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

Revision 1
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Revision History

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1. On page 9, the descriptive measure name LOS from 121 to 365 days (%) has been changed to LOS from 121 to 180 days (%), the short measure name HC_LOS_121_365 has been changed to HC_LOS_121_180, the descriptive measure name LOS More than 365 days (%) has been changed to LOS more than 180 days (%), and the short measure name HC_GT_365 has been 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_PRSNT[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_PRSNT[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_CUR_TOILTG [1]) > 1 is replaced by VALUE(M1850_CUR_TRNSFRNG) > 1.

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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 date, 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.)

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 of 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).

Measures Included in Reports

Throughout the remainder of this document, measures are referred to as follows:

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_STH0SP
Long-term care hospital (%)	INPT_LTH0SP
Inpatient rehab hospital/unit (%)	INPT_REHAB
Psychiatric hospital/unit (%)	INPT_PSYCH
Medical regimen change (%)	MED_REG_CHNG
Prior Conditions	
Urinary incontinence (%)	P_UR_INCON
Indwelling/suprapubic catheter (%)	P_CATH
Intractable pain (%)	P_INTRACT_PAIN
Impaired decision-making (%)	P_IMPR_DECSN
Disruptive/Inappropriate behav. (%)	P_DISRUPTIVE
Memory loss (%)	P_MEM_LOSS
None Listed (%)	P_NONE
No inpatient discharge / regimen change (%)	NO_INPAT_DC_REG_CHNG

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

Therapies

Domain and Descriptive Measure Name	Short Measure Name
IV/infusion therapy (%)	IVTHER_IV
Parenteral nutrition (%)	IVTHER_PAREN
Enteral nutrition (%)	IVTHER_ENTERAL

GENERAL HEALTH STATUS

Hospitalization Risks

Recent decline mental/emot/behav (%)	RISK_RCNT_DCLN
Multiple hospitalizations (%)	RISK_MLTPL_HOSPZTN
History of falls (%)	RISK_HSTRY_FALLS
5 or more medications (%)	RISK_5PLUS_MDCTN

Hospitalization Risks (cont'd.)

Frailty factors (%)	RISK_FRAILTY
Other (%)	RISK_OTHR
None (%)	RISK_NONE

Overall Status

Overall Status (0-3)	OVERALL_STATUS
Unknown / Unclear (%)	OVERALL_STATUS_UK

Other Risk Factors

Smoking (%)	RISK_SMOKING
Obesity (%)	RISK_OBESITY
Alcohol dependency (%)	RISK_ALCOHOLISM
Drug dependency (%)	RISK_DRUGS
None (%)	RISK_NONE

LIVING ARRANGEMENT / ASSISTANCE

Current Situation

Lives alone (%)	LIV_ALONE
Lives with others (%)	LIV_OTHERS
Lives in congregate situation (%)	LIV_CONGEGRATE

Availability of Assistance

Around the clock (%)	AVAIL_RTC
Regular daytime (%)	AVAIL_DAY
Regular nighttime (%)	AVAIL_NIGHT
Occasional (%)	AVAIL_SOME
None (%)	AVAIL_NONE

Patient-Related Characteristics Measure

Domain and Descriptive Measure Name	Short Measure Name
CARE MANAGEMENT	
ADLs	
None needed (%)	ADL_NONE_NEEDED
Caregiver currently provides (%)	ADL_CG_PROVIDES
Caregiver training needed (%)	ADL_NEED_TRAINING
Uncertain/Unlikely to be provided (%)	ADL_CG_UNCERTAIN
Needed, but not available (%)	ADL_CG_NONE
IADLs	
None needed (%)	IADL_NONE_NEEDED
Caregiver currently provides (%)	IADL_CG_PROVIDES
Caregiver training needed (%)	IADL_NEED_TRAINING
Uncertain/Unlikely to be provided (%)	IADL_CG_UNCERTAIN
Needed, but not available (%)	IADL_CG_NONE
Frequency of ADL / IADL assistance (1-5)	FREQ_CG_ASSIST
Medication Administration	
None needed (%)	MDCTN_NONE_NEEDED
Caregiver currently provides (%)	MDCTN_CG_PROVIDES
Caregiver training needed (%)	MDCTN_NEED_TRAINING
Uncertain/Unlikely to be provided (%)	MDCTN_CG_UNCERTAIN
Needed, but not available (%)	MDCTN_CG_NONE
Medical Procedures	
None needed (%)	PRCDR_NONE_NEEDED
Caregiver currently provides (%)	PRCDR_CG_PROVIDES
Caregiver training needed (%)	PRCDR_NEED_TRAINING
Uncertain/Unlikely to be provided (%)	PRCDR_CG_UNCERTAIN
Needed, but not available (%)	PRCDR_CG_NONE
Management of Equipment	
None needed (%)	EQUIP_NONE_NEEDED
Caregiver currently provides (%)	EQUIP_CG_PROVIDES
Caregiver training needed (%)	EQUIP_NEED_TRAINING
Uncertain/Unlikely to be provided (%)	EQUIP_CG_UNCERTAIN
Needed, but not available (%)	EQUIP_CG_NONE
Supervision / Safety	
None needed (%)	SPRVSN_NONE_NEEDED
Caregiver currently provides (%)	SPRVSN_CG_PROVIDES
Caregiver training needed (%)	SPRVSN_NEED_TRAINING
Uncertain/Unlikely to be provided (%)	SPRVSN_CG_UNCERTAIN
Needed, but not available (%)	SPRVSN_CG_NONE

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

Advocacy

None needed (%)   ADVCY_NONE_NEEDED

Caregiver currently provides (%)   ADVCY_CG_PROVIDES

Caregiver training needed (%)   ADVCY_NEED_TRAINING

Uncertain/Unlikely to be provided (%)   ADVCY_CG_UNCERTAIN

Needed, but not available (%)   ADVCY_CG_NONE

SENSORY STATUS

Vision impairment (0-2)   VISION

Hearing impairment (0-2)   HEARING

Verbal content understanding (0-3)   VERBAL_UNDERSTAND

Speech/language (0-5)   SPEECH

Pain interfering with activity (0-4)   PAIN

INTEGUMENTARY STATUS

Pressure Ulcers

Pressure ulcer risk (%)   PRES_ULC_RISK

Pressure ulcer present (%)   PRES_ULC

Stage II pressure ulcer count (#)   PRES_ULC_STG2

Stage III pressure ulcer count (#)   PRES_ULC_STG3

Stage IV pressure ulcer count (#)   PRES_ULC_STG4

Unstageable pressure ulcer count (#)   PRES_ULC_NO_STG

Status most problematic PU (0-3)   PRES_ULC_STATUS

Stage I pressure ulcer count (0-4)   PRES_ULC_STG1

Stage most problematic PU (1-4)   PRES_ULC_STG

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
Disruptive/inappropriate behavior (%)	INAPPRO_BHV
Delusional, hallucinatory, etc. (%)	DELUSIONS
None demonstrated (%)	NOBHV
Frequency of behavior problems (0-5)	BEH_PROB_FREQ
Psychiatric nursing (%)	PSYCH_NURS

ACTIVITIES OF DAILY LIVING

SOC / ROC Status

Grooming (0-3)	GROOMING
Dress upper body (0-3)	DRESS_UPPER
Dress lower body (0-3)	DRESS_LOWER
Bathing (0-6)	BATHING
Toilet Transfer (0-4)	TOILET_TRANSFER
Toileting Hygiene (0-3)	TOILET_HYGIENE
Bed Transferring (0-5)	TRANSFERRING
Ambulation (0-6)	AMBULATION
Eating (0-5)	FEEDING

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

Status prior to SOC/ROC

Prior Self-Care (0-2)	P_SELF_CARE
Prior Ambulation (0-2)	P_AMBULATION
Prior Transfer (0-2)	P_TRANSFER

IADLs, MEDICATIONS, OTHER

IADLs

Light meal prep (0-2)	MEAL_PREP
Phone use (0-5)	PHONE_USE
Prior Household (0-2)	P_HOUSEHOLD

Falls Risk

At risk for falls (%)	FALL_RISK

Medication Status

Drug regimen: problem found (%)	MED_PROBLEM
Mgmt oral medications (SOC/ROC) (0-3)	ORAL_MEDS
Mgmt oral medications(SOC/ROC): NA (%)	ORAL_MED_NA
Mgmt injected meds (SOC/ROC) (0-3)	INJECT_MEDS
Mgmt injected meds (SOC/ROC): NA (%)	INJECT_MED_NA
Prior mgmt oral medications (0-3)	P_ORAL_MEDS
Prior mgmt oral medications: NA (%)	P_ORAL_MED_NA
Prior mgmt injected medication (0-3)	P_INJECT_MEDS
Prior mgmt injected medication: NA (%)	P_INJECT_MED_NA

THERAPY / PLAN OF CARE

Therapy Visits

# Therapy visits indicated (#)	THERAPY_NEED

PATIENT DIAGNOSTIC INFORMATION

Acute Conditions

Orthopedic (%)	ACUTE_ORTHO
Neurologic (%)	ACUTE_NEURO
Open wounds/lesions (%)	ACUTE_WOUND
Cardiac/peripheral vascular (%)	ACUTE_CARDIO
Pulmonary (%)	ACUTE_LUNG
Diabetes mellitus (%)	ACUTE_DIABETES
Gastrointestinal disorder (%)	ACUTE_GI
Contagious/communicable (%)	ACUTE_CONTAGIOUS
Urinary incont./catheter (%)	ACUTE_INCONT
Mental/emotional (%)	ACUTE_PSYCH
Oxygen therapy (%)	ACUTE_O2

Patient-Related Characteristics Measure

Domain and Descriptive Measure Name	Short Measure Name
IV/infusion therapy (%)	ACUTE_IV
Enteral/parenteral nutrition (%)	ACUTE_ENT_PAR_NUTRI
Ventilator (%)	ACUTE_VENT

Chronic Conditions

Dependence in living skills (%)	CHRONIC_LIV_SKILL
Dependence in personal care (%)	CHRONIC_PERS_CARE
Impaired ambulation/mobility (%)	CHRONIC_MOBILITY
Urinary incontinence/catheter (%)	CHRONIC_INCONT_CATH
Dependence in med. admin. (%)	CHRONIC_MED_ADMIN
Chronic pain (%)	CHRONIC_PAIN
Cognitive/mental/behavioral (%)	CHRONIC_MENT_BEHAV
Chronic pt. with caregiver (%)	CHRONIC_ANY_W_CG

Home Care Diagnoses

Infections/parasitic diseases (%)	HC_DX_INFECT
Neoplasms (%)	HC_DX_NEOPLASM
Endocrine/nutrit./metabolic (%)	HC_DX_ENDOCRINE
Blood diseases (%)	HC_DX_BLOOD
Mental diseases (%)	HC_DX_MENTAL
Nervous system diseases (%)	HC_DX_NERVOUS
Circulatory system diseases (%)	HC_DX_CIRCULATORY
Respiratory system diseases (%)	HC_DX_RESPIRATORY
Digestive system diseases (%)	HC_DX_DIGESTIVE
Genitourinary sys. diseases (%)	HC_DX_GEN_URINARY
Pregnancy problems (%)	HC_DX_PREGNANCY
Skin/subcutaneous diseases (%)	HC_DX_SKIN
Musculoskeletal sys. diseases (%)	HC_DX_MUSCL_SKEL
Congenital anomalies (%)	HC_DX_CONGENITAL
Ill-defined conditions (%)	HC_DX_ILL_DEFINED
Fractures (%)	HC_DX_FRACTURE
Intracranial injury (%)	HC_DX_CRANIAL
Other injury (%)	HC_DX_INJURY_OTH
Iatrogenic conditions (%)	HC_DX_IATROGENIC

PATIENT DISCHARGE INFORMATION

Length of Stay

LOS until discharge (in days)	HC_LOS
LOS from 1 to 30 days (%)	HC_LOS_1_30
LOS from 31 to 60 days (%)	HC_LOS_31_60

Patient-Related Characteristics Measure

Domain and Descriptive Measure Name	Short Measure Name
LOS from 61 to 120 days (%)	HC_LOS_61_120
LOS from 121 to 180 days (%)	HC_LOS_121_180
LOS more than 180 days (%)	HC_LOS_GT_180
Reason for Emergent Care	
Improper medications (%)	EC_REASON_MEDS
Injury from fall (%)	EC_REASON_FALL
Respiratory infection (%)	EC_REASON_RESP_INF
Other respiratory (%)	EC_REASON_RESP_OTHER
Heart failure (%)	EC_REASON_HEART_FAIL
Cardiac dysrhythmia (%)	EC_REASON_DYSRYTHMIA
Myocardial infarction (%)	EC_REASON_AMI
Other heart disease (%)	EC_REASON_HEART_OTHER
Stroke (CVA) or TIA (%)	EC_REASON_STROKE_TIA
Hypo/Hyperglycemia (%)	EC_REASON_HI_LO_BG
GI bleeding, obstruction, etc. (%)	EC_REASON_GI
Dehydration, malnutrition (%)	EC_REASON_NUTRITION
Urinary tract infection (%)	EC_REASON_UTI
IV catheter-related infection (%)	EC_REASON_IV_INFECT
Wound infection (%)	EC_REASON_WOUND_INFCT
Uncontrolled pain (%)	EC_REASON_PAIN
Acute mental/behav. problem (%)	EC_REASON_MENTAL_BEHAV
Deep vein thrombosis (%)	EC_REASON_THROMBOSIS
Other (%)	EC_REASON_OTHER
No emergent care (%)	NO_EMERGENT_CARE
Reason for Hospitalization	
Improper medication (%)	HOSP_REASON_MEDS
Injury from fall (%)	HOSP_REASON_FALL
Respiratory infection (%)	HOSP_REASON_RESP_INF
Other respiratory (%)	HOSP_REASON_RESP_OTHER
Heart failure (%)	HOSP_REASON_HEART_FAIL
Cardiac dysrhythmia (%)	HOSP_REASON_DYSRYTHMIA
Myocardial infarction (%)	HOSP_REASON_AMI
Other heart disease (%)	HOSP_REASON_HEART_OTHER
Stroke (CVA) or TIA (%)	HOSP_REASON_STROKE_TIA
Hypo/Hyperglycemia (%)	HOSP_REASON_HI_LO_BG
GI bleeding, obstruction, etc. (%)	HOSP_REASON_GI
Dehydration, malnutrition (%)	HOSP_REASON_NUTRITION

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

Patient-Related Characteristics Measure Domain and Descriptive Measure Name	Short Measure Name
Urinary tract infection (%)	HOSP_REASON_UTI
IV catheter-related infection (%)	HOSP_REASON_IV_INFECT
Wound infection (%)	HOSP_REASON_WOUND_INFCT
Uncontrolled pain (%)	HOSP_REASON_PAIN
Acute mental/behav. problem (%)	HOSP_REASON_MENTAL_BEHAV
Deep vein thrombosis (%)	HOSP_REASON_THROMBOSIS
Scheduled visit (%)	HOSP_REASON_SCHED_VISIT
Other (%)	HOSP_REASON_OTHER
No hospitalization (%)	NO_HOSPITALIZATION

PATIENT CHARACTERISTICS MEASURES TRANSFORMATION PSEUDO-CODE

Note: VALUE(FieldName) indicates conversion of one or two character text field to numeric value.

PATIENT HISTORY

<u>Demographics</u>

<u>Age</u>
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

<u>Gender: Female</u>
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_SELF_PAY[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_UNKNOWN[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_IRF_14_DA[1] = 1
THEN
    INPT_REHAB = 1
ELSE
    INPT_REHAB = 0
END IF

Psychiatric hospital/unit (%)
IF M1000_PSYCH_14_DA[1] = 1
THEN
    INPT_PSYCH = 1
ELSE
    INPT_PSYCH = 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

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

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

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

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 = 1
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

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_NONE = 1

ELSE

    RISK_NONE = 0

END IF

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

<u>Other Risk Factors</u>

<u>*Smoking (%)*</u>
IF M1036_RSK_UNKNOWN[1] = 1
THEN
        RISK_SMOKING = MISSING
ELSE
        RISK_SMOKING = VALUE(M1036_RSK_SMOKING[1])
END IF

<u>*Obesity (%)*</u>
IF M1036_RSK_UNKNOWN[1] = 1
THEN
        RISK_OBESITY = MISSING
ELSE
        RISK_OBESITY = VALUE(M1036_RSK_OBESITY[1])
END IF

<u>*Alcohol dependency (%)*</u>
IF M1036_RSK_UNKNOWN[1] = 1
THEN
        RISK_ALCOHOLISM = MISSING
ELSE
        RISK_ALCOHOLISM = VALUE(M1036_RSK_ALCOHOLISM[1])
END IF

<u>*Drug dependency (%)*</u>
IF M1036_RSK_UNKNOWN[1] = 1
THEN
        RISK_DRUGS = MISSING
ELSE
        RISK_DRUGS = VALUE(M1036_RSK_DRUGS[1])
END IF

<u>*None (%)*</u>
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

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

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

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

<u>Advocacy</u>

None needed (%)

IF M2100_CARE_TYPE_SRC_ADVCY[1] = 00

THEN

    ADVCY_ASSIST_NONE_NEEDED = 1

ELSE

    ADVCY_ASSIST_NONE_NEEDED = 0

END IF

Caregiver currently provides (%)

IF M2100_CARE_TYPE_SRC_ADVCY[1] = 01

THEN

    ADVCY_CG_PROVIDES = 1

ELSE

    ADVCY_CG_PROVIDES = 0

END IF

Caregiver training needed (%)
IF M2100_CARE_TYPE_SRC_ADVCY[1] = 02
THEN
    ADVCY_NEED_TRAINING = 1
ELSE
    ADVCY_NEED_TRAINING = 0
END IF

Uncertain/unlikely to be provided (%)
IF M2100_CARE_TYPE_SRC_ADVCY[1] = 03
    OR M2100_CARE_TYPE_SRC_ADVCY[1] = 04
THEN
    ADVCY_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

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])

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

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_NUM_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_PRSNT[1] = 00
THEN
    SRGCL_WND = 0
ELSE
    SRGCL_WND = 1
END IF

Status most problematic surg. (0-3)
IF M1340_SRGCL_WND_PRSNT[1] = 00
THEN
    SRGCL_WND_STAT = 0
ELSE
    IF M1340_SRGCL_WND_PRSNT[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_CUR_GROOMING[1])

Dress upper body (0-3)
DRESS_UPPER = VALUE(M1810_CUR_DRESS_UPPER[1])

Dress lower body (0-3)
DRESS_LOWER = VALUE(M1820_CUR_DRESS_LOWER[1])

Bathing (0-6)
BATHING = VALUE(M1830_CRNT_BATHING[1])

Toilet Transfer (0-4)
TOILET_TRANSFER = VALUE(M1840_CUR_TOILTG[1])

Toileting Hygiene (0-3)
TOILET_HYGIENE = VALUE(M1845_CUR_TOILTG_HYGN[1])

Bed Transferring (0-5)
TRANSFERRING = VALUE(M1850_CUR_TRNSFRNG[1])

Ambulation (0-6)
AMBULATION = VALUE(M1860_CUR_AMBLTN[1])

Eating (0-5)
FEEDING = VALUE(M1870_CUR_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_CUR_PREP_LT_MEALS[1])

Phone use (0-5)
IF M1890_CUR_PHONE_USE [1] = NA
THEN
     PHONE_USE = MISSING
ELSE
     PHONE_USE = VALUE(M1890_CUR_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

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

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_NUM[1])
END IF

PATIENT DIAGNOSTIC INFORMATION

Acute Conditions
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.

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

Inpatient diagnosis and medical regimen change diagnosis codes at three digit level:
3DIGIT(FieldName) = portion of ICD-9 code to the left of the decimal point. If the ICD-9 code is blank, the result is blank. If the ICD-9 coded is a V or E code, the result is blank.

INPAT_DIAG1 = 3DIGIT(M1010_14_DAY_INP1_ICD[1])

INPAT_DIAG2 = 3DIGIT(M1010_14_DAY_INP2_ICD[1])
INPAT_DIAG3 = 3DIGIT(M1010_14_DAY_INP3_ICD[1])
INPAT_DIAG4 = 3DIGIT(M1010_14_DAY_INP4_ICD[1])
INPAT_DIAG5 = 3DIGIT(M1010_14_DAY_INP5_ICD[1])
INPAT_DIAG6 = 3DIGIT(M1010_14_DAY_INP6_ICD[1])
MEDREG_DIAG1 = 3DIGIT(M1016_CHGREG_ICD1[1])
MEDREG_DIAG2 = 3DIGIT(M1016_CHGREG_ICD2[1])
MEDREG_DIAG3 = 3DIGIT(M1016_CHGREG_ICD3[1])
MEDREG_DIAG4 = 3DIGIT(M1016_CHGREG_ICD4[1])
MEDREG_DIAG5 = 3DIGIT(M1016_CHGREG_ICD5[1])
MEDREG_DIAG6 = 3DIGIT(M1016_CHGREG_ICD6[1])

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)
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)
   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)
　　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)
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

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(M0500_RESPTX_OXYGEN)

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_CUR_PHONE_USE[1] = NA
THEN
     CUR_PHONE_TRIGGER_2 = 0
     CUR_PHONE_TRIGGER_3 = 0
ELSE
     IF VALUE(M1890_CUR_PHONE_USE[1]) >2
     THEN
          CUR_PHONE_TRIGGER_2 = 1
     ELSE
          CUR_PHONE_TRIGGER_2 = 0
     END IF
     IF VALUE(M1890_CUR_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_CUR_PREP_LT_MEALS[1]) > 0
        AND CUR_PHONE_TRIGGER_2 = 1)
        OR VALUE(M1880_CUR_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_CUR_PREP_LT_MEALS[1]) > 0
        AND CUR_PHONE_TRIGGER_2 = 1)
        OR VALUE(M1880_CUR_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_CUR_TOILTG[1]) > 2
        OR VALUE(M1845_CUR_TOILTG_HYGN[1]) > 2
        OR (VALUE(M1800_CUR_GROOMING[1]) > 1 **AND**
        (VALUE(M1810_CUR_DRESS_UPPER[1]) >1 **OR**
        VALUE(M1820_CUR_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_CUR_TOILTG[1]) > 2
        OR VALUE(M1845_CUR_TOILTG_HYGN[1]) > 2
        OR (VALUE(M1800_CUR_GROOMING[1]) > 1 **AND**
        (VALUE(M1810_CUR_DRESS_UPPER[1]) >1 **OR**
        VALUE(M1820_CUR_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_CUR_TOILTG [1]) > 2
    OR VALUE(M1850_CUR_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_CUR_TOILTG [1]) > 2
    OR VALUE(M1850_CUR_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

Home Care Diagnoses

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 there are "payment" diagnoses coded, severity rating is ignored. V or E code diagnoses are ignored for the purpose of calculating these measures.

3DIGIT(FieldName) = portion of ICD-9 code to the left of the decimal point. If the ICD-9 code is blank, the result is blank. If the ICD-9 coded is a V or E code, 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 = 3DIGIT(M1020_PRIMARY_DIAG_ICD[1])
   PMT_DIAG1 = 3DIGIT(M1024_PMT_DIAG_ICD_A3[1])
   PMT2_DIAG1 = 3DIGIT(M1024_PMT_DIAG_ICD_A4[1])
   IF M1022_OTH_DIAG1_SEVERITY[1] > 00
   THEN
      HC_DIAG2 = 3DIGIT(M1022_OTH_DIAG1_ICD[1])
   ELSE
      HC_DIAG2 = BLANK
   END IF
   PMT_DIAG2 = 3DIGIT(M1024_PMT_DIAG_ICD_B3 [1])
   PMT2_DIAG2 = 3DIGIT(M1024_PMT_DIAG_ICD_B4[1])
   IF M1022_OTH_DIAG2_SEVERITY[1] > 00
   THEN
      HC_DIAG3 = 3DIGIT(M1022_OTH_DIAG2_ICD[1])
   ELSE
      HC_DIAG3 = BLANK
   END IF
   PMT_DIAG3 = 3DIGIT(M1024_PMT_DIAG_ICD_C3 [1])
   PMT2_DIAG3 = 3DIGIT(M1024_PMT_DIAG_ICD_C4[1])
   IF M1022_OTH_DIAG3_SEVERITY[1] > 00
   THEN
      HC_DIAG4 = 3DIGIT(M1022_OTH_DIAG3_ ICD [1])
   ELSE
      HC_DIAG4 = BLANK
   END IF
   PMT_DIAG4 = 3DIGIT(M1024_PMT_DIAG_ICD_D3 [1])
   PMT2_DIAG4 = 3DIGIT(M1024_PMT_DIAG_ICD_D4[1])
   IF M1022_OTH_DIAG4_SEVERITY[1] > 00
   THEN
      HC_DIAG5 = 3DIGIT(M1022_OTH_DIAG4_ICD[1])
   ELSE
      HC_DIAG5 = BLANK
   END IF
   PMT_DIAG5 = 3DIGIT(M1024_PMT_DIAG_ICD_E3 [1])
   PMT2_DIAG5 = 3DIGIT(M1024_PMT_DIAG_ICD_E4[1])
   IF M1022_OTH_DIAG5_SEVERITY[1] > 00
   THEN
      HC_DIAG6 = 3DIGIT(M1022_OTH_DIAG5_ICD[1])
```

ELSE
    HC_DIAG6 = BLANK
END IF
PMT_DIAG6 = 3DIGIT(M1024_PMT_DIAG_ICD_F3 [1])
PMT2_DIAG6 = 3DIGIT(M1024_PMT_DIAG_ICD_F4[1])
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

Pregnancy problems (%)
IF (HC_DIAG1 >= 630 AND HC_DIAG1 <= 676)
    OR (PMT_DIAG1 >= 630 AND PMT_DIAG1 <= 676)
    OR (PMT2_DIAG1 >= 630 AND PMT2_DIAG1 <= 676)
    OR (HC_DIAG2 >= 630 AND HC_DIAG2 <= 676)
    OR (PMT_DIAG2 >= 630 AND PMT_DIAG2 <= 676)
    OR (PMT2_DIAG2 >= 630 AND PMT2_DIAG2 <= 676)
    OR (HC_DIAG3 >= 630 AND HC_DIAG3 <= 676)
    OR (PMT_DIAG3 >= 630 AND PMT_DIAG3 <= 676)
    OR (PMT2_DIAG3 >= 630 AND PMT2_DIAG3 <= 676)
    OR (HC_DIAG4 >= 630 AND HC_DIAG4 <= 676)
    OR (PMT_DIAG4 >= 630 AND PMT_DIAG4 <= 676)
    OR (PMT2_DIAG4 >= 630 AND PMT2_DIAG4 <= 676)
    OR (HC_DIAG5 >= 630 AND HC_DIAG5 <= 676)
    OR (PMT_DIAG5 >= 630 AND PMT_DIAG5 <= 676)
    OR (PMT2_DIAG5 >= 630 AND PMT2_DIAG5 <= 676)
    OR (HC_DIAG6 >= 630 AND HC_DIAG6 <= 676)
    OR (PMT_DIAG6 >= 630 AND PMT_DIAG6 <= 676)
    OR (PMT2_DIAG6 >= 630 AND PMT2_DIAG6 <= 676)
THEN
    HC_DX_PREGNANCY = 1
ELSE

HC_DX_PREGNANCY = 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

Congenital anomalies (%)
IF (HC_DIAG1 >= 740 AND HC_DIAG1 <= 759)
        OR (PMT_DIAG1 >= 740 AND PMT_DIAG1 <= 759)
        OR (PMT2_DIAG1 >= 740 AND PMT2_DIAG1 <= 759)
        OR (HC_DIAG2 >= 740 AND HC_DIAG2 <= 759)
        OR (PMT_DIAG2 >= 740 AND PMT_DIAG2 <= 759)
        OR (PMT2_DIAG2 >= 740 AND PMT2_DIAG2 <= 759)
        OR (HC_DIAG3 >= 740 AND HC_DIAG3 <= 759)
        OR (PMT_DIAG3 >= 740 AND PMT_DIAG3 <= 759)
        OR (PMT2_DIAG3 >= 740 AND PMT2_DIAG3 <= 759)
        OR (HC_DIAG4 >= 740 AND HC_DIAG4 <= 759)
        OR (PMT_DIAG4 >= 740 AND PMT_DIAG4 <= 759)
        OR (PMT2_DIAG4 >= 740 AND PMT2_DIAG4 <= 759)
        OR (HC_DIAG5 >= 740 AND HC_DIAG5 <= 759)
        OR (PMT_DIAG5 >= 740 AND PMT_DIAG5 <= 759)
        OR (PMT2_DIAG5 >= 740 AND PMT2_DIAG5 <= 759)
        OR (HC_DIAG6 >= 740 AND HC_DIAG6 <= 759)
        OR (PMT_DIAG6 >= 740 AND PMT_DIAG6 <= 759)
        OR (PMT2_DIAG6 >= 740 AND PMT2_DIAG6 <= 759)
THEN
        HC_DX_CONGENITAL = 1
ELSE
        HC_DX_CONGENITAL = 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

Iatrogenic conditions (%)
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_IATROGENIC = 1
ELSE
        HC_DX_IATROGENIC = 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_31_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

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_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 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_PULMNRY[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

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_DSRTHM[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