

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

Revision 2  
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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.

Revision 2: December 2012

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

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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_STHOSP
Long-term care hospital (%)	INPT_LTHOSP
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

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

Frailty factors (%)

RISK\_FRAILTY

Other (%)

RISK\_OTHR

None (%)

RISK\_H\_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**  
**CARE MANAGEMENT**

**Short Measure Name**

ADLs

None needed (%)  
 Caregiver currently provides (%)  
 Caregiver training needed (%)  
 Uncertain/Unlikely to be provided (%)  
 Needed, but not available (%)

ADL\_NONE\_NEEDED  
 ADL\_CG\_PROVIDES  
 ADL\_NEED\_TRAINING  
 ADL\_CG\_UNCERTAIN  
 ADL\_CG\_NONE

IADLs

None needed (%)  
 Caregiver currently provides (%)  
 Caregiver training needed (%)  
 Uncertain/Unlikely to be provided (%)  
 Needed, but not available (%)

IADL\_NONE\_NEEDED  
 IADL\_CG\_PROVIDES  
 IADL\_NEED\_TRAINING  
 IADL\_CG\_UNCERTAIN  
 IADL\_CG\_NONE

Frequency of ADL / IADL assistance (1-5)

FREQ\_CG\_ASSIST

Medication Administration

None needed (%)  
 Caregiver currently provides (%)  
 Caregiver training needed (%)  
 Uncertain/Unlikely to be provided (%)  
 Needed, but not available (%)

MDCTN\_NONE\_NEEDED  
 MDCTN\_CG\_PROVIDES  
 MDCTN\_NEED\_TRAINING  
 MDCTN\_CG\_UNCERTAIN  
 MDCTN\_CG\_NONE

Medical Procedures

None needed (%)  
 Caregiver currently provides (%)  
 Caregiver training needed (%)  
 Uncertain/Unlikely to be provided (%)  
 Needed, but not available (%)

PRCDR\_NONE\_NEEDED  
 PRCDR\_CG\_PROVIDES  
 PRCDR\_NEED\_TRAINING  
 PRCDR\_CG\_UNCERTAIN  
 PRCDR\_CG\_NONE

Management of Equipment

None needed (%)  
 Caregiver currently provides (%)  
 Caregiver training needed (%)  
 Uncertain/Unlikely to be provided (%)  
 Needed, but not available (%)

EQUIP\_NONE\_NEEDED  
 EQUIP\_CG\_PROVIDES  
 EQUIP\_NEED\_TRAINING  
 EQUIP\_CG\_UNCERTAIN  
 EQUIP\_CG\_NONE

Supervision / Safety

None needed (%)  
 Caregiver currently provides (%)  
 Caregiver training needed (%)  
 Uncertain/Unlikely to be provided (%)  
 Needed, but not available (%)

SPRVSN\_NONE\_NEEDED  
 SPRVSN\_CG\_PROVIDES  
 SPRVSN\_NEED\_TRAINING  
 SPRVSN\_CG\_UNCERTAIN  
 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**

IV/infusion therapy (%)

Enteral/parenteral nutrition (%)

Ventilator (%)

#### Chronic Conditions

Dependence in living skills (%)

Dependence in personal care (%)

Impaired ambulation/mobility (%)

Urinary incontinence/catheter (%)

Dependence in med. admin. (%)

Chronic pain (%)

Cognitive/mental/behavioral (%)

Chronic pt. with caregiver (%)

#### Home Care Diagnoses

Infections/parasitic diseases (%)

Neoplasms (%)

Endocrine/nutrit./metabolic (%)

Blood diseases (%)

Mental diseases (%)

Nervous system diseases (%)

Circulatory system diseases (%)

Respiratory system diseases (%)

Digestive system diseases (%)

Genitourinary sys. diseases (%)

Pregnancy problems (%)

Skin/subcutaneous diseases (%)

Musculoskeletal sys. diseases (%)

Congenital anomalies (%)

Ill-defined conditions (%)

Fractures (%)

Intracranial injury (%)

Other injury (%)

Iatrogenic conditions (%)

### **PATIENT DISCHARGE INFORMATION**

#### Length of Stay

LOS until discharge ( in days)

LOS from 1 to 30 days (%)

LOS from 31 to 60 days (%)

### **Short Measure Name**

ACUTE\_IV

ACUTE\_ENT\_PAR\_NUTRI

ACUTE\_VENT

CHRONIC\_LIV\_SKILL

CHRONIC\_PERS\_CARE

CHRONIC\_MOBILITY

CHRONIC\_INCONT\_CATH

CHRONIC\_MED\_ADMIN

CHRONIC\_PAIN

CHRONIC\_MENT\_BEHAV

CHRONIC\_ANY\_W\_CG

HC\_DX\_INFECT

HC\_DX\_NEOPLASM

HC\_DX\_ENDOCRINE

HC\_DX\_BLOOD

HC\_DX\_MENTAL

HC\_DX\_NERVOUS

HC\_DX\_CIRCULATORY

HC\_DX\_RESPIRATORY

HC\_DX\_DIGESTIVE

HC\_DX\_GEN\_URINARY

HC\_DX\_PREGNANCY

HC\_DX\_SKIN

HC\_DX\_MUSCL\_SKEL

HC\_DX\_CONGENITAL

HC\_DX\_ILL\_DEFINED

HC\_DX\_FRACTURE

HC\_DX\_CRANIAL

HC\_DX\_INJURY\_OTH

HC\_DX\_IATROGENIC

HC\_LOS

HC\_LOS\_1\_30

HC\_LOS\_31\_60

## Patient-Related Characteristics Measure

### Domain and Descriptive Measure Name

LOS from 61 to 120 days (%)

LOS from 121 to 180 days (%)

LOS more than 180 days (%)

#### Reason for Emergent Care

Improper medications (%)

Injury from fall (%)

Respiratory infection (%)

Other respiratory (%)

Heart failure (%)

Cardiac dysrhythmia (%)

Myocardial infarction (%)

Other heart disease (%)

Stroke (CVA) or TIA (%)

Hypo/Hyperglycemia (%)

GI bleeding, obstruction, etc. (%)

Dehydration, malnutrition (%)

Urinary tract infection (%)

IV catheter-related infection (%)

Wound infection (%)

Uncontrolled pain (%)

Acute mental/behav. problem (%)

Deep vein thrombosis (%)

Other (%)

No emergent care (%)

#### Reason for Hospitalization

Improper medication (%)

Injury from fall (%)

Respiratory infection (%)

Other respiratory (%)

Heart failure (%)

Cardiac dysrhythmia (%)

Myocardial infarction (%)

Other heart disease (%)

Stroke (CVA) or TIA (%)

Hypo/Hyperglycemia (%)

GI bleeding, obstruction, etc. (%)

Dehydration, malnutrition (%)

### Short Measure Name

HC\_LOS\_61\_120

HC\_LOS\_121\_180

HC\_LOS\_GT\_180

EC\_REASON\_MEDS

EC\_REASON\_FALL

EC\_REASON\_RESP\_INF

EC\_REASON\_RESP\_OTHER

EC\_REASON\_HEART\_FAIL

EC\_REASON\_DYSRHYTHMIA

EC\_REASON\_AMI

EC\_REASON\_HEART\_OTHER

EC\_REASON\_STROKE\_TIA

EC\_REASON\_HI\_LO\_BG

EC\_REASON\_GI

EC\_REASON\_NUTRITION

EC\_REASON\_UTI

EC\_REASON\_IV\_INFECT

EC\_REASON\_WOUND\_INFCT

EC\_REASON\_PAIN

EC\_REASON\_MENTAL\_BEHAV

EC\_REASON\_THROMBOSIS

EC\_REASON\_OTHER

NO\_EMERGENT\_CARE

HOSP\_REASON\_MEDS

HOSP\_REASON\_FALL

HOSP\_REASON\_RESP\_INF

HOSP\_REASON\_RESP\_OTHER

HOSP\_REASON\_HEART\_FAIL

HOSP\_REASON\_DYSRHYTHMIA

HOSP\_REASON\_AMI

HOSP\_REASON\_HEART\_OTHER

HOSP\_REASON\_STROKE\_TIA

HOSP\_REASON\_HI\_LO\_BG

HOSP\_REASON\_GI

HOSP\_REASON\_NUTRITION

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

Urinary tract infection (%)

IV catheter-related infection (%)

Wound infection (%)

Uncontrolled pain (%)

Acute mental/behav. problem (%)

Deep vein thrombosis (%)

Scheduled visit (%)

Other (%)

No hospitalization (%)

**Short Measure Name**

HOSP\_REASON\_UTI

HOSP\_REASON\_IV\_INFECT

HOSP\_REASON\_WOUND\_INFCT

HOSP\_REASON\_PAIN

HOSP\_REASON\_MENTAL\_BEHAV

HOSP\_REASON\_THROMBOSIS

HOSP\_REASON\_SCHED\_VISIT

HOSP\_REASON\_OTHER

NO\_HOSPITALIZATION

## PATIENT CHARACTERISTICS MEASURES TRANSFORMATION PSEUDO-CODE

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

### PATIENT HISTORY

#### Demographics

##### Age

IF M0100\_ASSMT\_REASON[1] = 01

THEN

IF MONTH (M0030\_START\_CARE\_DT[1]) > MONTH  
(M0066\_PAT\_BIRTH\_DT[1])

OR (MONTH (M0030\_START\_CARE\_DT[1]) =  
MONTH(M0066\_PAT\_BIRTH\_DT[1]))

AND DAY (M0030\_START\_CARE\_DT[1]) >=  
DAY (M0066\_PAT\_BIRTH\_DT[1]))

THEN

AGE = YEAR (M0030\_START\_CARE\_DT[1]) –  
YEAR (M0066\_PAT\_BIRTH\_DT[1])

ELSE

AGE = YEAR (M0030\_START\_CARE\_DT[1]) –  
YEAR (M0066\_PAT\_BIRTH\_DT[1])-1

ELSE

IF MONTH (M0032\_ROC\_DT[1]) > MONTH (M0066\_PAT\_BIRTH\_DT[1])  
OR (MONTH(M0032\_ROC\_DT[1]) = MONTH (M0066\_PAT\_BIRTH\_DT[1]))  
AND DAY (M0032\_ROC\_DT[1]) >= DAY (M0066\_PAT\_BIRTH\_DT[1]))

THEN

AGE = YEAR (M0032\_ROC\_DT[1]) – YEAR (M0066\_PAT\_BIRTH\_DT[1])

ELSE

AGE = YEAR (M0032\_ROC\_DT[1]) – YEAR (M0066\_PAT\_BIRTH\_DT[1])-1

END IF

##### Gender: Female

IF M0069\_PAT\_GENDER[1] = 2

THEN

GENDER = 1

ELSE

GENDER = 0

END IF

Race: Black (%)

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

Race: White (%)

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

Race: Other (%)

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

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

**Payment Source**

Any Medicare (%)

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

Any Medicaid (%)

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



PAY\_MCAID = 1  
ELSE  
PAY\_MCAID = 0  
END IF

Any HMO (%)

IF M0150\_CPAY\_MCARE\_HMO[1] = 1 OR M0150\_CPAY\_MCAID\_HMO[1] = 1 OR  
M0150\_CPAY\_PRIV\_HMO[1] = 1  
THEN  
PAY\_HMO = 1  
ELSE  
PAY\_HMO = 0  
END IF

Medicare HMO (%)

IF M0150\_CPAY\_MCARE\_HMO[1] = 1  
THEN  
PAY\_MCHMO = 1  
ELSE  
PAY\_MCHMO = 0  
END IF

Any Other (%)

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

IF M0150\_CPAY\_WRKCOMP[1] = 1 OR M0150\_CPAY\_TITLEPGMS[1] = 1 OR  
M0150\_CPAY\_OTH\_GOVT[1] = 1 OR M0150\_CPAY\_PRIV\_INS[1] = 1 OR  
M0150\_CPAY\_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\_H\_NONE = 1  
**ELSE**  
    RISK\_H\_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
```

### **Other Risk Factors**

#### *Smoking (%)*

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

#### *Obesity (%)*

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

#### *Alcohol dependency (%)*

```
IF M1036_RSK_UNKNOWN[1] = 1
THEN
RISK_ALCOHOLISM = MISSING
ELSE
RISK_ALCOHOLISM = VALUE (M1036_RSK_ALCOHOLISM[1])
END IF
```

#### *Drug dependency (%)*

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

#### *None (%)*

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

**THEN**  
    RISK\_NONE = MISSING  
**ELSE**  
    RISK\_NONE = VALUE (M1036\_RSK\_NONE[1])  
**END IF**

## **LIVING ARRANGEMENT / ASSISTANCE**

### **Current Situation**

#### *Lives alone (%)*

**IF** M1100\_PTNT\_LVG\_STUTN[1] = 01 **OR** M1100\_PTNT\_LVG\_STUTN[1] = 02  
    **OR** M1100\_PTNT\_LVG\_STUTN[1] = 03 **OR** M1100\_PTNT\_LVG\_STUTN[1] = 04  
    **OR** M1100\_PTNT\_LVG\_STUTN[1] = 05  
**THEN**  
    LIV\_ALONE = 1  
**ELSE**  
    LIV\_ALONE = 0  
**END IF**

#### *Lives with others (%)*

**IF** M1100\_PTNT\_LVG\_STUTN[1] = 06 **OR** M1100\_PTNT\_LVG\_STUTN[1] = 07  
    **OR** M1100\_PTNT\_LVG\_STUTN[1] = 08 **OR** M1100\_PTNT\_LVG\_STUTN[1] = 09  
    **OR** M1100\_PTNT\_LVG\_STUTN[1] = 10  
**THEN**  
    LIV\_OTHERS = 1  
**ELSE**  
    LIV\_OTHERS = 0  
**END IF**

#### *Lives in congregate situation (%)*

**IF** M1100\_PTNT\_LVG\_STUTN[1] = 11 **OR** M1100\_PTNT\_LVG\_STUTN[1] = 12  
    **-OR** M1100\_PTNT\_LVG\_STUTN[1] = 13 **OR** M1100\_PTNT\_LVG\_STUTN[1] = 14  
    **OR** M1100\_PTNT\_LVG\_STUTN[1] = 15  
**THEN**  
    LIV\_CONGEGRATE = 1  
**ELSE**  
    LIV\_CONGEGRATE = 0  
**END IF**

## **Availability**

### **Around the clock (%)**

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

### **Regular daytime (%)**

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

### **Regular nighttime (%)**

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

### **Occasional (%)**

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

### **None (%)**

```
IF M1100_PTNT_LVG_STUTN[1] = 05 OR M1100_PTNT_LVG_STUTN[1] = 10  
    OR M1100_PTNT_LVG_STUTN[1] = 15
```

**THEN**  
    AVAIL\_NONE = 1  
**ELSE**  
    AVAIL\_NONE = 0  
**END IF**

## **CARE MANAGEMENT**

### **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_PRCR[1] = 00
THEN
  PRCR_ASSIST_NONE_NEEDED = 1
ELSE
  PRCR_ASSIST_NONE_NEEDED = 0
END IF
```

Caregiver currently provides (%)

```
IF M2100_CARE_TYPE_SRC_PRCR[1] = 01
THEN
  PRCR_CG_PROVIDES = 1
ELSE
  PRCR_CG_PROVIDES = 0
END IF
```

Caregiver training needed (%)

```
IF M2100_CARE_TYPE_SRC_PRCR[1] = 02
THEN
  PRCR_NEED_TRAINING = 1
ELSE
  PRCR_NEED_TRAINING = 0
```

**END IF**

Uncertain/unlikely to be provided (%)

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

Needed but not available (%)

```
IF M2100_CARE_TYPE_SRC_PRCDR[1] = 05
THEN
    PRCDR_CG_NONE = 1
ELSE
    PRCDR_CG_NONE = 0
END IF
```

### **Management of Equipment**

None needed (%)

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

Caregiver currently provides (%)

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

Caregiver training needed (%)

```
IF M2100_CARE_TYPE_SRC_EQUIP[1] = 02
THEN
    EQUIP_NEED_TRAINING = 1
```



**ELSE**  
    EQUIP\_NEED\_TRAINING = 0  
**END IF**

Uncertain/unlikely to be provided (%)

**IF** M2100\_CARE\_TYPE\_SRC\_EQUIP[1] = 03  
    **OR** M2100\_CARE\_TYPE\_SRC\_EQUIP[1] = 04  
**THEN**  
    EQUIP\_CG\_UNCERTAIN = 1  
**ELSE**  
    EQUIP\_CG\_UNCERTAIN = 0  
**END IF**

Needed but not available (%)

**IF** M2100\_CARE\_TYPE\_SRC\_EQUIP[1] = 05  
**THEN**  
    EQUIP\_CG\_NONE = 1  
**ELSE**  
    EQUIP\_CG\_NONE = 0  
**END IF**

### **Supervision / Safety**

None needed (%)

**IF** M2100\_CARE\_TYPE\_SRC\_SPRVSN[1] = 00  
**THEN**  
    SPRVSN\_ASSIST\_NONE\_NEEDED = 1  
**ELSE**  
    SPRVSN\_ASSIST\_NONE\_NEEDED = 0  
**END IF**

Caregiver currently provides (%)

**IF** M2100\_CARE\_TYPE\_SRC\_SPRVSN[1] = 01  
**THEN**  
    SPRVSN\_CG\_PROVIDES = 1  
**ELSE**  
    SPRVSN\_CG\_PROVIDES = 0  
**END IF**

Caregiver training needed (%)

**IF** M2100\_CARE\_TYPE\_SRC\_SPRVSN[1] = 02

**THEN**  
    SPRVSN\_NEED\_TRAINING = 1  
**ELSE**  
    SPRVSN\_NEED\_TRAINING = 0  
**END IF**

*Uncertain/unlikely to be provided (%)*  
**IF** M2100\_CARE\_TYPE\_SRC\_SPRVSN[1] = 03  
    **OR** M2100\_CARE\_TYPE\_SRC\_SPRVSN[1] = 04  
**THEN**  
    SPRVSN\_CG\_UNCERTAIN = 1  
**ELSE**  
    SPRVSN\_CG\_UNCERTAIN = 0  
**END IF**

*Needed but not available (%)*  
**IF** M2100\_CARE\_TYPE\_SRC\_SPRVSN[1] = 05  
**THEN**  
    SPRVSN\_CG\_NONE = 1  
**ELSE**  
    SPRVSN\_CG\_NONE = 0  
**END IF**

### **Advocacy**

*None needed (%)*  
**IF** M2100\_CARE\_TYPE\_SRC\_ADVNCY[1] = 00  
**THEN**  
    ADVNCY\_ASSIST\_NONE\_NEEDED = 1  
**ELSE**  
    ADVNCY\_ASSIST\_NONE\_NEEDED = 0  
**END IF**

*Caregiver currently provides (%)*  
**IF** M2100\_CARE\_TYPE\_SRC\_ADVNCY[1] = 01  
**THEN**  
    ADVNCY\_CG\_PROVIDES = 1  
**ELSE**  
    ADVNCY\_CG\_PROVIDES = 0  
**END IF**

Caregiver training needed (%)

```
IF M2100_CARE_TYPE_SRC_ADV CY[1] = 02
THEN
    ADVCY_NEED_TRAINING = 1
ELSE
    ADVCY_NEED_TRAINING = 0
END IF
```

Uncertain/unlikely to be provided (%)

```
IF M2100_CARE_TYPE_SRC_ADV CY[1] = 03
    OR M2100_CARE_TYPE_SRC_ADV CY[1] = 04
THEN
    ADVCY_CG_UNCERTAIN = 1
ELSE
    ADVCY_CG_UNCERTAIN = 0
END IF
```

Needed but not available (%)

```
IF M2100_CARE_TYPE_SRC_ADV CY[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_TISSUE[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)

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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

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Cardiac/peripheral vascular (%)

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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)**

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    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)

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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_PULMNR[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_DYSRHYTHMIA = MISSING
  ELSEIF M2430_HOSP_CRDC_DSRTHM[2] = 1
  THEN
    HOSP_REASON_DYSRHYTHMIA = 1
  ELSE
    HOSP_REASON_DYSRHYTHMIA = 0
  END IF
ELSE
  HOSP_REASON_DYSRHYTHMIA = 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_PULMNRV[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
```