 (OPT_DIAG1>= "E09.51" AND OPT_DIAG1 <= "E09.59") OR
 (OPT_DIAG1>= "E10.51" AND OPT_DIAG1 <= "E10.59") OR
 (OPT_DIAG1>= "E11.51" AND OPT_DIAG1 <= "E11.59") OR
 (OPT_DIAG1>= "E13.51" AND OPT_DIAG1 <= "E13.59") OR
 (OPT_DIAG1>= "G45.0" AND OPT_DIAG1 <= "G46.8") OR
 (OPT_DIAG1 = "R00.1") OR
 ((MID(OPT2_DIAG1,1,3) >= "I00" AND MID(OPT2_DIAG1,1,3) <= "I99") AND
 NOT ((OPT2_DIAG1 = "I96."))) OR
 (OPT2_DIAG1>= "E08.51" AND OPT2_DIAG1 <= "E08.59") OR
 (OPT2_DIAG1>= "E09.51" AND OPT2_DIAG1 <= "E09.59") OR
 (OPT2_DIAG1>= "E10.51" AND OPT2_DIAG1 <= "E10.59") OR
 (OPT2_DIAG1>= "E11.51" AND OPT2_DIAG1 <= "E11.59") OR
 (OPT2_DIAG1>= "E13.51" AND OPT2_DIAG1 <= "E13.59") OR
 (OPT2_DIAG1>= "G45.0" AND OPT2_DIAG1 <= "G46.8") OR
 (OPT2_DIAG1 = "R00.1") OR
 ((MID(OPT_DIAG2,1,3) >= "I00" AND MID(OPT_DIAG2,1,3) <= "I99") AND
 NOT ((OPT_DIAG2 = "I96."))) OR
 (OPT_DIAG2>= "E08.51" AND OPT_DIAG2 <= "E08.59") OR
 (OPT_DIAG2>= "E09.51" AND OPT_DIAG2 <= "E09.59") OR
 (OPT_DIAG2>= "E10.51" AND OPT_DIAG2 <= "E10.59") OR
 (OPT_DIAG2>= "E11.51" AND OPT_DIAG2 <= "E11.59") OR
 (OPT_DIAG2>= "E13.51" AND OPT_DIAG2 <= "E13.59") OR
 (OPT_DIAG2>= "G45.0" AND OPT_DIAG2 <= "G46.8") OR
 (OPT_DIAG2 = "R00.1") OR
 ((MID(OPT2_DIAG2,1,3) >= "I00" AND MID(OPT2_DIAG2,1,3) <= "I99") AND
 NOT ((OPT2_DIAG2 = "I96."))) OR

(OPT2_DIAG2>= "E08.51" AND OPT2_DIAG2 <= "E08.59") OR
 (OPT2_DIAG2>= "E09.51" AND OPT2_DIAG2 <= "E09.59") OR
 (OPT2_DIAG2>= "E10.51" AND OPT2_DIAG2 <= "E10.59") OR
 (OPT2_DIAG2>= "E11.51" AND OPT2_DIAG2 <= "E11.59") OR
 (OPT2_DIAG2>= "E13.51" AND OPT2_DIAG2 <= "E13.59") OR
 (OPT2_DIAG2>= "G45.0" AND OPT2_DIAG2 <= "G46.8") OR
 (OPT2_DIAG2 = "R00.1") OR
 ((MID(OPT_DIAG3,1,3) >= "I00" AND MID(OPT_DIAG3,1,3) <= "I99") AND
 NOT ((OPT_DIAG3 = "I96."))) OR
 (OPT_DIAG3>= "E08.51" AND OPT_DIAG3 <= "E08.59") OR
 (OPT_DIAG3>= "E09.51" AND OPT_DIAG3 <= "E09.59") OR
 (OPT_DIAG3>= "E10.51" AND OPT_DIAG3 <= "E10.59") OR
 (OPT_DIAG3>= "E11.51" AND OPT_DIAG3 <= "E11.59") OR
 (OPT_DIAG3>= "E13.51" AND OPT_DIAG3 <= "E13.59") OR
 (OPT_DIAG3>= "G45.0" AND OPT_DIAG3 <= "G46.8") OR
 (OPT_DIAG3 = "R00.1") OR
 ((MID(OPT2_DIAG3,1,3) >= "I00" AND MID(OPT2_DIAG3,1,3) <= "I99") AND
 NOT ((OPT2_DIAG3 = "I96."))) OR
 (OPT2_DIAG3>= "E08.51" AND OPT2_DIAG3 <= "E08.59") OR
 (OPT2_DIAG3>= "E09.51" AND OPT2_DIAG3 <= "E09.59") OR
 (OPT2_DIAG3>= "E10.51" AND OPT2_DIAG3 <= "E10.59") OR
 (OPT2_DIAG3>= "E11.51" AND OPT2_DIAG3 <= "E11.59") OR
 (OPT2_DIAG3>= "E13.51" AND OPT2_DIAG3 <= "E13.59") OR
 (OPT2_DIAG3>= "G45.0" AND OPT2_DIAG3 <= "G46.8") OR
 (OPT2_DIAG3 = "R00.1") OR
 ((MID(OPT_DIAG4,1,3) >= "I00" AND MID(OPT_DIAG4,1,3) <= "I99") AND
 NOT ((OPT_DIAG4 = "I96."))) OR
 (OPT_DIAG4>= "E08.51" AND OPT_DIAG4 <= "E08.59") OR
 (OPT_DIAG4>= "E09.51" AND OPT_DIAG4 <= "E09.59") OR
 (OPT_DIAG4>= "E10.51" AND OPT_DIAG4 <= "E10.59") OR
 (OPT_DIAG4>= "E11.51" AND OPT_DIAG4 <= "E11.59") OR
 (OPT_DIAG4>= "E13.51" AND OPT_DIAG4 <= "E13.59") OR
 (OPT_DIAG4>= "G45.0" AND OPT_DIAG4 <= "G46.8") OR
 (OPT_DIAG4 = "R00.1") OR
 ((MID(OPT2_DIAG4,1,3) >= "I00" AND MID(OPT2_DIAG4,1,3) <= "I99") AND
 NOT ((OPT2_DIAG4 = "I96."))) OR
 (OPT2_DIAG4>= "E08.51" AND OPT2_DIAG4 <= "E08.59") OR
 (OPT2_DIAG4>= "E09.51" AND OPT2_DIAG4 <= "E09.59") OR
 (OPT2_DIAG4>= "E10.51" AND OPT2_DIAG4 <= "E10.59") OR
 (OPT2_DIAG4>= "E11.51" AND OPT2_DIAG4 <= "E11.59") OR

(OPT2_DIAG4>= "E13.51" AND OPT2_DIAG4 <= "E13.59") OR
 (OPT2_DIAG4>= "G45.0" AND OPT2_DIAG4 <= "G46.8") OR
 (OPT2_DIAG4 = "R00.1") OR
 ((MID(OPT_DIAG5,1,3) >= "I00" AND MID(OPT_DIAG5,1,3) <= "I99") AND
 NOT ((OPT_DIAG5 = "I96."))) OR
 (OPT_DIAG5>= "E08.51" AND OPT_DIAG5 <= "E08.59") OR
 (OPT_DIAG5>= "E09.51" AND OPT_DIAG5 <= "E09.59") OR
 (OPT_DIAG5>= "E10.51" AND OPT_DIAG5 <= "E10.59") OR
 (OPT_DIAG5>= "E11.51" AND OPT_DIAG5 <= "E11.59") OR
 (OPT_DIAG5>= "E13.51" AND OPT_DIAG5 <= "E13.59") OR
 (OPT_DIAG5>= "G45.0" AND OPT_DIAG5 <= "G46.8") OR
 (OPT_DIAG5 = "R00.1") OR
 ((MID(OPT2_DIAG5,1,3) >= "I00" AND MID(OPT2_DIAG5,1,3) <= "I99") AND
 NOT ((OPT2_DIAG5 = "I96."))) OR
 (OPT2_DIAG5>= "E08.51" AND OPT2_DIAG5 <= "E08.59") OR
 (OPT2_DIAG5>= "E09.51" AND OPT2_DIAG5 <= "E09.59") OR
 (OPT2_DIAG5>= "E10.51" AND OPT2_DIAG5 <= "E10.59") OR
 (OPT2_DIAG5>= "E11.51" AND OPT2_DIAG5 <= "E11.59") OR
 (OPT2_DIAG5>= "E13.51" AND OPT2_DIAG5 <= "E13.59") OR
 (OPT2_DIAG5>= "G45.0" AND OPT2_DIAG5 <= "G46.8") OR
 (OPT2_DIAG5 = "R00.1") OR
 ((MID(OPT_DIAG6,1,3) >= "I00" AND MID(OPT_DIAG6,1,3) <= "I99") AND
 NOT ((OPT_DIAG6 = "I96."))) OR
 (OPT_DIAG6>= "E08.51" AND OPT_DIAG6 <= "E08.59") OR
 (OPT_DIAG6>= "E09.51" AND OPT_DIAG6 <= "E09.59") OR
 (OPT_DIAG6>= "E10.51" AND OPT_DIAG6 <= "E10.59") OR
 (OPT_DIAG6>= "E11.51" AND OPT_DIAG6 <= "E11.59") OR
 (OPT_DIAG6>= "E13.51" AND OPT_DIAG6 <= "E13.59") OR
 (OPT_DIAG6>= "G45.0" AND OPT_DIAG6 <= "G46.8") OR
 (OPT_DIAG6 = "R00.1") OR
 ((MID(OPT2_DIAG6,1,3) >= "I00" AND MID(OPT2_DIAG6,1,3) <= "I99") AND
 NOT ((OPT2_DIAG6 = "I96."))) OR
 (OPT2_DIAG6>= "E08.51" AND OPT2_DIAG6 <= "E08.59") OR
 (OPT2_DIAG6>= "E09.51" AND OPT2_DIAG6 <= "E09.59") OR
 (OPT2_DIAG6>= "E10.51" AND OPT2_DIAG6 <= "E10.59") OR
 (OPT2_DIAG6>= "E11.51" AND OPT2_DIAG6 <= "E11.59") OR
 (OPT2_DIAG6>= "E13.51" AND OPT2_DIAG6 <= "E13.59") OR
 (OPT2_DIAG6>= "G45.0" AND OPT2_DIAG6 <= "G46.8") OR
 (OPT2_DIAG6 = "R00.1")

THEN

```

        HC_DX_CIRCULATORY = 1
ELSE
        HC_DX_CIRCULATORY = 0
END IF

```

Respiratory system diseases (%)

```

IF  (MID(HC_DIAG1,1,3) >= "J00" AND MID(HC_DIAG1,1,3) <= "J99") OR
    (MID(HC_DIAG2,1,3) >= "J00" AND MID(HC_DIAG2,1,3) <= "J99") OR
    (MID(HC_DIAG3,1,3) >= "J00" AND MID(HC_DIAG3,1,3) <= "J99") OR
    (MID(HC_DIAG4,1,3) >= "J00" AND MID(HC_DIAG4,1,3) <= "J99") OR
    (MID(HC_DIAG5,1,3) >= "J00" AND MID(HC_DIAG5,1,3) <= "J99") OR
    (MID(HC_DIAG6,1,3) >= "J00" AND MID(HC_DIAG6,1,3) <= "J99") OR
    (MID(OPT_DIAG1,1,3) >= "J00" AND MID(OPT_DIAG1,1,3) <= "J99") OR
    (MID(OPT2_DIAG1,1,3) >= "J00" AND MID(OPT2_DIAG1,1,3) <= "J99") OR
    (MID(OPT_DIAG2,1,3) >= "J00" AND MID(OPT_DIAG2,1,3) <= "J99") OR
    (MID(OPT2_DIAG2,1,3) >= "J00" AND MID(OPT2_DIAG2,1,3) <= "J99") OR
    (MID(OPT_DIAG3,1,3) >= "J00" AND MID(OPT_DIAG3,1,3) <= "J99") OR
    (MID(OPT2_DIAG3,1,3) >= "J00" AND MID(OPT2_DIAG3,1,3) <= "J99") OR
    (MID(OPT_DIAG4,1,3) >= "J00" AND MID(OPT_DIAG4,1,3) <= "J99") OR
    (MID(OPT2_DIAG4,1,3) >= "J00" AND MID(OPT2_DIAG4,1,3) <= "J99") OR
    (MID(OPT_DIAG5,1,3) >= "J00" AND MID(OPT_DIAG5,1,3) <= "J99") OR
    (MID(OPT2_DIAG5,1,3) >= "J00" AND MID(OPT2_DIAG5,1,3) <= "J99") OR
    (MID(OPT_DIAG6,1,3) >= "J00" AND MID(OPT_DIAG6,1,3) <= "J99") OR
    (MID(OPT2_DIAG6 ,1,3) >= "J00" AND MID(OPT2_DIAG6 ,1,3) <= "J99")
THEN
        HC_DX_RESPIRATORY = 1
ELSE
        HC_DX_RESPIRATORY = 0
END IF

```

Digestive system diseases (%)

```

IF  (MID(HC_DIAG1,1,3) >= "K00" AND MID(HC_DIAG1,1,3) <= "K94") OR
    (MID(HC_DIAG2,1,3) >= "K00" AND MID(HC_DIAG2,1,3) <= "K94") OR
    (MID(HC_DIAG3,1,3) >= "K00" AND MID(HC_DIAG3,1,3) <= "K94") OR
    (MID(HC_DIAG4,1,3) >= "K00" AND MID(HC_DIAG4,1,3) <= "K94") OR
    (MID(HC_DIAG5,1,3) >= "K00" AND MID(HC_DIAG5,1,3) <= "K94") OR
    (MID(HC_DIAG6,1,3) >= "K00" AND MID(HC_DIAG6,1,3) <= "K94") OR
    (MID(OPT_DIAG1,1,3) >= "K00" AND MID(OPT_DIAG1,1,3) <= "K94") OR
    (MID(OPT2_DIAG1,1,3) >= "K00" AND MID(OPT2_DIAG1,1,3) <= "K94") OR
    (MID(OPT_DIAG2,1,3) >= "K00" AND MID(OPT_DIAG2,1,3) <= "K94") OR

```

```

(MID(OPT2_DIAG2,1,3) >= "K00" AND MID(OPT2_DIAG2,1,3) <= "K94") OR
(MID(OPT_DIAG3,1,3) >= "K00" AND MID(OPT_DIAG3,1,3) <= "K94") OR
(MID(OPT2_DIAG3,1,3) >= "K00" AND MID(OPT2_DIAG3,1,3) <= "K94") OR
(MID(OPT_DIAG4,1,3) >= "K00" AND MID(OPT_DIAG4,1,3) <= "K94") OR
(MID(OPT2_DIAG4,1,3) >= "K00" AND MID(OPT2_DIAG4,1,3) <= "K94") OR
(MID(OPT_DIAG5,1,3) >= "K00" AND MID(OPT_DIAG5,1,3) <= "K94") OR
(MID(OPT2_DIAG5,1,3) >= "K00" AND MID(OPT2_DIAG5,1,3) <= "K94") OR
(MID(OPT_DIAG6,1,3) >= "K00" AND MID(OPT_DIAG6,1,3) <= "K94") OR
(MID(OPT2_DIAG6 ,1,3) >= "K00" AND MID(OPT2_DIAG6 ,1,3) <= "K94")
THEN
    HC_DX_DIGESTIVE = 1
ELSE
    HC_DX_DIGESTIVE = 0
END IF

```

Genitourinary sys. diseases (%)

```

IF    (MID(HC_DIAG1,1,3) >= "N00" AND MID(HC_DIAG1,1,3) <= "N99") OR
      (MID(HC_DIAG2,1,3) >= "N00" AND MID(HC_DIAG2,1,3) <= "N99") OR
      (MID(HC_DIAG3,1,3) >= "N00" AND MID(HC_DIAG3,1,3) <= "N99") OR
      (MID(HC_DIAG4,1,3) >= "N00" AND MID(HC_DIAG4,1,3) <= "N99") OR
      (MID(HC_DIAG5,1,3) >= "N00" AND MID(HC_DIAG5,1,3) <= "N99") OR
      (MID(HC_DIAG6,1,3) >= "N00" AND MID(HC_DIAG6,1,3) <= "N99") OR
      (MID(OPT_DIAG1,1,3) >= "N00" AND MID(OPT_DIAG1,1,3) <= "N99") OR
      (MID(OPT2_DIAG1,1,3) >= "N00" AND MID(OPT2_DIAG1,1,3) <= "N99") OR
      (MID(OPT_DIAG2,1,3) >= "N00" AND MID(OPT_DIAG2,1,3) <= "N99") OR
      (MID(OPT2_DIAG2,1,3) >= "N00" AND MID(OPT2_DIAG2,1,3) <= "N99") OR
      (MID(OPT_DIAG3,1,3) >= "N00" AND MID(OPT_DIAG3,1,3) <= "N99") OR
      (MID(OPT2_DIAG3,1,3) >= "N00" AND MID(OPT2_DIAG3,1,3) <= "N99") OR
      (MID(OPT_DIAG4,1,3) >= "N00" AND MID(OPT_DIAG4,1,3) <= "N99") OR
      (MID(OPT2_DIAG4,1,3) >= "N00" AND MID(OPT2_DIAG4,1,3) <= "N99") OR
      (MID(OPT_DIAG5,1,3) >= "N00" AND MID(OPT_DIAG5,1,3) <= "N99") OR
      (MID(OPT2_DIAG5,1,3) >= "N00" AND MID(OPT2_DIAG5,1,3) <= "N99") OR
      (MID(OPT_DIAG6,1,3) >= "N00" AND MID(OPT_DIAG6,1,3) <= "N99") OR
      (MID(OPT2_DIAG6 ,1,3) >= "N00" AND MID(OPT2_DIAG6 ,1,3) <= "N99")
THEN
    HC_DX_GEN_URINARY = 1
ELSE
    HC_DX_GEN_URINARY = 0
END IF

```

Skin/subcutaneous diseases (%)

IF (MID(HC_DIAG1,1,3) >= "L00" AND MID(HC_DIAG1,1,3) <= "L99") **OR**
(HC_DIAG1>= "E08.621" AND HC_DIAG1 <= "E08.628") **OR**
(HC_DIAG1>= "E09.621" AND HC_DIAG1 <= "E09.628") **OR**
(HC_DIAG1>= "E10.621" AND HC_DIAG1 <= "E10.628") **OR**
(HC_DIAG1>= "E11.621" AND HC_DIAG1 <= "E11.628") **OR**
(HC_DIAG1>= "E13.621" AND HC_DIAG1 <= "E13.628") **OR**
(HC_DIAG1>= "I70.231" AND HC_DIAG1 <= "I70.25") **OR**
(HC_DIAG1>= "I70.331" AND HC_DIAG1 <= "I70.35") **OR**
(HC_DIAG1>= "I70.431" AND HC_DIAG1 <= "I70.45") **OR**
(HC_DIAG1>= "I70.531" AND HC_DIAG1 <= "I70.55") **OR**
(HC_DIAG1>= "I70.631" AND HC_DIAG1 <= "I70.65") **OR**
(HC_DIAG1>= "I70.731" AND HC_DIAG1 <= "I70.75") **OR**
(MID(HC_DIAG2,1,3) >= "L00" AND MID(HC_DIAG2,1,3) <= "L99") **OR**
(HC_DIAG2>= "E08.621" AND HC_DIAG2 <= "E08.628") **OR**
(HC_DIAG2>= "E09.621" AND HC_DIAG2 <= "E09.628") **OR**
(HC_DIAG2>= "E10.621" AND HC_DIAG2 <= "E10.628") **OR**
(HC_DIAG2>= "E11.621" AND HC_DIAG2 <= "E11.628") **OR**
(HC_DIAG2>= "E13.621" AND HC_DIAG2 <= "E13.628") **OR**
(HC_DIAG2>= "I70.231" AND HC_DIAG2 <= "I70.25") **OR**
(HC_DIAG2>= "I70.331" AND HC_DIAG2 <= "I70.35") **OR**
(HC_DIAG2>= "I70.431" AND HC_DIAG2 <= "I70.45") **OR**
(HC_DIAG2>= "I70.531" AND HC_DIAG2 <= "I70.55") **OR**
(HC_DIAG2>= "I70.631" AND HC_DIAG2 <= "I70.65") **OR**
(HC_DIAG2>= "I70.731" AND HC_DIAG2 <= "I70.75") **OR**
(MID(HC_DIAG3,1,3) >= "L00" AND MID(HC_DIAG3,1,3) <= "L99") **OR**
(HC_DIAG3>= "E08.621" AND HC_DIAG3 <= "E08.628") **OR**
(HC_DIAG3>= "E09.621" AND HC_DIAG3 <= "E09.628") **OR**
(HC_DIAG3>= "E10.621" AND HC_DIAG3 <= "E10.628") **OR**
(HC_DIAG3>= "E11.621" AND HC_DIAG3 <= "E11.628") **OR**
(HC_DIAG3>= "E13.621" AND HC_DIAG3 <= "E13.628") **OR**
(HC_DIAG3>= "I70.231" AND HC_DIAG3 <= "I70.25") **OR**
(HC_DIAG3>= "I70.331" AND HC_DIAG3 <= "I70.35") **OR**
(HC_DIAG3>= "I70.431" AND HC_DIAG3 <= "I70.45") **OR**
(HC_DIAG3>= "I70.531" AND HC_DIAG3 <= "I70.55") **OR**
(HC_DIAG3>= "I70.631" AND HC_DIAG3 <= "I70.65") **OR**
(HC_DIAG3>= "I70.731" AND HC_DIAG3 <= "I70.75") **OR**
(MID(HC_DIAG4,1,3) >= "L00" AND MID(HC_DIAG4,1,3) <= "L99") **OR**
(HC_DIAG4>= "E08.621" AND HC_DIAG4 <= "E08.628") **OR**
(HC_DIAG4>= "E09.621" AND HC_DIAG4 <= "E09.628") **OR**

(HC_DIAG4>= "E10.621" AND HC_DIAG4 <= "E10.628") OR
 (HC_DIAG4>= "E11.621" AND HC_DIAG4 <= "E11.628") OR
 (HC_DIAG4>= "E13.621" AND HC_DIAG4 <= "E13.628") OR
 (HC_DIAG4>= "I70.231" AND HC_DIAG4 <= "I70.25") OR
 (HC_DIAG4>= "I70.331" AND HC_DIAG4 <= "I70.35") OR
 (HC_DIAG4>= "I70.431" AND HC_DIAG4 <= "I70.45") OR
 (HC_DIAG4>= "I70.531" AND HC_DIAG4 <= "I70.55") OR
 (HC_DIAG4>= "I70.631" AND HC_DIAG4 <= "I70.65") OR
 (HC_DIAG4>= "I70.731" AND HC_DIAG4 <= "I70.75") OR
 (MID(HC_DIAG5,1,3) >= "L00" AND MID(HC_DIAG5,1,3) <= "L99") OR
 (HC_DIAG5>= "E08.621" AND HC_DIAG5 <= "E08.628") OR
 (HC_DIAG5>= "E09.621" AND HC_DIAG5 <= "E09.628") OR
 (HC_DIAG5>= "E10.621" AND HC_DIAG5 <= "E10.628") OR
 (HC_DIAG5>= "E11.621" AND HC_DIAG5 <= "E11.628") OR
 (HC_DIAG5>= "E13.621" AND HC_DIAG5 <= "E13.628") OR
 (HC_DIAG5>= "I70.231" AND HC_DIAG5 <= "I70.25") OR
 (HC_DIAG5>= "I70.331" AND HC_DIAG5 <= "I70.35") OR
 (HC_DIAG5>= "I70.431" AND HC_DIAG5 <= "I70.45") OR
 (HC_DIAG5>= "I70.531" AND HC_DIAG5 <= "I70.55") OR
 (HC_DIAG5>= "I70.631" AND HC_DIAG5 <= "I70.65") OR
 (HC_DIAG5>= "I70.731" AND HC_DIAG5 <= "I70.75") OR
 (MID(HC_DIAG6,1,3) >= "L00" AND MID(HC_DIAG6,1,3) <= "L99") OR
 (HC_DIAG6>= "E08.621" AND HC_DIAG6 <= "E08.628") OR
 (HC_DIAG6>= "E09.621" AND HC_DIAG6 <= "E09.628") OR
 (HC_DIAG6>= "E10.621" AND HC_DIAG6 <= "E10.628") OR
 (HC_DIAG6>= "E11.621" AND HC_DIAG6 <= "E11.628") OR
 (HC_DIAG6>= "E13.621" AND HC_DIAG6 <= "E13.628") OR
 (HC_DIAG6>= "I70.231" AND HC_DIAG6 <= "I70.25") OR
 (HC_DIAG6>= "I70.331" AND HC_DIAG6 <= "I70.35") OR
 (HC_DIAG6>= "I70.431" AND HC_DIAG6 <= "I70.45") OR
 (HC_DIAG6>= "I70.531" AND HC_DIAG6 <= "I70.55") OR
 (HC_DIAG6>= "I70.631" AND HC_DIAG6 <= "I70.65") OR
 (HC_DIAG6>= "I70.731" AND HC_DIAG6 <= "I70.75") OR
 (MID(OPT_DIAG1,1,3) >= "L00" AND MID(OPT_DIAG1,1,3) <= "L99") OR
 (OPT_DIAG1>= "E08.621" AND OPT_DIAG1 <= "E08.628") OR
 (OPT_DIAG1>= "E09.621" AND OPT_DIAG1 <= "E09.628") OR
 (OPT_DIAG1>= "E10.621" AND OPT_DIAG1 <= "E10.628") OR
 (OPT_DIAG1>= "E11.621" AND OPT_DIAG1 <= "E11.628") OR
 (OPT_DIAG1>= "E13.621" AND OPT_DIAG1 <= "E13.628") OR
 (OPT_DIAG1>= "I70.231" AND OPT_DIAG1 <= "I70.25") OR

(OPT_DIAG1>= "I70.331" AND OPT_DIAG1 <= "I70.35") OR
 (OPT_DIAG1>= "I70.431" AND OPT_DIAG1 <= "I70.45") OR
 (OPT_DIAG1>= "I70.531" AND OPT_DIAG1 <= "I70.55") OR
 (OPT_DIAG1>= "I70.631" AND OPT_DIAG1 <= "I70.65") OR
 (OPT_DIAG1>= "I70.731" AND OPT_DIAG1 <= "I70.75") OR
 (MID(OPT2_DIAG1,1,3) >= "L00" AND MID(OPT2_DIAG1,1,3) <= "L99") OR
 (OPT2_DIAG1>= "E08.621" AND OPT2_DIAG1 <= "E08.628") OR
 (OPT2_DIAG1>= "E09.621" AND OPT2_DIAG1 <= "E09.628") OR
 (OPT2_DIAG1>= "E10.621" AND OPT2_DIAG1 <= "E10.628") OR
 (OPT2_DIAG1>= "E11.621" AND OPT2_DIAG1 <= "E11.628") OR
 (OPT2_DIAG1>= "E13.621" AND OPT2_DIAG1 <= "E13.628") OR
 (OPT2_DIAG1>= "I70.231" AND OPT2_DIAG1 <= "I70.25") OR
 (OPT2_DIAG1>= "I70.331" AND OPT2_DIAG1 <= "I70.35") OR
 (OPT2_DIAG1>= "I70.431" AND OPT2_DIAG1 <= "I70.45") OR
 (OPT2_DIAG1>= "I70.531" AND OPT2_DIAG1 <= "I70.55") OR
 (OPT2_DIAG1>= "I70.631" AND OPT2_DIAG1 <= "I70.65") OR
 (OPT2_DIAG1>= "I70.731" AND OPT2_DIAG1 <= "I70.75") OR
 (MID(OPT_DIAG2,1,3) >= "L00" AND MID(OPT_DIAG2,1,3) <= "L99") OR
 (OPT_DIAG2>= "E08.621" AND OPT_DIAG2 <= "E08.628") OR
 (OPT_DIAG2>= "E09.621" AND OPT_DIAG2 <= "E09.628") OR
 (OPT_DIAG2>= "E10.621" AND OPT_DIAG2 <= "E10.628") OR
 (OPT_DIAG2>= "E11.621" AND OPT_DIAG2 <= "E11.628") OR
 (OPT_DIAG2>= "E13.621" AND OPT_DIAG2 <= "E13.628") OR
 (OPT_DIAG2>= "I70.231" AND OPT_DIAG2 <= "I70.25") OR
 (OPT_DIAG2>= "I70.331" AND OPT_DIAG2 <= "I70.35") OR
 (OPT_DIAG2>= "I70.431" AND OPT_DIAG2 <= "I70.45") OR
 (OPT_DIAG2>= "I70.531" AND OPT_DIAG2 <= "I70.55") OR
 (OPT_DIAG2>= "I70.631" AND OPT_DIAG2 <= "I70.65") OR
 (OPT_DIAG2>= "I70.731" AND OPT_DIAG2 <= "I70.75") OR
 (MID(OPT2_DIAG2,1,3) >= "L00" AND MID(OPT2_DIAG2,1,3) <= "L99") OR
 (OPT2_DIAG2>= "E08.621" AND OPT2_DIAG2 <= "E08.628") OR
 (OPT2_DIAG2>= "E09.621" AND OPT2_DIAG2 <= "E09.628") OR
 (OPT2_DIAG2>= "E10.621" AND OPT2_DIAG2 <= "E10.628") OR
 (OPT2_DIAG2>= "E11.621" AND OPT2_DIAG2 <= "E11.628") OR
 (OPT2_DIAG2>= "E13.621" AND OPT2_DIAG2 <= "E13.628") OR
 (OPT2_DIAG2>= "I70.231" AND OPT2_DIAG2 <= "I70.25") OR
 (OPT2_DIAG2>= "I70.331" AND OPT2_DIAG2 <= "I70.35") OR
 (OPT2_DIAG2>= "I70.431" AND OPT2_DIAG2 <= "I70.45") OR
 (OPT2_DIAG2>= "I70.531" AND OPT2_DIAG2 <= "I70.55") OR
 (OPT2_DIAG2>= "I70.631" AND OPT2_DIAG2 <= "I70.65") OR

(OPT2_DIAG2>= "I70.731" AND OPT2_DIAG2 <= "I70.75") OR
 (MID(OPT_DIAG3,1,3) >= "L00" AND MID(OPT_DIAG3,1,3) <= "L99") OR
 (OPT_DIAG3>= "E08.621" AND OPT_DIAG3 <= "E08.628") OR
 (OPT_DIAG3>= "E09.621" AND OPT_DIAG3 <= "E09.628") OR
 (OPT_DIAG3>= "E10.621" AND OPT_DIAG3 <= "E10.628") OR
 (OPT_DIAG3>= "E11.621" AND OPT_DIAG3 <= "E11.628") OR
 (OPT_DIAG3>= "E13.621" AND OPT_DIAG3 <= "E13.628") OR
 (OPT_DIAG3>= "I70.231" AND OPT_DIAG3 <= "I70.25") OR
 (OPT_DIAG3>= "I70.331" AND OPT_DIAG3 <= "I70.35") OR
 (OPT_DIAG3>= "I70.431" AND OPT_DIAG3 <= "I70.45") OR
 (OPT_DIAG3>= "I70.531" AND OPT_DIAG3 <= "I70.55") OR
 (OPT_DIAG3>= "I70.631" AND OPT_DIAG3 <= "I70.65") OR
 (OPT_DIAG3>= "I70.731" AND OPT_DIAG3 <= "I70.75") OR
 (MID(OPT2_DIAG3,1,3) >= "L00" AND MID(OPT2_DIAG3,1,3) <= "L99") OR
 (OPT2_DIAG3>= "E08.621" AND OPT2_DIAG3 <= "E08.628") OR
 (OPT2_DIAG3>= "E09.621" AND OPT2_DIAG3 <= "E09.628") OR
 (OPT2_DIAG3>= "E10.621" AND OPT2_DIAG3 <= "E10.628") OR
 (OPT2_DIAG3>= "E11.621" AND OPT2_DIAG3 <= "E11.628") OR
 (OPT2_DIAG3>= "E13.621" AND OPT2_DIAG3 <= "E13.628") OR
 (OPT2_DIAG3>= "I70.231" AND OPT2_DIAG3 <= "I70.25") OR
 (OPT2_DIAG3>= "I70.331" AND OPT2_DIAG3 <= "I70.35") OR
 (OPT2_DIAG3>= "I70.431" AND OPT2_DIAG3 <= "I70.45") OR
 (OPT2_DIAG3>= "I70.531" AND OPT2_DIAG3 <= "I70.55") OR
 (OPT2_DIAG3>= "I70.631" AND OPT2_DIAG3 <= "I70.65") OR
 (OPT2_DIAG3>= "I70.731" AND OPT2_DIAG3 <= "I70.75") OR
 (MID(OPT_DIAG4,1,3) >= "L00" AND MID(OPT_DIAG4,1,3) <= "L99") OR
 (OPT_DIAG4>= "E08.621" AND OPT_DIAG4 <= "E08.628") OR
 (OPT_DIAG4>= "E09.621" AND OPT_DIAG4 <= "E09.628") OR
 (OPT_DIAG4>= "E10.621" AND OPT_DIAG4 <= "E10.628") OR
 (OPT_DIAG4>= "E11.621" AND OPT_DIAG4 <= "E11.628") OR
 (OPT_DIAG4>= "E13.621" AND OPT_DIAG4 <= "E13.628") OR
 (OPT_DIAG4>= "I70.231" AND OPT_DIAG4 <= "I70.25") OR
 (OPT_DIAG4>= "I70.331" AND OPT_DIAG4 <= "I70.35") OR
 (OPT_DIAG4>= "I70.431" AND OPT_DIAG4 <= "I70.45") OR
 (OPT_DIAG4>= "I70.531" AND OPT_DIAG4 <= "I70.55") OR
 (OPT_DIAG4>= "I70.631" AND OPT_DIAG4 <= "I70.65") OR
 (OPT_DIAG4>= "I70.731" AND OPT_DIAG4 <= "I70.75") OR
 (MID(OPT2_DIAG4,1,3) >= "L00" AND MID(OPT2_DIAG4,1,3) <= "L99") OR
 (OPT2_DIAG4>= "E08.621" AND OPT2_DIAG4 <= "E08.628") OR
 (OPT2_DIAG4>= "E09.621" AND OPT2_DIAG4 <= "E09.628") OR

(OPT2_DIAG4>= "E10.621" AND OPT2_DIAG4 <= "E10.628") OR
 (OPT2_DIAG4>= "E11.621" AND OPT2_DIAG4 <= "E11.628") OR
 (OPT2_DIAG4>= "E13.621" AND OPT2_DIAG4 <= "E13.628") OR
 (OPT2_DIAG4>= "I70.231" AND OPT2_DIAG4 <= "I70.25") OR
 (OPT2_DIAG4>= "I70.331" AND OPT2_DIAG4 <= "I70.35") OR
 (OPT2_DIAG4>= "I70.431" AND OPT2_DIAG4 <= "I70.45") OR
 (OPT2_DIAG4>= "I70.531" AND OPT2_DIAG4 <= "I70.55") OR
 (OPT2_DIAG4>= "I70.631" AND OPT2_DIAG4 <= "I70.65") OR
 (OPT2_DIAG4>= "I70.731" AND OPT2_DIAG4 <= "I70.75") OR
 (MID(OPT_DIAG5,1,3) >= "L00" AND MID(OPT_DIAG5,1,3) <= "L99") OR
 (OPT_DIAG5>= "E08.621" AND OPT_DIAG5 <= "E08.628") OR
 (OPT_DIAG5>= "E09.621" AND OPT_DIAG5 <= "E09.628") OR
 (OPT_DIAG5>= "E10.621" AND OPT_DIAG5 <= "E10.628") OR
 (OPT_DIAG5>= "E11.621" AND OPT_DIAG5 <= "E11.628") OR
 (OPT_DIAG5>= "E13.621" AND OPT_DIAG5 <= "E13.628") OR
 (OPT_DIAG5>= "I70.231" AND OPT_DIAG5 <= "I70.25") OR
 (OPT_DIAG5>= "I70.331" AND OPT_DIAG5 <= "I70.35") OR
 (OPT_DIAG5>= "I70.431" AND OPT_DIAG5 <= "I70.45") OR
 (OPT_DIAG5>= "I70.531" AND OPT_DIAG5 <= "I70.55") OR
 (OPT_DIAG5>= "I70.631" AND OPT_DIAG5 <= "I70.65") OR
 (OPT_DIAG5>= "I70.731" AND OPT_DIAG5 <= "I70.75") OR
 (MID(OPT2_DIAG5,1,3) >= "L00" AND MID(OPT2_DIAG5,1,3) <= "L99") OR
 (OPT2_DIAG5>= "E08.621" AND OPT2_DIAG5 <= "E08.628") OR
 (OPT2_DIAG5>= "E09.621" AND OPT2_DIAG5 <= "E09.628") OR
 (OPT2_DIAG5>= "E10.621" AND OPT2_DIAG5 <= "E10.628") OR
 (OPT2_DIAG5>= "E11.621" AND OPT2_DIAG5 <= "E11.628") OR
 (OPT2_DIAG5>= "E13.621" AND OPT2_DIAG5 <= "E13.628") OR
 (OPT2_DIAG5>= "I70.231" AND OPT2_DIAG5 <= "I70.25") OR
 (OPT2_DIAG5>= "I70.331" AND OPT2_DIAG5 <= "I70.35") OR
 (OPT2_DIAG5>= "I70.431" AND OPT2_DIAG5 <= "I70.45") OR
 (OPT2_DIAG5>= "I70.531" AND OPT2_DIAG5 <= "I70.55") OR
 (OPT2_DIAG5>= "I70.631" AND OPT2_DIAG5 <= "I70.65") OR
 (OPT2_DIAG5>= "I70.731" AND OPT2_DIAG5 <= "I70.75") OR
 (MID(OPT_DIAG6,1,3) >= "L00" AND MID(OPT_DIAG6,1,3) <= "L99") OR
 (OPT_DIAG6>= "E08.621" AND OPT_DIAG6 <= "E08.628") OR
 (OPT_DIAG6>= "E09.621" AND OPT_DIAG6 <= "E09.628") OR
 (OPT_DIAG6>= "E10.621" AND OPT_DIAG6 <= "E10.628") OR
 (OPT_DIAG6>= "E11.621" AND OPT_DIAG6 <= "E11.628") OR
 (OPT_DIAG6>= "E13.621" AND OPT_DIAG6 <= "E13.628") OR
 (OPT_DIAG6>= "I70.231" AND OPT_DIAG6 <= "I70.25") OR

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(OPT_DIAG6>= "I70.331" AND OPT_DIAG6 <= "I70.35") OR
(OPT_DIAG6>= "I70.431" AND OPT_DIAG6 <= "I70.45") OR
(OPT_DIAG6>= "I70.531" AND OPT_DIAG6 <= "I70.55") OR
(OPT_DIAG6>= "I70.631" AND OPT_DIAG6 <= "I70.65") OR
(OPT_DIAG6>= "I70.731" AND OPT_DIAG6 <= "I70.75") OR
(MID(OPT2_DIAG6,1,3) >= "L00" AND MID(OPT2_DIAG6,1,3) <= "L99") OR
(OPT2_DIAG6 >= "E08.621" AND OPT2_DIAG6 <= "E08.628") OR
(OPT2_DIAG6 >= "E09.621" AND OPT2_DIAG6 <= "E09.628") OR
(OPT2_DIAG6 >= "E10.621" AND OPT2_DIAG6 <= "E10.628") OR
(OPT2_DIAG6 >= "E11.621" AND OPT2_DIAG6 <= "E11.628") OR
(OPT2_DIAG6 >= "E13.621" AND OPT2_DIAG6 <= "E13.628") OR
(OPT2_DIAG6 >= "I70.231" AND OPT2_DIAG6 <= "I70.25") OR
(OPT2_DIAG6 >= "I70.331" AND OPT2_DIAG6 <= "I70.35") OR
(OPT2_DIAG6 >= "I70.431" AND OPT2_DIAG6 <= "I70.45") OR
(OPT2_DIAG6 >= "I70.531" AND OPT2_DIAG6 <= "I70.55") OR
(OPT2_DIAG6 >= "I70.631" AND OPT2_DIAG6 <= "I70.65") OR
(OPT2_DIAG6 >= "I70.731" AND OPT2_DIAG6 <= "I70.75")
THEN
    HC_DX_SKIN = 1
ELSE
    HC_DX_SKIN = 0
END IF

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Musculoskeletal sys. diseases (%)

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IF ( (MID(HC_DIAG1,1,3) >= "M00" AND MID(HC_DIAG1,1,3) <= "M99") AND
NOT( (HC_DIAG1>= "M10.00" AND HC_DIAG1 <= "M10.9") OR
( HC_DIAG1>= "M1A.00X0" AND HC_DIAG1 <= "M1A.9XX1"))) OR
(HC_DIAG1>= "E08.610" AND HC_DIAG1 <= "E08.618") OR
(HC_DIAG1>= "E09.610" AND HC_DIAG1 <= "E09.618") OR
(HC_DIAG1>= "E10.610" AND HC_DIAG1 <= "E10.618") OR
(HC_DIAG1>= "E11.610" AND HC_DIAG1 <= "E11.618") OR
(HC_DIAG1>= "E13.610" AND HC_DIAG1 <= "E13.618") OR
(HC_DIAG1 = "R26.2") OR
( (MID(HC_DIAG2,1,3) >= "M00" AND MID(HC_DIAG2,1,3) <= "M99") AND
NOT( (HC_DIAG2>= "M10.00" AND HC_DIAG2 <= "M10.9") OR
( HC_DIAG2>= "M1A.00X0" AND HC_DIAG2 <= "M1A.9XX1"))) OR
(HC_DIAG2>= "E08.610" AND HC_DIAG2 <= "E08.618") OR
(HC_DIAG2>= "E09.610" AND HC_DIAG2 <= "E09.618") OR
(HC_DIAG2>= "E10.610" AND HC_DIAG2 <= "E10.618") OR
(HC_DIAG2>= "E11.610" AND HC_DIAG2 <= "E11.618") OR

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(HC_DIAG2>= "E13.610" AND HC_DIAG2 <= "E13.618") OR
 (HC_DIAG2 = "R26.2") OR
 ((MID(HC_DIAG3,1,3) >= "M00" AND MID(HC_DIAG3,1,3) <= "M99") AND
 NOT((HC_DIAG3>= "M10.00" AND HC_DIAG3 <= "M10.9") OR
 (HC_DIAG3>= "M1A.00X0" AND HC_DIAG3 <= "M1A.9XX1")))) OR
 (HC_DIAG3>= "E08.610" AND HC_DIAG3 <= "E08.618") OR
 (HC_DIAG3>= "E09.610" AND HC_DIAG3 <= "E09.618") OR
 (HC_DIAG3>= "E10.610" AND HC_DIAG3 <= "E10.618") OR
 (HC_DIAG3>= "E11.610" AND HC_DIAG3 <= "E11.618") OR
 (HC_DIAG3>= "E13.610" AND HC_DIAG3 <= "E13.618") OR
 (HC_DIAG3 = "R26.2") OR
 ((MID(HC_DIAG4,1,3) >= "M00" AND MID(HC_DIAG4,1,3) <= "M99") AND
 NOT((HC_DIAG4>= "M10.00" AND HC_DIAG4 <= "M10.9") OR
 (HC_DIAG4>= "M1A.00X0" AND HC_DIAG4 <= "M1A.9XX1")))) OR
 (HC_DIAG4>= "E08.610" AND HC_DIAG4 <= "E08.618") OR
 (HC_DIAG4>= "E09.610" AND HC_DIAG4 <= "E09.618") OR
 (HC_DIAG4>= "E10.610" AND HC_DIAG4 <= "E10.618") OR
 (HC_DIAG4>= "E11.610" AND HC_DIAG4 <= "E11.618") OR
 (HC_DIAG4>= "E13.610" AND HC_DIAG4 <= "E13.618") OR
 (HC_DIAG4 = "R26.2") OR
 ((MID(HC_DIAG5,1,3) >= "M00" AND MID(HC_DIAG5,1,3) <= "M99") AND
 NOT((HC_DIAG5>= "M10.00" AND HC_DIAG5 <= "M10.9") OR
 (HC_DIAG5>= "M1A.00X0" AND HC_DIAG5 <= "M1A.9XX1")))) OR
 (HC_DIAG5>= "E08.610" AND HC_DIAG5 <= "E08.618") OR
 (HC_DIAG5>= "E09.610" AND HC_DIAG5 <= "E09.618") OR
 (HC_DIAG5>= "E10.610" AND HC_DIAG5 <= "E10.618") OR
 (HC_DIAG5>= "E11.610" AND HC_DIAG5 <= "E11.618") OR
 (HC_DIAG5>= "E13.610" AND HC_DIAG5 <= "E13.618") OR
 (HC_DIAG5 = "R26.2") OR
 ((MID(HC_DIAG6,1,3) >= "M00" AND MID(HC_DIAG6,1,3) <= "M99") AND
 NOT((HC_DIAG6>= "M10.00" AND HC_DIAG6 <= "M10.9") OR
 (HC_DIAG6>= "M1A.00X0" AND HC_DIAG6 <= "M1A.9XX1")))) OR
 (HC_DIAG6>= "E08.610" AND HC_DIAG6 <= "E08.618") OR
 (HC_DIAG6>= "E09.610" AND HC_DIAG6 <= "E09.618") OR
 (HC_DIAG6>= "E10.610" AND HC_DIAG6 <= "E10.618") OR
 (HC_DIAG6>= "E11.610" AND HC_DIAG6 <= "E11.618") OR
 (HC_DIAG6>= "E13.610" AND HC_DIAG6 <= "E13.618") OR
 (HC_DIAG6 = "R26.2") OR
 ((MID(OPT_DIAG1,1,3) >= "M00" AND MID(OPT_DIAG1,1,3) <= "M99") AND
 NOT((OPT_DIAG1>= "M10.00" AND OPT_DIAG1 <= "M10.9") OR

(OPT_DIAG1>= "M1A.00X0" AND OPT_DIAG1 <= "M1A.9XX1")) OR
 (OPT_DIAG1>= "E08.610" AND OPT_DIAG1 <= "E08.618") OR
 (OPT_DIAG1>= "E09.610" AND OPT_DIAG1 <= "E09.618") OR
 (OPT_DIAG1>= "E10.610" AND OPT_DIAG1 <= "E10.618") OR
 (OPT_DIAG1>= "E11.610" AND OPT_DIAG1 <= "E11.618") OR
 (OPT_DIAG1>= "E13.610" AND OPT_DIAG1 <= "E13.618") OR
 (OPT_DIAG1 = "R26.2") OR
 ((MID(OPT2_DIAG1,1,3) >= "M00" AND MID(OPT2_DIAG1,1,3) <= "M99") AND
 NOT((OPT2_DIAG1>= "M10.00" AND OPT2_DIAG1 <= "M10.9") OR
 (OPT2_DIAG1>= "M1A.00X0" AND OPT2_DIAG1 <= "M1A.9XX1")) OR
 (OPT2_DIAG1>= "E08.610" AND OPT2_DIAG1 <= "E08.618") OR
 (OPT2_DIAG1>= "E09.610" AND OPT2_DIAG1 <= "E09.618") OR
 (OPT2_DIAG1>= "E10.610" AND OPT2_DIAG1 <= "E10.618") OR
 (OPT2_DIAG1>= "E11.610" AND OPT2_DIAG1 <= "E11.618") OR
 (OPT2_DIAG1>= "E13.610" AND OPT2_DIAG1 <= "E13.618") OR
 (OPT2_DIAG1 = "R26.2") OR
 ((MID(OPT_DIAG2,1,3) >= "M00" AND MID(OPT_DIAG2,1,3) <= "M99") AND
 NOT((OPT_DIAG2>= "M10.00" AND OPT_DIAG2 <= "M10.9") OR
 (OPT_DIAG2>= "M1A.00X0" AND OPT_DIAG2 <= "M1A.9XX1")) OR
 (OPT_DIAG2>= "E08.610" AND OPT_DIAG2 <= "E08.618") OR
 (OPT_DIAG2>= "E09.610" AND OPT_DIAG2 <= "E09.618") OR
 (OPT_DIAG2>= "E10.610" AND OPT_DIAG2 <= "E10.618") OR
 (OPT_DIAG2>= "E11.610" AND OPT_DIAG2 <= "E11.618") OR
 (OPT_DIAG2>= "E13.610" AND OPT_DIAG2 <= "E13.618") OR
 (OPT_DIAG2 = "R26.2") OR
 ((MID(OPT2_DIAG2,1,3) >= "M00" AND MID(OPT2_DIAG2,1,3) <= "M99") AND
 NOT((OPT2_DIAG2>= "M10.00" AND OPT2_DIAG2 <= "M10.9") OR
 (OPT2_DIAG2>= "M1A.00X0" AND OPT2_DIAG2 <= "M1A.9XX1")) OR
 (OPT2_DIAG2>= "E08.610" AND OPT2_DIAG2 <= "E08.618") OR
 (OPT2_DIAG2>= "E09.610" AND OPT2_DIAG2 <= "E09.618") OR
 (OPT2_DIAG2>= "E10.610" AND OPT2_DIAG2 <= "E10.618") OR
 (OPT2_DIAG2>= "E11.610" AND OPT2_DIAG2 <= "E11.618") OR
 (OPT2_DIAG2>= "E13.610" AND OPT2_DIAG2 <= "E13.618") OR
 (OPT2_DIAG2 = "R26.2") OR
 ((MID(OPT_DIAG3,1,3) >= "M00" AND MID(OPT_DIAG3,1,3) <= "M99") AND
 NOT((OPT_DIAG3>= "M10.00" AND OPT_DIAG3 <= "M10.9") OR
 (OPT_DIAG3>= "M1A.00X0" AND OPT_DIAG3 <= "M1A.9XX1")) OR
 (OPT_DIAG3>= "E08.610" AND OPT_DIAG3 <= "E08.618") OR
 (OPT_DIAG3>= "E09.610" AND OPT_DIAG3 <= "E09.618") OR
 (OPT_DIAG3>= "E10.610" AND OPT_DIAG3 <= "E10.618") OR

(OPT_DIAG3>= "E11.610" AND OPT_DIAG3 <= "E11.618") OR
 (OPT_DIAG3>= "E13.610" AND OPT_DIAG3 <= "E13.618") OR
 (OPT_DIAG3 = "R26.2") OR
 ((MID(OPT2_DIAG3,1,3) >= "M00" AND MID(OPT2_DIAG3,1,3) <= "M99") AND
 NOT((OPT2_DIAG3>= "M10.00" AND OPT2_DIAG3 <= "M10.9") OR
 (OPT2_DIAG3>= "M1A.00X0" AND OPT2_DIAG3 <= "M1A.9XX1")))) OR
 (OPT2_DIAG3>= "E08.610" AND OPT2_DIAG3 <= "E08.618") OR
 (OPT2_DIAG3>= "E09.610" AND OPT2_DIAG3 <= "E09.618") OR
 (OPT2_DIAG3>= "E10.610" AND OPT2_DIAG3 <= "E10.618") OR
 (OPT2_DIAG3>= "E11.610" AND OPT2_DIAG3 <= "E11.618") OR
 (OPT2_DIAG3>= "E13.610" AND OPT2_DIAG3 <= "E13.618") OR
 (OPT2_DIAG3 = "R26.2") OR
 ((MID(OPT_DIAG4,1,3) >= "M00" AND MID(OPT_DIAG4,1,3) <= "M99") AND
 NOT((OPT_DIAG4>= "M10.00" AND OPT_DIAG4 <= "M10.9") OR
 (OPT_DIAG4>= "M1A.00X0" AND OPT_DIAG4 <= "M1A.9XX1")))) OR
 (OPT_DIAG4>= "E08.610" AND OPT_DIAG4 <= "E08.618") OR
 (OPT_DIAG4>= "E09.610" AND OPT_DIAG4 <= "E09.618") OR
 (OPT_DIAG4>= "E10.610" AND OPT_DIAG4 <= "E10.618") OR
 (OPT_DIAG4>= "E11.610" AND OPT_DIAG4 <= "E11.618") OR
 (OPT_DIAG4>= "E13.610" AND OPT_DIAG4 <= "E13.618") OR
 (OPT_DIAG4 = "R26.2") OR
 ((MID(OPT2_DIAG4,1,3) >= "M00" AND MID(OPT2_DIAG4,1,3) <= "M99") AND
 NOT((OPT2_DIAG4>= "M10.00" AND OPT2_DIAG4 <= "M10.9") OR
 (OPT2_DIAG4>= "M1A.00X0" AND OPT2_DIAG4 <= "M1A.9XX1")))) OR
 (OPT2_DIAG4>= "E08.610" AND OPT2_DIAG4 <= "E08.618") OR
 (OPT2_DIAG4>= "E09.610" AND OPT2_DIAG4 <= "E09.618") OR
 (OPT2_DIAG4>= "E10.610" AND OPT2_DIAG4 <= "E10.618") OR
 (OPT2_DIAG4>= "E11.610" AND OPT2_DIAG4 <= "E11.618") OR
 (OPT2_DIAG4>= "E13.610" AND OPT2_DIAG4 <= "E13.618") OR
 (OPT2_DIAG4 = "R26.2") OR
 ((MID(OPT_DIAG5,1,3) >= "M00" AND MID(OPT_DIAG5,1,3) <= "M99") AND
 NOT((OPT_DIAG5>= "M10.00" AND OPT_DIAG5 <= "M10.9") OR
 (OPT_DIAG5>= "M1A.00X0" AND OPT_DIAG5 <= "M1A.9XX1")))) OR
 (OPT_DIAG5>= "E08.610" AND OPT_DIAG5 <= "E08.618") OR
 (OPT_DIAG5>= "E09.610" AND OPT_DIAG5 <= "E09.618") OR
 (OPT_DIAG5>= "E10.610" AND OPT_DIAG5 <= "E10.618") OR
 (OPT_DIAG5>= "E11.610" AND OPT_DIAG5 <= "E11.618") OR
 (OPT_DIAG5>= "E13.610" AND OPT_DIAG5 <= "E13.618") OR
 (OPT_DIAG5 = "R26.2") OR
 ((MID(OPT2_DIAG5,1,3) >= "M00" AND MID(OPT2_DIAG5,1,3) <= "M99") AND

```

NOT( (OPT2_DIAG5>= "M10.00" AND OPT2_DIAG5 <= "M10.9") OR
( OPT2_DIAG5>= "M1A.00X0" AND OPT2_DIAG5 <= "M1A.9XX1")) OR
(OPT2_DIAG5>= "E08.610" AND OPT2_DIAG5 <= "E08.618") OR
(OPT2_DIAG5>= "E09.610" AND OPT2_DIAG5 <= "E09.618") OR
(OPT2_DIAG5>= "E10.610" AND OPT2_DIAG5 <= "E10.618") OR
(OPT2_DIAG5>= "E11.610" AND OPT2_DIAG5 <= "E11.618") OR
(OPT2_DIAG5>= "E13.610" AND OPT2_DIAG5 <= "E13.618") OR
(OPT2_DIAG5 = "R26.2") OR
( (MID(OPT_DIAG6,1,3) >= "M00" AND MID(OPT_DIAG6,1,3) <= "M99") AND
NOT( (OPT_DIAG6>= "M10.00" AND OPT_DIAG6 <= "M10.9") OR
( OPT_DIAG6>= "M1A.00X0" AND OPT_DIAG6 <= "M1A.9XX1")) OR
(OPT_DIAG6>= "E08.610" AND OPT_DIAG6 <= "E08.618") OR
(OPT_DIAG6>= "E09.610" AND OPT_DIAG6 <= "E09.618") OR
(OPT_DIAG6>= "E10.610" AND OPT_DIAG6 <= "E10.618") OR
(OPT_DIAG6>= "E11.610" AND OPT_DIAG6 <= "E11.618") OR
(OPT_DIAG6>= "E13.610" AND OPT_DIAG6 <= "E13.618") OR
(OPT_DIAG6 = "R26.2") OR
( (MID(OPT2_DIAG6 ,1,3) >= "M00" AND MID(OPT2_DIAG6 ,1,3) <= "M99") AND
NOT( (OPT2_DIAG6 >= "M10.00" AND OPT2_DIAG6 <= "M10.9") OR
( OPT2_DIAG6 >= "M1A.00X0" AND OPT2_DIAG6 <= "M1A.9XX1")) OR
(OPT2_DIAG6 >= "E08.610" AND OPT2_DIAG6 <= "E08.618") OR
(OPT2_DIAG6 >= "E09.610" AND OPT2_DIAG6 <= "E09.618") OR
(OPT2_DIAG6 >= "E10.610" AND OPT2_DIAG6 <= "E10.618") OR
(OPT2_DIAG6 >= "E11.610" AND OPT2_DIAG6 <= "E11.618") OR
(OPT2_DIAG6 >= "E13.610" AND OPT2_DIAG6 <= "E13.618") OR
(OPT2_DIAG6 = "R26.2")
THEN
    HC_DX_MUSCL_SKEL = 1
ELSE
    HC_DX_MUSCL_SKEL = 0
END IF

```

Ill-defined conditions (%)

```

IF
( (MID(HC_DIAG1,1,3) >= "R00" AND MID(HC_DIAG1,1,3) <= "R99") AND
    NOT( (HC_DIAG1 = "R00.1") OR ( HC_DIAG1 = "R26.2")) OR
    (HC_DIAG1 = "E08.52") OR
    (HC_DIAG1 = "E09.52") OR
    (HC_DIAG1 = "E10.52") OR
    (HC_DIAG1 = "E11.52") OR

```

(HC_DIAG1 = "E13.52") OR
 (HC_DIAG1>= "I70.261" AND HC_DIAG1 <= "I70.269") OR
 (HC_DIAG1>= "I70.361" AND HC_DIAG1 <= "I70.369") OR
 (HC_DIAG1>= "I70.461" AND HC_DIAG1 <= "I70.469") OR
 (HC_DIAG1>= "I70.561" AND HC_DIAG1 <= "I70.569") OR
 (HC_DIAG1>= "I70.661" AND HC_DIAG1 <= "I70.669") OR
 (HC_DIAG1>= "I70.761" AND HC_DIAG1 <= "I70.769") OR
 (HC_DIAG1 = "I96.") OR
 (HC_DIAG1 = "G47.00") OR
 (HC_DIAG1 = "G47.30") OR
 (HC_DIAG1 = "G93.3") OR
 ((MID(HC_DIAG2,1,3) >= "R00" AND MID(HC_DIAG2,1,3) <= "R99") AND
 NOT((HC_DIAG2 = "R00.1") OR (HC_DIAG2 = "R26.2")))) OR
 (HC_DIAG2 = "E08.52") OR
 (HC_DIAG2 = "E09.52") OR
 (HC_DIAG2 = "E10.52") OR
 (HC_DIAG2 = "E11.52") OR
 (HC_DIAG2 = "E13.52") OR
 (HC_DIAG2>= "I70.261" AND HC_DIAG2 <= "I70.269") OR
 (HC_DIAG2>= "I70.361" AND HC_DIAG2 <= "I70.369") OR
 (HC_DIAG2>= "I70.461" AND HC_DIAG2 <= "I70.469") OR
 (HC_DIAG2>= "I70.561" AND HC_DIAG2 <= "I70.569") OR
 (HC_DIAG2>= "I70.661" AND HC_DIAG2 <= "I70.669") OR
 (HC_DIAG2>= "I70.761" AND HC_DIAG2 <= "I70.769") OR
 (HC_DIAG2 = "I96.") OR
 (HC_DIAG2 = "G47.00") OR
 (HC_DIAG2 = "G47.30") OR
 (HC_DIAG2 = "G93.3") OR
 ((MID(HC_DIAG3,1,3) >= "R00" AND MID(HC_DIAG3,1,3) <= "R99") AND
 NOT((HC_DIAG3 = "R00.1") OR (HC_DIAG3 = "R26.2")))) OR
 (HC_DIAG3 = "E08.52") OR
 (HC_DIAG3 = "E09.52") OR
 (HC_DIAG3 = "E10.52") OR
 (HC_DIAG3 = "E11.52") OR
 (HC_DIAG3 = "E13.52") OR
 (HC_DIAG3>= "I70.261" AND HC_DIAG3 <= "I70.269") OR
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 (HC_DIAG3>= "I70.661" AND HC_DIAG3 <= "I70.669") OR

(HC_DIAG3>= "I70.761" AND HC_DIAG3 <= "I70.769") OR
 (HC_DIAG3 = "I96.") OR
 (HC_DIAG3 = "G47.00") OR
 (HC_DIAG3 = "G47.30") OR
 (HC_DIAG3 = "G93.3") OR
 ((MID(HC_DIAG4,1,3) >= "R00" AND MID(HC_DIAG4,1,3) <= "R99") AND
 NOT((HC_DIAG4 = "R00.1") OR (HC_DIAG4 = "R26.2"))) OR
 (HC_DIAG4 = "E08.52") OR
 (HC_DIAG4 = "E09.52") OR
 (HC_DIAG4 = "E10.52") OR
 (HC_DIAG4 = "E11.52") OR
 (HC_DIAG4 = "E13.52") OR
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 (HC_DIAG4>= "I70.661" AND HC_DIAG4 <= "I70.669") OR
 (HC_DIAG4>= "I70.761" AND HC_DIAG4 <= "I70.769") OR
 (HC_DIAG4 = "I96.") OR
 (HC_DIAG4 = "G47.00") OR
 (HC_DIAG4 = "G47.30") OR
 (HC_DIAG4 = "G93.3") OR
 ((MID(HC_DIAG5,1,3) >= "R00" AND MID(HC_DIAG5,1,3) <= "R99") AND
 NOT((HC_DIAG5 = "R00.1") OR (HC_DIAG5 = "R26.2"))) OR
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 (HC_DIAG5 = "G47.00") OR
 (HC_DIAG5 = "G47.30") OR
 (HC_DIAG5 = "G93.3") OR
 ((MID(HC_DIAG6,1,3) >= "R00" AND MID(HC_DIAG6,1,3) <= "R99") AND

NOT((HC_DIAG6 = "R00.1") OR (HC_DIAG6 = "R26.2")) OR
(HC_DIAG6 = "E08.52") OR
(HC_DIAG6 = "E09.52") OR
(HC_DIAG6 = "E10.52") OR
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(HC_DIAG6>= "I70.361" AND HC_DIAG6 <= "I70.369") OR
(HC_DIAG6>= "I70.461" AND HC_DIAG6 <= "I70.469") OR
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(HC_DIAG6 = "G93.3") OR
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(OPT_DIAG1 = "I96.") OR
(OPT_DIAG1 = "G47.00") OR
(OPT_DIAG1 = "G47.30") OR
(OPT_DIAG1 = "G93.3") OR
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(OPT2_DIAG1 = "E08.52") OR
(OPT2_DIAG1 = "E09.52") OR
(OPT2_DIAG1 = "E10.52") OR
(OPT2_DIAG1 = "E11.52") OR
(OPT2_DIAG1 = "E13.52") OR

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 (OPT2_DIAG1>= "I70.661" AND OPT2_DIAG1 <= "I70.669") OR
 (OPT2_DIAG1>= "I70.761" AND OPT2_DIAG1 <= "I70.769") OR
 (OPT2_DIAG1 = "I96.") OR
 (OPT2_DIAG1 = "G47.00") OR
 (OPT2_DIAG1 = "G47.30") OR
 (OPT2_DIAG1 = "G93.3") OR
 ((MID(OPT_DIAG2,1,3) >= "R00" AND MID(OPT_DIAG2,1,3) <= "R99") AND
 NOT((OPT_DIAG2 = "R00.1") OR (OPT_DIAG2 = "R26.2"))) OR
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 (OPT2_DIAG2>= "I70.761" AND OPT2_DIAG2 <= "I70.769") OR

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 (OPT_DIAG3>= "I70.361" AND OPT_DIAG3 <= "I70.369") OR
 (OPT_DIAG3>= "I70.461" AND OPT_DIAG3 <= "I70.469") OR
 (OPT_DIAG3>= "I70.561" AND OPT_DIAG3 <= "I70.569") OR
 (OPT_DIAG3>= "I70.661" AND OPT_DIAG3 <= "I70.669") OR
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 (OPT_DIAG3 = "G47.00") OR
 (OPT_DIAG3 = "G47.30") OR
 (OPT_DIAG3 = "G93.3") OR
 ((MID(OPT2_DIAG3,1,3) >= "R00" AND MID(OPT2_DIAG3,1,3) <= "R99") AND
 NOT((OPT2_DIAG3 = "R00.1") OR (OPT2_DIAG3 = "R26.2")))) OR
 (OPT2_DIAG3 = "E08.52") OR
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 (OPT2_DIAG3 = "E11.52") OR
 (OPT2_DIAG3 = "E13.52") OR
 (OPT2_DIAG3>= "I70.261" AND OPT2_DIAG3 <= "I70.269") OR
 (OPT2_DIAG3>= "I70.361" AND OPT2_DIAG3 <= "I70.369") OR
 (OPT2_DIAG3>= "I70.461" AND OPT2_DIAG3 <= "I70.469") OR
 (OPT2_DIAG3>= "I70.561" AND OPT2_DIAG3 <= "I70.569") OR
 (OPT2_DIAG3>= "I70.661" AND OPT2_DIAG3 <= "I70.669") OR
 (OPT2_DIAG3>= "I70.761" AND OPT2_DIAG3 <= "I70.769") OR
 (OPT2_DIAG3 = "I96.") OR
 (OPT2_DIAG3 = "G47.00") OR
 (OPT2_DIAG3 = "G47.30") OR
 (OPT2_DIAG3 = "G93.3") OR
 ((MID(OPT_DIAG4,1,3) >= "R00" AND MID(OPT_DIAG4,1,3) <= "R99") AND
 NOT((OPT_DIAG4 = "R00.1") OR (OPT_DIAG4 = "R26.2")))) OR

(OPT_DIAG4 = "E08.52") OR
 (OPT_DIAG4 = "E09.52") OR
 (OPT_DIAG4 = "E10.52") OR
 (OPT_DIAG4 = "E11.52") OR
 (OPT_DIAG4 = "E13.52") OR
 (OPT_DIAG4 >= "I70.261" AND OPT_DIAG4 <= "I70.269") OR
 (OPT_DIAG4 >= "I70.361" AND OPT_DIAG4 <= "I70.369") OR
 (OPT_DIAG4 >= "I70.461" AND OPT_DIAG4 <= "I70.469") OR
 (OPT_DIAG4 >= "I70.561" AND OPT_DIAG4 <= "I70.569") OR
 (OPT_DIAG4 >= "I70.661" AND OPT_DIAG4 <= "I70.669") OR
 (OPT_DIAG4 >= "I70.761" AND OPT_DIAG4 <= "I70.769") OR
 (OPT_DIAG4 = "I96.") OR
 (OPT_DIAG4 = "G47.00") OR
 (OPT_DIAG4 = "G47.30") OR
 (OPT_DIAG4 = "G93.3") OR
 ((MID(OPT2_DIAG4,1,3) >= "R00" AND MID(OPT2_DIAG4,1,3) <= "R99") AND
 NOT((OPT2_DIAG4 = "R00.1") OR (OPT2_DIAG4 = "R26.2"))) OR
 (OPT2_DIAG4 = "E08.52") OR
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 (OPT2_DIAG4 >= "I70.361" AND OPT2_DIAG4 <= "I70.369") OR
 (OPT2_DIAG4 >= "I70.461" AND OPT2_DIAG4 <= "I70.469") OR
 (OPT2_DIAG4 >= "I70.561" AND OPT2_DIAG4 <= "I70.569") OR
 (OPT2_DIAG4 >= "I70.661" AND OPT2_DIAG4 <= "I70.669") OR
 (OPT2_DIAG4 >= "I70.761" AND OPT2_DIAG4 <= "I70.769") OR
 (OPT2_DIAG4 = "I96.") OR
 (OPT2_DIAG4 = "G47.00") OR
 (OPT2_DIAG4 = "G47.30") OR
 (OPT2_DIAG4 = "G93.3") OR
 ((MID(OPT_DIAG5,1,3) >= "R00" AND MID(OPT_DIAG5,1,3) <= "R99") AND
 NOT((OPT_DIAG5 = "R00.1") OR (OPT_DIAG5 = "R26.2"))) OR
 (OPT_DIAG5 = "E08.52") OR
 (OPT_DIAG5 = "E09.52") OR
 (OPT_DIAG5 = "E10.52") OR
 (OPT_DIAG5 = "E11.52") OR
 (OPT_DIAG5 = "E13.52") OR
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(OPT_DIAG5>= "I70.361" AND OPT_DIAG5 <= "I70.369") OR
 (OPT_DIAG5>= "I70.461" AND OPT_DIAG5 <= "I70.469") OR
 (OPT_DIAG5>= "I70.561" AND OPT_DIAG5 <= "I70.569") OR
 (OPT_DIAG5>= "I70.661" AND OPT_DIAG5 <= "I70.669") OR
 (OPT_DIAG5>= "I70.761" AND OPT_DIAG5 <= "I70.769") OR
 (OPT_DIAG5 = "I96.") OR
 (OPT_DIAG5 = "G47.00") OR
 (OPT_DIAG5 = "G47.30") OR
 (OPT_DIAG5 = "G93.3") OR
 ((MID(OPT2_DIAG5,1,3) >= "R00" AND MID(OPT2_DIAG5,1,3) <= "R99") AND
 NOT((OPT2_DIAG5 = "R00.1") OR (OPT2_DIAG5 = "R26.2")))) OR
 (OPT2_DIAG5 = "E08.52") OR
 (OPT2_DIAG5 = "E09.52") OR
 (OPT2_DIAG5 = "E10.52") OR
 (OPT2_DIAG5 = "E11.52") OR
 (OPT2_DIAG5 = "E13.52") OR
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 (OPT2_DIAG5>= "I70.461" AND OPT2_DIAG5 <= "I70.469") OR
 (OPT2_DIAG5>= "I70.561" AND OPT2_DIAG5 <= "I70.569") OR
 (OPT2_DIAG5>= "I70.661" AND OPT2_DIAG5 <= "I70.669") OR
 (OPT2_DIAG5>= "I70.761" AND OPT2_DIAG5 <= "I70.769") OR
 (OPT2_DIAG5 = "I96.") OR
 (OPT2_DIAG5 = "G47.00") OR
 (OPT2_DIAG5 = "G47.30") OR
 (OPT2_DIAG5 = "G93.3") OR
 ((MID(OPT_DIAG6,1,3) >= "R00" AND MID(OPT_DIAG6,1,3) <= "R99") AND
 NOT((OPT_DIAG6 = "R00.1") OR (OPT_DIAG6 = "R26.2")))) OR
 (OPT_DIAG6 = "E08.52") OR
 (OPT_DIAG6 = "E09.52") OR
 (OPT_DIAG6 = "E10.52") OR
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 (OPT_DIAG6 = "E13.52") OR
 (OPT_DIAG6>= "I70.261" AND OPT_DIAG6 <= "I70.269") OR
 (OPT_DIAG6>= "I70.361" AND OPT_DIAG6 <= "I70.369") OR
 (OPT_DIAG6>= "I70.461" AND OPT_DIAG6 <= "I70.469") OR
 (OPT_DIAG6>= "I70.561" AND OPT_DIAG6 <= "I70.569") OR
 (OPT_DIAG6>= "I70.661" AND OPT_DIAG6 <= "I70.669") OR
 (OPT_DIAG6>= "I70.761" AND OPT_DIAG6 <= "I70.769") OR
 (OPT_DIAG6 = "I96.") OR

```

(OPT_DIAG6 = "G47.00") OR
(OPT_DIAG6 = "G47.30") OR
(OPT_DIAG6 = "G93.3") OR
( (MID(OPT2_DIAG6 ,1,3) >= "R00" AND MID(OPT2_DIAG6 ,1,3) <= "R99") AND
NOT( (OPT2_DIAG6 = "R00.1") OR ( OPT2_DIAG6 = "R26.2")))) OR
(OPT2_DIAG6 = "E08.52") OR
(OPT2_DIAG6 = "E09.52") OR
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(OPT2_DIAG6 >= "I70.261" AND OPT2_DIAG6 <= "I70.269") OR
(OPT2_DIAG6 >= "I70.361" AND OPT2_DIAG6 <= "I70.369") OR
(OPT2_DIAG6 >= "I70.461" AND OPT2_DIAG6 <= "I70.469") OR
(OPT2_DIAG6 >= "I70.561" AND OPT2_DIAG6 <= "I70.569") OR
(OPT2_DIAG6 >= "I70.661" AND OPT2_DIAG6 <= "I70.669") OR
(OPT2_DIAG6 >= "I70.761" AND OPT2_DIAG6 <= "I70.769") OR
(OPT2_DIAG6 = "I96.") OR
(OPT2_DIAG6 = "G47.00") OR
(OPT2_DIAG6 = "G47.30") OR
(OPT2_DIAG6 = "G93.3")
THEN
    HC_DX_ILL_DEFINED = 1
ELSE
    HC_DX_ILL_DEFINED = 0
END IF

```

Fractures (%)

```

IF (MID(HC_DIAG1,1,2) >= "S0" AND MID(HC_DIAG1,1,2) <= "S9" AND
MID(HC_DIAG1,3,3) >= "2.0" AND MID(HC_DIAG1,3,3) <= "3.9") OR
(MID(HC_DIAG1,1,2) = "S1" AND MID(HC_DIAG1,3,3) = "6.1") OR
(MID(HC_DIAG1,1,2) >= "S2" AND MID(HC_DIAG1,1,2) <= "S3" AND
MID(HC_DIAG1,3,3) >= "9.0" AND MID(HC_DIAG1,3,3) <= "9.3" AND
MID(HC_DIAG1,6,1) = "1") OR
(MID(HC_DIAG1,1,2) >= "S4" AND MID(HC_DIAG1,1,2) <= "S9" AND
MID(HC_DIAG1,3,3) >= "6.0" AND MID(HC_DIAG1,3,3) <= "6.9" AND
MID(HC_DIAG1,6,1) = "1") OR
(MID(HC_DIAG1,1,2) >= "S4" AND MID(HC_DIAG1,1,2) <= "S9" AND
MID(HC_DIAG1,3,3) >= "9.0" AND MID(HC_DIAG1,3,3) <= "9.3") OR
(MID(HC_DIAG2,1,2) >= "S0" AND MID(HC_DIAG2,1,2) <= "S9" AND
MID(HC_DIAG2,3,3) >= "2.0" AND MID(HC_DIAG2,3,3) <= "3.9") OR

```

(MID(HC_DIAG2,1,2) = "S1" AND MID(HC_DIAG2,3,3) = "6.1") OR
 (MID(HC_DIAG2,1,2) >= "S2" AND MID(HC_DIAG2,1,2) <= "S3" AND
 MID(HC_DIAG2,3,3) >= "9.0" AND MID(HC_DIAG2,3,3) <= "9.3" AND
 MID(HC_DIAG2,6,1) = "1") OR
 (MID(HC_DIAG2,1,2) >= "S4" AND MID(HC_DIAG2,1,2) <= "S9" AND
 MID(HC_DIAG2,3,3) >= "6.0" AND MID(HC_DIAG2,3,3) <= "6.9" AND
 MID(HC_DIAG2,6,1) = "1") OR
 (MID(HC_DIAG2,1,2) >= "S4" AND MID(HC_DIAG2,1,2) <= "S9" AND
 MID(HC_DIAG2,3,3) >= "9.0" AND MID(HC_DIAG2,3,3) <= "9.3") OR
 (MID(HC_DIAG3,1,2) >= "S0" AND MID(HC_DIAG3,1,2) <= "S9" AND
 MID(HC_DIAG3,3,3) >= "2.0" AND MID(HC_DIAG3,3,3) <= "3.9") OR
 (MID(HC_DIAG3,1,2) = "S1" AND MID(HC_DIAG3,3,3) = "6.1") OR
 (MID(HC_DIAG3,1,2) >= "S2" AND MID(HC_DIAG3,1,2) <= "S3" AND
 MID(HC_DIAG3,3,3) >= "9.0" AND MID(HC_DIAG3,3,3) <= "9.3" AND
 MID(HC_DIAG3,6,1) = "1") OR
 (MID(HC_DIAG3,1,2) >= "S4" AND MID(HC_DIAG3,1,2) <= "S9" AND
 MID(HC_DIAG3,3,3) >= "6.0" AND MID(HC_DIAG3,3,3) <= "6.9" AND
 MID(HC_DIAG3,6,1) = "1") OR
 (MID(HC_DIAG3,1,2) >= "S4" AND MID(HC_DIAG3,1,2) <= "S9" AND
 MID(HC_DIAG3,3,3) >= "9.0" AND MID(HC_DIAG3,3,3) <= "9.3") OR
 (MID(HC_DIAG4,1,2) >= "S0" AND MID(HC_DIAG4,1,2) <= "S9" AND
 MID(HC_DIAG4,3,3) >= "2.0" AND MID(HC_DIAG4,3,3) <= "3.9") OR
 (MID(HC_DIAG4,1,2) = "S1" AND MID(HC_DIAG4,3,3) = "6.1") OR
 (MID(HC_DIAG4,1,2) >= "S2" AND MID(HC_DIAG4,1,2) <= "S3" AND
 MID(HC_DIAG4,3,3) >= "9.0" AND MID(HC_DIAG4,3,3) <= "9.3" AND
 MID(HC_DIAG4,6,1) = "1") OR
 (MID(HC_DIAG4,1,2) >= "S4" AND MID(HC_DIAG4,1,2) <= "S9" AND
 MID(HC_DIAG4,3,3) >= "6.0" AND MID(HC_DIAG4,3,3) <= "6.9" AND
 MID(HC_DIAG4,6,1) = "1") OR
 (MID(HC_DIAG4,1,2) >= "S4" AND MID(HC_DIAG4,1,2) <= "S9" AND
 MID(HC_DIAG4,3,3) >= "9.0" AND MID(HC_DIAG4,3,3) <= "9.3") OR
 (MID(HC_DIAG5,1,2) >= "S0" AND MID(HC_DIAG5,1,2) <= "S9" AND
 MID(HC_DIAG5,3,3) >= "2.0" AND MID(HC_DIAG5,3,3) <= "3.9") OR
 (MID(HC_DIAG5,1,2) = "S1" AND MID(HC_DIAG5,3,3) = "6.1") OR
 (MID(HC_DIAG5,1,2) >= "S2" AND MID(HC_DIAG5,1,2) <= "S3" AND
 MID(HC_DIAG5,3,3) >= "9.0" AND MID(HC_DIAG5,3,3) <= "9.3" AND
 MID(HC_DIAG5,6,1) = "1") OR
 (MID(HC_DIAG5,1,2) >= "S4" AND MID(HC_DIAG5,1,2) <= "S9" AND
 MID(HC_DIAG5,3,3) >= "6.0" AND MID(HC_DIAG5,3,3) <= "6.9" AND
 MID(HC_DIAG5,6,1) = "1") OR

(MID(HC_DIAG5,1,2) >= "S4" AND MID(HC_DIAG5,1,2) <= "S9" AND
 MID(HC_DIAG5,3,3) >= "9.0" AND MID(HC_DIAG5,3,3) <= "9.3") OR
 (MID(HC_DIAG6,1,2) >= "S0" AND MID(HC_DIAG6,1,2) <= "S9" AND
 MID(HC_DIAG6,3,3) >= "2.0" AND MID(HC_DIAG6,3,3) <= "3.9") OR
 (MID(HC_DIAG6,1,2) = "S1" AND MID(HC_DIAG6,3,3) = "6.1") OR
 (MID(HC_DIAG6,1,2) >= "S2" AND MID(HC_DIAG6,1,2) <= "S3" AND
 MID(HC_DIAG6,3,3) >= "9.0" AND MID(HC_DIAG6,3,3) <= "9.3" AND
 MID(HC_DIAG6,6,1) = "1") OR
 (MID(HC_DIAG6,1,2) >= "S4" AND MID(HC_DIAG6,1,2) <= "S9" AND
 MID(HC_DIAG6,3,3) >= "6.0" AND MID(HC_DIAG6,3,3) <= "6.9" AND
 MID(HC_DIAG6,6,1) = "1") OR
 (MID(HC_DIAG6,1,2) >= "S4" AND MID(HC_DIAG6,1,2) <= "S9" AND
 MID(HC_DIAG6,3,3) >= "9.0" AND MID(HC_DIAG6,3,3) <= "9.3") OR
 (MID(OPT_DIAG1,1,2) >= "S0" AND MID(OPT_DIAG1,1,2) <= "S9" AND
 MID(OPT_DIAG1,3,3) >= "2.0" AND MID(OPT_DIAG1,3,3) <= "3.9") OR
 (MID(OPT_DIAG1,1,2) = "S1" AND MID(OPT_DIAG1,3,3) = "6.1") OR
 (MID(OPT_DIAG1,1,2) >= "S2" AND MID(OPT_DIAG1,1,2) <= "S3" AND
 MID(OPT_DIAG1,3,3) >= "9.0" AND MID(OPT_DIAG1,3,3) <= "9.3" AND
 MID(OPT_DIAG1,6,1) = "1") OR
 (MID(OPT_DIAG1,1,2) >= "S4" AND MID(OPT_DIAG1,1,2) <= "S9" AND
 MID(OPT_DIAG1,3,3) >= "6.0" AND MID(OPT_DIAG1,3,3) <= "6.9" AND
 MID(OPT_DIAG1,6,1) = "1") OR
 (MID(OPT_DIAG1,1,2) >= "S4" AND MID(OPT_DIAG1,1,2) <= "S9" AND
 MID(OPT_DIAG1,3,3) >= "9.0" AND MID(OPT_DIAG1,3,3) <= "9.3") OR
 (MID(OPT2_DIAG1,1,2) >= "S0" AND MID(OPT2_DIAG1,1,2) <= "S9" AND
 MID(OPT2_DIAG1,3,3) >= "2.0" AND MID(OPT2_DIAG1,3,3) <= "3.9") OR
 (MID(OPT2_DIAG1,1,2) = "S1" AND MID(OPT2_DIAG1,3,3) = "6.1") OR
 (MID(OPT2_DIAG1,1,2) >= "S2" AND MID(OPT2_DIAG1,1,2) <= "S3" AND
 MID(OPT2_DIAG1,3,3) >= "9.0" AND MID(OPT2_DIAG1,3,3) <= "9.3" AND
 MID(OPT2_DIAG1,6,1) = "1") OR
 (MID(OPT2_DIAG1,1,2) >= "S4" AND MID(OPT2_DIAG1,1,2) <= "S9" AND
 MID(OPT2_DIAG1,3,3) >= "6.0" AND MID(OPT2_DIAG1,3,3) <= "6.9" AND
 MID(OPT2_DIAG1,6,1) = "1") OR
 (MID(OPT2_DIAG1,1,2) >= "S4" AND MID(OPT2_DIAG1,1,2) <= "S9" AND
 MID(OPT2_DIAG1,3,3) >= "9.0" AND MID(OPT2_DIAG1,3,3) <= "9.3") OR
 (MID(OPT_DIAG2,1,2) >= "S0" AND MID(OPT_DIAG2,1,2) <= "S9" AND
 MID(OPT_DIAG2,3,3) >= "2.0" AND MID(OPT_DIAG2,3,3) <= "3.9") OR
 (MID(OPT_DIAG2,1,2) = "S1" AND MID(OPT_DIAG2,3,3) = "6.1") OR
 (MID(OPT_DIAG2,1,2) >= "S2" AND MID(OPT_DIAG2,1,2) <= "S3" AND
 MID(OPT_DIAG2,3,3) >= "9.0" AND MID(OPT_DIAG2,3,3) <= "9.3" AND

MID(OPT_DIAG2,6,1) = "1") OR
 (MID(OPT_DIAG2,1,2) >= "S4" AND MID(OPT_DIAG2,1,2) <= "S9" AND
 MID(OPT_DIAG2,3,3) >= "6.0" AND MID(OPT_DIAG2,3,3) <= "6.9" AND
 MID(OPT_DIAG2,6,1) = "1") OR
 (MID(OPT_DIAG2,1,2) >= "S4" AND MID(OPT_DIAG2,1,2) <= "S9" AND
 MID(OPT_DIAG2,3,3) >= "9.0" AND MID(OPT_DIAG2,3,3) <= "9.3") OR
 (MID(OPT2_DIAG2,1,2) >= "S0" AND MID(OPT2_DIAG2,1,2) <= "S9" AND
 MID(OPT2_DIAG2,3,3) >= "2.0" AND MID(OPT2_DIAG2,3,3) <= "3.9") OR
 (MID(OPT2_DIAG2,1,2) = "S1" AND MID(OPT2_DIAG2,3,3) = "6.1") OR
 (MID(OPT2_DIAG2,1,2) >= "S2" AND MID(OPT2_DIAG2,1,2) <= "S3" AND
 MID(OPT2_DIAG2,3,3) >= "9.0" AND MID(OPT2_DIAG2,3,3) <= "9.3" AND
 MID(OPT2_DIAG2,6,1) = "1") OR
 (MID(OPT2_DIAG2,1,2) >= "S4" AND MID(OPT2_DIAG2,1,2) <= "S9" AND
 MID(OPT2_DIAG2,3,3) >= "6.0" AND MID(OPT2_DIAG2,3,3) <= "6.9" AND
 MID(OPT2_DIAG2,6,1) = "1") OR
 (MID(OPT2_DIAG2,1,2) >= "S4" AND MID(OPT2_DIAG2,1,2) <= "S9" AND
 MID(OPT2_DIAG2,3,3) >= "9.0" AND MID(OPT2_DIAG2,3,3) <= "9.3") OR
 (MID(OPT_DIAG3,1,2) >= "S0" AND MID(OPT_DIAG3,1,2) <= "S9" AND
 MID(OPT_DIAG3,3,3) >= "2.0" AND MID(OPT_DIAG3,3,3) <= "3.9") OR
 (MID(OPT_DIAG3,1,2) = "S1" AND MID(OPT_DIAG3,3,3) = "6.1") OR
 (MID(OPT_DIAG3,1,2) >= "S2" AND MID(OPT_DIAG3,1,2) <= "S3" AND
 MID(OPT_DIAG3,3,3) >= "9.0" AND MID(OPT_DIAG3,3,3) <= "9.3" AND
 MID(OPT_DIAG3,6,1) = "1") OR
 (MID(OPT_DIAG3,1,2) >= "S4" AND MID(OPT_DIAG3,1,2) <= "S9" AND
 MID(OPT_DIAG3,3,3) >= "6.0" AND MID(OPT_DIAG3,3,3) <= "6.9" AND
 MID(OPT_DIAG3,6,1) = "1") OR
 (MID(OPT_DIAG3,1,2) >= "S4" AND MID(OPT_DIAG3,1,2) <= "S9" AND
 MID(OPT_DIAG3,3,3) >= "9.0" AND MID(OPT_DIAG3,3,3) <= "9.3") OR
 (MID(OPT2_DIAG3,1,2) >= "S0" AND MID(OPT2_DIAG3,1,2) <= "S9" AND
 MID(OPT2_DIAG3,3,3) >= "2.0" AND MID(OPT2_DIAG3,3,3) <= "3.9") OR
 (MID(OPT2_DIAG3,1,2) = "S1" AND MID(OPT2_DIAG3,3,3) = "6.1") OR
 (MID(OPT2_DIAG3,1,2) >= "S2" AND MID(OPT2_DIAG3,1,2) <= "S3" AND
 MID(OPT2_DIAG3,3,3) >= "9.0" AND MID(OPT2_DIAG3,3,3) <= "9.3" AND
 MID(OPT2_DIAG3,6,1) = "1") OR
 (MID(OPT2_DIAG3,1,2) >= "S4" AND MID(OPT2_DIAG3,1,2) <= "S9" AND
 MID(OPT2_DIAG3,3,3) >= "6.0" AND MID(OPT2_DIAG3,3,3) <= "6.9" AND
 MID(OPT2_DIAG3,6,1) = "1") OR
 (MID(OPT2_DIAG3,1,2) >= "S4" AND MID(OPT2_DIAG3,1,2) <= "S9" AND
 MID(OPT2_DIAG3,3,3) >= "9.0" AND MID(OPT2_DIAG3,3,3) <= "9.3") OR
 (MID(OPT_DIAG4,1,2) >= "S0" AND MID(OPT_DIAG4,1,2) <= "S9" AND

MID(OPT_DIAG4,3,3) >= "2.0" AND MID(OPT_DIAG4,3,3) <= "3.9") OR
 (MID(OPT_DIAG4,1,2) = "S1" AND MID(OPT_DIAG4,3,3) = "6.1") OR
 (MID(OPT_DIAG4,1,2) >= "S2" AND MID(OPT_DIAG4,1,2) <= "S3" AND
 MID(OPT_DIAG4,3,3) >= "9.0" AND MID(OPT_DIAG4,3,3) <= "9.3" AND
 MID(OPT_DIAG4,6,1) = "1") OR
 (MID(OPT_DIAG4,1,2) >= "S4" AND MID(OPT_DIAG4,1,2) <= "S9" AND
 MID(OPT_DIAG4,3,3) >= "6.0" AND MID(OPT_DIAG4,3,3) <= "6.9" AND
 MID(OPT_DIAG4,6,1) = "1") OR
 (MID(OPT_DIAG4,1,2) >= "S4" AND MID(OPT_DIAG4,1,2) <= "S9" AND
 MID(OPT_DIAG4,3,3) >= "9.0" AND MID(OPT_DIAG4,3,3) <= "9.3") OR
 (MID(OPT2_DIAG4,1,2) >= "S0" AND MID(OPT2_DIAG4,1,2) <= "S9" AND
 MID(OPT2_DIAG4,3,3) >= "2.0" AND MID(OPT2_DIAG4,3,3) <= "3.9") OR
 (MID(OPT2_DIAG4,1,2) = "S1" AND MID(OPT2_DIAG4,3,3) = "6.1") OR
 (MID(OPT2_DIAG4,1,2) >= "S2" AND MID(OPT2_DIAG4,1,2) <= "S3" AND
 MID(OPT2_DIAG4,3,3) >= "9.0" AND MID(OPT2_DIAG4,3,3) <= "9.3" AND
 MID(OPT2_DIAG4,6,1) = "1") OR
 (MID(OPT2_DIAG4,1,2) >= "S4" AND MID(OPT2_DIAG4,1,2) <= "S9" AND
 MID(OPT2_DIAG4,3,3) >= "6.0" AND MID(OPT2_DIAG4,3,3) <= "6.9" AND
 MID(OPT2_DIAG4,6,1) = "1") OR
 (MID(OPT2_DIAG4,1,2) >= "S4" AND MID(OPT2_DIAG4,1,2) <= "S9" AND
 MID(OPT2_DIAG4,3,3) >= "9.0" AND MID(OPT2_DIAG4,3,3) <= "9.3") OR
 (MID(OPT_DIAG5,1,2) >= "S0" AND MID(OPT_DIAG5,1,2) <= "S9" AND
 MID(OPT_DIAG5,3,3) >= "2.0" AND MID(OPT_DIAG5,3,3) <= "3.9") OR
 (MID(OPT_DIAG5,1,2) = "S1" AND MID(OPT_DIAG5,3,3) = "6.1") OR
 (MID(OPT_DIAG5,1,2) >= "S2" AND MID(OPT_DIAG5,1,2) <= "S3" AND
 MID(OPT_DIAG5,3,3) >= "9.0" AND MID(OPT_DIAG5,3,3) <= "9.3" AND
 MID(OPT_DIAG5,6,1) = "1") OR
 (MID(OPT_DIAG5,1,2) >= "S4" AND MID(OPT_DIAG5,1,2) <= "S9" AND
 MID(OPT_DIAG5,3,3) >= "6.0" AND MID(OPT_DIAG5,3,3) <= "6.9" AND
 MID(OPT_DIAG5,6,1) = "1") OR
 (MID(OPT_DIAG5,1,2) >= "S4" AND MID(OPT_DIAG5,1,2) <= "S9" AND
 MID(OPT_DIAG5,3,3) >= "9.0" AND MID(OPT_DIAG5,3,3) <= "9.3") OR
 (MID(OPT2_DIAG5,1,2) >= "S0" AND MID(OPT2_DIAG5,1,2) <= "S9" AND
 MID(OPT2_DIAG5,3,3) >= "2.0" AND MID(OPT2_DIAG5,3,3) <= "3.9") OR
 (MID(OPT2_DIAG5,1,2) = "S1" AND MID(OPT2_DIAG5,3,3) = "6.1") OR
 (MID(OPT2_DIAG5,1,2) >= "S2" AND MID(OPT2_DIAG5,1,2) <= "S3" AND
 MID(OPT2_DIAG5,3,3) >= "9.0" AND MID(OPT2_DIAG5,3,3) <= "9.3" AND
 MID(OPT2_DIAG5,6,1) = "1") OR
 (MID(OPT2_DIAG5,1,2) >= "S4" AND MID(OPT2_DIAG5,1,2) <= "S9" AND
 MID(OPT2_DIAG5,3,3) >= "6.0" AND MID(OPT2_DIAG5,3,3) <= "6.9" AND

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MID(OPT2_DIAG5,6,1) = "1") OR
(MID(OPT2_DIAG5,1,2) >= "S4" AND MID(OPT2_DIAG5,1,2) <= "S9" AND
MID(OPT2_DIAG5,3,3) >= "9.0" AND MID(OPT2_DIAG5,3,3) <= "9.3") OR
(MID(OPT_DIAG6,1,2) >= "S0" AND MID(OPT_DIAG6,1,2) <= "S9" AND
MID(OPT_DIAG6,3,3) >= "2.0" AND MID(OPT_DIAG6,3,3) <= "3.9") OR
(MID(OPT_DIAG6,1,2) = "S1" AND MID(OPT_DIAG6,3,3) = "6.1") OR
(MID(OPT_DIAG6,1,2) >= "S2" AND MID(OPT_DIAG6,1,2) <= "S3" AND
MID(OPT_DIAG6,3,3) >= "9.0" AND MID(OPT_DIAG6,3,3) <= "9.3" AND
MID(OPT_DIAG6,6,1) = "1") OR
(MID(OPT_DIAG6,1,2) >= "S4" AND MID(OPT_DIAG6,1,2) <= "S9" AND
MID(OPT_DIAG6,3,3) >= "6.0" AND MID(OPT_DIAG6,3,3) <= "6.9" AND
MID(OPT_DIAG6,6,1) = "1") OR
(MID(OPT_DIAG6,1,2) >= "S4" AND MID(OPT_DIAG6,1,2) <= "S9" AND
MID(OPT_DIAG6,3,3) >= "9.0" AND MID(OPT_DIAG6,3,3) <= "9.3") OR
(MID(OPT2_DIAG6 ,1,2) >= "S0" AND MID(OPT2_DIAG6 ,1,2) <= "S9" AND
MID(OPT2_DIAG6 ,3,3) >= "2.0" AND MID(OPT2_DIAG6 ,3,3) <= "3.9") OR
(MID(OPT2_DIAG6 ,1,2) = "S1" AND MID(OPT2_DIAG6 ,3,3) = "6.1") OR
(MID(OPT2_DIAG6 ,1,2) >= "S2" AND MID(OPT2_DIAG6 ,1,2) <= "S3" AND
MID(OPT2_DIAG6 ,3,3) >= "9.0" AND MID(OPT2_DIAG6 ,3,3) <= "9.3" AND
MID(OPT2_DIAG6 ,6,1) = "1") OR
(MID(OPT2_DIAG6 ,1,2) >= "S4" AND MID(OPT2_DIAG6 ,1,2) <= "S9" AND
MID(OPT2_DIAG6 ,3,3) >= "6.0" AND MID(OPT2_DIAG6 ,3,3) <= "6.9" AND
MID(OPT2_DIAG6 ,6,1) = "1") OR
(MID(OPT2_DIAG6 ,1,2) >= "S4" AND MID(OPT2_DIAG6 ,1,2) <= "S9" AND
MID(OPT2_DIAG6 ,3,3) >= "9.0" AND MID(OPT2_DIAG6 ,3,3) <= "9.3")
THEN
    HC_DX_FRACTURE = 1
ELSE
    HC_DX_FRACTURE = 0
END IF

```

Note: The following logic has been added with Revision 4 to accommodate the FY2017 update to the ICD-10-CM code set.

```

IF HC_DX_FRACTURE = 0 AND
    (MID(HC_DIAG1,1,6) = "M84.75" OR
    MID(HC_DIAG2,1,6) = "M84.75" OR
    MID(HC_DIAG3,1,6) = "M84.75" OR
    MID(HC_DIAG4,1,6) = "M84.75" OR
    MID(HC_DIAG5,1,6) = "M84.75" OR
    MID(HC_DIAG6,1,6) = "M84.75" OR

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MID(OPT_DIAG1,1,6) = "M84.75" OR
MID(OPT2_DIAG1,1,6) = "M84.75" OR
MID(OPT_DIAG2,1,6) = "M84.75" OR
MID(OPT2_DIAG2,1,6) = "M84.75" OR
MID(OPT_DIAG3,1,6) = "M84.75" OR
MID(OPT2_DIAG3,1,6) = "M84.75" OR
MID(OPT_DIAG4,1,6) = "M84.75" OR
MID(OPT2_DIAG4,1,6) = "M84.75" OR
MID(OPT_DIAG5,1,6) = "M84.75" OR
MID(OPT2_DIAG5,1,6) = "M84.75" OR
MID(OPT_DIAG6,1,6) = "M84.75" OR
MID(OPT2_DIAG6,1,6) = "M84.75")
THEN
    HC_DX_FRACTURE = 1
END IF

```

Intracranial injury (%)

```

IF
(MID(HC_DIAG1,1,3 = "S06") OR (MID(HC_DIAG2,1,3 = "S06") OR
    (MID(HC_DIAG3,1,3 = "S06") OR (MID(HC_DIAG4,1,3 = "S06") OR
    (MID(HC_DIAG5,1,3 = "S06") OR (MID(HC_DIAG6,1,3 = "S06") OR
    (MID(OPT_DIAG1,1,3 = "S06") OR (MID(OPT2_DIAG1,1,3 = "S06") OR
    (MID(OPT_DIAG2,1,3 = "S06") OR (MID(OPT2_DIAG2,1,3 = "S06") OR
    (MID(OPT_DIAG3,1,3 = "S06") OR (MID(OPT2_DIAG3,1,3 = "S06") OR
    (MID(OPT_DIAG4,1,3 = "S06") OR (MID(OPT2_DIAG4,1,3 = "S06") OR
    (MID(OPT_DIAG5,1,3 = "S06") OR (MID(OPT2_DIAG5,1,3 = "S06") OR
    (MID(OPT_DIAG6,1,3 = "S06") OR (MID(OPT2_DIAG6 ,1,3 = "S06")
THEN
    HC_DX_CRANIAL = 1
ELSE
    HC_DX_CRANIAL = 0
END IF

```

Other injury (%)

```

IF
( (MID(HC_DIAG1,1,3) >= "S09" AND MID(HC_DIAG1,1,3) <= "S99") OR
    (MID(HC_DIAG2,1,3) >= "S09" AND MID(HC_DIAG2,1,3) <= "S99") OR
    (MID(HC_DIAG3,1,3) >= "S09" AND MID(HC_DIAG3,1,3) <= "S99") OR
    (MID(HC_DIAG4,1,3) >= "S09" AND MID(HC_DIAG4,1,3) <= "S99") OR

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(MID(HC_DIAG5,1,3) >= "S09" AND MID(HC_DIAG5,1,3) <= "S99") OR
(MID(HC_DIAG6,1,3) >= "S09" AND MID(HC_DIAG6,1,3) <= "S99") OR
(MID(OPT_DIAG1,1,3) >= "S09" AND MID(OPT_DIAG1,1,3) <= "S99") OR
(MID(OPT2_DIAG1,1,3) >= "S09" AND MID(OPT2_DIAG1,1,3) <= "S99") OR
(MID(OPT_DIAG2,1,3) >= "S09" AND MID(OPT_DIAG2,1,3) <= "S99") OR
(MID(OPT2_DIAG2,1,3) >= "S09" AND MID(OPT2_DIAG2,1,3) <= "S99") OR
(MID(OPT_DIAG3,1,3) >= "S09" AND MID(OPT_DIAG3,1,3) <= "S99") OR
(MID(OPT2_DIAG3,1,3) >= "S09" AND MID(OPT2_DIAG3,1,3) <= "S99") OR
(MID(OPT_DIAG4,1,3) >= "S09" AND MID(OPT_DIAG4,1,3) <= "S99") OR
(MID(OPT2_DIAG4,1,3) >= "S09" AND MID(OPT2_DIAG4,1,3) <= "S99") OR
(MID(OPT_DIAG5,1,3) >= "S09" AND MID(OPT_DIAG5,1,3) <= "S99") OR
(MID(OPT2_DIAG5,1,3) >= "S09" AND MID(OPT2_DIAG5,1,3) <= "S99") OR
(MID(OPT_DIAG6,1,3) >= "S09" AND MID(OPT_DIAG6,1,3) <= "S99") OR
(MID(OPT2_DIAG6 ,1,3) >= "S09" AND MID(OPT2_DIAG6 ,1,3) <= "S99") )
AND (HC_DX_CRANIAL = 0) AND (HC_DX_FRACTURE = 0) OR
(MID(HC_DIAG1,1,3) >= "T07" AND MID(HC_DIAG1,1,3) <= "T32") OR
(MID(HC_DIAG2,1,3) >= "T07" AND MID(HC_DIAG2,1,3) <= "T32") OR
(MID(HC_DIAG3,1,3) >= "T07" AND MID(HC_DIAG3,1,3) <= "T32") OR
(MID(HC_DIAG4,1,3) >= "T07" AND MID(HC_DIAG4,1,3) <= "T32") OR
(MID(HC_DIAG5,1,3) >= "T07" AND MID(HC_DIAG5,1,3) <= "T32") OR
(MID(HC_DIAG6,1,3) >= "T07" AND MID(HC_DIAG6,1,3) <= "T32") OR
(MID(OPT_DIAG1,1,3) >= "T07" AND MID(OPT_DIAG1,1,3) <= "T32") OR
(MID(OPT2_DIAG1,1,3) >= "T07" AND MID(OPT2_DIAG1,1,3) <= "T32") OR
(MID(OPT_DIAG2,1,3) >= "T07" AND MID(OPT_DIAG2,1,3) <= "T32") OR
(MID(OPT2_DIAG2,1,3) >= "T07" AND MID(OPT2_DIAG2,1,3) <= "T32") OR
(MID(OPT_DIAG3,1,3) >= "T07" AND MID(OPT_DIAG3,1,3) <= "T32") OR
(MID(OPT2_DIAG3,1,3) >= "T07" AND MID(OPT2_DIAG3,1,3) <= "T32") OR
(MID(OPT_DIAG4,1,3) >= "T07" AND MID(OPT_DIAG4,1,3) <= "T32") OR
(MID(OPT2_DIAG4,1,3) >= "T07" AND MID(OPT2_DIAG4,1,3) <= "T32") OR
(MID(OPT_DIAG5,1,3) >= "T07" AND MID(OPT_DIAG5,1,3) <= "T32") OR
(MID(OPT2_DIAG5,1,3) >= "T07" AND MID(OPT2_DIAG5,1,3) <= "T32") OR
(MID(OPT_DIAG6,1,3) >= "T07" AND MID(OPT_DIAG6,1,3) <= "T32") OR
(MID(OPT2_DIAG6 ,1,3) >= "T07" AND MID(OPT2_DIAG6 ,1,3) <= "T32")
THEN
    HC_DX_INJURY_OTH = 1
ELSE
    HC_DX_INJURY_OTH = 0
END IF

```

Adverse reactions and complications (%)

IF (MID(HC_DIAG1,1,3) >= "T33" **AND** MID(HC_DIAG1,1,3) <= "T88") **OR**
(HC_DIAG1 = "A02.1") **OR** (HC_DIAG1 = "A22.7") **OR** (HC_DIAG1 = "A26.7") **OR**
(HC_DIAG1 = "A32.7") **OR** (HC_DIAG1 = "A40.0") **OR** (HC_DIAG1 = "A40.1") **OR**
(HC_DIAG1 = "A40.3") **OR** (HC_DIAG1 = "A40.8") **OR** (HC_DIAG1 = "A40.9") **OR**
(HC_DIAG1 = "A41.0") **OR** (HC_DIAG1 = "A41.1") **OR** (HC_DIAG1 = "A41.2") **OR**
(HC_DIAG1 = "A41.3") **OR** (HC_DIAG1 = "A41.4") **OR**
(HC_DIAG1 = "A41.50") **OR** (HC_DIAG1 = "A41.51") **OR**
(HC_DIAG1 = "A41.52") **OR** (HC_DIAG1 = "A41.53") **OR**
(HC_DIAG1 = "A41.59") **OR** (HC_DIAG1 = "A41.81") **OR**
(HC_DIAG1 = "A41.89") **OR** (HC_DIAG1 = "A41.9") **OR**
(HC_DIAG1 = "A42.7") **OR** (HC_DIAG1 = "A54.86") **OR**
(HC_DIAG1 = "B37.7") **OR** (HC_DIAG1 = "L76.81") **OR**
(HC_DIAG1 = "L76.82") **OR**
(MID(HC_DIAG2,1,3) >= "T33" **AND** MID(HC_DIAG2,1,3) <= "T88") **OR**
(HC_DIAG2 = "A02.1") **OR** (HC_DIAG2 = "A22.7") **OR** (HC_DIAG2 = "A26.7") **OR**
(HC_DIAG2 = "A32.7") **OR** (HC_DIAG2 = "A40.0") **OR** (HC_DIAG2 = "A40.1") **OR**
(HC_DIAG2 = "A40.3") **OR** (HC_DIAG2 = "A40.8") **OR** (HC_DIAG2 = "A40.9") **OR**
(HC_DIAG2 = "A41.0") **OR** (HC_DIAG2 = "A41.1") **OR** (HC_DIAG2 = "A41.2") **OR**
(HC_DIAG2 = "A41.3") **OR** (HC_DIAG2 = "A41.4") **OR**
(HC_DIAG2 = "A41.50") **OR** (HC_DIAG2 = "A41.51") **OR**
(HC_DIAG2 = "A41.52") **OR** (HC_DIAG2 = "A41.53") **OR**
(HC_DIAG2 = "A41.59") **OR** (HC_DIAG2 = "A41.81") **OR**
(HC_DIAG2 = "A41.89") **OR** (HC_DIAG2 = "A41.9") **OR**
(HC_DIAG2 = "A42.7") **OR** (HC_DIAG2 = "A54.86") **OR**
(HC_DIAG2 = "B37.7") **OR** (HC_DIAG2 = "L76.81") **OR**
(HC_DIAG2 = "L76.82") **OR**
(MID(HC_DIAG3,1,3) >= "T33" **AND** MID(HC_DIAG3,1,3) <= "T88") **OR**
(HC_DIAG3 = "A02.1") **OR** (HC_DIAG3 = "A22.7") **OR** (HC_DIAG3 = "A26.7") **OR**
(HC_DIAG3 = "A32.7") **OR** (HC_DIAG3 = "A40.0") **OR** (HC_DIAG3 = "A40.1") **OR**
(HC_DIAG3 = "A40.3") **OR** (HC_DIAG3 = "A40.8") **OR** (HC_DIAG3 = "A40.9") **OR**
(HC_DIAG3 = "A41.0") **OR** (HC_DIAG3 = "A41.1") **OR** (HC_DIAG3 = "A41.2") **OR**
(HC_DIAG3 = "A41.3") **OR** (HC_DIAG3 = "A41.4") **OR**
(HC_DIAG3 = "A41.50") **OR** (HC_DIAG3 = "A41.51") **OR**
(HC_DIAG3 = "A41.52") **OR** (HC_DIAG3 = "A41.53") **OR**
(HC_DIAG3 = "A41.59") **OR** (HC_DIAG3 = "A41.81") **OR**
(HC_DIAG3 = "A41.89") **OR** (HC_DIAG3 = "A41.9") **OR**
(HC_DIAG3 = "A42.7") **OR** (HC_DIAG3 = "A54.86") **OR**
(HC_DIAG3 = "B37.7") **OR** (HC_DIAG3 = "L76.81") **OR**
(HC_DIAG3 = "L76.82") **OR**

(MID(HC_DIAG4,1,3) >= "T33" AND MID(HC_DIAG4,1,3) <= "T88") OR
 (HC_DIAG4 = "A02.1") OR (HC_DIAG4 = "A22.7") OR (HC_DIAG4 = "A26.7") OR
 (HC_DIAG4 = "A32.7") OR (HC_DIAG4 = "A40.0") OR (HC_DIAG4 = "A40.1") OR
 (HC_DIAG4 = "A40.3") OR (HC_DIAG4 = "A40.8") OR (HC_DIAG4 = "A40.9") OR
 (HC_DIAG4 = "A41.0") OR (HC_DIAG4 = "A41.1") OR (HC_DIAG4 = "A41.2") OR
 (HC_DIAG4 = "A41.3") OR (HC_DIAG4 = "A41.4") OR
 (HC_DIAG4 = "A41.50") OR (HC_DIAG4 = "A41.51") OR
 (HC_DIAG4 = "A41.52") OR (HC_DIAG4 = "A41.53") OR
 (HC_DIAG4 = "A41.59") OR (HC_DIAG4 = "A41.81") OR
 (HC_DIAG4 = "A41.89") OR (HC_DIAG4 = "A41.9") OR
 (HC_DIAG4 = "A42.7") OR (HC_DIAG4 = "A54.86") OR
 (HC_DIAG4 = "B37.7") OR (HC_DIAG4 = "L76.81") OR
 (HC_DIAG4 = "L76.82") OR
 (MID(HC_DIAG5,1,3) >= "T33" AND MID(HC_DIAG5,1,3) <= "T88") OR
 (HC_DIAG5 = "A02.1") OR (HC_DIAG5 = "A22.7") OR (HC_DIAG5 = "A26.7") OR
 (HC_DIAG5 = "A32.7") OR (HC_DIAG5 = "A40.0") OR (HC_DIAG5 = "A40.1") OR
 (HC_DIAG5 = "A40.3") OR (HC_DIAG5 = "A40.8") OR (HC_DIAG5 = "A40.9") OR
 (HC_DIAG5 = "A41.0") OR (HC_DIAG5 = "A41.1") OR (HC_DIAG5 = "A41.2") OR
 (HC_DIAG5 = "A41.3") OR (HC_DIAG5 = "A41.4") OR
 (HC_DIAG5 = "A41.50") OR (HC_DIAG5 = "A41.51") OR
 (HC_DIAG5 = "A41.52") OR (HC_DIAG5 = "A41.53") OR
 (HC_DIAG5 = "A41.59") OR (HC_DIAG5 = "A41.81") OR
 (HC_DIAG5 = "A41.89") OR (HC_DIAG5 = "A41.9") OR
 (HC_DIAG5 = "A42.7") OR (HC_DIAG5 = "A54.86") OR
 (HC_DIAG5 = "B37.7") OR (HC_DIAG5 = "L76.81") OR
 (HC_DIAG5 = "L76.82") OR
 (MID(HC_DIAG6,1,3) >= "T33" AND MID(HC_DIAG6,1,3) <= "T88") OR
 (HC_DIAG6 = "A02.1") OR (HC_DIAG6 = "A22.7") OR (HC_DIAG6 = "A26.7") OR
 (HC_DIAG6 = "A32.7") OR (HC_DIAG6 = "A40.0") OR (HC_DIAG6 = "A40.1") OR
 (HC_DIAG6 = "A40.3") OR (HC_DIAG6 = "A40.8") OR (HC_DIAG6 = "A40.9") OR
 (HC_DIAG6 = "A41.0") OR (HC_DIAG6 = "A41.1") OR
 (HC_DIAG6 = "A41.2") OR (HC_DIAG6 = "A41.3") OR
 (HC_DIAG6 = "A41.4") OR (HC_DIAG6 = "A41.50") OR
 (HC_DIAG6 = "A41.51") OR (HC_DIAG6 = "A41.52") OR
 (HC_DIAG6 = "A41.53") OR (HC_DIAG6 = "A41.59") OR
 (HC_DIAG6 = "A41.81") OR (HC_DIAG6 = "A41.89") OR
 (HC_DIAG6 = "A41.9") OR (HC_DIAG6 = "A42.7") OR
 (HC_DIAG6 = "A54.86") OR (HC_DIAG6 = "B37.7") OR
 (HC_DIAG6 = "L76.81") OR (HC_DIAG6 = "L76.82") OR
 (MID(OPT_DIAG1,1,3) >= "T33" AND MID(OPT_DIAG1,1,3) <= "T88") OR

(OPT_DIAG1 = "A02.1") OR (OPT_DIAG1 = "A22.7") OR
 (OPT_DIAG1 = "A26.7") OR (OPT_DIAG1 = "A32.7") OR
 (OPT_DIAG1 = "A40.0") OR (OPT_DIAG1 = "A40.1") OR
 (OPT_DIAG1 = "A40.3") OR (OPT_DIAG1 = "A40.8") OR
 (OPT_DIAG1 = "A40.9") OR (OPT_DIAG1 = "A41.0") OR
 (OPT_DIAG1 = "A41.1") OR (OPT_DIAG1 = "A41.2") OR
 (OPT_DIAG1 = "A41.3") OR (OPT_DIAG1 = "A41.4") OR
 (OPT_DIAG1 = "A41.50") OR (OPT_DIAG1 = "A41.51") OR
 (OPT_DIAG1 = "A41.52") OR (OPT_DIAG1 = "A41.53") OR
 (OPT_DIAG1 = "A41.59") OR (OPT_DIAG1 = "A41.81") OR
 (OPT_DIAG1 = "A41.89") OR (OPT_DIAG1 = "A41.9") OR
 (OPT_DIAG1 = "A42.7") OR (OPT_DIAG1 = "A54.86") OR
 (OPT_DIAG1 = "B37.7") OR (OPT_DIAG1 = "L76.81") OR
 (OPT_DIAG1 = "L76.82") OR
 (MID(OPT2_DIAG1,1,3) >= "T33" AND MID(OPT2_DIAG1,1,3) <= "T88") OR
 (OPT2_DIAG1 = "A02.1") OR (OPT2_DIAG1 = "A22.7") OR
 (OPT2_DIAG1 = "A26.7") OR (OPT2_DIAG1 = "A32.7") OR
 (OPT2_DIAG1 = "A40.0") OR (OPT2_DIAG1 = "A40.1") OR
 (OPT2_DIAG1 = "A40.3") OR (OPT2_DIAG1 = "A40.8") OR
 (OPT2_DIAG1 = "A40.9") OR (OPT2_DIAG1 = "A41.0") OR
 (OPT2_DIAG1 = "A41.1") OR (OPT2_DIAG1 = "A41.2") OR
 (OPT2_DIAG1 = "A41.3") OR (OPT2_DIAG1 = "A41.4") OR
 (OPT2_DIAG1 = "A41.50") OR (OPT2_DIAG1 = "A41.51") OR
 (OPT2_DIAG1 = "A41.52") OR (OPT2_DIAG1 = "A41.53") OR
 (OPT2_DIAG1 = "A41.59") OR (OPT2_DIAG1 = "A41.81") OR
 (OPT2_DIAG1 = "A41.89") OR (OPT2_DIAG1 = "A41.9") OR
 (OPT2_DIAG1 = "A42.7") OR (OPT2_DIAG1 = "A54.86") OR
 (OPT2_DIAG1 = "B37.7") OR (OPT2_DIAG1 = "L76.81") OR
 (OPT2_DIAG1 = "L76.82") OR
 (MID(OPT_DIAG2,1,3) >= "T33" AND MID(OPT_DIAG2,1,3) <= "T88") OR
 (OPT_DIAG2 = "A02.1") OR (OPT_DIAG2 = "A22.7") OR
 (OPT_DIAG2 = "A26.7") OR (OPT_DIAG2 = "A32.7") OR
 (OPT_DIAG2 = "A40.0") OR (OPT_DIAG2 = "A40.1") OR
 (OPT_DIAG2 = "A40.3") OR (OPT_DIAG2 = "A40.8") OR
 (OPT_DIAG2 = "A40.9") OR (OPT_DIAG2 = "A41.0") OR
 (OPT_DIAG2 = "A41.1") OR (OPT_DIAG2 = "A41.2") OR
 (OPT_DIAG2 = "A41.3") OR (OPT_DIAG2 = "A41.4") OR
 (OPT_DIAG2 = "A41.50") OR (OPT_DIAG2 = "A41.51") OR
 (OPT_DIAG2 = "A41.52") OR (OPT_DIAG2 = "A41.53") OR
 (OPT_DIAG2 = "A41.59") OR (OPT_DIAG2 = "A41.81") OR

(OPT_DIAG2 = "A41.89") OR (OPT_DIAG2 = "A41.9") OR
 (OPT_DIAG2 = "A42.7") OR (OPT_DIAG2 = "A54.86") OR
 (OPT_DIAG2 = "B37.7") OR (OPT_DIAG2 = "L76.81") OR
 (OPT_DIAG2 = "L76.82") OR
 (MID(OPT2_DIAG2,1,3) >= "T33" AND MID(OPT2_DIAG2,1,3) <= "T88") OR
 (OPT2_DIAG2 = "A02.1") OR (OPT2_DIAG2 = "A22.7") OR
 (OPT2_DIAG2 = "A26.7") OR (OPT2_DIAG2 = "A32.7") OR
 (OPT2_DIAG2 = "A40.0") OR (OPT2_DIAG2 = "A40.1") OR
 (OPT2_DIAG2 = "A40.3") OR (OPT2_DIAG2 = "A40.8") OR
 (OPT2_DIAG2 = "A40.9") OR (OPT2_DIAG2 = "A41.0") OR
 (OPT2_DIAG2 = "A41.1") OR (OPT2_DIAG2 = "A41.2") OR
 (OPT2_DIAG2 = "A41.3") OR (OPT2_DIAG2 = "A41.4") OR
 (OPT2_DIAG2 = "A41.50") OR (OPT2_DIAG2 = "A41.51") OR
 (OPT2_DIAG2 = "A41.52") OR (OPT2_DIAG2 = "A41.53") OR
 (OPT2_DIAG2 = "A41.59") OR (OPT2_DIAG2 = "A41.81") OR
 (OPT2_DIAG2 = "A41.89") OR (OPT2_DIAG2 = "A41.9") OR
 (OPT2_DIAG2 = "A42.7") OR (OPT2_DIAG2 = "A54.86") OR
 (OPT2_DIAG2 = "B37.7") OR (OPT2_DIAG2 = "L76.81") OR
 (OPT2_DIAG2 = "L76.82") OR
 (MID(OPT_DIAG3,1,3) >= "T33" AND MID(OPT_DIAG3,1,3) <= "T88") OR
 (OPT_DIAG3 = "A02.1") OR (OPT_DIAG3 = "A22.7") OR
 (OPT_DIAG3 = "A26.7") OR (OPT_DIAG3 = "A32.7") OR
 (OPT_DIAG3 = "A40.0") OR (OPT_DIAG3 = "A40.1") OR
 (OPT_DIAG3 = "A40.3") OR (OPT_DIAG3 = "A40.8") OR
 (OPT_DIAG3 = "A40.9") OR (OPT_DIAG3 = "A41.0") OR
 (OPT_DIAG3 = "A41.1") OR (OPT_DIAG3 = "A41.2") OR
 (OPT_DIAG3 = "A41.3") OR (OPT_DIAG3 = "A41.4") OR
 (OPT_DIAG3 = "A41.50") OR (OPT_DIAG3 = "A41.51") OR
 (OPT_DIAG3 = "A41.52") OR (OPT_DIAG3 = "A41.53") OR
 (OPT_DIAG3 = "A41.59") OR (OPT_DIAG3 = "A41.81") OR
 (OPT_DIAG3 = "A41.89") OR (OPT_DIAG3 = "A41.9") OR
 (OPT_DIAG3 = "A42.7") OR (OPT_DIAG3 = "A54.86") OR
 (OPT_DIAG3 = "B37.7") OR (OPT_DIAG3 = "L76.81") OR
 (OPT_DIAG3 = "L76.82") OR
 (MID(OPT2_DIAG3,1,3) >= "T33" AND MID(OPT2_DIAG3,1,3) <= "T88") OR
 (OPT2_DIAG3 = "A02.1") OR (OPT2_DIAG3 = "A22.7") OR
 (OPT2_DIAG3 = "A26.7") OR (OPT2_DIAG3 = "A32.7") OR
 (OPT2_DIAG3 = "A40.0") OR (OPT2_DIAG3 = "A40.1") OR
 (OPT2_DIAG3 = "A40.3") OR (OPT2_DIAG3 = "A40.8") OR
 (OPT2_DIAG3 = "A40.9") OR (OPT2_DIAG3 = "A41.0") OR

(OPT2_DIAG3 = "A41.1") OR (OPT2_DIAG3 = "A41.2") OR
 (OPT2_DIAG3 = "A41.3") OR (OPT2_DIAG3 = "A41.4") OR
 (OPT2_DIAG3 = "A41.50") OR (OPT2_DIAG3 = "A41.51") OR
 (OPT2_DIAG3 = "A41.52") OR (OPT2_DIAG3 = "A41.53") OR
 (OPT2_DIAG3 = "A41.59") OR (OPT2_DIAG3 = "A41.81") OR
 (OPT2_DIAG3 = "A41.89") OR (OPT2_DIAG3 = "A41.9") OR
 (OPT2_DIAG3 = "A42.7") OR (OPT2_DIAG3 = "A54.86") OR
 (OPT2_DIAG3 = "B37.7") OR (OPT2_DIAG3 = "L76.81") OR
 (OPT2_DIAG3 = "L76.82") OR
 (MID(OPT_DIAG4,1,3) >= "T33" AND MID(OPT_DIAG4,1,3) <= "T88") OR
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 (OPT_DIAG4 = "A40.0") OR (OPT_DIAG4 = "A40.1") OR
 (OPT_DIAG4 = "A40.3") OR (OPT_DIAG4 = "A40.8") OR
 (OPT_DIAG4 = "A40.9") OR (OPT_DIAG4 = "A41.0") OR
 (OPT_DIAG4 = "A41.1") OR (OPT_DIAG4 = "A41.2") OR
 (OPT_DIAG4 = "A41.3") OR (OPT_DIAG4 = "A41.4") OR
 (OPT_DIAG4 = "A41.50") OR (OPT_DIAG4 = "A41.51") OR
 (OPT_DIAG4 = "A41.52") OR (OPT_DIAG4 = "A41.53") OR
 (OPT_DIAG4 = "A41.59") OR (OPT_DIAG4 = "A41.81") OR
 (OPT_DIAG4 = "A41.89") OR (OPT_DIAG4 = "A41.9") OR
 (OPT_DIAG4 = "A42.7") OR (OPT_DIAG4 = "A54.86") OR
 (OPT_DIAG4 = "B37.7") OR (OPT_DIAG4 = "L76.81") OR
 (OPT_DIAG4 = "L76.82") OR
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 (OPT2_DIAG4 = "A26.7") OR (OPT2_DIAG4 = "A32.7") OR
 (OPT2_DIAG4 = "A40.0") OR (OPT2_DIAG4 = "A40.1") OR
 (OPT2_DIAG4 = "A40.3") OR (OPT2_DIAG4 = "A40.8") OR
 (OPT2_DIAG4 = "A40.9") OR (OPT2_DIAG4 = "A41.0") OR
 (OPT2_DIAG4 = "A41.1") OR (OPT2_DIAG4 = "A41.2") OR
 (OPT2_DIAG4 = "A41.3") OR (OPT2_DIAG4 = "A41.4") OR
 (OPT2_DIAG4 = "A41.50") OR (OPT2_DIAG4 = "A41.51") OR
 (OPT2_DIAG4 = "A41.52") OR (OPT2_DIAG4 = "A41.53") OR
 (OPT2_DIAG4 = "A41.59") OR (OPT2_DIAG4 = "A41.81") OR
 (OPT2_DIAG4 = "A41.89") OR (OPT2_DIAG4 = "A41.9") OR
 (OPT2_DIAG4 = "A42.7") OR (OPT2_DIAG4 = "A54.86") OR
 (OPT2_DIAG4 = "B37.7") OR (OPT2_DIAG4 = "L76.81") OR
 (OPT2_DIAG4 = "L76.82") OR
 (MID(OPT_DIAG5,1,3) >= "T33" AND MID(OPT_DIAG5,1,3) <= "T88") OR

(OPT_DIAG5 = "A02.1") OR (OPT_DIAG5 = "A22.7") OR
 (OPT_DIAG5 = "A26.7") OR (OPT_DIAG5 = "A32.7") OR
 (OPT_DIAG5 = "A40.0") OR (OPT_DIAG5 = "A40.1") OR
 (OPT_DIAG5 = "A40.3") OR (OPT_DIAG5 = "A40.8") OR
 (OPT_DIAG5 = "A40.9") OR (OPT_DIAG5 = "A41.0") OR
 (OPT_DIAG5 = "A41.1") OR (OPT_DIAG5 = "A41.2") OR
 (OPT_DIAG5 = "A41.3") OR (OPT_DIAG5 = "A41.4") OR
 (OPT_DIAG5 = "A41.50") OR (OPT_DIAG5 = "A41.51") OR
 (OPT_DIAG5 = "A41.52") OR (OPT_DIAG5 = "A41.53") OR
 (OPT_DIAG5 = "A41.59") OR (OPT_DIAG5 = "A41.81") OR
 (OPT_DIAG5 = "A41.89") OR (OPT_DIAG5 = "A41.9") OR
 (OPT_DIAG5 = "A42.7") OR (OPT_DIAG5 = "A54.86") OR
 (OPT_DIAG5 = "B37.7") OR (OPT_DIAG5 = "L76.81") OR
 (OPT_DIAG5 = "L76.82") OR
 (MID(OPT2_DIAG5,1,3) >= "T33" AND MID(OPT2_DIAG5,1,3) <= "T88") OR
 (OPT2_DIAG5 = "A02.1") OR (OPT2_DIAG5 = "A22.7") OR
 (OPT2_DIAG5 = "A26.7") OR (OPT2_DIAG5 = "A32.7") OR
 (OPT2_DIAG5 = "A40.0") OR (OPT2_DIAG5 = "A40.1") OR
 (OPT2_DIAG5 = "A40.3") OR (OPT2_DIAG5 = "A40.8") OR
 (OPT2_DIAG5 = "A40.9") OR (OPT2_DIAG5 = "A41.0") OR
 (OPT2_DIAG5 = "A41.1") OR (OPT2_DIAG5 = "A41.2") OR
 (OPT2_DIAG5 = "A41.3") OR (OPT2_DIAG5 = "A41.4") OR
 (OPT2_DIAG5 = "A41.50") OR (OPT2_DIAG5 = "A41.51") OR
 (OPT2_DIAG5 = "A41.52") OR (OPT2_DIAG5 = "A41.53") OR
 (OPT2_DIAG5 = "A41.59") OR (OPT2_DIAG5 = "A41.81") OR
 (OPT2_DIAG5 = "A41.89") OR (OPT2_DIAG5 = "A41.9") OR
 (OPT2_DIAG5 = "A42.7") OR (OPT2_DIAG5 = "A54.86") OR
 (OPT2_DIAG5 = "B37.7") OR (OPT2_DIAG5 = "L76.81") OR
 (OPT2_DIAG5 = "L76.82") OR
 (MID(OPT_DIAG6,1,3) >= "T33" AND MID(OPT_DIAG6,1,3) <= "T88") OR
 (OPT_DIAG6 = "A02.1") OR (OPT_DIAG6 = "A22.7") OR
 (OPT_DIAG6 = "A26.7") OR (OPT_DIAG6 = "A32.7") OR
 (OPT_DIAG6 = "A40.0") OR (OPT_DIAG6 = "A40.1") OR
 (OPT_DIAG6 = "A40.3") OR (OPT_DIAG6 = "A40.8") OR
 (OPT_DIAG6 = "A40.9") OR (OPT_DIAG6 = "A41.0") OR
 (OPT_DIAG6 = "A41.1") OR (OPT_DIAG6 = "A41.2") OR
 (OPT_DIAG6 = "A41.3") OR (OPT_DIAG6 = "A41.4") OR
 (OPT_DIAG6 = "A41.50") OR (OPT_DIAG6 = "A41.51") OR
 (OPT_DIAG6 = "A41.52") OR (OPT_DIAG6 = "A41.53") OR
 (OPT_DIAG6 = "A41.59") OR (OPT_DIAG6 = "A41.81") OR

```

(OPT_DIAG6 = "A41.89") OR (OPT_DIAG6 = "A41.9") OR
(OPT_DIAG6 = "A42.7") OR (OPT_DIAG6 = "A54.86") OR
(OPT_DIAG6 = "B37.7") OR (OPT_DIAG6 = "L76.81") OR
(OPT_DIAG6 = "L76.82") OR
(MID(OPT2_DIAG6 ,1,3) >= "T33" AND MID(OPT2_DIAG6 ,1,3) <= "T88") OR
(OPT2_DIAG6 = "A02.1") OR (OPT2_DIAG6 = "A22.7") OR
(OPT2_DIAG6 = "A26.7") OR (OPT2_DIAG6 = "A32.7") OR
(OPT2_DIAG6 = "A40.0") OR (OPT2_DIAG6 = "A40.1") OR
(OPT2_DIAG6 = "A40.3") OR (OPT2_DIAG6 = "A40.8") OR
(OPT2_DIAG6 = "A40.9") OR (OPT2_DIAG6 = "A41.0") OR
(OPT2_DIAG6 = "A41.1") OR (OPT2_DIAG6 = "A41.2") OR
(OPT2_DIAG6 = "A41.3") OR (OPT2_DIAG6 = "A41.4") OR
(OPT2_DIAG6 = "A41.50") OR (OPT2_DIAG6 = "A41.51") OR
(OPT2_DIAG6 = "A41.52") OR (OPT2_DIAG6 = "A41.53") OR
(OPT2_DIAG6 = "A41.59") OR (OPT2_DIAG6 = "A41.81") OR
(OPT2_DIAG6 = "A41.89") OR (OPT2_DIAG6 = "A41.9") OR
(OPT2_DIAG6 = "A42.7") OR (OPT2_DIAG6 = "A54.86") OR
(OPT2_DIAG6 = "B37.7") OR (OPT2_DIAG6 = "L76.81") OR
(OPT2_DIAG6 = "L76.82")
THEN
    HC_DX_ADV_REACT = 1
ELSE
    HC_DX_ADV_REACT = 0
END IF

```

TRANSFORMATIONS THAT APPLY WHEN THE START/RESUMPTION OF CARE ASSESSMENT IS OASIS-C2

Reason for Emergent Care

Improper medications (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_MEDS = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN

```

```

        EC_REASON_MEDS = MISSING
    ELSEIF M2310_ECR_MEDICATION[2] = 1
    THEN
        EC_REASON_MEDS = 1
    ELSE
        EC_REASON_MEDS = 0
    END IF
ELSE
    EC_REASON_MEDS = MISSING
END IF

```

Injury from fall (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_FALL = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
        M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_FALL = MISSING
    ELSEIF M2310_ECR_INJRY_BY_FALL[2] = 1
    THEN
        EC_REASON_FALL = 1
    ELSE
        EC_REASON_FALL = 0
    END IF
ELSE
    EC_REASON_FALL = MISSING
END IF

```

Respiratory infection (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_RESP_INF = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
        M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN

```

```

        EC_REASON_RESP_INF = MISSING
    ELSEIF M2310_ECR_RSPRTRY_INFCTN[2] = 1
    THEN
        EC_REASON_RESP_INF = 1
    ELSE
        EC_REASON_RESP_INF = 0
    END IF
ELSE
    EC_REASON_RESP_INF = MISSING
END IF

```

Other respiratory (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_RESP_OTHER = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_RESP_OTHER = MISSING
    ELSEIF M2310_ECR_RSPRTRY_OTHR[2] = 1
    THEN
        EC_REASON_RESP_OTHER = 1
    ELSE
        EC_REASON_RESP_OTHER = 0
    END IF
ELSE
    EC_REASON_RESP_OTHER = MISSING
END IF

```

Heart failure (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_HEART_FAIL = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN

```

```

        EC_REASON_HEART_FAIL = MISSING
    ELSEIF M2310_ECR_HRT_FAILR[2] = 1
    THEN
        EC_REASON_HEART_FAIL = 1
    ELSE
        EC_REASON_HEART_FAIL = 0
    END IF
ELSE
    EC_REASON_HEART_FAIL = MISSING
END IF

```

Cardiac dysrhythmia (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_DYSRYTHMIA = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
        M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_DYSRYTHMIA = MISSING
    ELSEIF M2310_ECR_CRDC_DSRTHM[2] = 1
    THEN
        EC_REASON_DYSRYTHMIA = 1
    ELSE
        EC_REASON_DYSRYTHMIA = 0
    END IF
ELSE
    EC_REASON_DYSRYTHMIA = MISSING
END IF

```

Myocardial infarction (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_AMI = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
        M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN

```

```

        EC_REASON_AMI = MISSING
    ELSEIF M2310_ECR_MI_CHST_PAIN[2] = 1
    THEN
        EC_REASON_AMI = 1
    ELSE
        EC_REASON_AMI = 0
    END IF
ELSE
    EC_REASON_AMI = MISSING
END IF

```

Other heart disease (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_HEART_OTHER = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_HEART_OTHER = MISSING
    ELSEIF M2310_ECR_OTHR_HRT_DEASE[2] = 1
    THEN
        EC_REASON_HEART_OTHER = 1
    ELSE
        EC_REASON_HEART_OTHER = 0
    END IF
ELSE
    EC_REASON_HEART_OTHER = MISSING
END IF

```

Stroke (CVA) or TIA (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_STROKE_TIA = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN

```



```

        EC_REASON_STROKE_TIA = MISSING
    ELSEIF M2310_ECR_STROKE_TIA[2] = 1
    THEN
        EC_REASON_STROKE_TIA = 1
    ELSE
        EC_REASON_STROKE_TIA = 0
    END IF
ELSE
    EC_REASON_STROKE_TIA = MISSING
END IF

```

Hypo/Hyperglycemia (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_HI_LO_BG = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_HI_LO_BG = MISSING
    ELSEIF M2310_ECR_HYPOGLYC[2] = 1
    THEN
        EC_REASON_HI_LO_BG = 1
    ELSE
        EC_REASON_HI_LO_BG = 0
    END IF
ELSE
    EC_REASON_HI_LO_BG = MISSING
END IF

```

GI bleeding, obstruction, etc. (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_GI = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN

```

```

        EC_REASON_GI = MISSING
    ELSEIF M2310_ECR_GI_PRBLM[2] = 1
    THEN
        EC_REASON_GI = 1
    ELSE
        EC_REASON_GI = 0
    END IF
ELSE
    EC_REASON_GI = MISSING
END IF

```

Dehydration, malnutrition (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_NUTRITION = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_NUTRITION = MISSING
    ELSEIF M2310_ECR_DHYDRTN_MALNTR[2] = 1
    THEN
        EC_REASON_NUTRITION = 1
    ELSE
        EC_REASON_NUTRITION = 0
    END IF
ELSE
    EC_REASON_NUTRITION = MISSING
END IF

```

Urinary tract infection (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_UTI = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN

```

```

        EC_REASON_UTI = MISSING
    ELSEIF M2310_ECR_UTI[2] = 1
    THEN
        EC_REASON_UTI = 1
    ELSE
        EC_REASON_UTI = 0
    END IF
ELSE
    EC_REASON_UTI = MISSING
END IF

```

IV catheter-related infection (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_IV_INFECT = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_IV_INFECT = MISSING
    ELSEIF M2310_ECR_CTHTR_CMPLCTN[2] = 1
    THEN
        EC_REASON_IV_INFECT = 1
    ELSE
        EC_REASON_IV_INFECT = 0
    END IF
ELSE
    EC_REASON_IV_INFECT = MISSING
END IF

```

Wound infection (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_WOUND_INFCT = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN

```

```

        EC_REASON_WOUND_INFCT = MISSING
    ELSEIF M2310_ECR_WND_INFCTN_DTRORTN[2] = 1
    THEN
        EC_REASON_WOUND_INFCT = 1
    ELSE
        EC_REASON_WOUND_INFCT = 0
    END IF
ELSE
    EC_REASON_WOUND_INFCT = MISSING
END IF

```

Uncontrolled pain (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_PAIN = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_PAIN = MISSING
    ELSEIF M2310_ECR_UNCNTLD_PAIN[2] = 1
    THEN
        EC_REASON_PAIN = 1
    ELSE
        EC_REASON_PAIN = 0
    END IF
ELSE
    EC_REASON_PAIN = MISSING
END IF

```

Acute mental/behav. problem (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_MENTAL_BEHAV = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN

```

```

        EC_REASON_MENTAL_BEHAV = MISSING
    ELSEIF M2310_ECR_MENTL_BHVRL_PRBLM[2] = 1
    THEN
        EC_REASON_MENTAL_BEHAV = 1
    ELSE
        EC_REASON_MENTAL_BEHAV = 0
    END IF
ELSE
    EC_REASON_MENTAL_BEHAV = MISSING
END IF

```

Deep vein thrombosis (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_THROMBOSIS = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN
        EC_REASON_THROMBOSIS = MISSING
    ELSEIF M2310_ECR_DVT_PULMNR[2] = 1
    THEN
        EC_REASON_THROMBOSIS = 1
    ELSE
        EC_REASON_THROMBOSIS = 0
    END IF
ELSE
    EC_REASON_THROMBOSIS = MISSING
END IF

```

Other (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK
THEN
    EC_REASON_OTHER = MISSING
ELSEIF (M2301_EMER_USE_AFTR_LAST_ASMT[2] = 01 OR
    M2301_EMER_USE_AFTR_LAST_ASMT[2] = 02)
THEN
    IF M2310_ECR_UNKNOWN[2] = 1
    THEN

```

```

        EC_REASON_OTHER = MISSING
    ELSEIF M2310_ECR_OTHER[2] = 1
    THEN
        EC_REASON_OTHER = 1
    ELSE
        EC_REASON_OTHER = 0
    END IF
ELSE
    EC_REASON_OTHER = MISSING
END IF

```

No emergent care (%)

```

IF M2301_EMER_USE_AFTR_LAST_ASMT[2] = UK OR M0100_ASSMT_REASON[2] =
    08
THEN
    NO_EMERGENT_CARE = MISSING
ELSEIF M2301_EMER_USE_AFTR_LAST_ASMT[2] = 00
THEN
    NO_EMERGENT_CARE = 1
ELSE
    NO_EMERGENT_CARE = 0
END IF

```

Medication Status

Drug regimen: problem found (%)

```

IF M2001_DRUG_RGMN_RVW[1] = 00 OR M2001_DRUG_RGMN_RVW[1] = NA
THEN
    MED_PROBLEM = MISSING
ELSEIF M2001_DRUG_RGMN_RVW[1] = 02
THEN
    MED_PROBLEM = 1
ELSE
    MED_PROBLEM = 0
END IF

```

Integumentary Status

Pressure Ulcers

Stage II pressure ulcer count (#)

```
IF M1306_UNHLD_STG2_PRSR_ULCR[1] = 0
THEN
    PRES_ULC_STG2 = 0
ELSE
    PRES_ULC_STG2 = VALUE(M1311_NBR_PRSULC_STG2_A1[1])
END IF
```

Stage III pressure ulcer count (#)

```
IF M1306_UNHLD_STG2_PRSR_ULCR[1] = 0
THEN
    PRES_ULC_STG3 = 0
ELSE
    PRES_ULC_STG3 = VALUE(M1311_NBR_PRSULC_STG3_B1[1])
END IF
```

Stage IV pressure ulcer count (#)

```
IF M1306_UNHLD_STG2_PRSR_ULCR[1] = 0
THEN
    PRES_ULC_STG4 = 0
ELSE
    PRES_ULC_STG4 = VALUE(M1311_NBR_PRSULC_STG4_C1[1])
END IF
```

Unstageable pressure ulcer count (#)

```
IF M1306_UNHLD_STG2_PRSR_ULCR[1] = 0
THEN
    PRES_ULC_NO_STG = 0
ELSE
    PRES_ULC_NO_STG = VALUE(M1311_NSTG_DRSG_D1[1]) +
        VALUE(M1311_NSTG_CVRG_E1[1]) +
        VALUE(M1311_NSTG_DEEP_TSUE_F1[1])
END IF
```

TRANSFORMATIONS THAT APPLY WHEN THE START/RESUMPTION OF CARE ASSESSMENT IS OASIS-C, OASIS-C1/ICD-9 VERSION, OASIS-C1/ICD-10 VERSION, OR OASIS-C2

Patient History

Demographics

Age

IF M0100_ASSMT_REASON[1] = 01

THEN

IF MONTH(M0030_START_CARE_DT[1]) > MONTH(M0066_PAT_BIRTH_DT[1])

OR (MONTH(M0030_START_CARE_DT[1]) =

 MONTH(M0066_PAT_BIRTH_DT[1])

AND DAY(M0030_START_CARE_DT[1]) >=

 DAY(M0066_PAT_BIRTH_DT[1]))

THEN

 AGE = YEAR(M0030_START_CARE_DT[1]) –

 YEAR(M0066_PAT_BIRTH_DT[1])

ELSE

 AGE = YEAR(M0030_START_CARE_DT[1]) –

 YEAR(M0066_PAT_BIRTH_DT[1])-1

ELSE

IF MONTH(M0032_ROC_DT[1]) > MONTH(M0066_PAT_BIRTH_DT[1])

OR (MONTH(M0032_ROC_DT[1]) = MONTH(M0066_PAT_BIRTH_DT[1])

AND DAY(M0032_ROC_DT[1]) >= DAY(M0066_PAT_BIRTH_DT[1]))

THEN

 AGE = YEAR(M0032_ROC_DT[1]) – YEAR(M0066_PAT_BIRTH_DT[1])

ELSE

 AGE = YEAR(M0032_ROC_DT[1]) – YEAR(M0066_PAT_BIRTH_DT[1])-1

END IF

Gender: Female

IF M0069_PAT_GENDER[1] = 2

THEN

 GENDER = 1

ELSE

 GENDER = 0

END IF

Race: Black (%)

```
IF M0140_ETHNIC_BLACK[1] = 1
THEN
    RACE_BLACK = 1
ELSE
    RACE_BLACK = 0
END IF
```

Race: White (%)

```
IF M0140_ETHNIC_WHITE[1] = 1
THEN
    RACE_WHITE = 1
ELSE
    RACE_WHITE = 0
END IF
```

Race: Other (%)

Note: Previously this category was restricted to patients for whom neither white nor black was indicated. Now it includes patients for whom any other category is indicated, even if black or white is also indicated.

```
IF M0140_ETHNIC_AI_AN[1] = 1 OR M0140_ETHNIC_ASIAN[1] = 1 OR
    M0140_ETHNIC_HISP[1] = 1 OR M0140_ETHNIC_NH_PI[1] = 1
THEN
    RACE_OTHER = 1
ELSE
    RACE_OTHER = 0
END IF
```

Payment Source

Any Medicare (%)

```
IF M0150_CPAY_MCARE_FFS[1] = 1 OR M0150_CPAY_MCARE_HMO[1] = 1
THEN
    PAY_MCARE = 1
ELSE
    PAY_MCARE = 0
END IF
```

Any Medicaid (%)

```
IF M0150_CPAY_MCAID_FFS[1] = 1 OR M0150_CPAY_MCAID_HMO[1] = 1
THEN
```

```
PAY_MCAID = 1
ELSE
    PAY_MCAID = 0
END IF
```

Any HMO (%)

```
IF M0150_CPAY_MCARE_HMO[1] = 1 OR M0150_CPAY_MCAID_HMO[1] = 1 OR
    M0150_CPAY_PRIV_HMO[1] = 1
THEN
    PAY_HMO = 1
ELSE
    PAY_HMO = 0
END IF
```

Medicare HMO (%)

```
IF M0150_CPAY_MCARE_HMO[1] = 1
THEN
    PAY_MCHMO = 1
ELSE
    PAY_MCHMO = 0
END IF
```

Any Other (%)

Note: Previous reports (based on OASIS-B1 data) included only private insurance and/or private HMO in this measure. Now it includes all government programs other than Medicare/Medicaid, private insurance (FFS), self-pay, and unpaid care.

```
IF M0150_CPAY_WRKCOMP[1] = 1 OR M0150_CPAY_TITLEPGMS[1] = 1 OR
    M0150_CPAY_OTH_GOVT[1] = 1 OR M0150_CPAY_PRIV_INS[1] = 1 OR
    M0150_CPAY_SELFPAY[1] = 1 OR M0150_CPAY_OTHER[1] = 1 OR
    M0150_CPAY_NONE[1] = 1
THEN PAY_OTHER = 1
ELSE
    PAY_OTHER = 0
END IF
```

Missing data exclusions for Payment Source

Note: This exclusion does not apply to data residing on OASIS national repository, because records with missing payment source will not be accepted by the submission system.

```
IF M0150_CPAY_UK[1] = 1
```

```

THEN
    PAY_MCARE = MISSING
    PAY_MCAID = MISSING
    PAY_HMO = MISSING
    PAY_MC_HMO = MISSING
    PAY_OTHER = MISSING
END IF

```

Episode Start

Episode Timing: Early (%)

```

IF M0110_EPISODE_TIMING[1] = NA
THEN
    TIME_EARLY = MISSING
ELSEIF M0110_EPISODE_TIMING[1] = 01
THEN
    TIME_EARLY = 1
ELSE
    TIME_EARLY = 0
END IF

```

Episode Timing: Later (%)

```

IF M0110_EPISODE_TIMING[1] = NA
THEN
    TIME_LATER = MISSING
ELSEIF M0110_EPISODE_TIMING[1] = 02
THEN
    TIME_LATER = 1
ELSE
    TIME_LATER = 0
END IF

```

Episode Timing: Unknown (%)

```

IF M0110_EPISODE_TIMING[1] = NA
THEN
    TIME_UK = MISSING
ELSEIF M0110_EPISODE_TIMING[1] = UK
THEN
    TIME_UK = 1
ELSE

```

TIME_UK = 0
END IF

Inpatient Discharge / Change in Medical Regimen

Long-term nursing facility (%)

IF M1000_DC_LTC_14_DA[1] = 1
THEN
INPT_LTC = 1
ELSE
INPT_LTC = 0
END IF

Skilled nursing facility (%)

IF M1000_DC_SNF_14_DA[1] = 1
THEN
INPT_SNF = 1
ELSE
INPT_SNF = 0
END IF

Short-stay acute hospital (%)

IF M1000_DC_IPPS_14_DA[1] = 1
THEN INPT_STHOSP = 1
ELSE IF M1000_DC_IPPS_14_DA[1] = 0
THEN INPT_STHOSP = 0
END IF

Long-term care hospital (%)

IF M1000_DC_LTCH_14_DA[1] = 1
THEN
INPT_LTHOSP = 1
ELSE
INPT_LTHOSP = 0
END IF

Inpatient rehab hospital/unit (%)

IF M1000_DC_IRF_14_DA[1] = 1
THEN
INPT_REHAB = 1
ELSE

INPT_REHAB = 0
END IF

Psychiatric hospital/unit (%)

IF M1000_DC_PSYCH_14_DA[1] = 1
THEN
INPT_PSYCH = 1
ELSE
INPT_PSYCH = 0
END IF

Prior Conditions

Urinary incontinence (%)

IF M1018_PRIOR_NOCHG_14D[1] = 1 OR M1018_PRIOR_UNKNOWN[1] = 1
THEN
P_UR_INCON = MISSING
ELSEIF M1018_PRIOR_UR_INCON[1] = 1
THEN
P_UR_INCON = 1
ELSE
P_UR_INCON = 0
END IF

Indwelling/suprapubic catheter (%)

IF M1018_PRIOR_NOCHG_14D[1] = 1 OR M1018_PRIOR_UNKNOWN[1] = 1
THEN
P_CATH = MISSING
ELSEIF M1018_PRIOR_CATH[1] = 1
THEN
P_CATH = 1
ELSE
P_CATH = 0
END IF

Intractable pain (%)

IF M1018_PRIOR_NOCHG_14D[1] = 1 OR M1018_PRIOR_UNKNOWN[1] = 1
THEN
P_INTRACT_PAIN = MISSING
ELSEIF M1018_PRIOR_INTRACT_PAIN[1] = 1
THEN

```
        P_INTRACT_PAIN = 1
ELSE
        P_INTRACT_PAIN = 0
END IF
```

Impaired decision-making (%)

```
IF M1018_PRIOR_NOCHG_14D[1] = 1 OR M1018_PRIOR_UNKNOWN[1] = 1
THEN
        P_IMPR_DECSN = MISSING
ELSEIF M1018_PRIOR_IMPR_DECSN[1] = 1
THEN
        P_IMPR_DECSN = 1
ELSE
        P_IMPR_DECSN = 0
END IF
```

Disruptive/Inappropriate behav. (%)

```
IF M1018_PRIOR_NOCHG_14D[1] = 1 OR M1018_PRIOR_UNKNOWN[1] = 1
THEN
        P_DISRUPTIVE = MISSING
ELSEIF M1018_PRIOR_DISRUPTIVE[1] = 1
THEN
        P_DISRUPTIVE = 1
ELSE
        P_DISRUPTIVE = 0
END IF
```

Memory loss (%)

```
IF M1018_PRIOR_NOCHG_14D[1] = 1 OR M1018_PRIOR_UNKNOWN[1] = 1
THEN
        P_MEM_LOSS = MISSING
ELSEIF M1018_PRIOR_MEM_LOSS[1] = 1
THEN
        P_MEM_LOSS = 1
ELSE
        P_MEM_LOSS = 0
END IF
```

None listed (%)

```
IF M1018_PRIOR_NOCHG_14D[1] = 1 OR M1018_PRIOR_UNKNOWN[1] = 1
THEN
    P_NONE = MISSING
ELSEIF M1018_PRIOR_NONE[1] = 1
THEN
    P_NONE = 1
ELSE
    P_NONE = 0
END IF
```

Therapies

IV/infusion therapy (%)

```
IF M1030_THH_IV_INFUSION = 1
THEN
    IVTHER_IV = 1
ELSE
    IVTHER_IV = 0
END IF
```

Parenteral nutrition (%)

```
IF M1030_THH_PAR_NUTRITION = 1
THEN
    IVTHER_PAREN = 1
ELSE
    IVTHER_PAREN = 0
END IF
```

Enteral nutrition (%)

```
IF M1030_THH_ENT_NUTRITION = 1
THEN
    IVTHER_ENTERAL = 1
ELSE
    IVTHER_ENTERAL = 0
END IF
```

General Health Status

Overall Status

Overall status (0-3)

```
IF M1034_PTNT_OVRAL_STUS[1] = UK
THEN
    OVERALL_STATUS = MISSING
ELSE
    OVERALL_STATUS = VALUE(M1034_PTNT_OVRAL_STUS[1])
END IF
```

Overall status unknown/unclear (%)

```
IF M1034_PTNT_OVRAL_STUS[1] = UK
THEN
    OVERALL_STATUS_UK = 1
ELSE
    OVERALL_STATUS_UK = 0
END IF
```

Other Risk Factors

Smoking (%)

```
IF M1036_RSK_UNKNOWN[1] = 1
THEN
    RISK_SMOKING = MISSING
ELSE
    RISK_SMOKING = VALUE(M1036_RSK_SMOKING[1])
END IF
```

Obesity (%)

```
IF M1036_RSK_UNKNOWN[1] = 1
THEN
    RISK_OBESITY = MISSING
ELSE
    RISK_OBESITY = VALUE(M1036_RSK_OBESITY[1])
END IF
```

Alcohol dependency (%)

```
IF M1036_RSK_UNKNOWN[1] = 1
THEN
```



```
RISK_ALCOHOLISM = MISSING
ELSE
    RISK_ALCOHOLISM = VALUE(M1036_RSK_ALCOHOLISM[1])
END IF
```

Drug dependency (%)

```
IF M1036_RSK_UNKNOWN[1] = 1
THEN
    RISK_DRUGS = MISSING
ELSE
    RISK_DRUGS = VALUE(M1036_RSK_DRUGS[1])
END IF
```

None (%)

```
IF M1036_RSK_UNKNOWN[1] = 1
THEN
    RISK_NONE = MISSING
ELSE
    RISK_NONE = VALUE(M1036_RSK_NONE[1])
END IF
```

Living Arrangement / Assistance

Current Situation

Lives alone (%)

```
IF M1100_PTNT_LVG_STUTN[1] = 01 OR M1100_PTNT_LVG_STUTN[1] = 02
    OR M1100_PTNT_LVG_STUTN[1] = 03 OR M1100_PTNT_LVG_STUTN[1] = 04
    OR M1100_PTNT_LVG_STUTN[1] = 05
THEN
    LIV_ALONE = 1
ELSE
    LIV_ALONE = 0
END IF
```

Lives with others (%)

```
IF M1100_PTNT_LVG_STUTN[1] = 06 OR M1100_PTNT_LVG_STUTN[1] = 07
    OR M1100_PTNT_LVG_STUTN[1] = 08 OR M1100_PTNT_LVG_STUTN[1] = 09
    OR M1100_PTNT_LVG_STUTN[1] = 10
THEN
    LIV_OTHERS = 1
```

ELSE
 LIV_OTHERS = 0
END IF

Lives in congregate situation (%)

IF M1100_PTNT_LVG_STUTN[1] = 11 **OR** M1100_PTNT_LVG_STUTN[1] = 12
 -OR M1100_PTNT_LVG_STUTN[1] = 13 **OR** M1100_PTNT_LVG_STUTN[1] = 14
 OR M1100_PTNT_LVG_STUTN[1] = 15
THEN
 LIV_CONGEGRATE = 1
ELSE
 LIV_CONGEGRATE = 0
END IF

Availability

Around the clock (%)

IF M1100_PTNT_LVG_STUTN[1] = 01 **OR** M1100_PTNT_LVG_STUTN[1] = 06
 OR M1100_PTNT_LVG_STUTN[1] = 11
THEN
 AVAIL_RTC = 1
ELSE
 AVAIL_RTC = 0
END IF

Regular daytime (%)

IF M1100_PTNT_LVG_STUTN[1] = 02 **OR** M1100_PTNT_LVG_STUTN[1] = 07
 OR M1100_PTNT_LVG_STUTN[1] = 12
THEN
 AVAIL_DAY = 1
ELSE
 AVAIL_DAY = 0
END IF

Regular nighttime (%)

IF M1100_PTNT_LVG_STUTN[1] = 03 **OR** M1100_PTNT_LVG_STUTN[1] = 08
 OR M1100_PTNT_LVG_STUTN[1] = 13
THEN
 AVAIL_NIGHT = 1
ELSE
 AVAIL_NIGHT = 0

END IF

Occasional (%)

IF M1100_PTNT_LVG_STUTN[1] = 04 **OR** M1100_PTNT_LVG_STUTN[1] = 09
 OR M1100_PTNT_LVG_STUTN[1] = 14
THEN
 AVAIL_SOME = 1
ELSE
 AVAIL_SOME = 0
END IF

None (%)

IF M1100_PTNT_LVG_STUTN[1] = 05 **OR** M1100_PTNT_LVG_STUTN[1] = 10
 OR M1100_PTNT_LVG_STUTN[1] = 15
THEN
 AVAIL_NONE = 1
ELSE
 AVAIL_NONE = 0
END IF

Care Management

Frequency of ADL IADL Assistance (1-5)

IF M2110_ADL_IADL_ASTNC_FREQ[1] = UK
THEN
 FREQ_CG_ASSIST = MISSING
ELSE
 FREQ_CG_ASSIST = VALUE(M2110_ADL_IADL_ASTNC_FREQ[1])
END IF

Sensory Status

Vision impairment (0-2)

VISION = VALUE(M1200_VISION[1])

Hearing impairment (0-2)

IF M1210_HEARG_ABLTY[1] = UK
THEN
 HEARING = MISSING
ELSE
 HEARING = VALUE(M1210_HEARG_ABLTY[1])

END IF

Verbal content understanding (0-3)

IF M1220_UNDRSTG_VERBAL_CNTNT[1] = UK

THEN

VERBAL_UNDERSTAND = MISSING

ELSE

VERBAL_UNDERSTAND = VALUE(M1220_UNDRSTG_VERBAL_CNTNT[1])

END IF

Speech/language (0-5)

SPEECH = VALUE(M1230_SPEECH[1])

Pain interfering with activity (0-4)

PAIN = VALUE(M1242_PAIN_FREQ_ACTVTY_MVMT[1])

Integumentary Status

Pressure Ulcers

Pressure ulcer risk (%)

IF M1300_PRSR_ULCR_RISK_ASMT[1] = 00

THEN

PRES_ULC_RISK = MISSING

ELSE

PRES_ULC_RISK = VALUE(M1302_RISK_OF_PRSR_ULCR[1])

END IF

Pressure ulcer present (%)

PRES_ULC = VALUE(M1306_UNHLD_STG2_PRSR_ULCR[1])

Status most problematic PU (0-3)

IF M1320_STUS_PRBLM_PRSR_ULCR[1] = NA **OR**

M1306_UNHLD_STG2_PRSR_ULCR[1] = 0

THEN

PRES_ULC_STATUS = MISSING

ELSE

PRES_ULC_STATUS = VALUE(M1320_STUS_PRBLM_PRSR_ULCR[1])

END IF

Stage I pressure ulcers count (0-4)

PRES_ULC_STG1 = VALUE(M1322_NBR_PRSULC_STG1[1])

Stage most problematic PU (0-4)

IF M1324_STG_PRBLM_ULCER[1] = NA

THEN

PRES_ULC_STG = MISSING

ELSE

PRES_ULC_STG = VALUE(M1324_STG_PRBLM_ULCER[1])

END IF

Stasis Ulcers

Stasis ulcer indicator (%)

IF M1330_STAS_ULCR_PRSNT[1] = 00

THEN

STAS_ULCR = 0

ELSE

STAS_ULCR = 1

END IF

Stasis ulcer count (0-4)

IF M1330_STAS_ULCR_PRSNT[1] = 00 OR M1330_STAS_ULCR_PRSNT[1] = 03

THEN

STAS_ULCR_CNT = 0

ELSE

STAS_ULCR_CNT = VALUE(M1332_NBR_STAS_ULCR[1])

END IF

Status most problematic stasis (0-3)

IF M1330_STAS_ULCR_PRSNT[1] = 00

THEN

STAS_ULCR_STAT = 0

ELSE

IF M1330_STAS_ULCR_PRSNT[1] = 03

THEN

STAS_ULCR_STAT = MISSING

ELSE

STAS_ULCR_STAT = VALUE(M1334_STUS_PRBLM_STAS_ULCR[1])

END IF

END IF

Surgical Wounds

Surgical wound indicator (%)

IF M1340_SRGCL_WND_PRSENT[1] = 00

THEN

SRGCL_WND = 0

ELSE

SRGCL_WND = 1

END IF

Status most problematic surg. (0-3)

IF M1340_SRGCL_WND_PRSENT[1] = 00

THEN

SRGCL_WND_STAT = 0

ELSE

IF M1340_SRGCL_WND_PRSENT[1] = 02

THEN

SRGCL_WND_STAT = MISSING

ELSE

SRGCL_WND_STAT = VALUE(M1342_STUS_PRBLM_SRGCL_WND[1])

END IF

END IF

Other

Skin lesion with intervention (%)

WND_LESION = VALUE(M1350_LESION_OPEN_WND[1])

Physiological Status

Respiratory

Dyspnea (0-4)

DYSPNEA = VALUE(M1400_WHEN_DYSPNEIC)

Oxygen therapy(%)

OXY_THERAPY = VALUE(M1410_RESPTX_OXYGEN)

Ventilator therapy(%)

VENT_THERAPY = VALUE(M1410_RESPTX_VENTILATOR)

CPAP/BPAP therapy (%)

AIRPRESS_THERAPY = VALUE(M1410_RESPTX_AIRPRESS)

Elimination Status

Urinary tract infection (%)

IF M1600_UTI[1] = UK **OR** M1600_UTI[1] = NA

THEN

UTI = MISSING

ELSE

UTI = VALUE(M1600_UTI[1])

END IF

Urinary incontinence/catheter (%)

IF M1610_UR_INCONT[1] = 00

THEN

INCONT_CATH = 0

ELSE

INCONT_CATH = 1

END IF

Urinary incontinence frequency (0-4)

IF M1610_UR_INCONT[1] = 02

THEN

INCONT_FREQ = MISSING

ELSEIF M1610_UR_INCONT[1] = 00

THEN

INCONT_FREQ = 0

ELSE

INCONT_FREQ = VALUE(M1615_INCNTNT_TIMING[1])

END IF

Bowel incontinence (0-5)

IF M1620_BWL_INCONT[1] = UK **OR** M1620_BWL_INCONT[1] = NA

THEN

BOWEL_INCONT = MISSING

ELSE

BOWEL_INCONT = VALUE(M1620_BWL_INCONT[1])

END IF

Bowel ostomy (%)

```
IF M1630_OSTOMY[1] = 00
THEN
    OSTOMY = 0
ELSE
    OSTOMY = 1
END IF
```

Neuro / Emotional / Behavioral

Cognition

Cognitive deficit (0-4)

```
COG_FUNC = VALUE(M1700_COG_FUNCTION[1])
```

Confusion frequency (0-4)

```
IF M1710_WHEN_CONFUSED[1] = NA
THEN
    CONFUSION = MISSING
ELSE
    CONFUSION = VALUE(M1710_WHEN_CONFUSED[1])
END IF
```

Emotional

Anxiety level (0-3)

```
IF M1720_WHEN_ANXIOUS[1] = NA
THEN
    ANXIETY = MISSING
ELSE
    ANXIETY = VALUE(M1720_WHEN_ANXIOUS[1])
END IF
```

Depression indicator (%)

```
IF M1730_STDZ_DPRSN_SCRNG[1] = 00
THEN
    DEPRESSION = MISSING
ELSEIF M1730_STDZ_DPRSN_SCRNG[1] = 01
THEN
    IF M1730_PHQ2_LACK_INTRST[1] = NA AND M1730_PHQ2_DPRSN[1] = NA
```



```

    THEN
        DEPRESSION = MISSING
    ELSEIF VALUE(M1730_PHQ2_LACK_INTRST[1]) >= 2 OR
        VALUE(M1730_PHQ2_DPRSN[1]) >= 2
    THEN
        DEPRESSION = 1
    ELSE
        DEPRESSION = 0
    END IF
ELSEIF M1730_STDZ_DPRSN_SCRNG[1] = 02
THEN
    DEPRESSION = 1
ELSEIF M1730_STDZ_DPRSN_SCRNG[1] = 03
    DEPRESSION = 0
END IF

```

PHQ-2: Interest / Pleasure (0-3)

```

IF M1730_STDZ_DPRSN_SCRNG[1] = 00 OR M1730_STDZ_DPRSN_SCRNG[1] = 02
OR M1730_STDZ_DPRSN_SCRNG[1] = 03
THEN
    PHQ2_INTEREST = MISSING
ELSEIF M1730_STDZ_DPRSN_SCRNG[1] = 01
THEN
    IF M1730_PHQ2_LACK_INTRST[1] = NA
    THEN
        PHQ2_INTEREST = MISSING
    ELSE
        PHQ2_INTEREST = VALUE(M1730_PHQ2_LACK_INTRST[1])
    END IF
END IF

```

PHQ-2: Down / Depressed (0-3)

```

IF M1730_STDZ_DPRSN_SCRNG[1] = 00 OR M1730_STDZ_DPRSN_SCRNG[1] = 02
OR M1730_STDZ_DPRSN_SCRNG[1] = 03
THEN
    PHQ2_DOWN = MISSING
ELSEIF M1730_STDZ_DPRSN_SCRNG[1] = 01
THEN
    IF M1730_PHQ2_DPRSN[1] = NA
    THEN

```

```

        PHQ2_DOWN = MISSING
    ELSE
        PHQ2_DOWN = VALUE(M1730_PHQ2_DPRSN[1])
    END IF
END IF

```

Behavioral

Memory deficit (%)

```
MEM_DEFICIT = VALUE(M1740_BD_MEM_DEFICIT[1])
```

Impaired decision-making (%)

```
IMPR_DECISN = VALUE(M1740_BD_IMP_DECISN[1])
```

Verbal disruption (%)

```
VERBAL_DISRUPT = VALUE(M1740_BD_VERBAL[1])
```

Physical aggression (%)

```
AGGRESSION = VALUE(M1740_BD_PHYSICAL[1])
```

Disruptive/inappropriate behavior (%)

```
INAPPRO_BHV = VALUE(M1740_BD_SOC_INAPPRO[1])
```

Delusional, hallucinatory, etc. (%)

```
DELUSIONS = VALUE(M1740_BD_DELUSIONS[1])
```

None demonstrated (%)

```
NOBHV = VALUE(M1740_BD_NONE[1])
```

Frequency of behavior problems (0-5)

```
BEH_PROB_FREQ = VALUE(M1745_BEH_PROB_FREQ[1])
```

Psychiatric nursing (%)

```
PSYCH_NURS = VALUE(M1750_REC_PSYCH_NURS[1])
```

Activities Of Daily Living

SOC/ROC Status

Grooming (0-3)

```
GROOMING = VALUE(M1800_CRNT_GROOMINGM1800_CRNT_GROOMING[1])
```

Dress upper body (0-3)

DRESS_UPPER =
VALUE(M1810_CRNT_DRESS_UPPERM1810_CRNT_DRESS_UPPER[1])

Dress lower body (0-3)

DRESS_LOWER =
VALUE(M1820_CRNT_DRESS_LOWERM1820_CRNT_DRESS_LOWER[1])

Bathing (0-6)

BATHING = VALUE(M1830_CRNT_BATHING[1])

Toilet Transfer (0-4)

TOILET_TRANSFER = VALUE(M1840_CRNT_TOILTGM1840_CRNT_TOILTG[1])

Toileting Hygiene (0-3)

TOILET_HYGIENE =
VALUE(M1845_CRNT_TOILTG_HYGNM1845_CRNT_TOILTG_HYGN[1])

Bed Transferring (0-5)

TRANSFERRING = VALUE(M1850_CRNT_TRNSFRNGM1850_CRNT_TRNSFRNG[1])

Ambulation (0-6)

AMBULATION = VALUE(M1860_CUR_AMBLTN[1])

Eating (0-5)

FEEDING = VALUE(M1870_CRNT_FEEDINGM1870_CRNT_FEEDING[1])

Status prior to SOC/ROC

Prior Self Care (0-2)

P_SELF_CARE = VALUE(M1900_PRIOR_ADLIADL_SELF[1])

Prior Ambulation (0-2)

P_AMBULATION = VALUE(M1900_PRIOR_ADLIADL_AMBLTN[1])

Prior Transfer (0-2)

P_TRANSFER = VALUE(M1900_PRIOR_ADLIADL_TRNSFR[1])

IADLs, Medications, Other

IADLs

Light meal prep (0-2)

MEAL_PREP =

VALUE(M1880_CRNT_PREP_LT_MEALSM1880_CRNT_PREP_LT_MEALS[1])

Phone use (0-5)

IF M1890_CRNT_PHONE_USEM1890_CRNT_PHONE_USE [1] = NA

THEN

PHONE_USE = MISSING

ELSE

PHONE_USE =

VALUE(M1890_CRNT_PHONE_USEM1890_CRNT_PHONE_USE[1])

END IF

Prior Household (0-2)

P_HOUSEHOLD = VALUE(M1900_PRIOR_ADLIADL_HSEHOLD[1])

Falls Risk

At risk for falls (%)

IF M1910_MLT_FCTR_FALL_RISK_ASMT[1] = 00

THEN

FALL_RISK = MISSING

ELSEIF M1910_MLT_FCTR_FALL_RISK_ASMT[1] = 02

THEN

FALL_RISK = 1

ELSE

FALL_RISK = 0

END IF

Mgmt oral medication at SOC/ROC (0-3)

IF M2020_CRNT_MGMT_ORAL_MDCTN[1] = NA

THEN

ORAL_MEDS = MISSING

ELSE

ORAL_MEDS = VALUE(M2020_CRNT_MGMT_ORAL_MDCTN[1])

END IF

Mgmt oral medication at SOC/ROC: NA

```
IF M2020_CRNT_MGMT_ORAL_MDCTN[1] = NA
THEN
    ORAL_MED_NA = 1
ELSE
    ORAL_MED_NA = 0
END IF
```

Mgmt injected meds at SOC/ROC (0-3)

```
IF M2030_CRNT_MGMT_INJCTN_MDCTN[1] = NA
THEN
    INJECT_MEDS = MISSING
ELSE
    INJECT_MEDS = VALUE(M2030_CRNT_MGMT_INJCTN_MDCTN[1])
END IF
```

Mgmt injected meds at SOC/ROC: NA

```
IF M2030_CRNT_MGMT_INJCTN_MDCTN[1] = NA
THEN
    INJECT_MED_NA = 1
ELSE
    INJECT_MED_NA = 0
END IF
```

Prior mgmt oral medication (0-3)

```
IF M2040_PRIOR_MGMT_ORAL_MDCTN[1] = NA
THEN
    P_ORAL_MEDS = MISSING
ELSE
    P_ORAL_MEDS = VALUE(M2040_PRIOR_MGMT_ORAL_MDCTN[1])
END IF
```

Prior mgmt oral medication: NA

```
IF M2040_PRIOR_MGMT_ORAL_MDCTN[1] = NA
THEN
    P_ORAL_MED_NA = 1
ELSE
    P_ORAL_MED_NA = 0
END IF
```

Prior mgmt injected medication (0-3)

```
IF M2040_PRIOR_MGMT_INJCTN_MDCTN[1] = NA
THEN
    P_INJECT_MEDS = MISSING
ELSE
    P_INJECT_MEDS = VALUE(M2040_PRIOR_MGMT_INJCTN_MDCTN[1])
END IF
```

Prior mgmt injected medication: NA

```
IF M2040_PRIOR_MGMT_INJCTN_MDCTN[1] = NA
THEN
    P_INJECT_MED_NA = 1
ELSE
    P_INJECT_MED_NA = 0
END IF
```

Therapy / Plan Of Care

Therapy Visits

Therapy visits indicated (#)

```
IF M2200_THER_NEED_NA_NUM[1] = 1
THEN
    THERAPY_NEED = MISSING
ELSE
    THERAPY_NEED =
        VALUE(M2200_THER_NEED_NBRM2200_THER_NEED_NBR[1])
END IF
```

Patient Diagnostic Information

Acute Conditions

Urinary incont./catheter (%)

```
IF (INPAT_DC = 1 OR MED_REG_CHNG = 1) AND
    (M1610_UR_INCONT[1] = 01 OR M1610_UR_INCONT[1] = 02) AND
    M1018_PRIOR_UR_INCON[1] = 0 AND
    M1018_PRIOR_CATH[1] = 0
THEN
    ACUTE_INCONT = 1
```

ELSE

ACUTE_INCONT = 0

END IF

Mental/emotional (%)

ACUTE_PSYCH = VALUE(M1750_REC_PSYCH_NURS[1])

Oxygen therapy (%)

ACUTE_O2 = VALUE(M1410_RESPTX_OXYGEN[1])

IV/infusion therapy (%)

ACUTE_IV = VALUE(M1030_THH_IV_INFUSION[1])

Enteral/parenteral nutrition (%)

IF M1030_THH_PAR_NUTRITION[1] = 1 **OR** M1030_THH_ENT_NUTRITION[1] = 1
THEN

ACUTE_ENT_PAR_NUTRI = 1

ELSE

ACUTE_ENT_PAR_NUTRI = 0

END IF

Ventilator (%)

ACUTE_VENT = VALUE(M1410_RESPTX_VENTILATOR[1])

Chronic Conditions

Dependence in living skills (%)

IF M1890_CRNT_PHONE_USEM1890_CRNT_PHONE_USE[1] = NA
THEN

CUR_PHONE_TRIGGER_2 = 0

CUR_PHONE_TRIGGER_3 = 0

ELSE

IF VALUE(M1890_CRNT_PHONE_USEM1890_CRNT_PHONE_USE[1]) >2
THEN

CUR_PHONE_TRIGGER_2 = 1

ELSE

CUR_PHONE_TRIGGER_2 = 0

END IF

IF VALUE(M1890_CRNT_PHONE_USE[1]) >3
THEN

CUR_PHONE_TRIGGER_3 = 1

ELSE

```

        CUR_PHONE_TRIGGER_3 = 0
    END IF
END IF
IF INPAT_DC = 0 AND
    MED_REG_CHNG = 0
    AND ((VALUE(M1880_CRNT_PREP_LT_MEALS[1]) > 0
    AND CUR_PHONE_TRIGGER_2 = 1)
    OR VALUE(M1880_CRNT_PREP_LT_MEALS[1]) > 1
    OR CUR_PHONE_TRIGGER_3 = 1)
THEN
    CHRONIC_LIV_SKILL = 1
ELSEIF (INPAT_DC = 1 OR MED_REG_CHNG = 1)
    AND ((VALUE(M1880_CRNT_PREP_LT_MEALS[1]) > 0
    AND CUR_PHONE_TRIGGER_2 = 1)
    OR VALUE(M1880_CRNT_PREP_LT_MEALS[1]) > 1
    OR CUR_PHONE_TRIGGER_3 = 1)
    AND VALUE(M1900_PRIOR_ADLIADL_HSEHOLD[1]) > 0
THEN
    CHRONIC_LIV_SKILL = 1
ELSE
    CHRONIC_LIV_SKILL = 0
END IF

```

Dependence in personal care (%)

```

IF INPAT_DC = 0 AND
    MED_REG_CHNG = 0
    AND (VALUE(M1830_CRNT_BATHG [1]) > 2
    OR VALUE(M1840_CRNT_TOILTG[1]) > 2
    OR VALUE(M1845_CRNT_TOILTG_HYGN[1]) > 2
    OR (VALUE(M1800_CRNT_GROOMING[1]) > 1 AND
    (VALUE(M1810_CRNT_DRESS_UPPER[1]) > 1 OR
    VALUE(M1820_CRNT_DRESS_LOWER[1]) > 1)))
THEN
    CHRONIC_PERS_CARE = 1
ELSEIF (INPAT_DC = 1 OR MED_REG_CHNG = 1)
    AND (VALUE(M1830_CRNT_BATHG [1]) > 2
    OR VALUE(M1840_CRNT_TOILTG[1]) > 2
    OR VALUE(M1845_CRNT_TOILTG_HYGN[1]) > 2
    OR (VALUE(M1800_CRNT_GROOMING[1]) > 1 AND
    (VALUE(M1810_CRNT_DRESS_UPPER[1]) > 1 OR
    VALUE(M1820_CRNT_DRESS_LOWER[1]) > 1))) AND
    VALUE(M1900_PRIOR_ADLIADL_SELF[1]) > 0
THEN
    CHRONIC_PERS_CARE = 1
ELSE
    CHRONIC_PERS_CARE = 0

```


END IF

Impaired ambulation/mobility (%)

```
IF INPAT_DC = 0 AND
    MED_REG_CHNG = 0
    AND (VALUE(M1840_CRNT_TOILTG [1]) > 2
    OR VALUE(M1850_CRNT_TRNSFRNG) > 1
    OR VALUE(M1860_CRNT_AMBLTN [1]) > 1)
THEN
    CHRONIC_MOBILITY = 1
ELSEIF (INPAT_DC = 1 OR MED_REG_CHNG = 1)
    AND (VALUE(M1840_CRNT_TOILTG [1]) > 2
    OR VALUE(M1850_CRNT_TRNSFRNG) > 1
    OR VALUE(M1860_CRNT_AMBLTN [1]) > 1)
    AND (VALUE(M1900_PRIOR_ADLIADL_AMBLTN[1]) > 0
    OR VALUE(M1900_PRIOR_ADLIADL_TRNSFR[1]) > 0)
THEN
    CHRONIC_MOBILITY = 1
ELSE
    CHRONIC_MOBILITY = 0
END IF
```

Urinary incontinence/catheter (%)

```
IF INPAT_DC = 0 AND
    MED_REG_CHNG = 0
    AND (M1610_UR_INCONT[1] = 01 OR M1610_UR_INCONT[1] = 02)
THEN
    CHRONIC_INCONT_CATH = 1
ELSEIF (INPAT_DC = 1 OR MED_REG_CHNG = 1)
    AND (M1610_UR_INCONT[1] = 01 OR M1610_UR_INCONT[1] = 02) AND
    (M1018_PRIOR_UR_INCON[1] = 1 OR M1018_PRIOR_CATH[1] = 1)
THEN
    CHRONIC_INCONT_CATH = 1
ELSE
    CHRONIC_INCONT_CATH = 0
END IF
```

Dependence in med. admin. (%)

```
IF INPAT_DC = 0 AND
    MED_REG_CHNG = 0
    AND (ORAL_MEDS > 0 OR INJECT_MEDS > 0)
THEN
    CHRONIC_MED_ADMIN = 1
```

```

ELSEIF (INPAT_DC = 1 OR MED_REG_CHNG = 1)
    AND (ORAL_MEDS > 0 OR INJECT_MEDS > 0)
    AND (P_ORAL_MEDS > 0 OR P_INJECT_MEDS > 0)
THEN
    CHRONIC_MED_ADMIN = 1
ELSE
    CHRONIC_MED_ADMIN = 0
END IF

```

Chronic pain (%)

```

IF INPAT_DC = 0 AND
    MED_REG_CHNG = 0
THEN
    IF PAIN > 2
    THEN
        CHRONIC_PAIN = 1
    ELSE
        CHRONIC_PAIN = 0
    END IF
ELSEIF (INPAT_DC = 1 OR MED_REG_CHNG = 1)
THEN
    IF P_INTRACT_PAIN = MISSING
    THEN
        CHRONIC_PAIN = MISSING
    ELSEIF PAIN > 2 AND
        P_INTRACT_PAIN = 1
    THEN
        CHRONIC_PAIN = 1
    ELSE
        CHRONIC_PAIN = 0
    END IF
END IF

```

Cognitive/mental/behavioral (%)

```

IF INPAT_DC = 0 AND
    MED_REG_CHNG = 0
THEN
    IF (MEM_DEFICIT = 1 OR IMPR_DECISN = 1 OR VERBAL_DISRUPT = 1
        OR AGGRESSION = 1 OR INAPPRO_BHV = 1 OR DELUSIONS = 1)
    THEN
        CHRONIC_MENT_BEHAV = 1
    ELSE
        CHRONIC_MENT_BEHAV = 0
    ENDIF
ELSEIF (INPAT_DC = 1 OR MED_REG_CHNG = 1)
THEN

```

```

IF P_IMPR_DECSN = MISSING
THEN
    CHRONIC_MENT_BEHAV = MISSING
ELSEIF (P_IMPR_DECSN = 1 OR P_DISRUPTIVE = 1 OR P_MEM_LOSS = 1)
    AND (MEM_DEFICIT = 1 OR IMPR_DECISN = 1 OR VERBAL_DISRUPT = 1
    OR AGGRESSION = 1 OR INAPPRO_BHV = 1 OR DELUSIONS = 1)
THEN
    CHRONIC_MENT_BEHAV = 1
ELSE
    CHRONIC_MENT_BEHAV = 0
END IF
END IF

```

Chronic pt. with caregiver (%)

```

IF (CHRONIC_LIV_SKILL = 1 OR CHRONIC_PERS_CARE = 1
    OR CHRONIC_MOBILITY = 1 OR CHRONIC_INCONT_CATH = 1
    OR CHRONIC_MED_ADMIN = 1 OR CHRONIC_PAIN = 1
    OR CHRONIC_MENT_BEHAV = 1)
    AND (AVAIL_RTC = 1 OR AVAIL_NIGHT = 1)
THEN
    CHRONIC_ANY_W_CG = 1
ELSE
    CHRONIC_ANY_W_CG = 0
END IF

```

Patient Discharge Information

Length of Stay

LOS until discharge (in days)

```

IF M0100_ASSMT_REASON[1] = 01
THEN
    HC_LOS = (M0906_DC_TRAN_DTH_DT[2] – M0030_START_CARE_DT) +1
ELSE IF M0100_ASSMT_REASON[1] = 03
THEN
    HC_LOS = (M0906_DC_TRAN_DTH_DT[2] – M0032_ROC_DT) +1
END IF

```

LOS from 1 to 30 days (%)

```

IF HC_LOS <= 30
THEN
    HC_LOS_1_30 = 1

```

ELSE

HC_LOS_1_30 = 0

END IF

LOS from 31 to 60 days (%)

IF HC_LOS > 30 **AND** HC_LOS <= 60

THEN

HC_LOS_31_60 = 1

ELSE

HC_LOS_31_60 = 0

END IF

LOS from 61 to 120 days (%)

IF HC_LOS > 60 **AND** HC_LOS <= 120

THEN

HC_LOS_61_120 = 1

ELSE

HC_LOS_61_120 = 0

END IF

LOS from 121 to 180 days (%)

IF HC_LOS > 120 **AND** HC_LOS <= 180

THEN

HC_LOS_121_180 = 1

ELSE

HC_LOS_121_180 = 0

END IF

LOS more than 180 days (%)

IF HC_LOS > 180

THEN

HC_LOS_GT_180 = 1

ELSE

HC_LOS_GT_180 = 0

END IF

Hospitalization Reason

Improper medications (%)

IF M2410_INPAT_FACILITY[2] = 01

```

THEN
  IF M2430_HOSP_UK[2] = 1
  THEN
    HOSP_REASON_MEDS = MISSING
  ELSEIF M2430_HOSP_MED[2] = 1
  THEN
    HOSP_REASON_MEDS = 1
  ELSE
    HOSP_REASON_MEDS = 0
  END IF
ELSE
  HOSP_REASON_MEDS = MISSING
END IF

```

Injury from fall (%)

```

IF M2410_INPAT_FACILITY[2] = 01
THEN
  IF M2430_HOSP_UK[2] = 1
  THEN
    HOSP_REASON_FALL = MISSING
  ELSEIF M2430_HOSP_INJRY_BY_FALL[2] = 1
  THEN
    HOSP_REASON_FALL = 1
  ELSE
    HOSP_REASON_FALL = 0
  END IF
ELSE
  HOSP_REASON_FALL = MISSING
END IF

```

Respiratory infection (%)

```

IF M2410_INPAT_FACILITY[2] = 01
THEN
  IF M2430_HOSP_UK[2] = 1
  THEN
    HOSP_REASON_RESP_INF = MISSING
  ELSEIF M2430_HOSP_RSPRTRY_INFCTN[2] = 1
  THEN
    HOSP_REASON_RESP_INF = 1
  ELSE

```

```

        HOSP_REASON_RESP_INF = 0
    END IF
ELSE
    HOSP_REASON_RESP_INF = MISSING
END IF

Other respiratory (%)
IF M2410_INPAT_FACILITY[2] = 01
THEN
    IF M2430_HOSP_UK[2] = 1
    THEN
        HOSP_REASON_RESP_OTHER = MISSING
    ELSEIF M2430_HOSP_RSPRTRY_OTHR[2] = 1
    THEN
        HOSP_REASON_RESP_OTHER = 1
    ELSE
        HOSP_REASON_RESP_OTHER = 0
    END IF
ELSE
    HOSP_REASON_RESP_OTHER = MISSING
END IF

```

```

Heart failure (%)
IF M2410_INPAT_FACILITY[2] = 01
THEN
    IF M2430_HOSP_UK[2] = 1
    THEN
        HOSP_REASON_HEART_FAIL = MISSING
    ELSEIF M2430_HOSP_HRT_FAILR[2] = 1
    THEN
        HOSP_REASON_HEART_FAIL = 1
    ELSE
        HOSP_REASON_HEART_FAIL = 0
    END IF
ELSE
    HOSP_REASON_HEART_FAIL = MISSING
END IF

```

```

Cardiac dysrhythmia (%)
IF M2410_INPAT_FACILITY[2] = 01

```

```

THEN
  IF M2430_HOSP_UK[2] = 1
  THEN
    HOSP_REASON_DYSRYTHMIA = MISSING
  ELSEIF M2430_HOSP_CRDC_DSRTM[2] = 1
  THEN
    HOSP_REASON_DYSRYTHMIA = 1
  ELSE
    HOSP_REASON_DYSRYTHMIA = 0
  END IF
ELSE
  HOSP_REASON_DYSRYTHMIA = MISSING
END IF

```

Myocardial infarction (%)

```

IF M2410_INPAT_FACILITY[2] = 01
THEN
  IF M2430_HOSP_UK[2] = 1
  THEN
    HOSP_REASON_AMI = MISSING
  ELSEIF M2430_HOSP_MI_CHST_PAIN[2] = 1
  THEN
    HOSP_REASON_AMI = 1
  ELSE
    HOSP_REASON_AMI = 0
  END IF
ELSE
  HOSP_REASON_AMI = MISSING
END IF

```

Other heart disease (%)

```

IF M2410_INPAT_FACILITY[2] = 01
THEN
  IF M2430_HOSP_UK[2] = 1
  THEN
    HOSP_REASON_HEART_OTHER = MISSING
  ELSEIF M2430_HOSP_OTHR_HRT_DEASE[2] = 1
  THEN
    HOSP_REASON_HEART_OTHER = 1
  ELSE

```

```

        HOSP_REASON_HEART_OTHER = 0
    END IF
ELSE
    HOSP_REASON_HEART_OTHER = MISSING
END IF

```

Stroke (CVA) or TIA (%)

```

IF M2410_INPAT_FACILITY[2] = 01
THEN
    IF M2430_HOSP_UK[2] = 1
    THEN
        HOSP_REASON_STROKE_TIA = MISSING
    ELSEIF M2430_HOSP_STROKE_TIA[2] = 1
    THEN
        HOSP_REASON_STROKE_TIA = 1
    ELSE
        HOSP_REASON_STROKE_TIA = 0
    END IF
ELSE
    HOSP_REASON_STROKE_TIA = MISSING
END IF

```

Hypo/Hyperglycemia (%)

```

IF M2410_INPAT_FACILITY[2] = 01
THEN
    IF M2430_HOSP_UK[2] = 1
    THEN
        HOSP_REASON_HI_LO_BG = MISSING
    ELSEIF M2430_HOSP_HYPOGLYC[2] = 1
    THEN
        HOSP_REASON_HI_LO_BG = 1
    ELSE
        HOSP_REASON_HI_LO_BG = 0
    END IF
ELSE
    HOSP_REASON_HI_LO_BG = MISSING
END IF

```

GI bleeding, obstruction, etc. (%)

```

IF M2410_INPAT_FACILITY[2] = 01

```



```

THEN
  IF M2430_HOSP_UK[2] = 1
  THEN
    HOSP_REASON_GI = MISSING
  ELSEIF M2430_HOSP_GI_PRBLM[2] = 1
  THEN
    HOSP_REASON_GI = 1
  ELSE
    HOSP_REASON_GI = 0
  END IF
ELSE
  HOSP_REASON_GI = MISSING
END IF

```

Dehydration, malnutrition (%)

```

IF M2410_INPAT_FACILITY[2] = 01
THEN
  IF M2430_HOSP_UK[2] = 1
  THEN
    HOSP_REASON_NUTRITION = MISSING
  ELSEIF M2430_HOSP_DHYDRTN_MALNTR[2] = 1
  THEN
    HOSP_REASON_NUTRITION = 1
  ELSE
    HOSP_REASON_NUTRITION = 0
  END IF
ELSE
  HOSP_REASON_NUTRITION = MISSING
END IF

```

Urinary tract infection (%)

```

IF M2410_INPAT_FACILITY[2] = 01
THEN
  IF M2430_HOSP_UK[2] = 1
  THEN
    HOSP_REASON_UTI = MISSING
  ELSEIF M2430_HOSP_UR_TRACT[2] = 1
  THEN
    HOSP_REASON_UTI = 1
  ELSE

```

```

        HOSP_REASON_UTI = 0
    END IF
ELSE
    HOSP_REASON_UTI = MISSING
END IF

```

IV catheter-related infection (%)

```

IF M2410_INPAT_FACILITY[2] = 01
THEN
    IF M2430_HOSP_UK[2] = 1
    THEN
        HOSP_REASON_IV_INFECT = MISSING
    ELSEIF M2430_HOSP_CTHTR_CMPLCTN[2] = 1
    THEN
        HOSP_REASON_IV_INFECT = 1
    ELSE
        HOSP_REASON_IV_INFECT = 0
    END IF
ELSE
    HOSP_REASON_IV_INFECT = MISSING
END IF

```

Wound infection (%)

```

IF M2410_INPAT_FACILITY[2] = 01
THEN
    IF M2430_HOSP_UK[2] = 1
    THEN
        HOSP_REASON_WOUND_INFCT = MISSING
    ELSEIF M2430_HOSP_WND_INFCTN[2] = 1
    THEN
        HOSP_REASON_WOUND_INFCT = 1
    ELSE
        HOSP_REASON_WOUND_INFCT = 0
    END IF
ELSE
    HOSP_REASON_WOUND_INFCT = MISSING
END IF

```

Uncontrolled pain (%)

```

IF M2410_INPAT_FACILITY[2] = 01

```

```

THEN
  IF M2430_HOSP_UK[2] = 1
  THEN
    HOSP_REASON_PAIN = MISSING
  ELSEIF M2430_HOSP_PAIN[2] = 1
  THEN
    HOSP_REASON_PAIN = 1
  ELSE
    HOSP_REASON_PAIN = 0
  END IF
ELSE
  HOSP_REASON_PAIN = MISSING
END IF

```

Acute mental/behav. problem (%)

```

IF M2410_INPAT_FACILITY[2] = 01
THEN
  IF M2430_HOSP_UK[2] = 1
  THEN
    HOSP_REASON_MENTAL_BEHAV = MISSING
  ELSEIF M2430_HOSP_MENTL_BHVRL_PRBLM[2] = 1
  THEN
    HOSP_REASON_MENTAL_BEHAV = 1
  ELSE
    HOSP_REASON_MENTAL_BEHAV = 0
  END IF
ELSE
  HOSP_REASON_MENTAL_BEHAV = MISSING
END IF

```

Deep vein thrombosis (%)

```

IF M2410_INPAT_FACILITY[2] = 01
THEN
  IF M2430_HOSP_UK[2] = 1
  THEN
    HOSP_REASON_THROMBOSIS = MISSING
  ELSEIF M2430_HOSP_DVT_PULMNRY[2] = 1
  THEN
    HOSP_REASON_THROMBOSIS = 1
  ELSE

```

```

        HOSP_REASON_THROMBOSIS = 0
    END IF
ELSE
    HOSP_REASON_THROMBOSIS = MISSING
END IF

Scheduled visit (%)
IF M2410_INPAT_FACILITY[2] = 01
THEN
    IF M2430_HOSP_UK[2] = 1
    THEN
        HOSP_REASON_SCHED_VISIT = MISSING
    ELSEIF M2430_HOSP_SCHLD_TRTMT[2] = 1
    THEN
        HOSP_REASON_SCHED_VISIT = 1
    ELSE
        HOSP_REASON_SCHED_VISIT = 0
    END IF
ELSE
    HOSP_REASON_SCHED_VISIT = MISSING
END IF

```

```

Other (%)
IF M2410_INPAT_FACILITY[2] = 01
THEN
    IF M2430_HOSP_UK[2] = 1
    THEN
        HOSP_REASON_OTHER = MISSING
    ELSEIF M2430_HOSP_OTHER[2] = 1
    THEN
        HOSP_REASON_OTHER = 1
    ELSE
        HOSP_REASON_OTHER = 0
    END IF
ELSE
    HOSP_REASON_OTHER = MISSING
END IF

```

```

No hospitalization (%)
IF M0100_ASSMNT_REASON[2] = 08

```

```
THEN
    NO_HOSPITALIZATION = MISSING
ELSEIF M2410_INPAT_FACILITY[2] = 01
THEN
    NO_HOSPITALIZATION = 0
ELSE
    NO_HOSPITALIZATION = 1
END IF
```