

**OUTCOME-BASED QUALITY IMPROVEMENT REPORTS:
TECHNICAL DOCUMENTATION OF MEASURES**

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OUTCOME-BASED QUALITY IMPROVEMENT REPORTS: TECHNICAL DOCUMENTATION OF MEASURES

INTRODUCTION

This document provides definitions of measures that appear in Outcome-Based Quality Improvement Reports, including detailed specifications for calculating these measures based on OASIS assessment data. For a complete description of these reports, including how to interpret and use the information presented, refer to the *Outcome-Based Quality Improvement Manual*, which is available from the Centers for Medicare & Medicaid Services (CMS) in three parts:¹

1. Outcome-Based Quality Improvement (OBQI) Implementation Manual;
2. Accessing OBQI & OBQM Reports - Using the CASPER Reporting System;
3. Supplement to the OBQI Manual - Interpreting and Using the 3-Bar Outcome Reports.

Episodes of Care Included in Outcome and Case Mix Reports

The unit of analysis for both outcome and case mix reports is an episode of care, defined as starting with an admission to home health care (M0100 Reason for assessment = 01 or 02) 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.

Assumptions and Conventions

The following transformations result in measures with numeric values. Where a measure represents presence of an attribute or occurrence of an event, “1” indicates that the attribute is present or the event occurred, while “0” indicates the attribute is absent or the event did not occur. Where a measure represents a relative amount, degree, or severity of a patient characteristic or condition, a numeric scale value is assigned. The range of scale values for a particular measure is determined by the OASIS item(s) used to calculate that measure. A code of ‘MISSING’ indicates that the case is excluded from analysis for that particular measure, either because the measure is not applicable or because the data item on which that measure is based has been indicated as “unknown”. In some circumstances, an entire case will be excluded from analysis because the data submitted do not meet the published data specifications for OASIS. This usually occurs only for data submitted prior to rigorous automated enforcement of data specifications (resulting in rejection of non-compliant data records) implemented in April of 2000.

¹ The three sections of the *Outcome-Based Quality Improvement Manual* are available for download from the CMS web site at: <http://www.cms.hhs.gov/oasis/obqi.asp>.

OASIS data items are referred to in this documentation using field names specified in OASIS Data Submission Specifications published by CMS (Version 1.04 for pre-PPS submissions, Version 1.20 for post-PPS submissions). As field names are the same across assessment time points, presence of [2] at the end of a field name indicates that this data item is taken from the end point assessment for an episode. For example, M0640_CUR_GROOMING refers to the 'Ability to Groom Oneself' item assessed at start or resumption of care. The field name M0100_ASSMT_REASON[2] refers to the 'Reason for Assessment' item at discharge (including death) or transfer to inpatient facility. Although some data items are collected at only one of the two time points, the [2] convention is used for all items that refer to the end point assessment to avoid possible misinterpretation. Note that for all Case Mix measures except those related to length of stay, data from the beginning assessment only are used. A few outcome measures are calculated using data from the episode of care end point assessment only, while most outcome measures use data from both the beginning and end point assessments.

Organization of Technical Documentation

The remainder of this document is divided into three sections. Outcome measures appearing in either the Risk-Adjusted Outcome Report or the Descriptive Outcome Report are described in the first section. The second section is devoted to measures that appear in the Case Mix Profile. The third and final section describes the calculation of measures that are used for risk adjustment of outcome reports. These measures are used to calculate predicted outcome values using statistical risk models, detailed descriptions of which are included in *Documentation of Prediction Models Used for Risk Adjustment of Home Health Agency Outcome Reports*, available at <http://www.cms.hhs.gov/oasis/riskadj1appa.pdf>.

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

Outcome Measures

Measures included in either the Risk-Adjusted Outcome Report or the Descriptive Outcome Report that are part of the OBQI report package are referred to as follows in the transformation pseudo-code below:

End Result Outcomes

| | |
|---|-------------------|
| Improvement in Grooming..... | IMP_GROOMING |
| Stabilization in Grooming | STAB_GROOMING |
| Improvement in Upper Body Dressing | IMP_UPPERDRESS |
| Improvement in Lower Body Dressing | IMP_LOWERDRESS |
| Improvement in Bathing | IMP_BATHING |
| Stabilization in Bathing | STAB_BATHING |
| Improvement in Toileting..... | IMP_TOILETING |
| Improvement in Transferring..... | IMP_TRANSFERRING |
| Stabilization in Transferring..... | STAB_TRANSFERRING |
| Improvement in Ambulation/Locomotion..... | IMP_AMBULATION |
| Improvement in Eating | IMP_EATING |
| Improvement in Light Meal Preparation | IMP_LIGHTMEAL |
| Stabilization in Light Meal Preparation..... | STAB_LIGHTMEAL |
| Improvement in Laundry | IMP_LAUNDRY |
| Stabilization in Laundry | STAB_LAUNDRY |
| Improvement in Housekeeping | IMP_HOUSEKEEP |
| Stabilization in Housekeeping..... | STAB_HOUSEKEEP |
| Improvement in Shopping | IMP_SHOPPING |
| Stabilization in Shopping..... | STAB_SHOPPING |
| Improvement in Phone Use..... | IMP_PHONE |
| Stabilization in Phone Use | STAB_PHONE |
| Improvement in Management of Oral Medications | IMP_ORALMEDS |
| Stabilization in Management of Oral Medications | STAB_ORALMEDS |
| Improvement in Speech and Language | IMP_SPEECH |
| Stabilization in Speech and Language | STAB_SPEECH |
| Improvement in Pain Interfering with Activity | IMP_PAIN |
| Improvement in Number of Surgical Wounds | IMP_NUMBERWOUNDS |
| Improvement in Status of Surgical Wounds..... | IMP_STATUSWOUNDS |
| Improvement in Dyspnea | IMP_DYSPNEA |
| Improvement in Urinary Tract Infection..... | IMP_UTI |
| Improvement in Urinary Incontinence | IMP_INCONT |
| Improvement in Bowel Incontinence | IMP_BOWELINCONT |
| Improvement in Cognitive Functioning..... | IMP_COGNITIVE |
| Stabilization in Cognitive Functioning | STAB_COGNITIVE |
| Improvement in Confusion Frequency..... | IMP_CONFUSION |
| Improvement in Anxiety Level | IMP_ANXIETY |
| Stabilization in Anxiety Level | STAB_ANXIETY |
| Improvement in Behavior Problem Frequency..... | IMP_BEHAVIOR |

Utilization Outcomes

| | |
|---------------------------------|---------------|
| Any Emergent Care..... | UTIL_EMERGENT |
| Discharged to Community..... | UTIL_DCCOMM |
| Acute Care Hospitalization..... | UTIL_HOSP |

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

Data Transformation Pseudo-Code

End Result Outcomes

End Result Outcomes are outcomes related to activities of daily living, instrumental activities of daily living, physiologic outcomes, and cognitive/social/behavioral outcomes. End Result Outcomes are not computed for patients who were transferred to inpatient facility [RFA = 06, 07] or for patients who died [RFA = 08].

IF M0100_ASSMT_REASON[2] = 09
THEN

Improvement in Grooming and Stabilization in Grooming

IF M0640_CUR_GROOMING NOT = 00, 01, 02, 03 OR
M0640_CUR_GROOMING[2] NOT = 00, 01, 02, 03

THEN

IMP_GROOMING = MISSING

STAB_GROOMING = MISSING

‘[SHOULD NEVER OCCUR]

ELSE

IF (M0640_CUR_GROOMING = 01 AND M0640_CUR_GROOMING[2] = 00) OR
(M0640_CUR_GROOMING = 02 AND M0640_CUR_GROOMING[2] = 00, 01) OR
(M0640_CUR_GROOMING = 03 AND M0640_CUR_GROOMING[2] = 00, 01, 02)

THEN

IMP_GROOMING = 1

ELSE IF (M0640_CUR_GROOMING = 01 AND

M0640_CUR_GROOMING[2] = 01, 02, 03) OR

(M0640_CUR_GROOMING = 02 AND M0640_CUR_GROOMING[2] = 02, 03) OR

(M0640_CUR_GROOMING = 03 AND M0640_CUR_GROOMING[2] = 03)

THEN

IMP_GROOMING = 0

ELSE IF M0640_CUR_GROOMING = 00

THEN

IMP_GROOMING = MISSING

IF (M0640_CUR_GROOMING = 00 AND M0640_CUR_GROOMING[2] = 00) OR
(M0640_CUR_GROOMING = 01 AND M0640_CUR_GROOMING[2] = 00, 01) OR
(M0640_CUR_GROOMING = 02 AND M0640_CUR_GROOMING[2] = 00, 01, 02)

THEN

STAB_GROOMING = 1

ELSE IF (M0640_CUR_GROOMING = 00 AND

M0640_CUR_GROOMING[2] = 01, 02, 03) OR

(M0640_CUR_GROOMING = 01 AND M0640_CUR_GROOMING[2] = 02, 03) OR

(M0640_CUR_GROOMING = 02 AND M0640_CUR_GROOMING[2] = 03)

THEN

STAB_GROOMING = 0

ELSE IF M0640_CUR_GROOMING = 03

THEN

STAB_GROOMING = MISSING

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

Improvement in Upper Body Dressing

```
IF M0650_CUR_DRESS_UPPER NOT = 00, 01, 02, 03 OR
   M0650_CUR_DRESS_UPPER[2] NOT = 00, 01, 02, 03
THEN
  IMP_UPPERDRESS = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
  IF (M0650_CUR_DRESS_UPPER = 01 AND M0650_CUR_DRESS_UPPER[2] = 00) OR
     (M0650_CUR_DRESS_UPPER = 02 AND
      M0650_CUR_DRESS_UPPER[2] = 00, 01) OR
     (M0650_CUR_DRESS_UPPER = 03 AND
      M0650_CUR_DRESS_UPPER[2] = 00, 01, 02)
  THEN
    IMP_UPPERDRESS = 1
  ELSE IF (M0650_CUR_DRESS_UPPER = 01 AND
           M0650_CUR_DRESS_UPPER[2] = 01, 02, 03) OR
          (M0650_CUR_DRESS_UPPER = 02 AND
           M0650_CUR_DRESS_UPPER[2] = 02, 03) OR
          (M0650_CUR_DRESS_UPPER = 03 AND M0650_CUR_DRESS_UPPER[2] = 03)
  THEN
    IMP_UPPERDRESS = 0
  ELSE IF M0650_CUR_DRESS_UPPER = 00
  THEN
    IMP_UPPERDRESS = MISSING
```

Improvement in Lower Body Dressing

```
IF M0660_CUR_DRESS_LOWER NOT = 00, 01, 02, 03 OR
   M0660_CUR_DRESS_LOWER[2] NOT = 00, 01, 02, 03
THEN
  IMP_LOWERDRESS = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
  IF (M0660_CUR_DRESS_LOWER = 01 AND M0660_CUR_DRESS_LOWER[2] = 00) OR
     (M0660_CUR_DRESS_LOWER = 02 AND
      M0660_CUR_DRESS_LOWER[2] = 00, 01) OR (M0660_CUR_DRESS_LOWER = 03
      AND M0660_CUR_DRESS_LOWER[2] = 00, 01, 02)
  THEN
    IMP_LOWERDRESS = 1
  ELSE IF (M0660_CUR_DRESS_LOWER = 01 AND
           M0660_CUR_DRESS_LOWER[2] = 01,02,03) OR
          (M0660_CUR_DRESS_LOWER = 02 AND
           M0660_CUR_DRESS_LOWER[2] = 02, 03) OR
          (M0660_CUR_DRESS_LOWER = 03 AND M0660_CUR_DRESS_LOWER[2] = 03)
  THEN
    IMP_LOWERDRESS = 0
  ELSE IF M0660_CUR_DRESS_LOWER = 00
  THEN
    IMP_LOWERDRESS = MISSING
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

Improvement in Bathing and Stabilization in Bathing

```
IF M0670_CUR_BATHING NOT = 00, 01, 02, 03, 04, 05 OR
   M0670_CUR_BATHING[2] NOT = 00, 01, 02, 03, 04, 05
THEN
  IMP_BATHING = MISSING
  STAB_BATHING = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
  IF (M0670_CUR_BATHING = 01 AND M0670_CUR_BATHING[2] = 00) OR
     (M0670_CUR_BATHING = 02 AND M0670_CUR_BATHING[2] = 00, 01) OR
     (M0670_CUR_BATHING = 03 AND M0670_CUR_BATHING[2] = 00, 01, 02) OR
     (M0670_CUR_BATHING = 04 AND M0670_CUR_BATHING[2] = 00, 01, 02, 03) OR
     (M0670_CUR_BATHING = 05 AND M0670_CUR_BATHING[2] = 00, 01, 02, 03, 04)
  THEN
    IMP_BATHING = 1
  ELSE IF (M0670_CUR_BATHING = 01 AND
           M0670_CUR_BATHING[2] = 01, 02, 03, 04, 05) OR
          (M0670_CUR_BATHING = 02 AND M0670_CUR_BATHING[2] = 02, 03, 04, 05) OR
          (M0670_CUR_BATHING = 03 AND M0670_CUR_BATHING[2] = 03, 04, 05) OR
          (M0670_CUR_BATHING = 04 AND M0670_CUR_BATHING[2] = 04, 05) OR
          (M0670_CUR_BATHING = 05 AND M0670_CUR_BATHING[2] = 05)
  THEN
    IMP_BATHING = 0
  ELSE IF M0670_CUR_BATHING = 00
  THEN
    IMP_BATHING = MISSING

  IF (M0670_CUR_BATHING = 00 AND M0670_CUR_BATHING[2] = 00) OR
     (M0670_CUR_BATHING = 01 AND M0670_CUR_BATHING[2] = 00, 01) OR
     (M0670_CUR_BATHING = 02 AND M0670_CUR_BATHING[2] = 00, 01, 02) OR
     (M0670_CUR_BATHING = 03 AND M0670_CUR_BATHING[2] = 00, 01, 02, 03) OR
     (M0670_CUR_BATHING = 04 AND M0670_CUR_BATHING[2] = 00, 01, 02, 03, 04)
  THEN
    STAB_BATHING = 1
  ELSE IF (M0670_CUR_BATHING = 00 AND
           M0670_CUR_BATHING[2] = 01, 02, 03, 04, 05) OR
          (M0670_CUR_BATHING = 01 AND M0670_CUR_BATHING[2] = 02, 03, 04, 05) OR
          (M0670_CUR_BATHING = 02 AND M0670_CUR_BATHING[2] = 03, 04, 05) OR
          (M0670_CUR_BATHING = 03 AND M0670_CUR_BATHING[2] = 04, 05) OR
          (M0670_CUR_BATHING = 04 AND M0670_CUR_BATHING[2] = 05)
  THEN
    STAB_BATHING = 0
  ELSE IF M0670_CUR_BATHING = 05
  THEN
    STAB_BATHING = MISSING
```


OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

Improvement in Toileting

```
IF M0680_CUR_TOILETING NOT = 00, 01, 02, 03, 04 OR
  M0680_CUR_TOILETING[2] NOT = 00, 01, 02, 03, 04
THEN
  IMP_TOILETING = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
  IF (M0680_CUR_TOILETING = 01 AND M0680_CUR_TOILETING[2] = 00) OR
    (M0680_CUR_TOILETING = 02 AND M0680_CUR_TOILETING[2] = 00, 01) OR
    (M0680_CUR_TOILETING = 03 AND M0680_CUR_TOILETING[2] = 00, 01, 02) OR
    (M0680_CUR_TOILETING = 04 AND M0680_CUR_TOILETING[2] = 00, 01, 02, 03)
  THEN
    IMP_TOILETING = 1
  ELSE IF (M0680_CUR_TOILETING = 01 AND M0680_CUR_TOILETING[2] = 01, 02, 03, 04)
    OR (M0680_CUR_TOILETING = 02 AND M0680_CUR_TOILETING[2] = 02, 03, 04)
    OR (M0680_CUR_TOILETING = 03 AND M0680_CUR_TOILETING[2] = 03, 04) OR
    (M0680_CUR_TOILETING = 04 AND M0680_CUR_TOILETING[2] = 04)
  THEN
    IMP_TOILETING = 0
  ELSE IF M0680_CUR_TOILETING = 00
  THEN
    IMP_TOILETING = MISSING
```

Improvement in Transferring and Stabilization in Transferring

```
IF M0690_CUR_TRANSFERRING NOT = 00, 01, 02, 03, 04, 05 OR
  M0690_CUR_TRANSFERRING[2] NOT = 00, 01, 02, 03, 04, 05
THEN
  IMP_TRANSFERRING = MISSING
  STAB_TRANSFERRING = MISSING                            '[SHOULD NEVER OCCUR]'
ELSE
  IF (M0690_CUR_TRANSFERRING = 01 AND M0690_CUR_TRANSFERRING[2] = 00) OR
    (M0690_CUR_TRANSFERRING = 02 AND
    M0690_CUR_TRANSFERRING[2] = 00, 01) OR (M0690_CUR_TRANSFERRING = 03
    AND M0690_CUR_TRANSFERRING[2] = 00, 01, 02) OR
    (M0690_CUR_TRANSFERRING = 04 AND
    M0690_CUR_TRANSFERRING[2] = 00,01,02,03) OR
    (M0690_CUR_TRANSFERRING = 05 AND
    M0690_CUR_TRANSFERRING[2] = 00,01,02,03,04)
  THEN
    IMP_TRANSFERRING = 1
  ELSE IF (M0690_CUR_TRANSFERRING = 01 AND
    M0690_CUR_TRANSFERRING[2] = 01, 02, 03, 04, 05) OR
    (M0690_CUR_TRANSFERRING = 02 AND
    M0690_CUR_TRANSFERRING[2] = 02,03,04,05) OR
    (M0690_CUR_TRANSFERRING = 03 AND
    M0690_CUR_TRANSFERRING[2] = 03, 04, 05) OR
    (M0690_CUR_TRANSFERRING = 04 AND
    M0690_CUR_TRANSFERRING[2] = 04, 05) OR
    (M0690_CUR_TRANSFERRING = 05 AND M0690_CUR_TRANSFERRING[2] = 05)
  THEN
    IMP_TRANSFERRING = 0
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

```
ELSE IF M0690_CUR_TRANSFERRING = 00
THEN
    IMP_TRANSFERRING = MISSING

IF (M0690_CUR_TRANSFERRING = 00 AND M0690_CUR_TRANSFERRING[2] = 00) OR
    (M0690_CUR_TRANSFERRING = 01 AND
    M0690_CUR_TRANSFERRING[2] = 00, 01) OR (M0690_CUR_TRANSFERRING = 02
    AND M0690_CUR_TRANSFERRING[2] = 00, 01, 02) OR
    (M0690_CUR_TRANSFERRING = 03 AND
    M0690_CUR_TRANSFERRING[2] = 00,01,02,03) OR
    (M0690_CUR_TRANSFERRING = 04 AND
    M0690_CUR_TRANSFERRING[2] = 00,01,02,03,04)
THEN
    STAB_TRANSFERRING = 1
ELSE IF (M0690_CUR_TRANSFERRING = 00 AND
    M0690_CUR_TRANSFERRING[2] = 01, 02, 03, 04, 05) OR
    (M0690_CUR_TRANSFERRING = 01 AND
    M0690_CUR_TRANSFERRING[2] = 02,03,04,05) OR
    (M0690_CUR_TRANSFERRING = 02 AND
    M0690_CUR_TRANSFERRING[2] = 03, 04, 05) OR
    (M0690_CUR_TRANSFERRING = 03 AND
    M0690_CUR_TRANSFERRING[2] = 04, 05) OR (M0690_CUR_TRANSFERRING = 04
    AND M0690_CUR_TRANSFERRING[2] = 05)
THEN
    STAB_TRANSFERRING = 0
ELSE IF M0690_CUR_TRANSFERRING = 05
THEN
    STAB_TRANSFERRING = MISSING
```

Improvement in Ambulation/Locomotion

```
IF M0700_CUR_AMBULATION NOT = 00, 01, 02, 03, 04, 05 OR
    M0700_CUR_AMBULATION[2] NOT = 00, 01, 02, 03, 04, 05
THEN
    IMP_AMBULATION = MISSING                ‘[SHOULD NEVER OCCUR]’
ELSE
    IF (M0700_CUR_AMBULATION = 01 AND M0700_CUR_AMBULATION[2] = 00) OR
        (M0700_CUR_AMBULATION = 02 AND M0700_CUR_AMBULATION[2] = 00, 01) OR
        (M0700_CUR_AMBULATION = 03 AND M0700_CUR_AMBULATION[2] = 00, 01, 02)
        OR (M0700_CUR_AMBULATION = 04 AND
        M0700_CUR_AMBULATION[2] = 00, 01, 02, 03) OR
        (M0700_CUR_AMBULATION = 05 AND
        M0700_CUR_AMBULATION[2] = 00, 01, 02, 03, 04)
    THEN
        IMP_AMBULATION = 1
    ELSE IF (M0700_CUR_AMBULATION = 01 AND
        M0700_CUR_AMBULATION[2] = 01, 02, 03, 04, 05) OR
        (M0700_CUR_AMBULATION = 02 AND
        M0700_CUR_AMBULATION[2] = 02, 03, 04, 05) OR
        (M0700_CUR_AMBULATION = 03 AND M0700_CUR_AMBULATION[2] = 03, 04, 05)
        OR (M0700_CUR_AMBULATION = 04 AND
        M0700_CUR_AMBULATION[2] = 04, 05) OR (M0700_CUR_AMBULATION = 05 AND
        M0700_CUR_AMBULATION[2] = 05)
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

```
THEN
    IMP_AMBULATION = 0
ELSE IF M0700_CUR_AMBULATION = 00
THEN
    IMP_AMBULATION = MISSING
```

Improvement in Eating

```
IF M0710_CUR_FEEDING NOT = 00, 01, 02, 03, 04, 05 OR
    M0710_CUR_FEEDING[2] NOT = 00, 01, 02, 03, 04, 05
THEN
    IMP_EATING = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
    IF (M0710_CUR_FEEDING = 01 AND M0710_CUR_FEEDING[2] = 00) OR
        (M0710_CUR_FEEDING = 02 AND M0710_CUR_FEEDING[2] = 00, 01) OR
        (M0710_CUR_FEEDING = 03 AND M0710_CUR_FEEDING[2] = 00, 01, 02) OR
        (M0710_CUR_FEEDING = 04 AND M0710_CUR_FEEDING[2] = 00, 01, 02, 03) OR
        (M0710_CUR_FEEDING = 05 AND M0710_CUR_FEEDING[2] = 00, 01, 02, 03, 04)
    THEN
        IMP_EATING = 1
    ELSE IF (M0710_CUR_FEEDING = 01 AND
        M0710_CUR_FEEDING[2] = 01, 02, 03, 04, 05) OR
        (M0710_CUR_FEEDING = 02 AND M0710_CUR_FEEDING[2] = 02, 03, 04, 05) OR
        (M0710_CUR_FEEDING = 03 AND M0710_CUR_FEEDING[2] = 03, 04, 05) OR
        (M0710_CUR_FEEDING = 04 AND M0710_CUR_FEEDING[2] = 04, 05) OR
        (M0710_CUR_FEEDING = 05 AND M0710_CUR_FEEDING[2] = 05)
    THEN
        IMP_EATING = 0
    ELSE IF M0710_CUR_FEEDING = 00
    THEN
        IMP_EATING = MISSING
```

Improvement in Light Meal Preparation and Stabilization in Light Meal Preparation

```
IF M0720_CUR_PREP_LT_MEALS NOT = 00, 01, 02 OR
    M0720_CUR_PREP_LT_MEALS[2] NOT = 00, 01, 02
THEN
    IMP_LIGHTMEAL = MISSING
    STAB_LIGHTMEAL = MISSING                            '[SHOULD NEVER OCCUR]'
ELSE
    IF (M0720_CUR_PREP_LT_MEALS = 01 AND M0720_CUR_PREP_LT_MEALS[2] = 00)
        OR (M0720_CUR_PREP_LT_MEALS = 02 AND
            M0720_CUR_PREP_LT_MEALS[2] = 00, 01)
    THEN
        IMP_LIGHTMEAL = 1
    ELSE IF (M0720_CUR_PREP_LT_MEALS = 01 AND
        M0720_CUR_PREP_LT_MEALS[2] = 01,02) OR
        (M0720_CUR_PREP_LT_MEALS = 02 AND M0720_CUR_PREP_LT_MEALS[2] = 02)
    THEN
        IMP_LIGHTMEAL = 0
    ELSE IF M0720_CUR_PREP_LT_MEALS = 00
    THEN
        IMP_LIGHTMEAL = MISSING
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

```
IF (M0720_CUR_PREP_LT_MEALS = 00 AND M0720_CUR_PREP_LT_MEALS[2] = 00)
  OR (M0720_CUR_PREP_LT_MEALS = 01 AND
  M0720_CUR_PREP_LT_MEALS[2] = 00, 01)
THEN
  STAB_LIGHTMEAL = 1
ELSE IF (M0720_CUR_PREP_LT_MEALS = 00 AND
  M0720_CUR_PREP_LT_MEALS[2] = 01,02) OR
  (M0720_CUR_PREP_LT_MEALS = 01 AND M0720_CUR_PREP_LT_MEALS[2] = 02)
THEN
  STAB_LIGHTMEAL = 0
ELSE IF M0720_CUR_PREP_LT_MEALS = 02
THEN
  STAB_LIGHTMEAL = MISSING
```

Improvement in Laundry and Stabilization in Laundry

```
IF M0740_CUR_LAUNDRY NOT = 00, 01, 02 OR
  M0740_CUR_LAUNDRY[2] NOT = 00, 01, 02
THEN
  IMP_LAUNDRY = MISSING
  STAB_LAUNDRY = MISSING           '[SHOULD NEVER OCCUR]'
ELSE

  IF (M0740_CUR_LAUNDRY = 01 AND M0740_CUR_LAUNDRY[2] = 00) OR
  (M0740_CUR_LAUNDRY = 02 AND M0740_CUR_LAUNDRY[2] = 00, 01)
  THEN
    IMP_LAUNDRY = 1
  ELSE IF (M0740_CUR_LAUNDRY = 01 AND M0740_CUR_LAUNDRY[2] = 01,02) OR
  (M0740_CUR_LAUNDRY = 02 AND M0740_CUR_LAUNDRY[2] = 02)
  THEN
    IMP_LAUNDRY = 0
  ELSE IF M0740_CUR_LAUNDRY = 00
  THEN
    IMP_LAUNDRY = MISSING

  IF (M0740_CUR_LAUNDRY = 00 AND M0740_CUR_LAUNDRY[2] = 00) OR
  (M0740_CUR_LAUNDRY = 01 AND M0740_CUR_LAUNDRY[2] = 00, 01)
  THEN
    STAB_LAUNDRY = 1
  ELSE IF (M0740_CUR_LAUNDRY = 00 AND M0740_CUR_LAUNDRY[2] = 01,02) OR
  (M0740_CUR_LAUNDRY = 01 AND M0740_CUR_LAUNDRY[2] = 02)
  THEN
    STAB_LAUNDRY = 0
  ELSE IF M0740_CUR_LAUNDRY = 02
  THEN
    STAB_LAUNDRY = MISSING
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

Improvement in Housekeeping and Stabilization in Housekeeping

```
IF M0750_CUR_HOUSEKEEPING NOT = 00, 01, 02, 03, 04 OR
   M0750_CUR_HOUSEKEEPING[2] NOT = 00, 01, 02, 03, 04
THEN
  IMP_HOUSEKEEP = MISSING
  STAB_HOUSEKEEP = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
  IF (M0750_CUR_HOUSEKEEPING = 01 AND M0750_CUR_HOUSEKEEPING[2] = 00) OR
     (M0750_CUR_HOUSEKEEPING = 02 AND
      M0750_CUR_HOUSEKEEPING[2] = 00, 01) OR (M0750_CUR_HOUSEKEEPING =
      03 AND M0750_CUR_HOUSEKEEPING[2] = 00, 01, 02) OR
     (M0750_CUR_HOUSEKEEPING = 04 AND
      M0750_CUR_HOUSEKEEPING[2] = 00, 01, 02, 03)
  THEN
    IMP_HOUSEKEEP = 1
  ELSE IF (M0750_CUR_HOUSEKEEPING = 01 AND
           M0750_CUR_HOUSEKEEPING[2] = 01, 02, 03, 04) OR
          (M0750_CUR_HOUSEKEEPING = 02 AND
           M0750_CUR_HOUSEKEEPING[2] = 02, 03, 04) OR
          (M0750_CUR_HOUSEKEEPING = 03 AND
           M0750_CUR_HOUSEKEEPING[2] = 03, 04) OR
          (M0750_CUR_HOUSEKEEPING = 04 AND M0750_CUR_HOUSEKEEPING[2] = 04)
  THEN
    IMP_HOUSEKEEP = 0
  ELSE IF M0750_CUR_HOUSEKEEPING = 00
  THEN
    IMP_HOUSEKEEP = MISSING

  IF (M0750_CUR_HOUSEKEEPING = 00 AND M0750_CUR_HOUSEKEEPING[2] = 00) OR
     (M0750_CUR_HOUSEKEEPING = 01 AND
      M0750_CUR_HOUSEKEEPING[2] = 00, 01) OR
     (M0750_CUR_HOUSEKEEPING = 02 AND
      M0750_CUR_HOUSEKEEPING[2] = 00, 01, 02) OR
     (M0750_CUR_HOUSEKEEPING = 03 AND
      M0750_CUR_HOUSEKEEPING[2] = 00, 01, 02, 03)
  THEN
    STAB_HOUSEKEEP = 1
  ELSE IF (M0750_CUR_HOUSEKEEPING = 00 AND
           M0750_CUR_HOUSEKEEPING[2] = 01, 02, 03, 04) OR
          (M0750_CUR_HOUSEKEEPING = 01 AND
           M0750_CUR_HOUSEKEEPING[2] = 02, 03, 04) OR
          (M0750_CUR_HOUSEKEEPING = 02 AND
           M0750_CUR_HOUSEKEEPING[2] = 03, 04) OR
          (M0750_CUR_HOUSEKEEPING = 03 AND M0750_CUR_HOUSEKEEPING[2] = 04)
  THEN
    STAB_HOUSEKEEP = 0
  ELSE IF M0750_CUR_HOUSEKEEPING = 04
  THEN
    STAB_HOUSEKEEP = MISSING
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

Improvement in Shopping and Stabilization in Shopping

```
IF M0760_CUR_SHOPPING NOT = 00, 01, 02, 03 OR
    M0760_CUR_SHOPPING[2] NOT = 00, 01, 02, 03
THEN
    IMP_SHOPPING = MISSING
    STAB_SHOPPING = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE

    IF (M0760_CUR_SHOPPING = 01 AND M0760_CUR_SHOPPING[2] = 00) OR
        (M0760_CUR_SHOPPING = 02 AND M0760_CUR_SHOPPING[2] = 00, 01) OR
        (M0760_CUR_SHOPPING = 03 AND M0760_CUR_SHOPPING[2] = 00, 01, 02)
    THEN
        IMP_SHOPPING = 1
    ELSE IF (M0760_CUR_SHOPPING = 01 AND M0760_CUR_SHOPPING[2] = 01, 02, 03)
        OR (M0760_CUR_SHOPPING = 02 AND M0760_CUR_SHOPPING[2] = 02, 03) OR
        (M0760_CUR_SHOPPING = 03 AND M0760_CUR_SHOPPING[2] = 03)
    THEN
        IMP_SHOPPING = 0
    ELSE IF M0760_CUR_SHOPPING = 00
    THEN
        IMP_SHOPPING = MISSING

    IF (M0760_CUR_SHOPPING = 00 AND M0760_CUR_SHOPPING[2] = 00) OR
        (M0760_CUR_SHOPPING = 01 AND M0760_CUR_SHOPPING[2] = 00, 01) OR
        (M0760_CUR_SHOPPING = 02 AND M0760_CUR_SHOPPING[2] = 00, 01, 02)
    THEN
        STAB_SHOPPING = 1
    ELSE IF (M0760_CUR_SHOPPING = 00 AND
        M0760_CUR_SHOPPING[2] = 01, 02, 03) OR (M0760_CUR_SHOPPING = 01 AND
        M0760_CUR_SHOPPING[2] = 02, 03) OR (M0760_CUR_SHOPPING = 02 AND
        M0760_CUR_SHOPPING[2] = 03)
    THEN
        STAB_SHOPPING = 0
    ELSE IF M0760_CUR_SHOPPING = 03
    THEN
        STAB_SHOPPING = MISSING
```

Improvement in Phone Use and Stabilization in Phone Use

```
IF M0770_CUR_PHONE_USE NOT = 00, 01, 02, 03, 04, 05, NA OR
    M0770_CUR_PHONE_USE[2] NOT = 00, 01, 02, 03, 04, 05, NA
THEN
    IMP_PHONE = MISSING
    STAB_PHONE = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE

    IF (M0770_CUR_PHONE_USE = 01 AND M0770_CUR_PHONE_USE[2] = 00) OR
        (M0770_CUR_PHONE_USE = 02 AND M0770_CUR_PHONE_USE[2] = 00, 01) OR
        (M0770_CUR_PHONE_USE = 03 AND M0770_CUR_PHONE_USE[2] = 00, 01, 02)
        OR (M0770_CUR_PHONE_USE = 04 AND
        M0770_CUR_PHONE_USE[2] = 00,01,02,03) OR (M0770_CUR_PHONE_USE = 05
        AND M0770_CUR_PHONE_USE[2] = 00,01,02,03,04)
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

```
THEN
    IMP_PHONE = 1
ELSE IF (M0770_CUR_PHONE_USE = 01 AND
    M0770_CUR_PHONE_USE[2] = 01, 02, 03, 04, 05) OR
    (M0770_CUR_PHONE_USE = 02 AND M0770_CUR_PHONE_USE[2] = 02,03,04,05)
    OR (M0770_CUR_PHONE_USE = 03 AND
    M0770_CUR_PHONE_USE[2] = 03, 04, 05) OR
    (M0770_CUR_PHONE_USE = 04 AND M0770_CUR_PHONE_USE[2] = 04, 05) OR
    (M0770_CUR_PHONE_USE = 05 AND M0770_CUR_PHONE_USE[2] = 05)
THEN
    IMP_PHONE = 0
ELSE IF M0770_CUR_PHONE_USE = 00, NA OR M0770_CUR_PHONE_USE[2] = NA
THEN IMP_PHONE = MISSING

IF (M0770_CUR_PHONE_USE = 00 AND M0770_CUR_PHONE_USE[2] = 00) OR
    (M0770_CUR_PHONE_USE = 01 AND M0770_CUR_PHONE_USE[2] = 00, 01) OR
    (M0770_CUR_PHONE_USE = 02 AND M0770_CUR_PHONE_USE[2] = 00, 01, 02)
    OR (M0770_CUR_PHONE_USE = 03 AND
    M0770_CUR_PHONE_USE[2] = 00,01,02,03) OR
    (M0770_CUR_PHONE_USE = 04 AND
    M0770_CUR_PHONE_USE[2] = 00,01,02,03,04)
THEN
    STAB_PHONE = 1
ELSE IF (M0770_CUR_PHONE_USE = 00 AND
    M0770_CUR_PHONE_USE[2] = 01, 02, 03, 04, 05) OR
    (M0770_CUR_PHONE_USE = 01 AND
    M0770_CUR_PHONE_USE[2] = 02,03,04,05) OR
    (M0770_CUR_PHONE_USE = 02 AND
    M0770_CUR_PHONE_USE[2] = 03, 04, 05) OR
    (M0770_CUR_PHONE_USE = 03 AND M0770_CUR_PHONE_USE[2] = 04, 05) OR
    (M0770_CUR_PHONE_USE = 04 AND M0770_CUR_PHONE_USE[2] = 05)
THEN
    STAB_PHONE = 0
ELSE IF M0770_CUR_PHONE_USE = 05, NA OR M0770_CUR_PHONE_USE[2] = NA
THEN
    STAB_PHONE = MISSING
```

Improvement in Management of Oral Medications and Stabilization in Management of Oral Medications

```
IF M0780_CUR_ORAL_MEDS NOT = 00, 01, 02, NA OR
    M0780_CUR_ORAL_MEDS[2] NOT = 00, 01, 02, NA
THEN
    IMP_ORALMEDS = MISSING
    STAB_ORALMEDS = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE

    IF (M0780_CUR_ORAL_MEDS = 01 AND M0780_CUR_ORAL_MEDS[2] = 00) OR
        (M0780_CUR_ORAL_MEDS = 02 AND M0780_CUR_ORAL_MEDS[2] = 00, 01)
    THEN
        IMP_ORALMEDS = 1
    ELSE IF (M0780_CUR_ORAL_MEDS = 01 AND M0780_CUR_ORAL_MEDS[2] = 01, 02)
        OR (M0780_CUR_ORAL_MEDS = 02 AND M0780_CUR_ORAL_MEDS[2] = 02)
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

```
THEN
    IMP_ORALMEDS = 0
ELSE IF M0780_CUR_ORAL_MEDS = 00, NA OR M0780_CUR_ORAL_MEDS[2] = NA
THEN
    IMP_ORALMEDS = MISSING

IF (M0780_CUR_ORAL_MEDS = 00 AND M0780_CUR_ORAL_MEDS[2] = 00) OR
(M0780_CUR_ORAL_MEDS = 01 AND M0780_CUR_ORAL_MEDS[2] = 00, 01)
THEN
    STAB_ORALMEDS = 1
ELSE IF (M0780_CUR_ORAL_MEDS = 00 AND
M0780_CUR_ORAL_MEDS[2] = 01, 02) OR (M0780_CUR_ORAL_MEDS = 01 AND
M0780_CUR_ORAL_MEDS[2] = 02)
THEN
    STAB_ORALMEDS = 0
ELSE IF M0780_CUR_ORAL_MEDS = 02, NA OR M0780_CUR_ORAL_MEDS[2] = NA
THEN
    STAB_ORALMEDS = MISSING
```

Improvement in Speech and Language and Stabilization in Speech and Language

```
IF M0410_SPEECH NOT = 00, 01, 02, 03, 04, 05 OR
M0410_SPEECH[2] NOT = 00, 01, 02, 03, 04, 05
THEN
    IMP_SPEECH = MISSING
    STAB_SPEECH = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE

    IF (M0410_SPEECH = 01 AND M0410_SPEECH[2] = 00) OR
(M0410_SPEECH = 02 AND M0410_SPEECH[2] = 00, 01) OR
(M0410_SPEECH = 03 AND M0410_SPEECH[2] = 00, 01, 02) OR
(M0410_SPEECH = 04 AND M0410_SPEECH[2] = 00, 01, 02, 03) OR
(M0410_SPEECH = 05 AND M0410_SPEECH[2] = 00, 01, 02, 03, 04)
    THEN
        IMP_SPEECH = 1
    ELSE IF (M0410_SPEECH = 01 AND M0410_SPEECH[2] = 01, 02, 03, 04, 05) OR
(M0410_SPEECH = 02 AND M0410_SPEECH[2] = 02,03,04,05) OR
(M0410_SPEECH = 03 AND M0410_SPEECH[2] = 03, 04, 05) OR
(M0410_SPEECH = 04 AND M0410_SPEECH[2] = 04, 05) OR
(M0410_SPEECH = 05 AND M0410_SPEECH[2] = 05)
    THEN
        IMP_SPEECH = 0
    ELSE IF M0410_SPEECH = 00
    THEN
        IMP_SPEECH = MISSING

    IF (M0410_SPEECH = 00 AND M0410_SPEECH[2] = 00) OR
(M0410_SPEECH = 01 AND M0410_SPEECH[2] = 00, 01) OR
(M0410_SPEECH = 02 AND M0410_SPEECH[2] = 00, 01, 02) OR
(M0410_SPEECH = 03 AND M0410_SPEECH[2] = 00, 01, 02, 03) OR
(M0410_SPEECH = 04 AND M0410_SPEECH[2] = 00, 01, 02, 03, 04)
    THEN
        STAB_SPEECH = 1
```


OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

```
ELSE IF (M0410_SPEECH = 00 AND M0410_SPEECH[2] = 01, 02, 03, 04, 05) OR
(M0410_SPEECH = 01 AND M0410_SPEECH[2] = 02, 03, 04, 05) OR
(M0410_SPEECH = 02 AND M0410_SPEECH[2] = 03, 04, 05) OR
(M0410_SPEECH = 03 AND M0410_SPEECH[2] = 04, 05) OR
(M0410_SPEECH = 04 AND M0410_SPEECH[2] = 05)
THEN
  STAB_SPEECH = 0
ELSE IF M0410_SPEECH = 05
THEN
  STAB_SPEECH = MISSING
```

Improvement in Pain Interfering with Activity

```
IF M0420_FREQ_PAIN NOT = 00, 01, 02, 03 OR
  M0420_FREQ_PAIN[2] NOT = 00, 01, 02, 03
THEN
  IMP_PAIN = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
  IF (M0420_FREQ_PAIN = 01 AND M0420_FREQ_PAIN[2] = 00) OR
    (M0420_FREQ_PAIN = 02 AND M0420_FREQ_PAIN[2] = 00, 01) OR
    (M0420_FREQ_PAIN = 03 AND M0420_FREQ_PAIN[2] = 00, 01, 02)
  THEN
    IMP_PAIN = 1
  ELSE IF (M0420_FREQ_PAIN = 01 AND M0420_FREQ_PAIN[2] = 01, 02, 03) OR
    (M0420_FREQ_PAIN = 02 AND M0420_FREQ_PAIN[2] = 02, 03) OR
    (M0420_FREQ_PAIN = 03 AND M0420_FREQ_PAIN[2] = 03)
  THEN
    IMP_PAIN = 0
  ELSE IF M0420_FREQ_PAIN = 00
  THEN
    IMP_PAIN = MISSING
```

Improvement in Number of Surgical Wounds and Improvement in Status of Surgical Wounds

```
IF (M0440_LESION_OPEN_WND = 0 AND M0482_SURG_WOUND = 1) OR
  ((M0488_STAT_PRB_SURGWND = NA) AND (M0486_UNOBS_SURGWND NOT = 1 OR
  M0484_NBR_SURGWND NOT = 00)) OR ((M0488_STAT_PRB_SURGWND[2] = NA) AND
  (M0486_UNOBS_SURGWND[2] NOT = 1 OR M0484_NBR_SURGWND[2] NOT = 00))
THEN
  IMP_NUMBERWOUNDS = MISSING
  IMP_STATUSWOUNDS = MISSING                        '[SHOULD NEVER OCCUR]'
ELSE
  IF M0440_LESION_OPEN_WND = 0 OR M0482_SURG_WOUND = 0
  THEN
    NBR_INT1 = 00
  ELSE IF M0482_SURG_WOUND = 1
  THEN
    NBR_INT1 = M0484_NBR_SURGWND

  IF M0440_LESION_OPEN_WND[2] = 0 OR M0482_SURG_WOUND[2] = 0
  THEN
    NBR_INT2 = 00
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

```
ELSE IF M0482_SURG_WOUND[2] = 1
THEN
    NBR_INT2 = M0484_NBR_SURGWND[2]

IF ((M0440_LESION_OPEN_WND = 1 OR M0482_SURG_WOUND = 1) AND NBR_INT1
    NOT = 00, 01, 02, 03, 04) OR
    ((M0440_LESION_OPEN_WND[2] = 1 OR M0482_SURG_WOUND[2] = 1) AND
    NBR_INT2 NOT = 00, 01, 02, 03, 04)
THEN
    IMP_NUMBERWOUNDS = MISSING           ‘[SHOULD NEVER OCCUR]
ELSE IF (NBR_INT1 = 01 AND NBR_INT2 = 00) OR (NBR_INT1 = 02 AND NBR_INT2 = 00,
    01) OR (NBR_INT1 = 03 AND NBR_INT2 = 00, 01, 02) OR (NBR_INT1 = 04 AND
    NBR_INT2 = 00, 01, 02, 03)
THEN
    IMP_NUMBERWOUNDS = 1
ELSE IF (NBR_INT1 = 01 AND NBR_INT2 = 01, 02, 03, 04) OR
    (NBR_INT1 = 02 AND NBR_INT2 = 02, 03, 04) OR (NBR_INT1 = 03 AND NBR_INT2
    = 03, 04) OR (NBR_INT1 = 04 AND NBR_INT2 = 04)
THEN
    IMP_NUMBERWOUNDS = 0
ELSE IF NBR_INT1 = 00
THEN
    IMP_NUMBERWOUNDS = MISSING

IF M0440_LESION_WND = 0 OR M0482_SURG_WOUND = 0
THEN
    STAT_INT1 = 00
ELSE IF M0482_SURG_WOUND = 1
THEN
    STAT_INT1 = M0488_STAT_PRB_SURGWND

IF M0440_LESION_WND[2] = 0 OR M0482_SURG_WOUND[2] = 0
THEN
    STAT_INT2 = 00
ELSE IF M0482_SURG_WOUND[2] = 1
THEN
    STAT_INT2 = M0488_STAT_PRB_SURGWND[2]

IF ((M0440_LESION_OPEN_WND = 1 OR M0482_SURG_WOUND = 1) AND
    STAT_INT1 NOT = 00, 01, 02, 03, NA) OR ((M0440_LESION_OPEN_WND[2] = 1 OR
    M0482_SURG_WOUND[2] = 1) AND STAT_INT2 NOT = 00, 01, 02, 03, NA)
THEN
    IMP_STATUSWOUNDS = MISSING           ‘[SHOULD NEVER OCCUR]
ELSE IF (STAT_INT1 = 01 AND STAT_INT2 = 00) OR (STAT_INT1 = 02 AND
    STAT_INT2 = 00, 01) OR (STAT_INT1 = 03 AND STAT_INT2 = 00, 01, 02)
THEN
    IMP_STATUSWOUNDS = 1
ELSE IF (STAT_INT1 = 01 AND STAT_INT2 = 01, 02, 03) OR (STAT_INT1 = 02 AND
    STAT_INT2 = 02, 03) OR (STAT_INT1 = 03 AND STAT_INT2 = 03)
THEN
    IMP_STATUSWOUNDS = 0
ELSE IF (STAT_INT1 = 00, NA) OR (STAT_INT2 = NA)
THEN
    IMP_STATUSWOUNDS = MISSING
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

Improvement in Dyspnea

```
IF M0490_WHEN_DYSPNEIC NOT = 00, 01, 02, 03, 04 OR
   M0490_WHEN_DYSPNEIC[2] NOT = 00, 01, 02, 03, 04
THEN
    IMP_DYSPNEA = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
    IF (M0490_WHEN_DYSPNEIC = 01 AND M0490_WHEN_DYSPNEIC[2] = 00) OR
       (M0490_WHEN_DYSPNEIC = 02 AND M0490_WHEN_DYSPNEIC[2] = 00, 01) OR
       (M0490_WHEN_DYSPNEIC = 03 AND
        M0490_WHEN_DYSPNEIC[2] = 00, 01, 02) OR
       (M0490_WHEN_DYSPNEIC = 04 AND
        M0490_WHEN_DYSPNEIC[2] = 00, 01, 02, 03)
    THEN
        IMP_DYSPNEA = 1
    ELSE IF (M0490_WHEN_DYSPNEIC = 01 AND
            M0490_WHEN_DYSPNEIC[2] = 01, 02, 03, 04) OR
            (M0490_WHEN_DYSPNEIC = 02 AND
            M0490_WHEN_DYSPNEIC[2] = 02, 03, 04) OR
            (M0490_WHEN_DYSPNEIC = 03 AND M0490_WHEN_DYSPNEIC[2] = 03, 04) OR
            (M0490_WHEN_DYSPNEIC = 04 AND M0490_WHEN_DYSPNEIC[2] = 04)
    THEN
        IMP_DYSPNEA = 0
    ELSE IF M0490_WHEN_DYSPNEIC = 00
    THEN
        IMP_DYSPNEA = MISSING
```

Improvement in Urinary Tract Infection

```
IF M0510_UTI NOT = 00, 01, NA, UK OR M0510_UTI[2] NOT = 00, 01, NA, UK
THEN
    IMP_UTI = MISSING                                    '[SHOULD NEVER OCCUR]'
ELSE
    IF (M0510_UTI = 01 AND M0510_UTI[2] = 00)
    THEN
        IMP_UTI = 1
    ELSE IF (M0510_UTI = 01 AND M0510_UTI[2] = 01)
    THEN
        IMP_UTI = 0
    ELSE IF M0510_UTI = 00, NA, UK OR M0510_UTI[2] = NA, UK
    THEN
        IMP_UTI = MISSING
```

Improvement in Urinary Incontinence

```
IF M0520_UR_INCONT NOT = 00, 01, 02 OR (M0520_UR_INCONT = 01 AND
   M0530_UR_INCONT_OCCURS NOT = 00, 01, 02) OR (M0520_UR_INCONT = 00,02 AND
   M0530_UR_INCONT_OCCURS = 00,01,02) OR
   M0520_UR_INCONT[2] NOT = 00, 01, 02 OR (M0520_UR_INCONT[2] = 01 AND
   M0530_UR_INCONT_OCCURS[2] NOT = 00, 01, 02) OR
   (M0520_UR_INCONT[2] = 00,02 AND M0530_UR_INCONT_OCCURS[2] = 00,01,02)
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

```
THEN
  OUT_INTERIM1 = MISSING
  OUT_INTERIM2 = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
  IF M0520_UR_INCONT = 00
  THEN
    OUT_INTERIM1 = 0
  ELSE IF M0530_UR_INCONT_OCCURS = 00
  THEN
    OUT_INTERIM1 = 1
  ELSE IF M0530_UR_INCONT_OCCURS = 01
  THEN
    OUT_INTERIM1 = 2
  ELSE IF M0530_UR_INCONT_OCCURS = 02
  THEN
    OUT_INTERIM1 = 3
  ELSE IF M0520_UR_INCONT = 02
  THEN
    OUT_INTERIM1 = 4

  IF M0520_UR_INCONT[2] = 00
  THEN
    OUT_INTERIM2 = 0
  ELSE IF M0530_UR_INCONT_OCCURS[2] = 00
  THEN
    OUT_INTERIM2 = 1
  ELSE IF M0530_UR_INCONT_OCCURS[2] = 01
  THEN
    OUT_INTERIM2 = 2
  ELSE IF M0530_UR_INCONT_OCCURS[2] = 02
  THEN
    OUT_INTERIM2 = 3
  ELSE IF M0520_UR_INCONT[2] = 02
  THEN
    OUT_INTERIM2 = 4

  IF OUT_INTERIM1 NOT = 0, 1, 2, 3, 4 OR OUT_INTERIM2 NOT = 0, 1, 2, 3, 4
  THEN
    IMP_INCONT = MISSING                                '[SHOULD NEVER OCCUR]'
  ELSE IF (OUT_INTERIM1 = 1 AND OUT_INTERIM2 = 0) OR (OUT_INTERIM1 = 2 AND
    OUT_INTERIM2 = 0, 1) OR (OUT_INTERIM1 = 3 AND OUT_INTERIM2 = 0, 1, 2) OR
    (OUT_INTERIM1 = 4 AND OUT_INTERIM2 = 0, 1, 2, 3)
  THEN
    IMP_INCONT = 1
  ELSE IF (OUT_INTERIM1 = 1 AND OUT_INTERIM2 = 1, 2, 3, 4) OR
    (OUT_INTERIM1 = 2 AND OUT_INTERIM2 = 2, 3, 4) OR (OUT_INTERIM1 = 3 AND
    OUT_INTERIM2 = 3, 4) OR (OUT_INTERIM1 = 4 AND OUT_INTERIM2 = 4)
  THEN
    IMP_INCONT = 0
  ELSE IF OUT_INTERIM1 = 0
  THEN
    IMP_INCONT = MISSING
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

Improvement in Bowel Incontinence

```
IF M0540_BWL_INCONT NOT = 00, 01, 02, 03, 04, 05, NA, UK OR
   M0540_BWL_INCONT[2] NOT = 00, 01, 02, 03, 04, 05, NA, UK
THEN
  IMP_BOWELINCONT = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
  IF (M0540_BWL_INCONT = 01 AND M0540_BWL_INCONT[2] = 00) OR
     (M0540_BWL_INCONT = 02 AND M0540_BWL_INCONT[2] = 00, 01) OR
     (M0540_BWL_INCONT = 03 AND M0540_BWL_INCONT[2] = 00, 01, 02) OR
     (M0540_BWL_INCONT = 04 AND M0540_BWL_INCONT[2] = 00,01,02,03) OR
     (M0540_BWL_INCONT = 05 AND M0540_BWL_INCONT[2] = 00,01,02,03,04)
  THEN
    IMP_BOWELINCONT = 1
  ELSE IF (M0540_BWL_INCONT = 01 AND M0540_BWL_INCONT[2] = 01, 02, 03, 04, 05)
    OR (M0540_BWL_INCONT = 02 AND M0540_BWL_INCONT[2] = 02,03,04,05) OR
    (M0540_BWL_INCONT = 03 AND M0540_BWL_INCONT[2] = 03, 04, 05) OR
    (M0540_BWL_INCONT = 04 AND M0540_BWL_INCONT[2] = 04, 05) OR
    (M0540_BWL_INCONT = 05 AND M0540_BWL_INCONT[2] = 05)
  THEN
    IMP_BOWELINCONT = 0
  ELSE IF M0540_BWL_INCONT = 00, NA, UK OR M0540_BWL_INCONT[2] = NA, UK
  THEN
    IMP_BOWELINCONT = MISSING
```

Improvement in Cognitive Functioning and Stabilization in Cognitive Functioning

```
IF M0560_COG_FUNCTION NOT = 00, 01, 02, 03, 04 OR
   M0560_COG_FUNCTION[2] NOT = 00, 01, 02, 03, 04
THEN
  IMP_COGNITIVE = MISSING
  STAB_COGNITIVE = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
  IF (M0560_COG_FUNCTION = 01 AND M0560_COG_FUNCTION[2] = 00) OR
     (M0560_COG_FUNCTION = 02 AND M0560_COG_FUNCTION[2] = 00, 01) OR
     (M0560_COG_FUNCTION = 03 AND M0560_COG_FUNCTION[2] = 00, 01, 02) OR
     (M0560_COG_FUNCTION = 04 AND M0560_COG_FUNCTION[2] = 00, 01, 02, 03)
  THEN
    IMP_COGNITIVE = 1
  ELSE IF (M0560_COG_FUNCTION = 01 AND
    M0560_COG_FUNCTION[2] = 01, 02, 03, 04) OR (M0560_COG_FUNCTION = 02
    AND M0560_COG_FUNCTION[2] = 02, 03, 04) OR (M0560_COG_FUNCTION = 03
    AND M0560_COG_FUNCTION[2] = 03, 04) OR (M0560_COG_FUNCTION = 04 AND
    M0560_COG_FUNCTION[2] = 04)
  THEN
    IMP_COGNITIVE = 0
  ELSE IF M0560_COG_FUNCTION = 00
  THEN
    IMP_COGNITIVE = MISSING
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

```
IF (M0560_COG_FUNCTION = 00 AND M0560_COG_FUNCTION[2] = 00) OR
(M0560_COG_FUNCTION = 01 AND M0560_COG_FUNCTION[2] = 00, 01) OR
(M0560_COG_FUNCTION = 02 AND M0560_COG_FUNCTION[2] = 00, 01, 02) OR
(M0560_COG_FUNCTION = 03 AND M0560_COG_FUNCTION[2] = 00, 01, 02, 03)
THEN
  STAB_COGNITIVE = 1
ELSE IF (M0560_COG_FUNCTION = 00 AND
M0560_COG_FUNCTION[2] = 01, 02, 03, 04) OR (M0560_COG_FUNCTION = 01
AND M0560_COG_FUNCTION[2] = 02, 03, 04) OR (M0560_COG_FUNCTION = 02
AND M0560_COG_FUNCTION[2] = 03, 04) OR (M0560_COG_FUNCTION = 03 AND
M0560_COG_FUNCTION[2] = 04)
THEN
  STAB_COGNITIVE = 0
ELSE IF M0560_COG_FUNCTION = 04
THEN
  STAB_COGNITIVE = MISSING
```

Improvement in Confusion Frequency

```
IF M0570_WHEN_CONFUSED NOT = 00, 01, 02, 03, 04, NA OR
M0570_WHEN_CONFUSED[2] NOT = 00, 01, 02, 03, 04, NA
THEN
  IMP_CONFUSION = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
  IF (M0570_WHEN_CONFUSED = 01 AND M0570_WHEN_CONFUSED[2] = 00) OR
(M0570_WHEN_CONFUSED = 02 AND M0570_WHEN_CONFUSED[2] = 00, 01) OR
(M0570_WHEN_CONFUSED = 03 AND M0570_WHEN_CONFUSED[2] = 00, 01, 02)
OR (M0570_WHEN_CONFUSED = 04 AND
M0570_WHEN_CONFUSED[2] = 00, 01, 02, 03)
  THEN
    IMP_CONFUSION = 1
  ELSE IF (M0570_WHEN_CONFUSED = 01 AND
M0570_WHEN_CONFUSED[2] = 01, 02, 03, 04) OR
(M0570_WHEN_CONFUSED = 02 AND
M0570_WHEN_CONFUSED[2] = 02, 03, 04) OR (M0570_WHEN_CONFUSED = 03
AND M0570_WHEN_CONFUSED[2] = 03, 04) OR (M0570_WHEN_CONFUSED = 04
AND M0570_WHEN_CONFUSED[2] = 04)
  THEN
    IMP_CONFUSION = 0
  ELSE IF M0570_WHEN_CONFUSED = 00 OR M0570_WHEN_CONFUSED[2] = NA
  THEN
    IMP_CONFUSION = MISSING
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

Improvement and Stabilization in Anxiety Level

```
IF M0580_WHEN_ANXIOUS NOT = 00, 01, 02, 03, NA OR
   M0580_WHEN_ANXIOUS[2] NOT = 00, 01, 02, 03, NA
THEN
  IMP_ANXIETY = MISSING
  STAB_ANXIETY = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
  IF (M0580_WHEN_ANXIOUS = 01 AND M0580_WHEN_ANXIOUS[2] = 00) OR
     (M0580_WHEN_ANXIOUS = 02 AND M0580_WHEN_ANXIOUS[2] = 00, 01) OR
     (M0580_WHEN_ANXIOUS = 03 AND M0580_WHEN_ANXIOUS[2] = 00, 01, 02)
  THEN
    IMP_ANXIETY = 1
  ELSE IF (M0580_WHEN_ANXIOUS = 01 AND M0580_WHEN_ANXIOUS[2] = 01, 02, 03)
    OR (M0580_WHEN_ANXIOUS = 02 AND M0580_WHEN_ANXIOUS[2] = 02, 03) OR
    (M0580_WHEN_ANXIOUS = 03 AND M0580_WHEN_ANXIOUS[2] = 03)
  THEN
    IMP_ANXIETY = 0
  ELSE IF M0580_WHEN_ANXIOUS = 00 OR M0580_WHEN_ANXIOUS[2] = NA
  THEN
    IMP_ANXIETY = MISSING

  IF (M0580_WHEN_ANXIOUS = 00 AND M0580_WHEN_ANXIOUS[2] = 00) OR
     (M0580_WHEN_ANXIOUS = 01 AND M0580_WHEN_ANXIOUS[2] = 00, 01) OR
     (M0580_WHEN_ANXIOUS = 02 AND M0580_WHEN_ANXIOUS[2] = 00, 01, 02)
  THEN
    STAB_ANXIETY = 1
  ELSE IF (M0580_WHEN_ANXIOUS = 00 AND M0580_WHEN_ANXIOUS[2] = 01, 02, 03)
    OR (M0580_WHEN_ANXIOUS = 01 AND M0580_WHEN_ANXIOUS[2] = 02, 03) OR
    (M0580_WHEN_ANXIOUS = 02 AND M0580_WHEN_ANXIOUS[2] = 03)
  THEN
    STAB_ANXIETY = 0
  ELSE IF M0580_WHEN_ANXIOUS = 03 OR M0580_WHEN_ANXIOUS[2] = NA
  THEN
    STAB_ANXIETY = MISSING
```

Improvement in Behavior Problem Frequency

```
IF M0620_BEH_PROB_FREQ NOT = 00, 01, 02, 03, 04, 05 OR
   M0620_BEH_PROB_FREQ[2] NOT = 00, 01, 02, 03, 04, 05
THEN
  IMP_BEHAVIOR = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
  ELSE IF (M0620_BEH_PROB_FREQ = 01 AND M0620_BEH_PROB_FREQ[2] = 00) OR
     (M0620_BEH_PROB_FREQ = 02 AND M0620_BEH_PROB_FREQ[2] = 00, 01) OR
     (M0620_BEH_PROB_FREQ = 03 AND M0620_BEH_PROB_FREQ[2] = 00, 01, 02)
    OR (M0620_BEH_PROB_FREQ = 04 AND
        M0620_BEH_PROB_FREQ[2] = 00, 01, 02, 03) OR (M0620_BEH_PROB_FREQ = 05
        AND M0620_BEH_PROB_FREQ[2] = 00, 01, 02, 03, 04)
  THEN
    IMP_BEHAVIOR = 1
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

```
ELSE IF (M0620_BEH_PROB_FREQ = 01 AND
M0620_BEH_PROB_FREQ[2] = 01, 02, 03, 04, 05) OR
(M0620_BEH_PROB_FREQ = 02 AND M0620_BEH_PROB_FREQ[2] = 02,03,04,05)
OR (M0620_BEH_PROB_FREQ = 03 AND
M0620_BEH_PROB_FREQ[2] = 03, 04, 05) OR (M0620_BEH_PROB_FREQ = 04
AND M0620_BEH_PROB_FREQ[2] = 04, 05) OR (M0620_BEH_PROB_FREQ = 05
AND M0620_BEH_PROB_FREQ[2] = 05)
THEN
IMP_BEHAVIOR = 0
ELSE IF M0620_BEH_PROB_FREQ = 00
THEN
IMP_BEHAVIOR = MISSING
```

Utilization Outcomes

Utilization Outcomes are measurements of patients' usage of additional health care services while on service or upon leaving the care of the home health agency. Utilization Outcomes are not computed for patients who died [RFA = 08]).

```
IF M0100_ASSMT_REASON[2] = 06, 07, 09
THEN
```

Any Emergent Care

```
IF M0830_EC_NONE[2] NOT = 0, 1 OR M0830_EC_EMER_ROOM[2] NOT = 0, 1 OR
M0830_EC_MD_OFF[2] NOT = 0, 1 OR M0830_EC_OUTPAT[2] NOT = 0, 1 OR
M0830_EC_UNKNOWN[2] NOT = 0, 1 OR
((M0830_EC_UNKNOWN[2] = 1 OR M0830_EC_NONE[2] = 1) AND
(M0830_EC_EMER_ROOM[2] = 1 OR M0830_EC_MD_OFF[2] = 1 OR
M0830_EC_OUTPAT[2] = 1)) OR (M0830_EC_NONE[2] = 0 AND
M0830_EC_EMER_ROOM[2] = 0 AND M0830_EC_MD_OFF[2] = 0 AND
M0830_EC_OUTPAT[2] = 0 AND M0830_EC_UNKNOWN[2] = 0) OR
(M0830_EC_UNKNOWN[2] = 1 AND M0830_EC_NONE[2] = 1)
THEN
UTIL_EMERGENT = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
IF M0830_UNKNOWN[2] = 1
THEN
UTIL_EMERGENT = MISSING
ELSE IF M0830_EC_NONE[2] = 0
THEN
UTIL_EMERGENT = 1
ELSE IF M0830_EC_NONE[2] = 1
THEN
UTIL_EMERGENT = 0
```


OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

Discharged to Community

```
IF M0100_ASSMT_REASON[2] = 09 AND M0870_DSCHG_DISP[2] NOT = 01, 02, 03, UK
THEN
    UTIL_DCCOMM = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
    IF M0100_ASSMT_REASON[2] = 09 AND M0870_DSCHG_DISP[2] = 01
    THEN
        UTIL_DCCOMM = 1
    ELSE IF (M0100_ASSMT_REASON[2] = 09 AND M0870_DSCHG_DISP[2] = 02, 03) OR
        M0100_ASSMT_REASON[2] = 06, 07
    THEN
        UTIL_DCCOMM = 0
    ELSE IF M0870_DSCHG_DISP[2] = UK
    THEN
        UTIL_DCCOMM = MISSING
```

Acute Care Hospitalization

```
IF (M0100_ASSMT_REASON[2] = 06, 07 AND M0855_INPAT_FACILITY[2] NOT = 01, 02, 03, 04)
    OR (M0100_ASSMT_REASON[2] = 09 AND M0855_INPAT_FACILITY[2] NOT = NA) OR
    (M0855_INPAT_FACILITY[2] = 01 AND M0890_HOSP_RSN[2] NOT = 01, 02, 03, UK)
THEN
    UTIL_HOSPDC = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
    IF (M0100_ASSMT_REASON[2] = 06, 07 AND M0855_INPAT_FACILITY [2]= 01)
    THEN
        UTIL_HOSPDC = 1
    ELSE UTIL_HOSPDC = 0
```

Exclusions for All Outcome Measures

For all outcome measures, pediatric patients, patients with implausibly high age, and patients who are comatose or nonresponsive at start of care are excluded.

```
IF AGE < 18 OR AGE > 120 OR M0570_WHEN_CONFUSED = NA OR M0580_WHEN_ANXIOUS = NA
THEN
    IMP_GROOMING = MISSING
    STAB_GROOMING = MISSING
    IMP_UPPERDRESS = MISSING
    IMP_LOWERDRESS = MISSING
    IMP_BATHING = MISSING
    STAB_BATHING = MISSING
    IMP_TOILETING = MISSING
    IMP_TRANSFERRING = MISSING
    STAB_TRANSFERRING = MISSING
    IMP_AMBULATION = MISSING
    IMP_EATING = MISSING
    IMP_LIGHTMEAL = MISSING
    STAB_LIGHTMEAL = MISSING
    IMP_LAUNDRY = MISSING
    STAB_LAUNDRY = MISSING
    IMP_HOUSEKEEP = MISSING
```

OUTCOME MEASURE TRANSFORMATION DOCUMENTATION

SSTAB_HOUSEKEEP = MISSING
IMP_SHOPPING = MISSING
STAB_SHOPPING = MISSING
IMP_PHONE = MISSING
STAB_PHONE = MISSING
IMP_ORALMEDS = MISSING
STAB_ORALMEDS = MISSING
IMP_SPEECH = MISSING
STAB_SPEECH = MISSING
IMP_PAIN = MISSING
IMP_NUMBERWOUNDS = MISSING
IMP_STATUSWOUNDS = MISSING
IMP_DYSPNEA = MISSING
IMP_UTI = MISSING
IMP_INCONT = MISSING
IMP_BOWELINCONT = MISSING
IMP_COGNITIVE = MISSING
STAB_COGNITIVE = MISSING
IMP_CONFUSION = MISSING
IMP_ANXIETY = MISSING
STAB_ANXIETY = MISSING
IMP_BEHAVIOR = MISSING
UTIL_EMERGENT = MISSING
UTIL_DCCOMM = MISSING
UTIL_HOSP = MISSING

CASE MIX TRANSFORMATION DOCUMENTATION

The transformation documentation below indicates, for each measure that appears in the Case Mix Profile, the name of the measure as it appears on the report,² followed by a formula OR logical expression indicating how the measure is calculated from specific OASIS data fields. Where a measure is coded for reporting exactly as it is coded for the corresponding item on the OASIS data record, the notation “[as originally coded]” appears. Case Mix Measures that are identical to Risk Factor Measures used for outcome reporting are designated by an asterisk.

Data Transformation Pseudo-Code

Demographics

***Age** (average in years)

M0090_INFO_COMPLETED_DT minus
M0066_PAT_BIRTH_DT, rounded down to the nearest year.

***Gender: Female** (%)

1 IF M0069_PAT_GENDER = 2
0 OTHERWISE.

Race: Black (%)

MISSING IF M0140_ETHNIC_UK = 1;
OTHERWISE M0140_ETHNIC_BLACK [as originally coded].

Race: White (%)

MISSING IF M0140_ETHNIC_UK = 1;
OTHERWISE M0140_ETHNIC_WHITE [as originally coded].

Race: Other (%)

MISSING IF M0140_ETHNIC_UK = 1,
Otherwise:
1 IF M0140_ETHNIC_BLACK = 0 AND M0140_ETHNIC_WHITE = 0;
0 OTHERWISE.

Payment Source

All MISSING IF M0150_CPAY_UNKNOWN = 1

Otherwise:

***Any Medicare** (%)

1 IF (M0150_CPAY_MCARE_FFS = 1 OR M0150_CPAY_MCARE_HMO = 1);
0 OTHERWISE.

Any Medicaid (%)

1 IF (M0150_CPAY_MCAID_FFS = 1 OR M0150_CPAY_MCAID_HMO = 1);
0 OTHERWISE.

Any HMO (%)

1 IF (M0150_CPAY_MCARE_HMO = 1 OR M0150_CPAY_MCAID_HMO = 1 OR
M0150_CPAY_PRIV_HMO = 1);
0 OTHERWISE.

² Where the name of the measure is followed by “(%)”, the measure is coded as zero OR one, with zero representing absence and one indicating presence of the attribute in question. The percentage reported on the case mix report is the number of ones divided by the total number of valid cases, multiplied by 100. Where the name of the measure is followed by “(0-x, scale average)”, x indicates the maximum valid scale value the measure can take on, and the number reported on the report is the mean numeric value of the measure across all cases with valid (non-missing) values.

CASE MIX TRANSFORMATION DOCUMENTATION

Medicare HMO (%)

1 IF M0150_CPAY_MCARE_HMO = 1;
0 OTHERWISE.

Any third party (%)

1 IF (M0150_CPAY_PRIV_HMO = 1 OR M0150_CPAY_PRIV_INS = 1);
0 OTHERWISE.

Current Residence

*Own home (%)

1 IF M0300_CURR_RESIDENCE = 01;
0 OTHERWISE.

Family member home (%)

1 IF M0300_CURR_RESIDENCE = 02;
0 OTHERWISE.

Current Living Situation

*Lives alone (%)

M0340_LIV_ALONE [as originally coded]

*With family member (%)

1 IF M0340_LIV_SPOUSE = 1 OR M0340_LIV_OTH_FAMILY = 1;
0 OTHERWISE.

With friend (%)

M0340_LIV_FRIEND [as originally coded]

With paid help (%)

M0340_LIV_PD_HELP [as originally coded]

Assisting Persons

All MISSING IF M0350_AP_UNKNOWN = 1

Otherwise:

Person residing in home (%)

M0350_AP_HM_RESIDENT [as originally coded]

Person residing outside home (%)

M0350_AP_REL_FRIEND [as originally coded]

Paid help (%)

M0350_AP_PD_HELP [as originally coded]

Primary Caregiver

All MISSING IF M0360_PRIMARY_CAREGIVER = UK OR M0350_UNKNOWN = 1,

All 0 IF M0350_AP_NONE = 1,

Otherwise:

Spouse/significant other (%)

1 IF M0360_PRIMARY_CAREGIVER = 01;
0 OTHERWISE.

Daughter/son (%)

1 IF M0360_PRIMARY_CAREGIVER = 02;
0 OTHERWISE.

Paid help (%)

1 IF M0360_PRIMARY_CAREGIVER = 05;
0 OTHERWISE.

No one person (%)

1 IF M0360_PRIMARY_CAREGIVER = 00 OR M0350_AP_NONE = 1;
0 OTHERWISE.

CASE MIX TRANSFORMATION DOCUMENTATION

Primary Caregiver Assistance

***Freq. of assistance (0-6, scale avg.)**

MISSING IF (M0360_PRIMARY_CAREGIVER = UK OR M0350_AP_UNKNOWN = 1 OR M0370_FREQ_PRM_ASSTANCE = UK);

Otherwise,

0 IF M0360_PRIMARY_CAREGIVER = 00 OR M0350_AP_NONE = 1;

1 IF M0370_FREQ_PRM_ASSTANCE = 06;

2 IF M0370_FREQ_PRM_ASSTANCE = 05;

3 IF M0370_FREQ_PRM_ASSTANCE = 04;

4 IF M0370_FREQ_PRM_ASSTANCE = 03;

5 IF M0370_FREQ_PRM_ASSTANCE = 02;

6 IF M0370_FREQ_PRM_ASSTANCE = 01

Inpatient Discharge within 14 Days of SOC

One of two different transformations applies, depending upon the OASIS version, and corresponding data submission specifications version.

OASIS-B1 10/98 -- Data Submission Specifications Version 1.04 and earlier

***From hospital (%)**

M0170_DC_HOSP_14_DAYS [as originally coded]

***From rehab facility (%)**

M0170_DC_REHAB_14_DAYS [as originally coded]

***From nursing home (%)**

M0170_DC_NURS_HOME_14_DAYS [as originally coded]

OASIS-B1 08/2000 -- Data Submission Specifications Version 1.10 and later

***From hospital (%)**

M0175_DC_HOSP_14_DAYS [as originally coded]

***From rehab facility (%)**

M0175_DC_REHAB_14_DAYS [as originally coded]

***From nursing home (%)**

1 IF M0175_DC_SNF_14_DAYS = 1 OR M0175_DC_NH_14_DAYS = 1;

0 OTHERWISE.

***Med. Reg. Chg. w/in 14 Days of SOC**

M0200_REG_CHG_14_DAYS [as originally coded]

Prognoses

***Moderate recovery prognosis (%)**

MISSING IF M0260_OVERALL_PROGNOSIS = UK,

Otherwise, M0260_OVERALL_PROGNOSIS [as originally coded]

***Good rehab prognosis (%)**

MISSING IF M0270_REHAB_PROGNOSIS = UK,

Otherwise, M0270_REHAB_PROGNOSIS [as originally coded]

CASE MIX TRANSFORMATION DOCUMENTATION

ADL Disabilities at SOC

- ***Grooming** (0-3, scale average)
M0640_CUR_GROOMING [as originally coded]
- ***Dress upper body** (0-3, scale avg.)
M0650_CUR_DRESS_UPPER [as originally coded]
- ***Dress lower body** (0-3, scale avg.)
M0660_CUR_DRESS_LOWER [as originally coded]
- ***Bathing** (0-5, scale average)
M0670_CUR_BATHING [as originally coded]
- ***Toileting** (0-4, scale average)
M0680_CUR_TOILETING [as originally coded]
- ***Transferring** (0-5, scale average)
M0690_CUR_TRANSFERRING [as originally coded]
- ***Ambulation** (0-5, scale average)
M0700_CUR_AMBULATION [as originally coded]
- ***Eating** (0-5, scale average)
M0710_CUR_FEEDING [as originally coded]

ADL Status Prior to SOC

- Grooming** (0-3, scale average)
MISSING IF M0640_PR_GROOMING = UK,
Otherwise, M0640_PR_GROOMING [as originally coded]
- Dress upper body** (0-3, scale avg.)
MISSING IF M0650_PR_DRESS_UPPER = UK,
Otherwise, M0650_PR_DRESS_UPPER [as originally coded]
- Dress lower body** (0-3, scale avg.)
MISSING IF M0660_PR_DRESS_LOWER = UK,
Otherwise, M0660_PR_DRESS_LOWER [as originally coded]
- Bathing** (0-5, scale average)
MISSING IF M0670_PR_BATHING = UK,
Otherwise, M0670_PR_BATHING [as originally coded]
- Toileting** (0-4, scale average)
MISSING IF M0680_PR_TOILETING = UK,
Otherwise, M0680_PR_TOILETING [as originally coded]
- Transferring** (0-5, scale average)
MISSING IF M0690_PR_TRANSFERRING = UK,
Otherwise, M0690_PR_TRANSFERRING [as originally coded]
- Ambulation** (0-5, scale average)
MISSING IF M0700_PR_AMBULATION = UK,
Otherwise, M0700_PR_AMBULATION [as originally coded]
- Eating** (0-5, scale average)
MISSING IF M0710_PR_FEEDING = UK,
Otherwise, M0710_PR_FEEDING [as originally coded]

CASE MIX TRANSFORMATION DOCUMENTATION

IADL Disabilities at SOC

- ***Light meal prep** (0-2, scale avg.)
M0720_CUR_PREP_LT_MEALS [as originally coded]
- ***Transportation** (0-2, scale avg.)
M0730_CUR_TRANSPORTATION [as originally coded]
- ***Laundry** (0-2, scale average)
M0740_CUR_LAUNDRY [as originally coded]
- ***Housekeeping** (0-4, scale avg.)
M0750_CUR_HOUSEKEEPING [as originally coded]
- ***Shopping** (0-3, scale average)
M0760_CUR_SHOPPING [as originally coded]
- ***Phone use** (0-5, scale average)
MISSING IF M0770_CUR_PHONE_USE = NA,
Otherwise, M0770_CUR_PHONE_USE [as originally coded]
- ***Mgmt. oral meds** (0-2, scale avg.)
MISSING IF M0780_CUR_ORAL_MEDS = NA,
Otherwise, M0780_CUR_ORAL_MEDS [as originally coded]

IADL Status Prior to SOC

- Light meal prep** (0-2, scale avg.)
MISSING IF M0720_PR_PREP_LT_MEALS = UK,
Otherwise, M0720_PR_PREP_LT_MEALS [as originally coded]
- Transportation** (0-2, scale avg.)
MISSING IF M0730_PR_TRANSPORTATION = UK,
Otherwise, M0730_PR_TRANSPORTATION [as originally coded]
- Laundry** (0-2, scale average)
MISSING IF M0740_PR_LAUNDRY = UK,
Otherwise, M0740_PR_LAUNDRY [as originally coded]
- Housekeeping** (0-4, scale avg.)
MISSING IF M0750_PR_HOUSEKEEPING = UK,
Otherwise, M0750_PR_HOUSEKEEPING [as originally coded]
- Shopping** (0-3, scale average)
MISSING IF M0760_PR_SHOPPING = UK,
Otherwise, M0760_PR_SHOPPING [as originally coded]
- Phone use** (0-5, scale average)
MISSING IF M0770_PR_PHONE_USE = NA, UK
Otherwise, M0770_PR_PHONE_USE [as originally coded]
- Mgmt. oral meds** (0-2, scale avg.)
MISSING IF M0780_PR_ORAL_MEDS = NA, UK
Otherwise, M0780_PR_ORAL_MEDS [as originally coded]

Respiratory Status

- ***Dyspnea** (0-4, scale average)
M0490_WHEN_DYSPNEIC [as originally coded]

CASE MIX TRANSFORMATION DOCUMENTATION

Therapies Received at Home

IV/infusion therapy (%)

M0250_THH_IV_INFUSION [as originally coded]

Parenteral nutrition (%)

M0250_THH_PAR_NUTRITION [as originally coded]

Enteral nutrition (%)

M0250_THH_ENT_NUTRITION [as originally coded]

Sensory Status

***Vision impairment (0-2, scale avg.)**

M0390_VISION [as originally coded]

***Hearing impair. (0-4, scale avg.)**

M0400_HEARING [as originally coded]

***Speech/language (0-5, scale avg.)**

M0410_SPEECH [as originally coded]

Pain

***Pain interfer. w/activity (0-3, scale avg.)**

M0420_FREQ_PAIN [as originally coded]

***Intractable pain (%)**

M0430_INTRACT_PAIN [as originally coded]

Neuro/Emotional/Behavioral Status

Moderate cognitive disability (%)

1 IF M0560_COG_FUNCTION = 02,03,04;
0 OTHERWISE.

Severe confusion disability (%)

MISSING IF M0570_WHEN_CONFUSED = NA,
Otherwise:
1 IF M0570_WHEN_CONFUSED = 03,04;
0 OTHERWISE.

Severe anxiety level (%)

MISSING IF M0580_WHEN_ANXIOUS = NA,
Otherwise:
1 IF M0580_WHEN_ANXIOUS = 02,03;
0 OTHERWISE.

Behav probs > twice a week (%)

1 IF M0620_BEH_PROB_FREQ = 04,05;
0 OTHERWISE.

CASE MIX TRANSFORMATION DOCUMENTATION

Integumentary Status

Presence of wound/lesion (%)

M0440_LESION_OPEN_WND [as originally coded]

*Stasis ulcer(s) present (%)

M0468_STASIS_ULCER [as originally coded]

*Surgical wound(s) present (%)

M0482_SURG_WOUND [as originally coded]

*Pressure ulcer(s) present (%)

1 IF M0450_NBR_PRSULC_STG1 > 0 OR M0450_NBR_PRSULC_STG2 > 0 OR
M0450_NBR_PRSULC_STG3 > 0 OR M0450_NBR_PRSULC_STG4 > 0;

0 OTHERWISE.

*Stage 2-4 ulcer(s) present (%)

1 IF M0450_NBR_PRSULC_STG2 > 0 OR M0450_NBR_PRSULC_STG3 > 0 OR
M0450_NBR_PRSULC_STG4 > 0;

0 OTHERWISE.

*Stage 3-4 ulcer(s) present (%)

1 IF M0450_NBR_PRSULC_STG3 > 0 OR M0450_NBR_PRSULC_STG4 > 0;

0 OTHERWISE.

Elimination Status

UTI within past 14 days (%)

MISSING IF M0510_UTI = NA, UK

Otherwise, M0510_UTI [as originally coded]

Urinary incont/catheter present (%)

1 IF M0520_UR_INCONT = 01,02;

0 OTHERWISE.

*Incontinent day and night (%)

1 IF M0530_UR_INCONT_OCCURS = 02;

0 OTHERWISE.

*Urinary catheter (%)

1 IF M0520_UR_INCONT = 02;

0 OTHERWISE.

Bowel incont. (0-5, scale avg.)

MISSING IF M0540_BWL_INCONT = NA, UK

Otherwise, M0540_BWL_INCONT [as originally coded]

Acute Conditions

Some of these measures are complex transformations based on a combination of data items and select groups of ICD-9 codes. The following terms have been used throughout the section to simplify the explanations:

“Inpatient facility discharge” indicates that one of the following conditions applies:

OASIS-B1 10/98 -- Data Submission Specifications Version 1.04 and earlier

M0170_DC_HOSP_14_DAYS = 1 OR

M0170_DC_REHAB_14_DAYS = 1 OR

M0170_DC_NURS_HOME_14_DAYS = 1

CASE MIX TRANSFORMATION DOCUMENTATION

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M0175_DC_HOSP_14_DAYS = 1 OR
M0175_DC_REHAB_14_DAYS = 1 OR
M0175_DC_SNF_14_DAYS = 1 OR
M0175_DC_NH_14_DAYS = 1

“Medical Regimen Change” indicates that:

M0200_REG_CHG_14_DAYS = 1

“Appropriate diagnosis codes” are as follows for the individual measures:

| Measure | ICD-9 Codes (Values and ranges listed below include 4 OR 5 digit codes beginning with the specified three digits.) |
|---------------------------------|--|
| Orthopedic (%) | 170-171, 213, 274, 710-739, 781, 800-848, 885-887, 895-897, 905, 927-928 |
| Neurologic (%) | 045-049, 191-192, 225, 320-326, 330-337, 340-359, 430-438, 850-854, 907, 950-957 |
| Open wounds/lesions (%) | 707, 870-884, 890-894, 940-949 |
| Cardiac/peripheral vascular (%) | 391, 393-398, 401-405, 410-417, 420-429, 440-448, 451-455, 456-459, 785 |
| Pulmonary (%) | 011-012, 160-165, 197, 212, 231, 460-466, 470-478, 480-487, 490-496, 500-508, 510-519, 786, 860-862 |
| Diabetes Mellitus (%) | 250 |
| Gastrointestinal disorder (%) | 001-009, 127, 129, 150-154, 156, 159, 211, 230, 530-537, 550-553, 555-558, 560-579, 787, 863 |
| Contagious/communicable (%) | 001-018, 020-027, 030-037, 039-057, 060-066, 070-088, 090-104, 110-118, 120-136 |

*Orthopedic (%)

1 IF (inpatient facility discharge AND appropriate diagnosis code entered in M0190_14_DAY_INP1_ICD OR M0190_14_DAY_INP2_ICD) OR (medical regimen change AND appropriate diagnosis code entered in M0210_CHGREG_ICD1 OR M0210_CHGREG_ICD2 OR M0210_CHGREG_ICD3 OR M0210_CHGREG_ICD4);
0 OTHERWISE.

*Neurologic (%)

1 IF (inpatient facility discharge AND appropriate diagnosis code entered in M0190_14_DAY_INP1_ICD OR M0190_14_DAY_INP2_ICD) OR (medical regimen change AND appropriate diagnosis code entered in M0210_CHGREG_ICD1 OR M0210_CHGREG_ICD2 OR M0210_CHGREG_ICD3 OR M0210_CHGREG_ICD4);
0 OTHERWISE.

*Open wounds/lesions (%)

1 IF (inpatient facility discharge AND appropriate diagnosis code entered in M0190_14_DAY_INP1_ICD OR M0190_14_DAY_INP2_ICD) OR (medical regimen change AND appropriate diagnosis code entered in M0210_CHGREG_ICD1 OR M0210_CHGREG_ICD2 OR M0210_CHGREG_ICD3 OR M0210_CHGREG_ICD4) OR M0440_LESION_OPEN_WND = 1;
0 OTHERWISE.

CASE MIX TRANSFORMATION DOCUMENTATION

***Terminal condition (%)**

1 IF M0280_LIFE_EXPECTANCY = 01;
0 OTHERWISE

***Cardiac/peripheral vascular (%)**

1 IF (inpatient facility discharge AND appropriate diagnosis code entered in
M0190_14_DAY_INP1_ICD OR M0190_14_DAY_INP2_ICD) OR
(medical regimen change AND appropriate diagnosis code entered in
M0210_CHGREG_ICD1 OR M0210_CHGREG_ICD2 OR M0210_CHGREG_ICD3 OR
M0210_CHGREG_ICD4);
0 OTHERWISE.

***Pulmonary (%)**

1 IF (inpatient facility discharge AND appropriate diagnosis code entered in
M0190_14_DAY_INP1_ICD OR M0190_14_DAY_INP2_ICD) OR
(medical regimen change AND appropriate diagnosis code entered in
M0210_CHGREG_ICD1 OR M0210_CHGREG_ICD2 OR M0210_CHGREG_ICD3 OR
M0210_CHGREG_ICD4);
0 OTHERWISE.

***Diabetes mellitus (%)**

1 IF (inpatient facility discharge AND appropriate diagnosis code entered in
M0190_14_DAY_INP1_ICD OR M0190_14_DAY_INP2_ICD) OR
(medical regimen change AND appropriate diagnosis code entered in
M0210_CHGREG_ICD1 OR M0210_CHGREG_ICD2 OR M0210_CHGREG_ICD3 OR
M0210_CHGREG_ICD4);
0 OTHERWISE.

***Gastrointestinal disorder (%)**

1 IF (inpatient facility discharge AND appropriate diagnosis code entered in
M0190_14_DAY_INP1_ICD OR M0190_14_DAY_INP2_ICD) OR
(medical regimen change AND appropriate diagnosis code entered in
M0210_CHGREG_ICD1 OR M0210_CHGREG_ICD2 OR M0210_CHGREG_ICD3 OR
M0210_CHGREG_ICD4) OR M0550_OSTOMY = 01;
0 OTHERWISE.

***Contagious/communicable (%)**

1 IF (inpatient facility discharge AND appropriate diagnosis code entered in
M0190_14_DAY_INP1_ICD OR M0190_14_DAY_INP2_ICD) OR
(medical regimen change AND appropriate diagnosis code entered in
M0210_CHGREG_ICD1 OR M0210_CHGREG_ICD2 OR M0210_CHGREG_ICD3 OR
M0210_CHGREG_ICD4);
0 OTHERWISE.

***Urinary incont./catheter (%)**

1 IF (inpatient facility discharge OR medical regimen change) AND
(M0520_UR_INCONT = 01,02) AND (M0220_PRIOR_UR_INCON ≠ 1 AND
M0220_PRIOR_CATH ≠ 1);
0 OTHERWISE.

***Mental/emotional (%)**

M0630_REC_PSYCH_NURS [as originally coded]

***Oxygen therapy (%)**

M0500_RESPTX_OXYGEN [as originally coded]

CASE MIX TRANSFORMATION DOCUMENTATION

*IV/infusion therapy (%)

M0250_THH_IV_INFUSION [as originally coded]

*Enteral/parenteral nutrition (%)

M0250_THH_PAR_NUTRITION [as originally coded]

*Ventilator (%)

M0500_RESPTX_VENTILATOR [as originally coded]

Chronic Conditions

These measures are complex transformations based on a series of OASIS data items and, as with the “Acute Conditions”, the following terms have been used throughout the section to simplify the explanations.

“Inpatient facility discharge” indicates that one of the following conditions applies:

OASIS-B1 10/98 -- Data Submission Specifications Version 1.04 and earlier

M0170_DC_HOSP_14_DAYS = 1 OR
M0170_DC_REHAB_14_DAYS = 1 OR
M0170_DC_NURS_HOME_14_DAYS = 1

OASIS-B1 08/2000 -- Data Submission Specifications Version 1.10 and later

M0175_DC_HOSP_14_DAYS = 1 OR
M0175_DC_REHAB_14_DAYS = 1 OR
M0175_DC_SNF_14_DAYS = 1 OR
M0175_DC_NH_14_DAYS = 1

“Medical Regimen Change” indicates that:

M0200_REG_CHG_14_DAYS = 1

*Dependence in living skills (%)

1 IF ((inpatient facility discharge OR medical regimen change) AND
M0720_PR_PREP_LT_MEALS = 01,02 AND any of the following combinations:
(M0730_PR_TRANSPORTATION = 01,02 AND (M0740_PR_LAUNDRY = 01,02 OR
M0750_PR_HOUSEKEEPING = 03,04 OR M0760_PR_SHOPPING = 02,03 OR
M0770_PR_PHONE_USE = 04,05)) OR
(M0740_PR_LAUNDRY = 01,02 AND (M0750_PR_HOUSEKEEPING = 03,04 OR
M0760_PR_SHOPPING = 02,03 OR M0770_PR_PHONE_USE = 04,05)) OR
(M0750_PR_HOUSEKEEPING = 03,04 AND (M0760_PR_SHOPPING = 02,03 OR
M0770_PR_PHONE_USE = 04,05)) OR
(M0760_PR_SHOPPING = 02,03 AND M0770_PR_PHONE_USE = 04,05)) OR
(no inpatient facility discharge AND no medical regimen change AND
M0720_CUR_PREP_LT_MEALS = 01,02 AND any of the following combinations:
(M0730_CUR_TRANSPORTATION = 01,02 AND
(M0740_CUR_LAUNDRY = 01,02 OR M0750_CUR_HOUSEKEEPING = 03,04 OR
M0760_CUR_SHOPPING = 02,03 OR M0770_CUR_PHONE_USE = 04,05)) OR
(M0740_CUR_LAUNDRY = 01,02 AND (M0750_CUR_HOUSEKEEPING = 03,04 OR
M0760_CUR_SHOPPING = 02,03 OR M0770_CUR_PHONE_USE = 04,05)) OR
(M0750_CUR_HOUSEKEEPING = 03,04 AND (M0760_CUR_SHOPPING = 02,03 OR
M0770_CUR_PHONE_USE = 04,05)) OR
(M0760_CUR_SHOPPING = 02,03 AND M0770_CUR_PHONE_USE = 04,05));
0 OTHERWISE.

CASE MIX TRANSFORMATION DOCUMENTATION

*Dependence in personal care (%)

1 IF (inpatient facility discharge OR medical regimen change) AND
(M0670_PR_BATHING = 03,04,05 OR (M0640_PR_GROOMING = 02,03 AND
(M0650_PR_DRESS_UPPER = 02,03 OR M0660_PR_DRESS_LOWER = 02,03))) OR
(no inpatient facility discharge AND no medical regimen change AND
(M0670_CUR_BATHING = 03,04,05 OR (M0640_CUR_GROOMING = 02,03 AND
(M0650_CUR_DRESS_UPPER = 02,03 OR M0660_CUR_DRESS_LOWER = 02,03))),
0 OTHERWISE.

*Impaired ambulation/mobility (%)

1 IF ((inpatient facility discharge OR medical regimen change) AND
(M0680_PR_TOILETING = 03,04 OR M0690_PR_TRANSFERRING = 02,03,04,05 OR
M0700_PR_AMBULATION = 02,03,04,05)) OR
((no inpatient facility discharge AND no medical regimen change) AND
(M0680_CUR_TOILETING = 03,04 OR M0690_CUR_TRANSFERRING = 02,03,04,05 OR
M0700_CUR_AMBULATION = 02,03,04,05));
0 OTHERWISE.

*Eating disability (%)

1 IF ((inpatient facility discharge OR medical regimen change) AND
M0710_PR_FEEDING = 02,03,04,05) OR (no inpatient facility discharge AND
no medical regimen change AND M0710_CUR_FEEDING = 02,03,04,05);
0 OTHERWISE.

*Urinary incontinence/catheter (%)

1 IF ((inpatient facility discharge OR medical regimen change) AND M0520_UR_INCONT = 01,02
AND (M0220_PRIOR_UR_INCON = 1 OR M0220_PRIOR_CATH = 1)) OR
(no inpatient facility discharge AND no medical regimen change AND
M0520_UR_INCONT = 01,02);
0 OTHERWISE.

*Dependence in med. admin. (%)

1 ((if inpatient facility discharge OR medical regimen change) AND
(M0780_PR_ORAL_MEDS = 01,02 OR M0790_PR_INHAL_MEDS = 01,02 OR
M0800_PR_INJECT_MEDS = 01,02)) OR
(no inpatient facility discharge AND no medical regimen change AND
(M0780_CUR_ORAL_MEDS = 01,02 OR M0790_CUR_INHAL_MEDS = 01,02 OR
M0800_CUR_INJECT_MEDS = 01,02));
0 OTHERWISE.

*Chronic pain (%)

1 IF ((inpatient facility discharge OR medical regimen change) AND
(M0430_INTRACT_PAIN = 1 AND M0220_PRIOR_INTRACT_PAIN = 1), OR
(no inpatient facility discharge AND no medical regimen change AND
M0430_INTRACT_PAIN = 1);
0 OTHERWISE.

CASE MIX TRANSFORMATION DOCUMENTATION

*Cognitive/mental/behavioral (%)

1 IF ((inpatient facility discharge OR medical regimen change) AND
(M0220_PRIOR_IMPR_DECSN = 1 OR M0220_PRIOR_DISRUPTIVE = 1 OR
M0220_PRIOR_MEM_LOSS = 1 OR M0610_BD_MEM_DEFICIT = 1 OR
M0610_BD_IMP_DECISN = 1 OR M0610_BD_VERBAL = 1 OR M0610_BD_PHYSICAL = 1
OR M0610_BD_SOC_INAPPRO = 1 OR M0610_BD_DELUSIONS = 1)) OR
((no inpatient facility discharge AND no medical regimen change) AND
(M0610_BD_MEM_DEFICIT = 1 OR M0610_BD_IMP_DECISN = 1 OR
M0610_BD_VERBAL = 1 OR M0610_BD_PHYSICAL = 1 OR
M0610_BD_SOC_INAPPRO = 1 OR M0610_BD_DELUSIONS = 1));
0 OTHERWISE.

*Chronic pt. with caregiver (%)

1 IF M0350_AP_HM_RESIDENT = 1 AND
Any of the other eight chronic conditions have values of 1;
0 OTHERWISE.

Diagnoses for Which Patients are Receiving Home Care

This series of data items is based on the six OASIS 'home care diagnosis' data items and their corresponding severity ratings. Note that the values and ranges of ICD-9 codes listed below are inclusive of 4 OR 5 digit codes beginning with the specified three digits. The data items are as follows:

| <u>Home Care Diagnosis Code</u> | <u>Corresponding Severity Rating</u> |
|---------------------------------|--------------------------------------|
| M0230_PRIMARY_DIAG_ICD..... | M0230_PRIMARY_DIAG_SEVERITY |
| M0240_OTH_DIAG1_ICD..... | M0240_OTH_DIAG1_SEVERITY |
| M0240_OTH_DIAG2_ICD..... | M0240_OTH_DIAG2_SEVERITY |
| M0240_OTH_DIAG3_ICD..... | M0240_OTH_DIAG3_SEVERITY |
| M0240_OTH_DIAG4_ICD..... | M0240_OTH_DIAG4_SEVERITY |
| M0240_OTH_DIAG5_ICD..... | M0240_OTH_DIAG5_SEVERITY |

Infectious/parasitic diseases (%)

1 IF any home care diagnosis code is in range 001-139 AND
the corresponding severity rating is >=1;
0 OTHERWISE.

Neoplasms (%)

1 IF any home care diagnosis code is in range 140-239 AND
the corresponding severity rating is >=1;
0 OTHERWISE.

Endocrine/nutrit./metabolic (%)

1 IF any home care diagnosis code is in range 240-279 AND
the corresponding severity rating is >=1;
0 OTHERWISE.

Blood diseases (%)

1 IF any home care diagnosis code is in range 280-289 AND
the corresponding severity rating is >=1;
0 OTHERWISE.

CASE MIX TRANSFORMATION DOCUMENTATION

Mental diseases (%)

1 IF any home care diagnosis code is in range 290-319 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Nervous system diseases (%)

1 IF any home care diagnosis code is in range 320-389 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Circulatory system diseases (%)

1 IF any home care diagnosis code is in range 390-459 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Respiratory system diseases (%)

1 IF any home care diagnosis code is in range 460-519 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Digestive system diseases (%)

1 IF any home care diagnosis code is in range 520-579 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Genitourinary sys. diseases (%)

1 IF any home care diagnosis code is in range 580-629 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Pregnancy problems (%)

1 IF any home care diagnosis code is in range 630-676 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Skin/subcutaneous diseases (%)

1 IF any home care diagnosis code is in range 680-709 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Musculoskeletal sys. diseases (%)

1 IF any home care diagnosis code is in range 710-739 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Congenital anomalies (%)

1 IF any home care diagnosis code is in range 740-759 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

CASE MIX TRANSFORMATION DOCUMENTATION

Ill-defined conditions (%)

1 IF any home care diagnosis code is in range 780-799 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Fractures (%)

1 IF any home care diagnosis code is in range 800-848 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Intracranial injury (%)

1 IF any home care diagnosis code is in range 850-854 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Other injury (%)

1 IF any home care diagnosis code is in range 860-959 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Iatrogenic conditions (%)

1 IF any home care diagnosis code is in range 960-999 AND
the corresponding severity rating is ≥ 1 ;

0 OTHERWISE.

Length of Stay

***LOS until discharge (avg. in days)**

For episodes beginning with SOC assessment:

$(M0906_DC_TRAN_DTH_DT[2] - M0030_START_CARE_DT) + 1$

For episodes beginning with ROC assessment:

$(M0906_DC_TRAN_DTH_DT[2] - M0032_ROC_DT) + 1$

LOS from 1 to 31 days (%)

1 IF LOS until discharge ≤ 31 ;

0 OTHERWISE.

LOS from 32 to 62 days (%)

1 IF LOS until discharge ≥ 32 AND ≤ 62 ;

0 OTHERWISE.

LOS from 63 to 124 days (%)

1 IF LOS until discharge ≥ 63 AND ≤ 124 ;

0 OTHERWISE.

LOS more than 124 days (%)

1 IF LOS until discharge > 124 ;

0 OTHERWISE.

RISK FACTOR TRANSFORMATION DOCUMENTATION

Risk Factors

There are 143 measures used as potential risk factors in the risk adjustment process. Among these, 66 are defined identically to measures that appear in the Case Mix Profile. Therefore, they are described below by reference to the Case Mix Transformation Documentation in the preceding section of this document. These are designated by a "Yes" in the rightmost column of the table below. A further 36 measures used as risk factors are based on case mix measures, with modifications for purposes of risk adjustment. These are designated by a "No*" in the final column of the table. The remaining risk factor measures do not appear in any form on the Case Mix Profile. Throughout the remainder of this document, risk factor measures are referred to by the names indicated in the second column of the table below. The descriptive names appearing in the leftmost column are included for cross-reference with *Documentation of Prediction Models Used for Risk Adjustment of Home Health Agency Outcome Reports*, available at <http://www.cms.hhs.gov/oasis/riskadj1appa.pdf>.

| Risk Factor Description | Data Item Name | Same as Case Mix Measure |
|--|-----------------------|---------------------------------|
| Acute condition: orthopedic (0-1) | ACUTE_1 | Yes |
| Acute condition: urinary incontinence/catheter (0-1) | ACUTE_10 | Yes |
| Acute condition: mental/emotional (0-1) | ACUTE_11 | Yes |
| Acute condition: oxygen therapy (0-1) | ACUTE_12 | Yes |
| Acute condition: IV/Infusion therapy (0-1) | ACUTE_13 | Yes |
| Acute condition: enteral/parenteral nutrition (0-1) | ACUTE_14 | Yes |
| Acute condition: ventilator (0-1) | ACUTE_15 | Yes |
| Acute condition: other # | ACUTE_16 # | No |
| Acute condition: neurologic (0-1) | ACUTE_2 | Yes |
| Acute condition: open wound/lesion (0-1) | ACUTE_3 | Yes |
| Acute condition: terminal (0-1) | ACUTE_4 | Yes |
| Acute condition: cardiac/peripheral vascular (0-1) | ACUTE_5 | Yes |
| Acute condition: pulmonary (0-1) | ACUTE_6 | Yes |
| Acute condition: diabetes mellitus (0-1) | ACUTE_7 | Yes |
| Acute condition: gastrointestinal disorder (0-1) | ACUTE_8 | Yes |
| Acute condition: contagious/communicable disease (0-1) | ACUTE_9 | Yes |
| Age (in years) | AGE | Yes |
| Disability in ambulation (0-5) | AMBULATION | Yes |
| Anxiety level (0-3) | ANXIETYLEVEL | No |
| Diagnosis: infectious/parasitic disease (0-1) | ANYDIAG_1 | No* |
| Diagnosis: genitourinary system diseases (0-1) | ANYDIAG_10 | No* |
| Diagnosis: pregnancy problems (0-1) | ANYDIAG_11 | No* |
| Diagnosis: skin/subcutaneous diseases (0-1) | ANYDIAG_12 | No* |
| Diagnosis: musculoskeletal system diseases (0-1) | ANYDIAG_13 | No* |
| Diagnosis: congenital anomalies (0-1) | ANYDIAG_14 | No* |
| Diagnosis: ill-defined conditions (0-1) | ANYDIAG_15 | No* |
| Diagnosis: fractures (0-1) | ANYDIAG_16 | No* |
| Diagnosis: intracranial injury (0-1) | ANYDIAG_17 | No* |
| Diagnosis: other injury (0-1) | ANYDIAG_18 | No* |
| Diagnosis: neoplasms (0-1) | ANYDIAG_2 | No* |
| Diagnosis: endocrine/nutritional/metabolic (0-1) | ANYDIAG_3 | No* |
| Diagnosis: blood diseases (0-1) | ANYDIAG_4 | No* |
| Diagnosis: mental disease (0-1) | ANYDIAG_5 | No* |

RISK FACTOR TRANSFORMATION DOCUMENTATION

| Risk Factor Description | Data Item Name | Same as Case Mix Measure |
|---|-----------------------|---------------------------------|
| Diagnosis: nervous system disorder (0-1) | ANYDIAG_6 | No* |
| Diagnosis: circulatory system diseases (0-1) | ANYDIAG_7 | No* |
| Diagnosis: respiratory system diseases (0-1) | ANYDIAG_8 | No* |
| Diagnosis: digestive system diseases (0-1) | ANYDIAG_9 | No* |
| Primary caregiver present (0-1) | ANYPRIMARY | No |
| Total number of acute conditions reported (0-16) | AQUIGN | No |
| Disability in bathing (0-5) | BATHING | Yes |
| Demonstrated behavior: memory deficit (0-1) | BEHAVE_1 | No |
| Demonstrated behavior: impaired decision-making (0-1) | BEHAVE_2 | No |
| Demonstrated behavior: verbal disruption (0-1) | BEHAVE_3 | No |
| Demonstrated behavior: disruptive, infant, socially inappr. (0-1) | BEHAVE_4 | No |
| Bowel incontinence frequency (0-5) | BOWEL_OUT | No* |
| ADL assistance provided by caregiver (0-1) | CAREGIVER_1 | No |
| IADL assistance provided by caregiver (0-1) | CAREGIVER_2 | No |
| Urinary catheter (0-1) | CATHETER | Yes |
| Chronic condition: dependence in living skills (0-1) | CHRONIC_1 | Yes |
| Chronic condition: dependence in personal care (0-1) | CHRONIC_2 | Yes |
| Chronic condition: impaired ambulation/mobility (0-1) | CHRONIC_3 | Yes |
| Chronic condition: eating disability (0-1) | CHRONIC_4 | Yes |
| Chronic condition: urinary incontinence/catheter (0-1) | CHRONIC_5 | Yes |
| Chronic condition: dependence in medication admin. (0-1) | CHRONIC_6 | Yes |
| Chronic condition: chronic pain (0-1) | CHRONIC_7 | Yes |
| Chronic condition: cognitive/mental/behavioral problems (0-1) | CHRONIC_8 | Yes |
| Chronic condition: at least one, but caregiver present (0-1) | CHRONIC_9 | Yes |
| Disability in cognitive functioning (0-4) | COGNITIVEFUNC | No |
| Confusion scale (0-4) | CONFUSIONFREQ | No |
| Total number of chronic conditions reported (0-9) | CQUIGN | No |
| Depression scale (0-5) | DEPRESSION | No |
| Dyspnea (0-4) | DYSPNEA | Yes |
| Disability in eating (0-5) | EATING | Yes |
| Infrequency of caregiver assistance (1-7) | FREQASST | Yes |
| Gender: female (0-1) | GENDER | Yes |
| Disability in grooming (0-3) | GROOMING | Yes |
| Hearing impairment (0-4) | HEARING | Yes |
| Disability in housekeeping (0-4) | HOUSEKEEPING | Yes |
| Incontinent during day and night (0-1) | INCONT | Yes |
| Urinary incontinence severity 1 (0-4) | INCONTBASE | No |
| Presence of urinary incontinence (0-1) | INCONTCATH | No |
| Urinary incontinence severity 2 (0-4) | INCONTSEV | No |
| Inpatient discharge from hospital (0-1) | INPT_1 | Yes |
| Inpatient discharge from rehab. facility (0-1) | INPT_2 | Yes |
| Inpatient discharge from nursing home (0-1) | INPT_3 | Yes |
| Intractable pain (0-1) | INTPAIN | Yes |
| Disability in laundry (0-2) | LAUNDRY | Yes |
| Patient lives alone (0-1) | LIVE_1 | Yes |
| Patient lives with family member (0-1) | LIVE_2 | Yes |
| Length of stay: more than 124 days (0-1) | LOS_4MO | Yes |
| Length of stay: more than 31 days (0-1) | LOSGT31 | No* |

RISK FACTOR TRANSFORMATION DOCUMENTATION

| Risk Factor Description | Data Item Name | Same as Case Mix Measure |
|--|-----------------------|---------------------------------|
| Length of stay: more than 62 days (0-1) | LOSGT62 | No* |
| Disability in dressing lower body (0-3) | LOWERDRESS | Yes |
| Maximum severity rating among all diagnoses (0-4) | MAXIMUMSEV | No |
| Disability in light meal preparation (0-2) | MEALPREP | Yes |
| Medical regimen change in past 14 days (0-1) | MEDREG | Yes |
| Patient has unpaid live-in help (0-1) | NEWASSIST | No |
| Disability in mgt. of oral medications (0-2) | ORALMEDS | Yes |
| Bowel ostomy (0-1) | OSTOMY | No |
| Prior (2 weeks ago) disability in ambulation (0-5) | P_AMBULATION_OUT | No* |
| Prior (2 weeks ago) disability in bathing (0-5) | P_BATHING_OUT | No* |
| Prior (2 weeks ago) disability in eating (0-5) | P_EATING_OUT | No* |
| Prior (2 weeks ago) disability in grooming (0-3) | P_GROOMING_OUT | No* |
| Prior (2 weeks ago) disability in housekeeping (0-4) | P_HOUSEKEEPING_OUT | No* |
| Prior (2 weeks ago) disability in laundry (0-2) | P_LAUNDRY_OUT | No* |
| Prior (2 weeks ago) disability in dressing lower body (0-3) | P_LOWERDRESS_OUT | No* |
| Prior (2 weeks ago) disability in light meal preparation (0-2) | P_MEALPREP_OUT | No* |
| Prior (2 weeks ago) disability in mgt. of oral medications (0-2) | P_ORALMEDS_OUT | No* |
| Prior (2 weeks ago) disability in telephone use (0-5) | P_PHONEUSE_OUT | No* |
| Prior (2 weeks ago) disability in shopping (0-3) | P_SHOPPING_OUT | No* |
| Prior (2 weeks ago) disability in toileting (0-4) | P_TOILETING_OUT | No* |
| Prior (2 weeks ago) disability in transportation (0-2) | P_TRANSFERRING_OUT | No* |
| Prior (2 weeks ago) disability in transferring (0-5) | P_TRANSPORT_OUT | No* |
| Prior (2 weeks ago) disability in dressing upper body (0-3) | P_UPPERDRESS_OUT | No* |
| Pain interfering with activity (0-3) | PAIN | Yes |
| Medicare as a payment source (0-1) | PAY_1 | Yes |
| Disability in telephone use (0-5) | PHONEUSE | Yes |
| Stage 1-4 pressure ulcer(s) present (0-1) | PRESSURE | Yes |
| Status of most problematic pressure ulcer (0-3) | PRESSURESTATUS | No |
| Stage of most problematic pressure ulcer (0-4) | PRESSUREULCER | No |
| Urinary incontinence with past 2 weeks (0-1) | PRIOR_1 | No |
| Urinary catheter within past 2 weeks (0-1) | PRIOR_2 | No |
| Intractable pain within past 2 weeks (0-1) | PRIOR_3 | No |
| Impaired decision-making within past 2 weeks (0-1) | PRIOR_4 | No |
| Disruptive/socially inappropriate behavior, past 2 weeks (0-1) | PRIOR_5 | No |
| Memory loss requiring supervision within past 2 weeks (0-1) | PRIOR_6 | No |
| Behavior problem frequency (0-5) | PROBFREQ | No |
| Moderate functional status recovery prognosis (0-1) | PROG | Yes |
| Good functional status rehabilitation prognosis (0-1) | REHAB | Yes |
| Patient lives in own home (0-1) | RESIDE_1 | Yes |
| Heavy smoking at SOC (0-1) | RISK_1 | No |
| Obese at SOC (0-1) | RISK_2 | No |
| Alcoholism at SOC (0-1) | RISK_3 | No |
| Drug dependency at SOC (0-1) | RISK_4 | No |
| Intervening inpatient care (0-1) | ROCIND | No |
| Severity rating for primary diagnosis (0-4) | SEVERITY | No |
| Number of diagnoses with severity rating ≥ 2 (0-6) | SEVERITY2 | No |
| Disability in shopping (0-3) | SHOPPING | Yes |
| Speech/language impairment (0-5) | SPEECH | Yes |

RISK FACTOR TRANSFORMATION DOCUMENTATION

| Risk Factor Description | Data Item Name | Same as Case Mix Measure |
|---|----------------|--------------------------|
| Stasis ulcer(s) present (0-1) | STASIS | Yes |
| Status of most problematic stasis ulcer (0-3) | STASISSTATUS | No |
| Number of stasis ulcers present (0-4) | STASISULCER | No |
| Surgical wound(s) present (0-1) | SURGICAL | Yes |
| Status of surgical wound (0-3) | SURGICALSTATUS | No |
| Number of surgical wounds present (0-4) | SURGICALWOUND | No |
| Disability in toileting (0-4) | TOILETING | Yes |
| Disability in transferring (0-5) | TRANSFERRING | Yes |
| Disability in transportation (0-2) | TRANSPORT | Yes |
| Stage 2-4 pressure ulcer(s) present (0-1) | ULC_1 | Yes |
| Stage 3-4 pressure ulcer(s) present (0-1) | ULC_2 | Yes |
| Disability in dressing upper body (0-3) | UPPERDRESS | Yes |
| Urinary tract infection (0-1) | UTI_OUT | No* |
| Vision impairment (0-2) | VISION | Yes |
| <p># This item is not used as an individual risk factor, but is used to compute AQUIGN. * Indicates that these data items are very similar to and, indeed, based on the measure used for the Case Mix Profile.</p> | | |

Data Transformation Pseudo-Code

Anxiety Level

```

IF M0580_WHEN_ANXIOUS = 00
THEN
    ANXIETYLEVEL = 0
ELSE IF M0580_WHEN_ANXIOUS = 01
THEN
    ANXIETYLEVEL = 1
ELSE IF M0580_WHEN_ANXIOUS = 02
THEN
    ANXIETYLEVEL = 2
ELSE IF M0580_WHEN_ANXIOUS = 03
THEN
    ANXIETYLEVEL = 3
ELSE IF M0580_WHEN_ANXIOUS = NA
THEN
    ANXIETY = MISSING
ELSE
    ANXIETY = MISSING
    [SHOULD NEVER OCCUR]

```

RISK FACTOR TRANSFORMATION DOCUMENTATION

Diagnostic Groupings

The following range references apply for the ANYDIAG_1 through ANYDIAG_18 transformations.

| <u>ICD-9 Codes</u> | <u>Reference</u> |
|--------------------|------------------|
| 001-139 | RANGE1 |
| 140-239 | RANGE2 |
| 240-279 | RANGE3 |
| 280-289 | RANGE4 |
| 290-319 | RANGE5 |
| 320-389 | RANGE6 |
| 390-459 | RANGE7 |
| 460-519 | RANGE8 |
| 520-579 | RANGE9 |
| 580-629 | RANGE10 |
| 630-676 | RANGE11 |
| 680-709 | RANGE12 |
| 710-739 | RANGE13 |
| 740-759 | RANGE14 |
| 780-799 | RANGE15 |
| 800-848 | RANGE16 |
| 850-854 | RANGE17 |
| 860-959 | RANGE18 |

IF M0190_14_DAY_INP1_ICD IS IN RANGE1 OR M0190_14_DAY_INP2_ICD IS IN RANGE1 OR
M0210_CHGREG_ICD1 IS IN RANGE1 OR M0210_CHGREG_ICD2 IS IN RANGE1 OR
M0210_CHGREG_ICD3 IS IN RANGE1 OR M0210_CHGREG_ICD4 IS IN RANGE1 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE1 OR M0240_OTH_DIAG1_ICD IS IN RANGE1 OR
M0240_OTH_DIAG2_ICD IS IN RANGE1 OR M0240_OTH_DIAG3_ICD IS IN RANGE1 OR
M0240_OTH_DIAG4_ICD IS IN RANGE1 OR M0240_OTH_DIAG5_ICD IS IN RANGE1

THEN

ANYDIAG_1 = 1

ELSE

ANYDIAG_1 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE2 OR M0190_14_DAY_INP2_ICD IS IN RANGE2 OR
M0210_CHGREG_ICD1 IS IN RANGE2 OR M0210_CHGREG_ICD2 IS IN RANGE2 OR
M0210_CHGREG_ICD3 IS IN RANGE2 OR M0210_CHGREG_ICD4 IS IN RANGE2 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE2 OR M0240_OTH_DIAG1_ICD IS IN RANGE2 OR
M0240_OTH_DIAG2_ICD IS IN RANGE2 OR M0240_OTH_DIAG3_ICD IS IN RANGE2 OR
M0240_OTH_DIAG4_ICD IS IN RANGE2 OR M0240_OTH_DIAG5_ICD IS IN RANGE2

THEN

ANYDIAG_2 = 1

ELSE

ANYDIAG_2 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE3 OR M0190_14_DAY_INP2_ICD IS IN RANGE3 OR
M0210_CHGREG_ICD1 IS IN RANGE3 OR M0210_CHGREG_ICD2 IS IN RANGE3 OR
M0210_CHGREG_ICD3 IS IN RANGE3 OR M0210_CHGREG_ICD4 IS IN RANGE3 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE3 OR M0240_OTH_DIAG1_ICD IS IN RANGE3 OR
M0240_OTH_DIAG2_ICD IS IN RANGE3 OR M0240_OTH_DIAG3_ICD IS IN RANGE3 OR
M0240_OTH_DIAG4_ICD IS IN RANGE3 OR M0240_OTH_DIAG5_ICD IS IN RANGE3

THEN

ANYDIAG_3 = 1

ELSE

ANYDIAG_3 = 0

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF M0190_14_DAY_INP1_ICD IS IN RANGE4 OR M0190_14_DAY_INP2_ICD IS IN RANGE4 OR
M0210_CHGREG_ICD1 IS IN RANGE4 OR M0210_CHGREG_ICD2 IS IN RANGE4 OR
M0210_CHGREG_ICD3 IS IN RANGE4 OR M0210_CHGREG_ICD4 IS IN RANGE4 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE4 OR M0240_OTH_DIAG1_ICD IS IN RANGE4 OR
M0240_OTH_DIAG2_ICD IS IN RANGE4 OR M0240_OTH_DIAG3_ICD IS IN RANGE4 OR
M0240_OTH_DIAG4_ICD IS IN RANGE4 OR M0240_OTH_DIAG5_ICD IS IN RANGE4

THEN

ANYDIAG_4 = 1

ELSE

ANYDIAG_4 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE5 OR M0190_14_DAY_INP2_ICD IS IN RANGE5 OR
M0210_CHGREG_ICD1 IS IN RANGE5 OR M0210_CHGREG_ICD2 IS IN RANGE5 OR
M0210_CHGREG_ICD3 IS IN RANGE5 OR M0210_CHGREG_ICD4 IS IN RANGE5 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE5 OR M0240_OTH_DIAG1_ICD IS IN RANGE5 OR
M0240_OTH_DIAG2_ICD IS IN RANGE5 OR M0240_OTH_DIAG3_ICD IS IN RANGE5 OR
M0240_OTH_DIAG4_ICD IS IN RANGE5 OR M0240_OTH_DIAG5_ICD IS IN RANGE5

THEN

ANYDIAG_5 = 1

ELSE

ANYDIAG_5 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE6 OR M0190_14_DAY_INP2_ICD IS IN RANGE6 OR
M0210_CHGREG_ICD1 IS IN RANGE6 OR M0210_CHGREG_ICD2 IS IN RANGE6 OR
M0210_CHGREG_ICD3 IS IN RANGE6 OR M0210_CHGREG_ICD4 IS IN RANGE6 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE6 OR M0240_OTH_DIAG1_ICD IS IN RANGE6 OR
M0240_OTH_DIAG2_ICD IS IN RANGE6 OR M0240_OTH_DIAG3_ICD IS IN RANGE6 OR
M0240_OTH_DIAG4_ICD IS IN RANGE6 OR M0240_OTH_DIAG5_ICD IS IN RANGE6

THEN

ANYDIAG_6 = 1

ELSE

ANYDIAG_6 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE7 OR M0190_14_DAY_INP2_ICD IS IN RANGE7 OR
M0210_CHGREG_ICD1 IS IN RANGE7 OR M0210_CHGREG_ICD2 IS IN RANGE7 OR
M0210_CHGREG_ICD3 IS IN RANGE7 OR M0210_CHGREG_ICD4 IS IN RANGE7 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE7 OR M0240_OTH_DIAG1_ICD IS IN RANGE7 OR
M0240_OTH_DIAG2_ICD IS IN RANGE7 OR M0240_OTH_DIAG3_ICD IS IN RANGE7 OR
M0240_OTH_DIAG4_ICD IS IN RANGE7 OR M0240_OTH_DIAG5_ICD IS IN RANGE7

THEN

ANYDIAG_7 = 1

ELSE

ANYDIAG_7 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE8 OR M0190_14_DAY_INP2_ICD IS IN RANGE8 OR
M0210_CHGREG_ICD1 IS IN RANGE8 OR M0210_CHGREG_ICD2 IS IN RANGE8 OR
M0210_CHGREG_ICD3 IS IN RANGE8 OR M0210_CHGREG_ICD4 IS IN RANGE8 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE8 OR M0240_OTH_DIAG1_ICD IS IN RANGE8 OR
M0240_OTH_DIAG2_ICD IS IN RANGE8 OR M0240_OTH_DIAG3_ICD IS IN RANGE8 OR
M0240_OTH_DIAG4_ICD IS IN RANGE8 OR M0240_OTH_DIAG5_ICD IS IN RANGE8

THEN

ANYDIAG_8 = 1

RISK FACTOR TRANSFORMATION DOCUMENTATION

ELSE

ANYDIAG_8 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE9 OR M0190_14_DAY_INP2_ICD IS IN RANGE9 OR
M0210_CHGREG_ICD1 IS IN RANGE9 OR M0210_CHGREG_ICD2 IS IN RANGE9 OR
M0210_CHGREG_ICD3 IS IN RANGE9 OR M0210_CHGREG_ICD4 IS IN RANGE9 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE9 OR M0240_OTH_DIAG1_ICD IS IN RANGE9 OR
M0240_OTH_DIAG2_ICD IS IN RANGE9 OR M0240_OTH_DIAG3_ICD IS IN RANGE9 OR
M0240_OTH_DIAG4_ICD IS IN RANGE9 OR M0240_OTH_DIAG5_ICD IS IN RANGE9

THEN

ANYDIAG_9 = 1

ELSE

ANYDIAG_9 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE10 OR M0190_14_DAY_INP2_ICD IS IN RANGE10 OR
M0210_CHGREG_ICD1 IS IN RANGE10 OR M0210_CHGREG_ICD2 IS IN RANGE10 OR
M0210_CHGREG_ICD3 IS IN RANGE10 OR M0210_CHGREG_ICD4 IS IN RANGE10 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE10 OR M0240_OTH_DIAG1_ICD IS IN RANGE10 OR
M0240_OTH_DIAG2_ICD IS IN RANGE10 OR M0240_OTH_DIAG3_ICD IS IN RANGE10 OR
M0240_OTH_DIAG4_ICD IS IN RANGE10 OR M0240_OTH_DIAG5_ICD IS IN RANGE10

THEN

ANYDIAG_10 = 1

ELSE

ANYDIAG_10 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE11 OR M0190_14_DAY_INP2_ICD IS IN RANGE11 OR
M0210_CHGREG_ICD1 IS IN RANGE11 OR M0210_CHGREG_ICD2 IS IN RANGE11 OR
M0210_CHGREG_ICD3 IS IN RANGE11 OR M0210_CHGREG_ICD4 IS IN RANGE11 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE11 OR M0240_OTH_DIAG1_ICD IS IN RANGE11 OR
M0240_OTH_DIAG2_ICD IS IN RANGE11 OR M0240_OTH_DIAG3_ICD IS IN RANGE11 OR
M0240_OTH_DIAG4_ICD IS IN RANGE11 OR M0240_OTH_DIAG5_ICD IS IN RANGE11

THEN

ANYDIAG_11 = 1

ELSE

ANYDIAG_11 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE12 OR M0190_14_DAY_INP2_ICD IS IN RANGE12 OR
M0210_CHGREG_ICD1 IS IN RANGE12 OR M0210_CHGREG_ICD2 IS IN RANGE12 OR
M0210_CHGREG_ICD3 IS IN RANGE12 OR M0210_CHGREG_ICD4 IS IN RANGE12 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE12 OR M0240_OTH_DIAG1_ICD IS IN RANGE12 OR
M0240_OTH_DIAG2_ICD IS IN RANGE12 OR M0240_OTH_DIAG3_ICD IS IN RANGE12 OR
M0240_OTH_DIAG4_ICD IS IN RANGE12 OR M0240_OTH_DIAG5_ICD IS IN RANGE12

THEN

ANYDIAG_12 = 1

ELSE

ANYDIAG_12 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE13 OR M0190_14_DAY_INP2_ICD IS IN RANGE13 OR
M0210_CHGREG_ICD1 IS IN RANGE13 OR M0210_CHGREG_ICD2 IS IN RANGE13 OR
M0210_CHGREG_ICD3 IS IN RANGE13 OR M0210_CHGREG_ICD4 IS IN RANGE13 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE13 OR M0240_OTH_DIAG1_ICD IS IN RANGE13 OR
M0240_OTH_DIAG2_ICD IS IN RANGE13 OR M0240_OTH_DIAG3_ICD IS IN RANGE13 OR
M0240_OTH_DIAG4_ICD IS IN RANGE13 OR M0240_OTH_DIAG5_ICD IS IN RANGE13

RISK FACTOR TRANSFORMATION DOCUMENTATION

THEN

ANYDIAG_13 = 1

ELSE

ANYDIAG_13 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE14 OR M0190_14_DAY_INP2_ICD IS IN RANGE14 OR
M0210_CHGREG_ICD1 IS IN RANGE14 OR M0210_CHGREG_ICD2 IS IN RANGE14 OR
M0210_CHGREG_ICD3 IS IN RANGE14 OR M0210_CHGREG_ICD4 IS IN RANGE14 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE14 OR M0240_OTH_DIAG1_ICD IS IN RANGE14 OR
M0240_OTH_DIAG2_ICD IS IN RANGE14 OR M0240_OTH_DIAG3_ICD IS IN RANGE14 OR
M0240_OTH_DIAG4_ICD IS IN RANGE14 OR M0240_OTH_DIAG5_ICD IS IN RANGE14

THEN

ANYDIAG_14 = 1

ELSE

ANYDIAG_14 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE15 OR M0190_14_DAY_INP2_ICD IS IN RANGE15 OR
M0210_CHGREG_ICD1 IS IN RANGE15 OR M0210_CHGREG_ICD2 IS IN RANGE15 OR
M0210_CHGREG_ICD3 IS IN RANGE15 OR M0210_CHGREG_ICD4 IS IN RANGE15 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE15 OR M0240_OTH_DIAG1_ICD IS IN RANGE15 OR
M0240_OTH_DIAG2_ICD IS IN RANGE15 OR M0240_OTH_DIAG3_ICD IS IN RANGE15 OR
M0240_OTH_DIAG4_ICD IS IN RANGE15 OR M0240_OTH_DIAG5_ICD IS IN RANGE15

THEN

ANYDIAG_15 = 1

ELSE

ANYDIAG_15 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE16 OR M0190_14_DAY_INP2_ICD IS IN RANGE16 OR
M0210_CHGREG_ICD1 IS IN RANGE16 OR M0210_CHGREG_ICD2 IS IN RANGE16 OR
M0210_CHGREG_ICD3 IS IN RANGE16 OR M0210_CHGREG_ICD4 IS IN RANGE16 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE16 OR M0240_OTH_DIAG1_ICD IS IN RANGE16 OR
M0240_OTH_DIAG2_ICD IS IN RANGE16 OR M0240_OTH_DIAG3_ICD IS IN RANGE16 OR
M0240_OTH_DIAG4_ICD IS IN RANGE16 OR M0240_OTH_DIAG5_ICD IS IN RANGE16

THEN

ANYDIAG_16 = 1

ELSE

ANYDIAG_16 = 0

IF M0190_14_DAY_INP1_ICD IS IN RANGE17 OR M0190_14_DAY_INP2_ICD IS IN RANGE17 OR
M0210_CHGREG_ICD1 IS IN RANGE17 OR M0210_CHGREG_ICD2 IS IN RANGE17 OR
M0210_CHGREG_ICD3 IS IN RANGE17 OR M0210_CHGREG_ICD4 IS IN RANGE17 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE17 OR M0240_OTH_DIAG1_ICD IS IN RANGE17 OR
M0240_OTH_DIAG2_ICD IS IN RANGE17 OR M0240_OTH_DIAG3_ICD IS IN RANGE17 OR
M0240_OTH_DIAG4_ICD IS IN RANGE17 OR M0240_OTH_DIAG5_ICD IS IN RANGE17

THEN

ANYDIAG_17 = 1

ELSE

ANYDIAG_17 = 0

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF M0190_14_DAY_INP1_ICD IS IN RANGE18 OR M0190_14_DAY_INP2_ICD IS IN RANGE18 OR
M0210_CHGREG_ICD1 IS IN RANGE18 OR M0210_CHGREG_ICD2 IS IN RANGE18 OR
M0210_CHGREG_ICD3 IS IN RANGE18 OR M0210_CHGREG_ICD4 IS IN RANGE18 OR
M0230_PRIMARY_DIAG_ICD IS IN RANGE18 OR M0240_OTH_DIAG1_ICD IS IN RANGE18 OR
M0240_OTH_DIAG2_ICD IS IN RANGE18 OR M0240_OTH_DIAG3_ICD IS IN RANGE18 OR
M0240_OTH_DIAG4_ICD IS IN RANGE18 OR M0240_OTH_DIAG5_ICD IS IN RANGE18

THEN

ANYDIAG_18 = 1

ELSE

ANYDIAG_18 = 0

NOTE: For diagnoses, INVALID means that the format of the diagnosis code does not meet the following criteria:

- Character 1 must be a space.
- Character 2 must be a 0 (zero) thru 9.
- Characters 3 thru 4 must be 0 (zero) thru 9.
- Character 5 must be a decimal point.
- Characters 6 and 7 must be 0 (zero) thru 9 or space.
- If character 6 is a space, then character 7 must be a space.

IF (M0230_PRIMARY_DIAG_ICD = BLANK, INVALID) OR (M0240_OTH_DIAG1_ICD = INVALID) OR
(M0240_OTH_DIAG2_ICD = INVALID) OR (M0240_OTH_DIAG3_ICD = INVALID) OR
(M0240_OTH_DIAG4_ICD = INVALID) OR (M0240_OTH_DIAG5_ICD = INVALID)

THEN

ANYDIAG_1 = MISSING

ANYDIAG_2 = MISSING

ANYDIAG_3 = MISSING

ANYDIAG_4 = MISSING

ANYDIAG_5 = MISSING

ANYDIAG_6 = MISSING

ANYDIAG_7 = MISSING

ANYDIAG_8 = MISSING

ANYDIAG_9 = MISSING

ANYDIAG_10 = MISSING

ANYDIAG_11 = MISSING

ANYDIAG_12 = MISSING

ANYDIAG_13 = MISSING

ANYDIAG_14 = MISSING

ANYDIAG_15 = MISSING

ANYDIAG_16 = MISSING

ANYDIAG_17 = MISSING

ANYDIAG_18 = MISSING

[SHOULD NEVER OCCUR]

IF M0350_AP_NONE = 1

THEN

ANYPRIMARY = 0

ELSE IF M0360_PRIMARY_CAREGIVER = 00

THEN

ANYPRIMARY = 0

ELSE IF M0360_PRIMARY_CAREGIVER = 01, 02, 03, 04, 05

THEN

ANYPRIMARY = 1

RISK FACTOR TRANSFORMATION DOCUMENTATION

ELSE IF M0360_PRIMARY_CAREGIVER = UK
THEN

ANYPRIMARY = MISSING

ELSE IF M0350_AP_UNKNOWN = 1

THEN

ANYPRIMARY = MISSING

ELSE

ANYPRIMARY = MISSING

[SHOULD NEVER OCCUR]

Acute Condition: Other (ACUTE_16)

The following references apply for the ACUTE_16 transformation.

| <u>Data Item</u> | <u>Reference</u> |
|---|------------------|
| M0170_DC_HOSP_14_DAYS OR M0175_DC_HOSP_14_DAYS | DISCHARGE1 |
| M0170_DC_REHAB_14_DAYS OR M0175_DC_REHAB_14_DAYS | DISCHARGE2 |
| M0170_DC_NURS_HOME_14_DAYS OR M0175_DC_SNF_14_DAYS OR M0175_DC_NH_14_DAYS | DISCHARGE3 |
| M0190_14_DAY_INP1_ICD..... | DISICD1 |
| M0190_14_DAY_INP2_ICD..... | DISICD2 |
| M0200_REG_CHG_14_DAYS..... | REGIMEN |
| M0210_CHGREG_ICD1 | REGICD1 |
| M0210_CHGREG_ICD2 | REGICD2 |
| M0210_CHGREG_ICD3 | REGICD3 |
| M0210_CHGREG_ICD4 | REGICD4 |

| <u>ICD-9 Codes</u> | <u>Reference</u> |
|---|------------------|
| 170-171, 213, 274, 710-739, 781, 800-848, 885-887, 895-897, 905, 927-928..... | GROUP1 |
| 045-049, 191-192, 225, 320-326, 330-337, 340-359, 430-438, 850-854, 907, 950-957 | GROUP2 |
| 707, 870-884, 890-894, 940-949..... | GROUP3 |
| 391, 393-398, 401-405, 410-417, 420-429, 440-448, 451-455, 456-459, 785..... | GROUP4 |
| 011-012, 160-165, 197, 212, 231, 460-466, 470-478, 480-487, 490-496, 500-508, 510-519, 786, 860-862 | GROUP5 |
| 001-009, 127, 129, 150-154, 156, 159, 211, 230, 530-537, 550-553, 555-558, 560-579, 787, 863..... | GROUP6 |
| 001-018, 020-027, 030-037, 039-057, 060- 066, 070-088, 090-104, 110-118, 120-136 | GROUP7 |
| 290-319, 797 | GROUP8 |
| 250..... | GROUP9 |

RISK FACTOR TRANSFORMATION DOCUMENTATION

NOTE: For diagnoses, INVALID means that the format of the diagnosis code does not meet the following criteria:

- Character 1 must be a space.
- Character 2 must be a 0 (zero) thru 9.
- Characters 3 thru 4 must be 0 (zero) thru 9.
- Character 5 must be a decimal point.
- Characters 6 and 7 must be 0 (zero) thru 9 or space.
- If character 6 is a space, then character 7 must be a space.

IF (DISCHARGE1 NOT = 0,1 OR DISCHARGE2 NOT = 0,1 OR DISCHARGE3 NOT = 0,1) OR
((DISCHARGE1 = 1 OR DISCHARGE2 = 1 OR DISCHARGE3 =1) AND
DISICD1 = BLANK, INVALID AND DISICD2 = BLANK, INVALID) OR
(REGIMEN NOT = 0,1 OR (REGIMEN = 1 AND
REGICD1 = BLANK, INVALID AND REGICD2 = BLANK, INVALID AND
REGICD3 = BLANK, INVALID AND REGICD4 = BLANK, INVALID))

THEN

ACUTE_16 = MISSING **{[SHOULD NEVER OCCUR]}**

ELSE

IF ((DISCHARGE1 = 1 OR DISCHARGE2 = 1 OR DISCHARGE3 = 1) AND
(DISICD1 **NOT IN** GROUP1, GROUP2, GROUP3, GROUP4, GROUP5, GROUP6,
GROUP7, GROUP8, GROUP9 AND
DISICD2 **NOT IN** GROUP1, GROUP2, GROUP3, GROUP4, GROUP5, GROUP6, GROUP7,
GROUP8, GROUP9)) OR
((REGIMEN = 1) AND
(REGICD1 **NOT IN** GROUP1, GROUP2, GROUP3, GROUP4, GROUP5, GROUP6,
GROUP7, GROUP8, GROUP9 AND
REGICD2 **NOT IN** GROUP1, GROUP2, GROUP3, GROUP4, GROUP5, GROUP6,
GROUP7, GROUP8, GROUP9 AND
REGICD3 **NOT IN** GROUP1, GROUP2, GROUP3, GROUP4, GROUP5, GROUP6,
GROUP7, GROUP8, GROUP9 AND
REGICD4 **NOT IN** GROUP1, GROUP2, GROUP3, GROUP4, GROUP5, GROUP6,
GROUP7, GROUP8, GROUP9))

THEN

ACUTE_16 = 1

ELSE

ACUTE_16 = 0

IF ACUTE_1 = 0, 1 AND ACUTE_2 = 0, 1 AND ACUTE_3 = 0, 1 AND
ACUTE_4 = 0, 1 AND ACUTE_5 = 0, 1 AND ACUTE_6 = 0, 1 AND ACUTE_7 = 0, 1 AND
ACUTE_8 = 0, 1 AND ACUTE_9 = 0, 1 AND ACUTE_10 = 0, 1 AND ACUTE_11 = 0, 1 AND
ACUTE_12 = 0, 1 AND ACUTE_13 = 0, 1 AND ACUTE_14 = 0, 1 AND ACUTE_15 = 0, 1
AND ACUTE_16 = 0, 1

THEN

AQUIGN = ACUTE_1 + ACUTE_2 + ACUTE_3 + ACUTE_4 + ACUTE_5 + ACUTE_6 +
ACUTE_7 + ACUTE_8 + ACUTE_9 + ACUTE_10 + ACUTE_11 + ACUTE_12 +
ACUTE_13 + ACUTE_14 + ACUTE_15 + ACUTE_16

ELSE

AQUIGN = MISSING **{[SHOULD NEVER OCCUR]}**

RISK FACTOR TRANSFORMATION DOCUMENTATION

Demonstrated Behavior

```
IF ((M0610_BD_MEM_DEFICIT = 0 AND M0610_BD_IMP_DECISN = 0 AND
M0610_BD_VERBAL = 0 AND M0610_BD_PHYSICAL = 0 AND
M0610_BD_SOC_INAPPRO = 0 AND M0610_BD_DELUSIONS = 0 AND
M0610_BD_NONE = 0) OR (M0610_BD_NONE = 1 AND
(M0610_BD_MEM_DEFICIT = 1 OR M0610_BD_IMP_DECISN = 1 OR
M0610_BD_VERBAL = 1 OR M0610_BD_PHYSICAL = 1 OR
M0610_BD_SOC_INAPPRO = 1 OR M0610_BD_DELUSIONS = 1))) OR
M0610_BD_MEM_DEFICIT NOT = 0, 1 OR M0610_BD_IMP_DECISN NOT = 0, 1 OR
M0610_BD_VERBAL NOT = 0, 1 OR M0610_BD_SOC_INAPPRO NOT = 0, 1
THEN
  BEHAVE_1 = MISSING
  BEHAVE_2 = MISSING
  BEHAVE_3 = MISSING
  BEHAVE_4 = MISSING
ELSE
  IF M0610_BD_MEM_DEFICIT = 1
  THEN
    BEHAVE_1 = 1
  ELSE IF M0610_BD_MEM_DEFICIT = 0
  THEN
    BEHAVE_1 = 0

  IF M0610_BD_IMP_DECISN = 1
  THEN
    BEHAVE_2 = 1
  ELSE IF M0610_BD_IMP_DECISN = 0
  THEN
    BEHAVE_2 = 0

  IF M0610_BD_VERBAL = 1
  THEN
    BEHAVE_3 = 1
  ELSE IF M0610_BD_VERBAL = 0
  THEN
    BEHAVE_3 = 0

  IF M0610_BD_SOC_INAPPRO = 1
  THEN
    BEHAVE_4 = 1
  ELSE IF M0610_BD_SOC_INAPPRO = 0
  THEN
    BEHAVE_4 = 0
```

[SHOULD NEVER OCCUR]

Bowel Incontinence Frequency

```
IF M0540_BWL_INCONT = 00,NA
THEN
  BOWEL_OUT = 0
ELSE IF M0540_BWL_INCONT = 01
THEN
  BOWEL_OUT = 1
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

```
ELSE IF M0540_BWL_INCONT = 02
THEN
    BOWEL_OUT = 2
ELSE IF M0540_BWL_INCONT = 03
THEN
    BOWEL_OUT = 3
ELSE IF M0540_BWL_INCONT = 04
THEN
    BOWEL_OUT = 4
ELSE IF M0540_BWL_INCONT = 05
THEN
    BOWEL_OUT = 5
ELSE IF M0540_BWL_INCONT = UK
THEN
    BOWEL_OUT = MISSING
ELSE
    BOWEL_OUT = MISSING                '[SHOULD NEVER OCCUR]
```

ADL/IADL assistance provided by caregiver

```
IF (M0360_PRIMARY_CAREGIVER NOT = 00, UK) AND
(M0350_AP_NONE NOT = 1 AND M0350_AP_UNKNOWN NOT = 1) AND
(M0380_CA_ADL NOT = 0,1 OR M0380_CA_IADL NOT = 0,1) OR
((M0360_PRIMARY_CAREGIVER NOT = 00, UK) AND
(M0350_AP_NONE NOT = 1 AND M0350_AP_UNKNOWN NOT = 1) AND
(M0380_CA_ADL = 0 AND M0380_CA_IADL = 0 AND M0380_CA_ENVIRONMENT = 0 AND
M0380_CA_PSYCHSOC = 0 AND M0380_CA_MEDICAL = 0 AND M0380_CA_FIN_LEGAL = 0
AND M0380_CA_HLTH_CARE = 0 AND M0380_CA_UNKNOWN = 0)) OR
((M0360_PRIMARY_CAREGIVER NOT = 00, UK) AND
(M0350_AP_NONE NOT = 1 AND M0350_AP_UNKNOWN NOT = 1) AND
(M0380_CA_UNKNOWN = 1 AND (M0380_CA_ADL = 1 OR
M0380_CA_IADL = 1 OR M0380_CA_ENVIRONMENT = 1 OR
M0380_CA_PSYCHSOC = 1 OR M0380_CA_MEDICAL = 1 OR
M0380_CA_FIN_LEGAL = 1 OR M0380_CA_HLTH_CARE = 1)))) OR
((M0360_PRIMARY_CAREGIVER = 00, UK OR
M0350_AP_NONE = 1 OR M0350_AP_UNKNOWN = 1) AND
(M0380_CA_IADL = 0, 1 OR M0380_CA_IADL = 0, 1 OR
M0380_CA_ENVIRONMENT = 0, 1 OR M0380_CA_PSYCHSOC = 0, 1 OR
M0380_CA_MEDICAL = 0, 1 OR M0380_CA_FIN_LEGAL = 0, 1 OR
M0380_CA_HLTH_CARE = 0, 1 OR M0380_CA_UNKNOWN = 0, 1))
THEN
CAREGIVER_1 = MISSING
CAREGIVER_2 = MISSING                '[SHOULD NEVER OCCUR]
ELSE IF M0380_CA_UNKNOWN = 1 OR M0350_AP_UNKNOWN = 1 OR
M0360_PRIMARY_CAREGIVER = UK
THEN
    CAREGIVER_1 = MISSING
    CAREGIVER_2 = MISSING
ELSE
    IF M0380_CA_ADL = 1
    THEN
        CAREGIVER_1 = 1
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

```
ELSE IF M0380_CA_ADL = 0 OR
      (M0360_PRIMARY_CAREGIVER = 00 OR M0350_AP_NONE = 1)
THEN
      CAREGIVER_1 = 0
```

```
IF M0380_CA_IADL = 1
THEN
      CAREGIVER_2 = 1
ELSE IF M0380_CA_IADL = 0 OR
      (M0360_PRIMARY_CAREGIVER = 00 OR M0350_AP_NONE = 1)
THEN
      CAREGIVER_2 = 0
```

Disability in Cognitive Functioning

```
IF M0560_COG_FUNCTION = 00
THEN
      COGNITIVEFUNC = 0
ELSE IF M0560_COG_FUNCTION = 01
THEN
      COGNITIVEFUNC = 1
ELSE IF M0560_COG_FUNCTION = 02
THEN
      COGNITIVEFUNC = 2
ELSE IF M0560_COG_FUNCTION = 03
THEN
      COGNITIVEFUNC = 3
ELSE IF M0560_COG_FUNCTION = 04
THEN
      COGNITIVEFUNC = 4
ELSE COGNITIVEFUNC = MISSING           '[SHOULD NEVER OCCUR]'
```

Confusion Scale

```
IF M0570_WHEN_CONFUSED = 00
THEN
      CONFUSIONFREQ = 0
ELSE IF M0570_WHEN_CONFUSED = 01
THEN
      CONFUSIONFREQ = 1
ELSE IF M0570_WHEN_CONFUSED = 02
THEN
      CONFUSIONFREQ = 2
ELSE IF M0570_WHEN_CONFUSED = 03
THEN
      CONFUSIONFREQ = 3
ELSE IF M0570_WHEN_CONFUSED = 04, NA
THEN
      CONFUSIONFREQ = 4
ELSE
      CONFUSIONFREQ = MISSING           '[SHOULD NEVER OCCUR]'
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

Total Number of Chronic Conditions Reported

IF CHRONIC_1 = 0, 1 AND CHRONIC_2 = 0, 1 AND CHRONIC_3 = 0, 1 AND CHRONIC_4 = 0, 1 AND
CHRONIC_5 = 0, 1 AND CHRONIC_6 = 0, 1 AND CHRONIC_7 = 0, 1 AND CHRONIC_8 = 0, 1

THEN

CQUIGN = CHRONIC_1 + CHRONIC_2 + CHRONIC_3 + CHRONIC_4 + CHRONIC_5 +
CHRONIC_6 + CHRONIC_7 + CHRONIC_8

ELSE

CQUIGN = MISSING

'[SHOULD NEVER OCCUR]

Depression Scale

IF M0590_DP_MOOD NOT = 0, 1 OR M0590_DP_SENSE_FAILURE NOT = 0, 1 OR
M0590_DP_HOPELESSNESS NOT = 0, 1 OR M0590_DP_DEATH NOT = 0, 1 OR
M0590_DP_SUICIDE NOT = 0, 1 OR (M0590_DP_MOOD = 0 AND
M0590_DP_SENSE_FAILURE = 0 AND M0590_DP_HOPELESSNESS = 0 AND
M0590_DP_DEATH = 0 AND M0590_DP_SUICIDE = 0 AND M0590_DP_NONE = 0) OR
((M0590_DP_NONE = 1 AND (M0590_DP_MOOD = 1 OR M0590_DP_SENSE_FAILURE = 1 OR
M0590_DP_HOPELESSNESS = 1 OR M0590_DP_DEATH = 1 OR M0590_DP_SUICIDE = 1)))

THEN

DEPRESSION = MISSING

'[SHOULD NEVER OCCUR]

ELSE

DEPRESSION = M0590_DP_MOOD + M0590_DP_SENSE_FAILURE +
M0590_DP_HOPELESSNESS + M0590_DP_DEATH + M0590_DP_SUICIDE

Urinary Incontinence Severity 1

IF M0520_UR_INCONT = 00

THEN

INCONTBASE = 0

ELSE IF M0530_UR_INCONT_OCCURS = 00

THEN

INCONTBASE = 1

ELSE IF M0530_UR_INCONT_OCCURS = 01

THEN

INCONTBASE = 2

ELSE IF M0530_UR_INCONT_OCCURS = 02

THEN

INCONTBASE = 3

ELSE IF M0520_UR_INCONT = 02

THEN

INCONTBASE = 4

ELSE

INCONTBASE = MISSING

'[SHOULD NOT OCCUR]

RISK FACTOR TRANSFORMATION DOCUMENTATION

Presence of Urinary Incontinence

```
IF M0520_UR_INCONT = 00, 02
THEN
    INCONTCATH = 0
ELSE IF M0520_UR_INCONT = 01
THEN
    INCONTCATH = 1
ELSE
    INCONTCATH = MISSING                '[SHOULD NEVER OCCUR]
```

Urinary Incontinence Severity 2

```
IF M0520_UR_INCONT = 00
THEN
    INCONTSEV = 0
ELSE IF M0520_UR_INCONT = 02
THEN
    INCONTSEV = 1
ELSE IF M0530_UR_INCONT_OCCURS = 00
THEN
    INCONTSEV = 2
ELSE IF M0530_UR_INCONT_OCCURS = 01
THEN
    INCONTSEV = 3
ELSE IF M0530_UR_INCONT_OCCURS = 02
THEN
    INCONTSEV = 4
ELSE
    INCONTSEV = MISSING                '[SHOULD NOT OCCUR]
```

Length of Stay: More than 31 days

```
IF LOSDAYS > 31
THEN
    LOSGT31 = 1
ELSE
    LOSGT31 = 0
```

Length of Stay: More than 62 days

```
IF LOSDAYS > 62
THEN
    LOSGT62 = 1
ELSE
    LOSGT62 = 0
```


RISK FACTOR TRANSFORMATION DOCUMENTATION

Maximum Severity Rating among All Diagnoses

```
IF M0230_PRIMARY_DIAG_SEVERITY = 00
THEN
    INTSEV0 = 0
ELSE IF M0230_PRIMARY_DIAG_SEVERITY = 01
THEN
    INTSEV0 = 1
ELSE IF M0230_PRIMARY_DIAG_SEVERITY = 02
THEN
    INTSEV0 = 2
ELSE IF M0230_PRIMARY_DIAG_SEVERITY = 03
THEN
    INTSEV0 = 3
ELSE IF M0230_PRIMARY_DIAG_SEVERITY = 04
THEN
    INTSEV0 = 4
ELSE INTSEV0 = MISSING                                '[SHOULD NEVER OCCUR]
```

```
IF M0240_OTH_DIAG_ICD1 NOT = BLANK, INVALID
THEN
    IF M0240_OTH_DIAG1_SEVERITY = 00
    THEN
        INTSEV1 = 0
    ELSE IF M0240_OTH_DIAG1_SEVERITY = 01
    THEN
        INTSEV1 = 1
    ELSE IF M0240_OTH_DIAG1_SEVERITY = 02
    THEN
        INTSEV1 = 2
    ELSE IF M0240_OTH_DIAG1_SEVERITY = 03
    THEN
        INTSEV1 = 3
    ELSE IF M0240_OTH_DIAG1_SEVERITY = 04
    THEN
        INTSEV1 = 4
    ELSE
        INTSEV1 = MISSING                                '[SHOULD NEVER OCCUR]
```

```
IF M0240_OTH_DIAG_ICD2 NOT = BLANK, INVALID
THEN
    IF M0240_OTH_DIAG2_SEVERITY = 00
    THEN
        INTSEV2 = 0
    ELSE IF M0240_OTH_DIAG2_SEVERITY = 01
    THEN
        INTSEV2 = 1
    ELSE IF M0240_OTH_DIAG2_SEVERITY = 02
    THEN
        INTSEV2 = 2
    ELSE IF M0240_OTH_DIAG2_SEVERITY = 03
    THEN
        INTSEV2 = 3
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

```
ELSE IF M0240_OTH_DIAG2_SEVERITY = 04
THEN
    INTSEV2 = 4
ELSE
    INTSEV2 = MISSING                                '[SHOULD NEVER OCCUR]
```

```
IF M0240_OTH_DIAG_ICD3 NOT = BLANK, INVALID
THEN
    IF M0240_OTH_DIAG3_SEVERITY = 00
    THEN
        INTSEV3 = 0
    ELSE IF M0240_OTH_DIAG3_SEVERITY = 01
    THEN
        INTSEV3 = 1
    ELSE IF M0240_OTH_DIAG3_SEVERITY = 02
    THEN
        INTSEV3 = 2
    ELSE IF M0240_OTH_DIAG3_SEVERITY = 03
    THEN
        INTSEV3 = 3
    ELSE IF M0240_OTH_DIAG3_SEVERITY = 04
    THEN
        INTSEV3 = 4
    ELSE
        INTSEV3 = MISSING                                '[SHOULD NEVER OCCUR]
```

```
IF M0240_OTH_DIAG_ICD4 NOT = BLANK, INVALID
THEN
    IF M0240_OTH_DIAG4_SEVERITY = 00
    THEN
        INTSEV4 = 0
    ELSE IF M0240_OTH_DIAG4_SEVERITY = 01
    THEN
        INTSEV4 = 1
    ELSE IF M0240_OTH_DIAG4_SEVERITY = 02
    THEN
        INTSEV4 = 2
    ELSE IF M0240_OTH_DIAG4_SEVERITY = 03
    THEN
        INTSEV4 = 3
    ELSE IF M0240_OTH_DIAG4_SEVERITY = 04
    THEN
        INTSEV4 = 4
    ELSE
        INTSEV4 = MISSING                                '[SHOULD NEVER OCCUR]
```

```
IF M0240_OTH_DIAG_ICD5 NOT = BLANK, INVALID
THEN
    IF M0240_OTH_DIAG5_SEVERITY = 00
    THEN
        INTSEV5 = 0
    ELSE IF M0240_OTH_DIAG5_SEVERITY = 01
    THEN
        INTSEV5 = 1
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

```
ELSE IF M0240_OTH_DIAG5_SEVERITY = 02
THEN
    INTSEV5 = 2
ELSE IF M0240_OTH_DIAG5_SEVERITY = 03
THEN
    INTSEV5 = 3
ELSE IF M0240_OTH_DIAG5_SEVERITY = 04
THEN
    INTSEV5 = 4
ELSE
    INTSEV5 = MISSING                                '[SHOULD NEVER OCCUR]
```

```
MAXIMUMSEV = 0.
IF INTSEV0 > 0
THEN
    MAXIMUMSEV = INTSEV0
IF INTSEV1 > MAXIMUMSEV
THEN
    MAXIMUMSEV = INTSEV1
IF INTSEV2 > MAXIMUMSEV
THEN
    MAXIMUMSEV = INTSEV2
IF INTSEV3 > MAXIMUMSEV
THEN
    MAXIMUMSEV = INTSEV3
IF INTSEV4 > MAXIMUMSEV
THEN
    MAXIMUMSEV = INTSEV4
IF INTSEV5 > MAXIMUMSEV
THEN
    MAXIMUMSEV = INTSEV5
```

Patient has Unpaid Live-in Help

```
IF M0350_AP_HM_RESIDENT = 1 OR M0350_AP_REL_FRIEND = 1
THEN
    NEWASSIST = 1
ELSE
    NEWASSIST = 0
```

Bowel Ostomy

```
IF M0540_BWL_INCONT = NA
THEN
    OSTOMY = 1
ELSE IF M0540_BWL_INCONT = 00, 01, 02, 03, 04, 05
THEN
    OSTOMY = 0
ELSE IF M0540_BWL_INCONT = UK
THEN
    OSTOMY = MISSING
ELSE
    OSTOMY = MISSING                                '[SHOULD NEVER OCCUR]
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

Prior (2 weeks ago) Disability in....

IF M0640_PR_GROOMING = UK

THEN

P_GROOMING_OUT = GROOMING

ELSE

P_GROOMING_OUT = M0640_PR_GROOMING

IF M0650_PR_DRESS_UPPER = UK

THEN

P_DRESS_UPPER_OUT = UPPERDRESS

ELSE

P_DRESS_UPPER_OUT = M0650_PR_DRESS_UPPER

IF M0660_PR_DRESS_LOWER = UK

THEN

P_DRESS_LOWER_OUT = LOWERDRESS

ELSE

P_DRESS_LOWER = M0660_PR_DRESS_LOWER

IF M0670_PR_BATHING = UK

THEN

P_BATHING_OUT = BATHING

ELSE

P_BATHING_OUT = M0670_PR_BATHING

IF M0680_PR_TOILETING = UK

THEN

P_TOILETING_OUT = TOILETING

ELSE

P_TOILETING_OUT = M0680_PR_GROOMING

IF M0690_PR_TRANSFERRING = UK

THEN

P_TRANSFERRING_OUT = TRANSFERRING

ELSE

P_TRANSFERRING_OUT = M0690_PR_TRANSFERRING

IF M0700_PR_AMBULATION = UK

THEN

P_AMBULATION_OUT = AMBULATION

ELSE

P_AMBULATION_OUT = M0700_PR_AMBULATION

IF M0710_PR_FEEDING = UK

THEN

P_EATING_OUT = EATING

ELSE

P_EATING_OUT = M0710_PR_FEEDING

IF M0720_PR_PREP_LT_MEALS = UK

THEN

P_MEALPREP_OUT = MEALPREP

RISK FACTOR TRANSFORMATION DOCUMENTATION

ELSE

P_MEALPREP_OUT = M0720_PR_PREP_LT_MEALS

IF M0730_PR_TRANSPORTION = UK

THEN

P_TRANSPORT_OUT = TRANSPORT

ELSE

P_TRANSPORT_OUT = M0730_PR_TRANSPORTION

IF M0740_PR_LAUNDRY = UK

THEN

P_LAUNDRY_OUT = LAUNDRY

ELSE

P_LAUNDRY_OUT = M0740_PR_LAUNDRY

IF M0750_PR_HOUSEKEEPING = UK

THEN

P_HOUSEKEEPING_OUT = HOUSEKEEPING

ELSE

P_HOUSEKEEPING_OUT = M0750_PR_HOUSEKEEPING

IF M0760_PR_SHOPPING = UK

THEN

P_SHOPPING_OUT = SHOPPING

ELSE

P_SHOPPING_OUT = M0760_PR_SHOPPING

IF M0770_PR_PHONE_USE = NA, UK

THEN

P_PHONEUSE_OUT = PHONEUSE

ELSE

P_PHONEUSE_OUT = M0770_PR_PHONE_USE

IF M0780_PR_ORAL_MEDS = NA, UK

THEN

P_ORALMEDS_OUT = ORALMEDS

ELSE

P_ORALMEDS_OUT = M0780_PR_ORAL_MEDS

Status of Most Problem Pressure Ulcer

IF M0440_LESION_OPEN_WND = 0 OR

(M0440_LESION_OPEN_WND = 1 AND M0445_PRESS_ULCER = 0)

THEN

PRESSURESTATUS = 0

PRESSUREULCER = 0

IF M0445_PRESS_ULCER = 1 AND M0464_STAT_PRBLM_PRSULC NOT = 01, 02, 03, NA

THEN

PRESSURESTATUS = MISSING **'[SHOULD NEVER OCCUR]'**

ELSE

IF M0464_STAT_PRBLM_PRSULC = 01

RISK FACTOR TRANSFORMATION DOCUMENTATION

```
THEN
  PRESSURESTATUS = 1
ELSE IF M0464_STAT_PRBLM_PRSULC = 02
THEN
  PRESSURESTATUS = 2
ELSE IF M0464_STAT_PRBLM_PRSULC = 03
THEN
  PRESSURESTATUS = 3
ELSE IF M0464_STAT_PRBLM_PRSULC = NA
THEN
  PRESSURESTATUS = MISSING
```

Stage of Most Problem Pressure Ulcer

```
IF M0445_PRESS_ULCER = 1 AND M0460_STG_PRBLM_ULCER NOT = 01, 02, 03, 04, NA
THEN
  PRESSUREULCER = MISSING           '[SHOULD NEVER OCCUR]'
ELSE
  IF M0460_STG_PRBLM_ULCER = 01
  THEN
    PRESSUREULCER = 1
  ELSE IF M0460_STG_PRBLM_ULCER = 02
  THEN
    PRESSUREULCER = 2
  ELSE IF M0460_STG_PRBLM_ULCER = 03
  THEN
    PRESSUREULCER = 3
  ELSE IF M0460_STG_PRBLM_ULCER = 04
  THEN
    PRESSUREULCER = 4
  ELSE IF M0460_STG_PRBLM_ULCER = NA
  THEN
    PRESSUREULCER = MISSING
```

Prior (more than 2 weeks) Physical, Cognitive, or Behavioral Problems

```
IF (M0220_PRIOR_UR_INCON NOT = 0, 1 OR M0220_PRIOR_CATH NOT = 0, 1 OR
M0220_PRIOR_INTRACT_PAIN NOT = 0, 1 OR M0220_PRIOR_IMPR_DECSN NOT = 0, 1 OR
M0220_PRIOR_DISRUPTIVE NOT = 0, 1 OR M0220_PRIOR_MEM_LOSS NOT = 0, 1) OR
((DISCHARGE1 = 0 AND DISCHARGE2 = 0 AND DISCHARGE3 = 0 AND REGIMEN = 0) AND
(M0175_DC_OTHER = 0 OR M0170_DC_OTHER = 0) AND (M0220_PRIOR_UNKNOWN = 1))
THEN
  PRIOR_1 = MISSING
  PRIOR_2 = MISSING
  PRIOR_3 = MISSING
  PRIOR_4 = MISSING
  PRIOR_5 = MISSING
  PRIOR_6 = MISSING           '[SHOULD NEVER OCCUR]'
ELSE IF M0220_PRIOR_UNKNOWN = 1
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

THEN

PRIOR_1 = MISSING
PRIOR_2 = MISSING
PRIOR_3 = MISSING
PRIOR_4 = MISSING
PRIOR_5 = MISSING
PRIOR_6 = MISSING

ELSE

IF M0220_PRIOR_UR_INCON = 1 OR (((M0170_NONE_14_DAYS = 1 OR
M0175_NONE_14_DAYS = 1) AND M0200_REG_CHG_14_DAYS = 0) AND
M0520_UR_INCONT = 01)

THEN

PRIOR_1 = 1

ELSE IF M0220_PRIOR_UR_INCON = 0 OR (((M0170_NONE_14_DAYS = 1 OR
M0175_NONE_14_DAYS = 1) AND M0200_REG_CHG_14_DAYS = 0) AND
M0520_UR_INCONT = 00, 02))

THEN

PRIOR_1 = 0

IF M0220_PRIOR_CATH = 1 OR (((M0170_NONE_14_DAYS = 1 OR
M0175_NONE_14_DAYS = 1) AND M0200_REG_CHG_14_DAYS = 0) AND
M0520_UR_INCONT = 02)

THEN

PRIOR_2 = 1

ELSE IF M0220_PRIOR_CATH = 0 OR (((M0170_NONE_14_DAYS = 1 OR
M0175_NONE_14_DAYS = 1) AND M0200_REG_CHG_14_DAYS = 0) AND
M0520_UR_INCONT = 00, 01)

THEN

PRIOR_2 = 0

IF M0220_PRIOR_INTRACT_PAIN = 1 OR (((M0170_NONE_14_DAYS = 1 OR
M0175_NONE_14_DAYS = 1) AND M0200_REG_CHG_14_DAYS = 0) AND
M0430_INTRACT_PAIN = 1)

THEN

PRIOR_3 = 1

ELSE IF M0220_PRIOR_INTRACT_PAIN = 0 OR (((M0170_NONE_14_DAYS = 1 OR
M0175_NONE_14_DAYS = 1) AND M0200_REG_CHG_14_DAYS = 0) AND
M0430_INTRACT_PAIN = 0)

THEN

PRIOR_3 = 0

IF M0220_PRIOR_IMPR_DECSN = 1 OR (((M0170_NONE_14_DAYS = 1 OR
M0175_NONE_14_DAYS = 1) AND M0200_REG_CHG_14_DAYS = 0) AND
M0610_BD_IMP_DECSN = 1)

THEN

PRIOR_4 = 1

ELSE IF M0220_PRIOR_IMPR_DECSN = 0 OR (((M0170_NONE_14_DAYS = 1 OR
M0175_NONE_14_DAYS = 1) AND M0200_REG_CHG_14_DAYS = 0) AND
M0610_BD_IMP_DECSN = 0)

THEN

PRIOR_4 = 0

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF M0220_PRIOR_DISRUPTIVE = 1 OR (((M0170_NONE_14_DAYS = 1 OR
M0175_NONE_14_DAYS = 1) AND M0200_REG_CHG_14_DAYS = 0) AND
M0610_BD_SOC_INAPPRO = 1)

THEN

PRIOR_5 = 1

ELSE IF M0220_PRIOR_DISRUPTIVE = 0 OR (((M0170_NONE_14_DAYS = 1 OR
M0175_NONE_14_DAYS = 1) AND M0200_REG_CHG_14_DAYS = 0) AND
M0610_BD_SOC_INAPPRO = 0)

THEN

PRIOR_5 = 0

IF M0220_PRIOR_MEM_LOSS = 1 OR (((M0170_NONE_14_DAYS = 1 OR
M0175_NONE_14_DAYS = 1) AND M0200_REG_CHG_14_DAYS = 0) AND
M0610_BD_MEM_DEFICIT = 1)

THEN

PRIOR_6 = 1

ELSE IF M0220_PRIOR_MEM_LOSS = 0 OR (((M0170_NONE_14_DAYS = 1 OR
M0175_NONE_14_DAYS = 1) AND M0200_REG_CHG_14_DAYS = 0) AND
M0610_BD_MEM_DEFICIT = 0)

THEN

PRIOR_6 = 0

Behavior Problem Frequency

IF M0620_BEH_PROB_FREQ = 00

THEN

PROBFREQ = 0

ELSE IF M0620_BEH_PROB_FREQ = 01

THEN

PROBFREQ = 1

ELSE IF M0620_BEH_PROB_FREQ = 02

THEN

PROBFREQ = 2

ELSE IF M0620_BEH_PROB_FREQ = 03

THEN

PROBFREQ = 3

ELSE IF M0620_BEH_PROB_FREQ = 04

THEN

PROBFREQ = 4

ELSE IF M0620_BEH_PROB_FREQ = 05

THEN

PROBFREQ = 5

ELSE

PROBFREQ = MISSING

'[SHOULD NEVER OCCUR]'

RISK FACTOR TRANSFORMATION DOCUMENTATION

Increased Risk Conditions Present

```
IF M0290_RISK_SMOKING NOT = 0, 1 OR M0290_RISK_OBESITY NOT = 0, 1 OR
M0290_RISK_ALCOHOLISM NOT = 0, 1 OR M0290_RISK_DRUGS NOT = 0, 1 OR
(M0290_RISK_SMOKING = 0 AND M0290_RISK_OBESITY = 0 AND
M0290_RISK_ALCOHOLISM = 0 AND M0290_RISK_DRUGS = 0 AND M0290_RISK_NONE = 0
AND M0290_RISK_UNKNOWN = 0) OR ((M0290_RISK_NONE = 1 OR
M0290_RISK_UNKNOWN = 1) AND (M0290_RISK_SMOKING = 1 OR
M0290_RISK_OBESITY = 1 OR M0290_RISK_ALCOHOLISM = 1 OR M0290_RISK_DRUGS = 1))
OR (M0290_RISK_NONE = 1 AND M0290_RISK_UNKNOWN = 1)
THEN
RISK_1 = MISSING
RISK_2 = MISSING
RISK_3 = MISSING
RISK_4 = MISSING                                '[SHOULD NEVER OCCUR]'
ELSE
IF (M0290_RISK_UNKNOWN = 1)
THEN
RISK_1 = MISSING
RISK_2 = MISSING
RISK_3 = MISSING
RISK_4 = MISSING
ELSE
IF M0290_RISK_SMOKING = 1
THEN
RISK_1 = 1
ELSE IF M0290_RISK_SMOKING = 0
THEN
RISK_1 = 0

IF M0290_RISK_OBESITY = 1
THEN
RISK_2 = 1
ELSE IF M0290_RISK_OBESITY = 0
THEN
RISK_2 = 0

IF M0290_RISK_ALCOHOLISM = 1
THEN
RISK_3 = 1
ELSE IF M0290_RISK_ALCOHOLISM = 0
THEN
RISK_3 = 0

IF M0290_RISK_DRUGS = 1
THEN
RISK_4 = 1
ELSE IF M0290_RISK_DRUGS = 0
THEN
RISK_4 = 0
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

Intervening Inpatient Care

```
IF M0100_ASSMT_REASON = 01, 02
THEN
    ROCIND = 0
ELSE IF M0100_ASSMT_REASON = 03
THEN
    ROCIND = 1
ELSE
    ROCIND = MISSING                '[SHOULD NEVER OCCUR]
```

Severity Rating for Primary Diagnosis

```
IF M0230_PRIMARY_DIAG_SEVERITY = 00
THEN
    SEVERITY = 0
ELSE IF M0230_PRIMARY_DIAG_SEVERITY = 01
THEN
    SEVERITY = 1
ELSE IF M0230_PRIMARY_DIAG_SEVERITY = 02
THEN
    SEVERITY = 2
ELSE IF M0230_PRIMARY_DIAG_SEVERITY = 03
THEN
    SEVERITY = 3
ELSE IF M0230_PRIMARY_DIAG_SEVERITY = 04
THEN
    SEVERITY = 4
ELSE
    SEVERITY = MISSING                '[SHOULD NEVER OCCUR]
```

Number of Diagnoses with Severity Rating > 2

```
SEVERITY2 = 0.
IF INTSEV0 >= 2
THEN
    SEVERITY2 = SEVERITY2 + 1
IF INTSEV1 >= 2
THEN
    SEVERITY2 = SEVERITY2 + 1
IF INTSEV2 >= 2
THEN
    SEVERITY2 = SEVERITY2 + 1
IF INTSEV3 >= 2
THEN
    SEVERITY2 = SEVERITY2 + 1
IF INTSEV4 >= 2
THEN
    SEVERITY2 = SEVERITY2 + 1
IF INTSEV5 >= 2
THEN
    SEVERITY2 = SEVERITY2 + 1
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

Status of Most Problematic Stasis Ulcer

IF M0440_LESION_OPEN_WND = 0 OR (M0440_LESION_OPEN_WND = 1 AND
M0468_STASIS_ULCER = 0)

THEN

STASISSTATUS = 0

STASISULCER = 0

IF M0468_STASIS_ULCER = 1 AND M0476_STAT_PRB_STASULC NOT = 01, 02, 03, NA

THEN

STASISSTATUS = MISSING **'[SHOULD NEVER OCCUR]'**

ELSE

IF M0476_STAT_PRB_STASULC = 01

THEN

STASISSTATUS = 1

ELSE IF M0476_STAT_PRB_STASULC = 02

THEN

STASISSTATUS = 2

ELSE IF M0476_STAT_PRB_STASULC = 03

THEN

STASISSTATUS = 3

ELSE IF M0476_STAT_PRB_STASULC = NA

THEN

STASISSTATUS = MISSING

Stage of Most Problematic Stasis Ulcer

IF M0468_STASIS_ULCER = 1 AND M0470_NBR_STASULC NOT = 00, 01, 02, 03, 04

THEN

STASISULCER = MISSING **'[SHOULD NEVER OCCUR]'**

ELSE

IF M0470_NBR_STASULC = 00

THEN

STASISULCER = 0

ELSE IF M0470_NBR_STASULC = 01

THEN

STASISULCER = 1

ELSE IF M0470_NBR_STASULC = 02

THEN

STASISULCER = 2

ELSE IF M0470_NBR_STASULC = 03

THEN

STASISULCER = 3

ELSE IF M0470_NBR_STASULC = 04

THEN

STASISULCER = 4

RISK FACTOR TRANSFORMATION DOCUMENTATION

Status of Surgical Wound

IF M0440_LESION_OPEN_WND = 0 OR (M0440_LESION_OPEN_WND = 1 AND
M0482_SURG_WOUND = 0)

THEN

SURGICALSTATUS = 0
SURGICALWOUND = 0

IF M0482_SURG_WOUND = 1 AND M0488_STAT_PRB_SURGWND NOT = 01, 02, 03, NA

THEN

SURGICALSTATUS = MISSING ' [SHOULD NEVER OCCUR]

ELSE

IF M0488_STAT_PRB_SURGWND = 01

THEN

SURGICALSTATUS = 1

ELSE IF M0488_STAT_PRB_SURGWND = 02

THEN

SURGICALSTATUS = 2

ELSE IF M0488_STAT_PRB_SURGWND = 03

THEN

SURGICALSTATUS = 3

ELSE IF M0488_STAT_PRB_SURGWND = NA

THEN

SURGICALSTATUS = MISSING

Number of Surgical Wounds Present

IF M0482_SURG_WOUND = 1 AND M0484_NBR_SURGWND NOT = 00, 01, 02, 03, 04

THEN

SURGICALWOUND = MISSING ' [SHOULD NEVER OCCUR]

ELSE

IF M0484_NBR_SURGWND = 00

THEN

SURGICALWOUND = 0

ELSE IF M0484_NBR_SURGWND = 01

THEN

SURGICALWOUND = 1

ELSE IF M0484_NBR_SURGWND = 02

THEN

SURGICALWOUND = 2

ELSE IF M0484_NBR_SURGWND = 03

THEN

SURGICALWOUND = 3

ELSE IF M0484_NBR_SURGWND = 04

THEN

SURGICALWOUND = 4

RISK FACTOR TRANSFORMATION DOCUMENTATION

Urinary Tract Infection

```
IF M0510_UTI = 00, NA
THEN
  UTI_OUT = 0
ELSE IF M0510_UTI = 01
THEN
  UTI_OUT = 1
ELSE IF M0510_UTI = UK
THEN
  UTI_OUT = MISSING
ELSE
  UTI_OUT = MISSING           '[SHOULD NEVER OCCUR]'
```

Mean Substitution for Missing Data on Risk Factor Measures

Before predicted outcome values can be estimated, missing values for risk factors are replaced with the mean value of valid data for the risk factor derived from the data set used to build the predictive model. As end result outcome models and utilization outcome models are based on different samples, two sets of mean values are used for substitution.

```
IF M0100_ASSMT_REASON[2] = '09'
THEN
  ERO_ACUTE_1 = ACUTE_1
  ERO_ACUTE_2 = ACUTE_2
  ERO_ACUTE_3 = ACUTE_3
  ERO_ACUTE_4 = ACUTE_4
  ERO_ACUTE_5 = ACUTE_5
  ERO_ACUTE_6 = ACUTE_6
  ERO_ACUTE_7 = ACUTE_7
  ERO_ACUTE_8 = ACUTE_8
  ERO_ACUTE_9 = ACUTE_9
  ERO_ACUTE_10 = ACUTE_10
  ERO_ACUTE_11 = ACUTE_11
  ERO_ACUTE_12 = ACUTE_12
  ERO_ACUTE_13 = ACUTE_13
  ERO_ACUTE_14 = ACUTE_14
  ERO_ACUTE_15 = ACUTE_15
  ERO_ACUTE_16 = ACUTE_16
  ERO_AGE = AGE
  ERO_AMBULATION = AMBULATION
  ERO_ANXIETYLEVEL = ANXIETYLEVEL
  ERO_ANYDIAG_1 = ANYDIAG_1
  ERO_ANYDIAG_2 = ANYDIAG_2
  ERO_ANYDIAG_3 = ANYDIAG_3
  ERO_ANYDIAG_4 = ANYDIAG_4
  ERO_ANYDIAG_5 = ANYDIAG_5
  ERO_ANYDIAG_6 = ANYDIAG_6
  ERO_ANYDIAG_7 = ANYDIAG_7
  ERO_ANYDIAG_8 = ANYDIAG_8
  ERO_ANYDIAG_9 = ANYDIAG_9
  ERO_ANYDIAG_10 = ANYDIAG_10
  ERO_ANYDIAG_11 = ANYDIAG_11
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

ERO_ANYDIAG_12 = ANYDIAG_12
ERO_ANYDIAG_13 = ANYDIAG_13
ERO_ANYDIAG_14 = ANYDIAG_14
ERO_ANYDIAG_15 = ANYDIAG_15
ERO_ANYDIAG_16 = ANYDIAG_16
ERO_ANYDIAG_17 = ANYDIAG_17
ERO_ANYDIAG_18 = ANYDIAG_18
ERO_ANYPRIMARY = ANYPRIMARY
ERO_AQUIGN = AQUIGN
ERO_BATHING = BATHING
ERO_BEHAVE_1 = BEHAVE_1
ERO_BEHAVE_2 = BEHAVE_2
ERO_BEHAVE_3 = BEHAVE_3
ERO_BEHAVE_4 = BEHAVE_4
ERO_BOWEL_OUT = BOWEL_OUT
ERO_CAREGIVER_1 = CAREGIVER_1
ERO_CAREGIVER_2 = CAREGIVER_2
ERO_CATHETER = CATHETER
ERO_CHRONIC_1 = CHRONIC_1
ERO_CHRONIC_2 = CHRONIC_2
ERO_CHRONIC_3 = CHRONIC_3
ERO_CHRONIC_4 = CHRONIC_4
ERO_CHRONIC_5 = CHRONIC_5
ERO_CHRONIC_6 = CHRONIC_6
ERO_CHRONIC_7 = CHRONIC_7
ERO_CHRONIC_8 = CHRONIC_8
ERO_CHRONIC_9 = CHRONIC_9
ERO_COGNITIVEFUNC = COGNITIVEFUNC
ERO_CONFUSIONFREQ = CONFUSIONFREQ
ERO_CQUIGN = CQUIGN
ERO_DEPRESSION = DEPRESSION
ERO_DYSPNEA = DYSPNEA
ERO_EATING = EATING
ERO_FREQASST = FREASST
ERO_GENDER = GENDER
ERO_GROOMING = GROOMING
ERO_HEARING = HEARING
ERO_HOUSEKEEPING = HOUSEKEEPING
ERO_INCONT = INCONT
ERO_INCONTBASE = INCONTBASE
ERO_INCONTCATH = INCONTCATH
ERO_INCONTSEV = INCONTSEV
ERO_INPT_1 = INPT_1
ERO_INPT_2 = INPT_2
ERO_INPT_3 = INPT_3
ERO_INTPAIN = INTPAIN
ERO_LAUNDRY = LAUNDRY
ERO_LIVE_1 = LIVE_1
ERO_LIVE_2 = LIVE_2
ERO_LOS_4MO = LOS_4MO
ERO_LOSGT31 = LOSGT31
ERO_LOSGT62 = LOSGT62
ERO_LOWERDRESS = LOWERDRESS

RISK FACTOR TRANSFORMATION DOCUMENTATION

ERO_MAXIMUMSEV = MAXIMUMSEV
ERO_MEALPREP = MEALPREP
ERO_MEDREG = MEDREG
ERO_NEWASSIST = NEWASSIST
ERO_ORALMEDS = ORALMEDS
ERO_OSTOMY = OSTOMY
ERO_P_AMBULATION_OUT = P_AMBULATION_OUT
ERO_P_BATHING_OUT = P_BATHING_OUT
ERO_P_EATING_OUT = P_EATING_OUT
ERO_P_GROOMING_OUT = P_GROOMING_OUT
ERO_P_HOUSEKEEPING_OUT = P_HOUSEKEEPING_OUT
ERO_P_LAUNDRY_OUT = P_LAUNDRY_OUT
ERO_P_LOWERDRESS_OUT = P_LOWERDRESS_OUT
ERO_P_MEALPREP_OUT = P_MEALPREP_OUT
ERO_P_ORALMEDS_OUT = P_ORALMEDS_OUT
ERO_P_PHONEUSE_OUT = P_PHONEUSE_OUT
ERO_P_SHOPPING_OUT = P_SHOPPING_OUT
ERO_P_TOILETING_OUT = P_TOILETING_OUT
ERO_P_TRANSFERRING_OUT = P_TRANSFERRING_OUT
ERO_P_TRANSPORT_OUT = P_TRANSPORT_OUT
ERO_P_UPPERDRESS_OUT = P_UPPERDRESS_OUT
ERO_PAIN = PAIN
ERO_PAY_1 = PAY_1
ERO_PHONEUSE = PHONEUSE
ERO_PRESSURE = PRESSURE
ERO_PRESSURESTATUS = PRESSURESTATUS
ERO_PRESSUREULCER = PRESSUREULCER
ERO_PRIOR_1 = PRIOR_1
ERO_PRIOR_2 = PRIOR_2
ERO_PRIOR_3 = PRIOR_3
ERO_PRIOR_4 = PRIOR_4
ERO_PRIOR_5 = PRIOR_5
ERO_PRIOR_6 = PRIOR_6
ERO_PROBFREQ = PROBFREQ
ERO_PROG = PROG
ERO_REHAB = REHAB
ERO_RESIDE_1 = RESIDE_1
ERO_RISK_1 = RISK_1
ERO_RISK_2 = RISK_2
ERO_RISK_3 = RISK_3
ERO_RISK_4 = RISK_4
ERO_ROCIND = ROCIND
ERO_SEVERITY = SEVERITY
ERO_SEVERITY2 = SEVERITY2
ERO_SHOPPING = SHOPPING
ERO_SPEECH = SPEECH
ERO_STASIS = STASIS
ERO_STASISSTATUS = STASISSTATUS
ERO_STASISULCER = STASISULCER
ERO_SURGICAL = SURGICAL
ERO_SURGICALSTATUS = SURGICALSTATUS
ERO_SURGICALWOUND = SURGICALWOUND
ERO_TOILETING = TOILETING

RISK FACTOR TRANSFORMATION DOCUMENTATION

ERO_TRANSFERRING = TRANSFERRING
ERO_TRANSPORT = TRANSPORT
ERO_ULC_1 = ULC_1
ERO_ULC_2 = ULC_2
ERO_UPPERDRESS = UPPERDRESS
ERO_UTI_OUT = UTI_OUT
ERO_VISION = VISION

IF ERO_ACUTE_1 **IS MISSING**
THEN
 ERO_ACUTE_1 = 0.327475

IF ERO_ACUTE_2 **IS MISSING**
THEN
 ERO_ACUTE_2 = 0.100232

IF ERO_ACUTE_3 **IS MISSING**
THEN
 ERO_ACUTE_3 = 0.478219

IF ERO_ACUTE_4 **IS MISSING**
THEN
 ERO_ACUTE_4 = 0.025017

IF ERO_ACUTE_5 **IS MISSING**
THEN
 ERO_ACUTE_5 = 0.311126

IF ERO_ACUTE_6 **IS MISSING**
THEN
 ERO_ACUTE_6 = 0.151868

IF ERO_ACUTE_7 **IS MISSING**
THEN
 ERO_ACUTE_7 = 0.091758

IF ERO_ACUTE_8 **IS MISSING**
THEN
 ERO_ACUTE_8 = 0.106904

IF ERO_ACUTE_9 **IS MISSING**
THEN
 ERO_ACUTE_9 = 0.012819

IF ERO_ACUTE_10 **IS MISSING**
THEN
 ERO_ACUTE_10 = 0.096993

IF ERO_ACUTE_11 **IS MISSING**
THEN
 ERO_ACUTE_11 = 0.013737

IF ERO_ACUTE_12 **IS MISSING**
THEN
 ERO_ACUTE_12 = 0.113730

IF ERO_ACUTE_13 **IS MISSING**
THEN
 ERO_ACUTE_13 = 0.024686

RISK FACTOR TRANSFORMATION DOCUMENTATION

```
IF ERO_ACUTE_14 IS MISSING
THEN
    ERO_ACUTE_14 = 0.015214

IF ERO_ACUTE_15 IS MISSING
THEN
    ERO_ACUTE_15 = 0.000758

IF ERO_AGE IS MISSING
THEN
    ERO_AGE = 75.677178

IF ERO_AMBULATION IS MISSING
THEN
    ERO_AMBULATION = 1.250760

IF ERO_ANXIETYLEVEL IS MISSING
THEN
    ERO_ANXIETYLEVEL = 0.573987

IF ERO_ANYDIAG_1 IS MISSING
THEN
    ERO_ANYDIAG_1 = 0.027600

IF ERO_ANYDIAG_10 IS MISSING
THEN
    ERO_ANYDIAG_10 = 0.112601

IF ERO_ANYDIAG_11 IS MISSING
THEN
    ERO_ANYDIAG_11 = 0.001363

IF ERO_ANYDIAG_12 IS MISSING
THEN
    ERO_ANYDIAG_12 = 0.079891

IF ERO_ANYDIAG_13 IS MISSING
THEN
    ERO_ANYDIAG_13 = 0.348449

IF ERO_ANYDIAG_14 IS MISSING
THEN
    ERO_ANYDIAG_14 = 0.008822

IF ERO_ANYDIAG_15 IS MISSING
THEN
    ERO_ANYDIAG_15 = 0.318727

IF ERO_ANYDIAG_16 IS MISSING
THEN
    ERO_ANYDIAG_16 = 0.108170

IF ERO_ANYDIAG_17 IS MISSING
THEN
    ERO_ANYDIAG_17 = 0.003062

IF ERO_ANYDIAG_18 IS MISSING
THEN
    ERO_ANYDIAG_18 = 0.064814
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

```
IF ERO_ANYDIAG_2 IS MISSING
THEN
    ERO_ANYDIAG_2 = 0.099462

IF ERO_ANYDIAG_3 IS MISSING
THEN
    ERO_ANYDIAG_3 = 0.280943

IF ERO_ANYDIAG_4 IS MISSING
THEN
    ERO_ANYDIAG_4 = 0.073094

IF ERO_ANYDIAG_5 IS MISSING
THEN
    ERO_ANYDIAG_5 = 0.094575

IF ERO_ANYDIAG_6 IS MISSING
THEN
    ERO_ANYDIAG_6 = 0.108888

IF ERO_ANYDIAG_7 IS MISSING
THEN
    ERO_ANYDIAG_7 = 0.558835

IF ERO_ANYDIAG_8 IS MISSING
THEN
    ERO_ANYDIAG_8 = 0.188563

IF ERO_ANYDIAG_9 IS MISSING
THEN
    ERO_ANYDIAG_9 = 0.117157

IF ERO_ANYPRIMARY IS MISSING
THEN
    ERO_ANYPRIMARY = 0.812744

IF ERO_AQUIGN IS MISSING
THEN
    ERO_AQUIGN = 2.206252

IF ERO_BATHING IS MISSING
THEN
    ERO_BATHING = 2.460371

IF ERO_BEHAVE_1 IS MISSING
THEN
    ERO_BEHAVE_1 = 0.109099

IF ERO_BEHAVE_2 IS MISSING
THEN
    ERO_BEHAVE_2 = 0.100118

IF ERO_BEHAVE_3 IS MISSING
THEN
    ERO_BEHAVE_3 = 0.012158

IF ERO_BEHAVE_4 IS MISSING
THEN
    ERO_BEHAVE_4 = 0.006159
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF ERO_BOWEL_OUT IS MISSING
THEN
 ERO_BOWEL_OUT = 0.252154

IF ERO_CAREGIVER_1 IS MISSING
THEN
 ERO_CAREGIVER_1 = 0.511528

IF ERO_CAREGIVER_2 IS MISSING
THEN
 ERO_CAREGIVER_2 = 0.768758

IF ERO_CATHETER IS MISSING
THEN
 ERO_CATHETER = 0.038081

IF ERO_CHRONIC_1 IS MISSING
THEN
 ERO_CHRONIC_1 = 0.442362

IF ERO_CHRONIC_2 IS MISSING
THEN
 ERO_CHRONIC_2 = 0.311160

IF ERO_CHRONIC_3 IS MISSING
THEN
 ERO_CHRONIC_3 = 0.174689

IF ERO_CHRONIC_4 IS MISSING
THEN
 ERO_CHRONIC_4 = 0.033958

IF ERO_CHRONIC_5 IS MISSING
THEN
 ERO_CHRONIC_5 = 0.193621

IF ERO_CHRONIC_6 IS MISSING
THEN
 ERO_CHRONIC_6 = 0.451099

IF ERO_CHRONIC_7 IS MISSING
THEN
 ERO_CHRONIC_7 = 0.055171

IF ERO_CHRONIC_8 IS MISSING
THEN
 ERO_CHRONIC_8 = 0.204427

IF ERO_CHRONIC_9 IS MISSING
THEN
 ERO_CHRONIC_9 = 0.378335

IF ERO_COGNITIVEFUNC IS MISSING
THEN
 ERO_COGNITIVEFUNC = 0.468478

IF ERO_CONFUSIONFREQ IS MISSING
THEN
 ERO_CONFUSIONFREQ = 0.622357

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF ERO_CQUIGN IS MISSING
THEN
 ERO_CQUIGN = 1.866637

IF ERO_DEPRESSION IS MISSING
THEN
 ERO_DEPRESSION = 0.240598

IF ERO_DYSPNEA IS MISSING
THEN
 ERO_DYSPNEA = 1.171838

IF ERO_EATING IS MISSING
THEN
 ERO_EATING = 0.374081

IF ERO_FREQASST IS MISSING
THEN
 ERO_FREQASST = 4.204024

IF ERO_GENDER IS MISSING
THEN
 ERO_GENDER = 0.646163

IF ERO_GROOMING IS MISSING
THEN
 ERO_GROOMING = 0.820413

IF ERO_HEARING IS MISSING
THEN
 ERO_HEARING = 0.457343

IF ERO_HOUSEKEEPING IS MISSING
THEN
 ERO_HOUSEKEEPING = 3.025456

IF ERO_INCONT IS MISSING
THEN
 ERO_INCONT = 0.164373

IF ERO_INCONTBASE IS MISSING
THEN
 ERO_INCONTBASE = 0.756180

IF ERO_INCONTCATH IS MISSING
THEN
 ERO_INCONTCATH = 0.255470

IF ERO_INCONTSEV IS MISSING
THEN
 ERO_INCONTSEV = 0.897407

IF ERO_INPT_1 IS MISSING
THEN
 ERO_INPT_1 = 0.602716

IF ERO_INPT_2 IS MISSING
THEN
 ERO_INPT_2 = 0.117134

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF ERO_INPT_3 IS MISSING
THEN
 ERO_INPT_3 = 0.080365

IF ERO_INTPAIN IS MISSING
THEN
 ERO_INTPAIN = 0.123984

IF ERO_LAUNDRY IS MISSING
THEN
 ERO_LAUNDRY = 1.718983

IF ERO_LIVE_1 IS MISSING
THEN
 ERO_LIVE_1 = 0.282734

IF ERO_LIVE_2 IS MISSING
THEN
 ERO_LIVE_2 = 0.623147

IF ERO_LOS_4MO IS MISSING
THEN
 ERO_LOS_4MO = 0.014484

IF ERO_LOSGT31 IS MISSING
THEN
 ERO_LOSGT31 = 0.405627

IF ERO_LOSGT62 IS MISSING
THEN
 ERO_LOSGT62 = 0.074560

IF ERO_LOWERDRESS IS MISSING
THEN
 ERO_LOWERDRESS = 1.276318

IF ERO_MAXIMUMSEV IS MISSING
THEN
 ERO_MAXIMUMSEV = 2.385965

IF ERO_MEALPREP IS MISSING
THEN
 ERO_MEALPREP = 1.093463

IF ERO_MEDREG IS MISSING
THEN
 ERO_MEDREG = 0.836522

IF ERO_NEWASSIST IS MISSING
THEN
 ERO_NEWASSIST = 0.893276

IF ERO_ORALMEDS IS MISSING
THEN
 ERO_ORALMEDS = 0.768829

IF ERO_OSTOMY IS MISSING
THEN
 ERO_OSTOMY = 0.019834

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF ERO_P_AMBULATION_OUT IS MISSING
THEN

ERO_P_AMBULATION_OUT = 0.858682

IF ERO_P_BATHING_OUT IS MISSING
THEN

ERO_P_BATHING_OUT = 1.492008

IF ERO_P_EATING_OUT IS MISSING
THEN

ERO_P_EATING_OUT = 0.263117

IF ERO_P_GROOMING_OUT IS MISSING
THEN

ERO_P_GROOMING_OUT = 0.548388

IF ERO_P_HOUSEKEEPING_OUT IS MISSING
THEN

ERO_P_HOUSEKEEPING_OUT = 2.011815

IF ERO_P_LAUNDRY_OUT IS MISSING
THEN

ERO_P_LAUNDRY_OUT = 1.138678

IF ERO_P_LOWERDRESS_OUT IS MISSING
THEN

ERO_P_LOWERDRESS_OUT = 0.750443

IF ERO_P_MEALPREP_OUT IS MISSING
THEN

ERO_P_MEALPREP_OUT = 0.726254

IF ERO_P_ORALMEDS_OUT IS MISSING
THEN

ERO_P_ORALMEDS_OUT = 0.648790

IF ERO_P_PHONEUSE_OUT IS MISSING
THEN

ERO_P_PHONEUSE_OUT = 0.621746

IF ERO_P_SHOPPING_OUT IS MISSING
THEN

ERO_P_SHOPPING_OUT = 1.471394

IF ERO_P_TOILETING_OUT IS MISSING
THEN

ERO_P_TOILETING_OUT = 0.433832

IF ERO_P_TRANSFERRING_OUT IS MISSING
THEN

ERO_P_TRANSFERRING_OUT = 0.575070

IF ERO_P_TRANSPORT_OUT IS MISSING
THEN

ERO_P_TRANSPORT_OUT = 0.749964

IF ERO_P_UPPERDRESS_OUT IS MISSING
THEN

ERO_P_UPPERDRESS_OUT = 0.623923

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF ERO_PAIN IS MISSING
THEN

ERO_PAIN = 1.230063

IF ERO_PAY_1 IS MISSING
THEN

ERO_PAY_1 = 0.942696

IF ERO_PHONEUSE IS MISSING
THEN

ERO_PHONEUSE = 0.703433

IF ERO_PRESSURE IS MISSING
THEN

ERO_PRESSURE = 0.053147

IF ERO_PRESSURESTATUS IS MISSING
THEN

ERO_PRESSURESTATUS = 0.111023

IF ERO_PRESSUREULCER IS MISSING
THEN

ERO_PRESSUREULCER = 0.110102

IF ERO_PRIOR_1 IS MISSING
THEN

ERO_PRIOR_1 = 0.191636

IF ERO_PRIOR_2 IS MISSING
THEN

ERO_PRIOR_2 = 0.017984

IF ERO_PRIOR_3 IS MISSING
THEN

ERO_PRIOR_3 = 0.095135

IF ERO_PRIOR_4 IS MISSING
THEN

ERO_PRIOR_4 = 0.121223

IF ERO_PRIOR_5 IS MISSING
THEN

ERO_PRIOR_5 = 0.012344

IF ERO_PRIOR_6 IS MISSING
THEN

ERO_PRIOR_6 = 0.100978

IF ERO_PROBFREQ IS MISSING
THEN

ERO_PROBFREQ = 0.268449

IF ERO_PROG IS MISSING
THEN

ERO_PROG = 0.934505

IF ERO_REHAB IS MISSING
THEN

ERO_REHAB = 0.813899

RISK FACTOR TRANSFORMATION DOCUMENTATION

```
IF ERO_RESIDE_1 IS MISSING
THEN
    ERO_RESIDE_1 = 0.773538

IF ERO_RISK_1 IS MISSING
THEN
    ERO_RISK_1 = 0.079093

IF ERO_RISK_2 IS MISSING
THEN
    ERO_RISK_2 = 0.137931

IF ERO_RISK_3 IS MISSING
THEN
    ERO_RISK_3 = 0.015844

IF ERO_RISK_4 IS MISSING
THEN
    ERO_RISK_4 = 0.012290

IF ERO_ROCIND IS MISSING
THEN
    ERO_ROCIND = .095448

IF ERO_SEVERITY IS MISSING
THEN
    ERO_SEVERITY = 2.315974

IF ERO_SEVERITY2 IS MISSING
THEN
    ERO_SEVERITY2 = 2.568906

IF ERO_SHOPPING IS MISSING
THEN
    ERO_SHOPPING = 2.245576

IF ERO_SPEECH IS MISSING
THEN
    ERO_SPEECH = 0.439300

IF ERO_STASIS IS MISSING
THEN
    ERO_STASIS = 0.022108

IF ERO_STASISSTATUS IS MISSING
THEN
    ERO_STASISSTATUS = 0.049092

IF ERO_STASISULCER IS MISSING
THEN
    ERO_STASISULCER = 0.039925

IF ERO_SURGICAL IS MISSING
THEN
    ERO_SURGICAL = 0.326506

IF ERO_SURGICALSTATUS IS MISSING
THEN
    ERO_SURGICALSTATUS = 0.557624
```


RISK FACTOR TRANSFORMATION DOCUMENTATION

IF ERO_SURGICALWOUND IS MISSING
THEN
 ERO_SURGICALWOUND = 0.513786

IF ERO_TOILETING IS MISSING
THEN
 ERO_TOILETING = 0.592343

IF ERO_TRANSFERRING IS MISSING
THEN
 ERO_TRANSFERRING = 0.854171

IF ERO_TRANSPORT IS MISSING
THEN
 ERO_TRANSPORT = 1.019605

IF ERO_ULC_1 IS MISSING
THEN
 ERO_ULC_1 = 0.043538

IF ERO_ULC_2 IS MISSING
THEN
 ERO_ULC_2 = 0.011884

IF ERO_UPPERDRESS IS MISSING
THEN
 ERO_UPPERDRESS = 0.963738

IF ERO_UTI_OUT IS MISSING
THEN
 ERO_UTI_OUT = 0.079265

IF ERO_VISION IS MISSING
THEN
 ERO_VISION = 0.287375

IF M0100_ASSMT_REASON[2] = '06', '07', '09'
THEN

 UTIL_ACUTE_1 = ACUTE_1
 UTIL_ACUTE_10 = ACUTE_10
 UTIL_ACUTE_11 = ACUTE_11
 UTIL_ACUTE_12 = ACUTE_12
 UTIL_ACUTE_13 = ACUTE_13
 UTIL_ACUTE_14 = ACUTE_14
 UTIL_ACUTE_15 = ACUTE_15
 UTIL_ACUTE_16 = ACUTE_16
 UTIL_ACUTE_2 = ACUTE_2
 UTIL_ACUTE_3 = ACUTE_3
 UTIL_ACUTE_4 = ACUTE_4
 UTIL_ACUTE_5 = ACUTE_5
 UTIL_ACUTE_6 = ACUTE_6
 UTIL_ACUTE_7 = ACUTE_7
 UTIL_ACUTE_8 = ACUTE_8
 UTIL_ACUTE_9 = ACUTE_9
 UTIL_AGE = AGE
 UTIL_AMBULATION = AMBULATION
 UTIL_ANXIETYLEVEL = ANXIETYLEVEL

RISK FACTOR TRANSFORMATION DOCUMENTATION

UTIL_ANYDIAG_1 = ANYDIAG_1
UTIL_ANYDIAG_10 = ANYDIAG_10
UTIL_ANYDIAG_11 = ANYDIAG_11
UTIL_ANYDIAG_12 = ANYDIAG_12
UTIL_ANYDIAG_13 = ANYDIAG_13
UTIL_ANYDIAG_14 = ANYDIAG_14
UTIL_ANYDIAG_15 = ANYDIAG_15
UTIL_ANYDIAG_16 = ANYDIAG_16
UTIL_ANYDIAG_17 = ANYDIAG_17
UTIL_ANYDIAG_18 = ANYDIAG_18
UTIL_ANYDIAG_2 = ANYDIAG_2
UTIL_ANYDIAG_3 = ANYDIAG_3
UTIL_ANYDIAG_4 = ANYDIAG_4
UTIL_ANYDIAG_5 = ANYDIAG_5
UTIL_ANYDIAG_6 = ANYDIAG_6
UTIL_ANYDIAG_7 = ANYDIAG_7
UTIL_ANYDIAG_8 = ANYDIAG_8
UTIL_ANYDIAG_9 = ANYDIAG_9
UTIL_ANYPRIMARY = ANYPRIMARY
UTIL_AQUIGN = AQUIGN
UTIL_BATHING = BATHING
UTIL_BEHAVE_1 = BEHAVE_1
UTIL_BEHAVE_2 = BEHAVE_2
UTIL_BEHAVE_3 = BEHAVE_3
UTIL_BEHAVE_4 = BEHAVE_4
UTIL_BOWEL_OUT = BOWEL_OUT
UTIL_CAREGIVER_1 = CAREGIVER_1
UTIL_CAREGIVER_2 = CAREGIVER_2
UTIL_CATHETER = CATHETER
UTIL_CHRONIC_1 = CHRONIC_1
UTIL_CHRONIC_2 = CHRONIC_2
UTIL_CHRONIC_3 = CHRONIC_3
UTIL_CHRONIC_4 = CHRONIC_4
UTIL_CHRONIC_5 = CHRONIC_5
UTIL_CHRONIC_6 = CHRONIC_6
UTIL_CHRONIC_7 = CHRONIC_7
UTIL_CHRONIC_8 = CHRONIC_8
UTIL_CHRONIC_9 = CHRONIC_9
UTIL_COGNITIVEFUNC = COGNITIVEFUNC
UTIL_CONFUSIONFREQ = CONFUSIONFREQ
UTIL_CQUIGN = CQUIGN
UTIL_DEPRESSION = DEPRESSION
UTIL_DYSPNEA = DYSPNEA
UTIL_EATING = EATING
UTIL_FREQASST = FREQASST
UTIL_GENDER = GENDER
UTIL_GROOMING = GROOMING
UTIL_HEARING = HEARING
UTIL_HOUSEKEEPING = HOUSEKEEPING
UTIL_INCONT = INCONT
UTIL_INCONTBASE = INCONTBASE
UTIL_INCONTCATH = INCONTCATH
UTIL_INCONTSEV = INCONTSEV

RISK FACTOR TRANSFORMATION DOCUMENTATION

UTIL_INPT_1 = INPT_1
UTIL_INPT_2 = INPT_2
UTIL_INPT_3 = INPT_3
UTIL_INTPAIN = INTPAIN
UTIL_LAUNDRY = LAUNDRY
UTIL_LIVE_1 = LIVE_1
UTIL_LIVE_2 = LIVE_2
UTIL_LOS_4MO = LOS_4MO
UTIL_LOSGT31 = LOSGT31
UTIL_LOSGT62 = LOSGT62
UTIL_LOWERDRESS = LOWERDRESS
UTIL_MAXIMUMSEV = MAXIMUMSEV
UTIL_MEALPREP = MEALPREP
UTIL_MEDREG = MEDREG
UTIL_NEWASSIST = NEWASSIST
UTIL_ORALMEDS = ORALMEDS
UTIL_OSTOMY = OSTOMY
UTIL_P_AMBULATION_OUT = P_AMBULATION_OUT
UTIL_P_BATHING_OUT = P_BATHING_OUT
UTIL_P_EATING_OUT = P_EATING_OUT
UTIL_P_GROOMING_OUT = P_GROOMING_OUT
UTIL_P_HOUSEKEEPING_OUT = P_HOUSEKEEPING_OUT
UTIL_P_LAUNDRY_OUT = P_LAUNDRY_OUT
UTIL_P_LOWERDRESS_OUT = P_LOWERDRESS_OUT
UTIL_P_MEALPREP_OUT = P_MEALPREP_OUT
UTIL_P_ORALMEDS_OUT = P_ORALMEDS_OUT
UTIL_P_PHONEUSE_OUT = P_PHONEUSE_OUT
UTIL_P_SHOPPING_OUT = P_SHOPPING_OUT
UTIL_P_TOILETING_OUT = P_TOILETING_OUT
UTIL_P_TRANSFERRING_OUT = P_TRANSFERRING_OUT
UTIL_P_TRANSPORT_OUT = P_TRANSPORT_OUT
UTIL_P_UPPERDRESS_OUT = P_UPPERDRESS_OUT
UTIL_PAIN = PAIN
UTIL_PAY_1 = PAY_1
UTIL_PHONEUSE = PHONEUSE
UTIL_PRESSURE = PRESSURE
UTIL_PRESSURESTATUS = PRESSURESTATUS
UTIL_PRESSUREULCER = PRESSUREULCER
UTIL_PRIOR_1 = PRIOR_1
UTIL_PRIOR_2 = PRIOR_2
UTIL_PRIOR_3 = PRIOR_3
UTIL_PRIOR_4 = PRIOR_4
UTIL_PRIOR_5 = PRIOR_5
UTIL_PRIOR_6 = PRIOR_6
UTIL_PROBFREQ = PROBFREQ
UTIL_PROG = PROG
UTIL_REHAB = REHAB
UTIL_RESIDE_1 = RESIDE_1
UTIL_RISK_1 = RISK_1
UTIL_RISK_2 = RISK_2
UTIL_RISK_3 = RISK_3
UTIL_RISK_4 = RISK_4
UTIL_ROCIND = ROCIND

RISK FACTOR TRANSFORMATION DOCUMENTATION

UTIL_SEVERITY = SEVERITY
UTIL_SEVERITY2 = SEVERITY2
UTIL_SHOPPING = SHOPPING
UTIL_SPEECH = SPEECH
UTIL_STASIS = STASIS
UTIL_STASISSTATUS = STASISSTATUS
UTIL_STASISULCER = STASISULCER
UTIL_SURGICAL = SURGICAL
UTIL_SURGICALSTATUS = SURGICALSTATUS
UTIL_SURGICALWOUND = SURGICALWOUND
UTIL_TOILETING = TOILETING
UTIL_TRANSFERRING = TRANSFERRING
UTIL_TRANSPORT = TRANSPORT
UTIL_ULC_1 = ULC_1
UTIL_ULC_2 = ULC_2
UTIL_UPPERDRESS = UPPERDRESS
UTIL_UTI_OUT = UTI_OUT
UTIL_VISION = VISION

IF UTIL_ACUTE_1 IS MISSING
THEN
 UTIL_ACUTE_1 = 0.286704

IF UTIL_ACUTE_10 IS MISSING
THEN
 UTIL_ACUTE_10 = 0.104564

IF UTIL_ACUTE_11 IS MISSING
THEN
 UTIL_ACUTE_11 = 0.015656

IF UTIL_ACUTE_12 IS MISSING
THEN
 UTIL_ACUTE_12 = 0.143160

IF UTIL_ACUTE_13 IS MISSING
THEN
 UTIL_ACUTE_13 = 0.029812

IF UTIL_ACUTE_14 IS MISSING
THEN
 UTIL_ACUTE_14 = 0.022728

IF UTIL_ACUTE_15 IS MISSING
THEN
 UTIL_ACUTE_15 = 0.001076

IF UTIL_ACUTE_2 IS MISSING
THEN
 UTIL_ACUTE_2 = 0.097916

IF UTIL_ACUTE_3 IS MISSING
THEN
 UTIL_ACUTE_3 = 0.475152

RISK FACTOR TRANSFORMATION DOCUMENTATION

```
IF UTIL_ACUTE_4 IS MISSING
THEN
    UTIL_ACUTE_4 = 0.034876

IF UTIL_ACUTE_5 IS MISSING
THEN
    UTIL_ACUTE_5 = 0.328756

IF UTIL_ACUTE_6 IS MISSING
THEN
    UTIL_ACUTE_6 = 0.172524

IF UTIL_ACUTE_7 IS MISSING
THEN
    UTIL_ACUTE_7 = 0.100868

IF UTIL_ACUTE_8 IS MISSING
THEN
    UTIL_ACUTE_8 = 0.115560

IF UTIL_ACUTE_9 IS MISSING
THEN
    UTIL_ACUTE_9 = 0.014648

IF UTIL_AGE IS MISSING
THEN
    UTIL_AGE = 75.431020

IF UTIL_AMBULATION IS MISSING
THEN
    UTIL_AMBULATION = 1.362232

IF UTIL_ANXIETYLEVEL IS MISSING
THEN
    UTIL_ANXIETYLEVEL = 0.633220

IF UTIL_ANYDIAG_1 IS MISSING
THEN
    UTIL_ANYDIAG_1 = 0.032380

IF UTIL_ANYDIAG_10 IS MISSING
THEN
    UTIL_ANYDIAG_10 = 0.132980

IF UTIL_ANYDIAG_11 IS MISSING
THEN
    UTIL_ANYDIAG_11 = 0.001160

IF UTIL_ANYDIAG_12 IS MISSING
THEN
    UTIL_ANYDIAG_12 = 0.097836

IF UTIL_ANYDIAG_13 IS MISSING
THEN
    UTIL_ANYDIAG_13 = 0.324160

IF UTIL_ANYDIAG_14 IS MISSING
THEN
    UTIL_ANYDIAG_14 = 0.008828
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

```
IF UTIL_ANYDIAG_15 IS MISSING
THEN
    UTIL_ANYDIAG_15 = 0.330708

IF UTIL_ANYDIAG_16 IS MISSING
THEN
    UTIL_ANYDIAG_16 = 0.095160

IF UTIL_ANYDIAG_17 IS MISSING
THEN
    UTIL_ANYDIAG_17 = 0.002836

IF UTIL_ANYDIAG_18 IS MISSING
THEN
    UTIL_ANYDIAG_18 = 0.067880

IF UTIL_ANYDIAG_2 IS MISSING
THEN
    UTIL_ANYDIAG_2 = 0.111268

IF UTIL_ANYDIAG_3 IS MISSING
THEN
    UTIL_ANYDIAG_3 = 0.311892

IF UTIL_ANYDIAG_4 IS MISSING
THEN
    UTIL_ANYDIAG_4 = 0.084228

IF UTIL_ANYDIAG_5 IS MISSING
THEN
    UTIL_ANYDIAG_5 = 0.100364

IF UTIL_ANYDIAG_6 IS MISSING
THEN
    UTIL_ANYDIAG_6 = 0.111616

IF UTIL_ANYDIAG_7 IS MISSING
THEN
    UTIL_ANYDIAG_7 = 0.582332

IF UTIL_ANYDIAG_8 IS MISSING
THEN
    UTIL_ANYDIAG_8 = 0.212232

IF UTIL_ANYDIAG_9 IS MISSING
THEN
    UTIL_ANYDIAG_9 = 0.126152

IF UTIL_ANYPRIMARY IS MISSING
THEN
    UTIL_ANYPRIMARY = 0.818157

IF UTIL_AQUIGN IS MISSING
THEN
    UTIL_AQUIGN = 2.300536

IF UTIL_BATHING IS MISSING
THEN
    UTIL_BATHING = 2.583020
```

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF UTIL_BEHAVE_1 IS MISSING
THEN
 UTIL_BEHAVE_1 = 0.122184

IF UTIL_BEHAVE_2 IS MISSING
THEN
 UTIL_BEHAVE_2 = 0.117232

IF UTIL_BEHAVE_3 IS MISSING
THEN
 UTIL_BEHAVE_3 = 0.014936

IF UTIL_BEHAVE_4 IS MISSING
THEN
 UTIL_BEHAVE_4 = 0.007424

IF UTIL_BOWEL_OUT IS MISSING
THEN
 UTIL_BOWEL_OUT = 0.330161

IF UTIL_CAREGIVER_1 IS MISSING
THEN
 UTIL_CAREGIVER_1 = 0.530797

IF UTIL_CAREGIVER_2 IS MISSING
THEN
 UTIL_CAREGIVER_2 = 0.775199

IF UTIL_CATHETER IS MISSING
THEN
 UTIL_CATHETER = 0.055932

IF UTIL_CHRONIC_1 IS MISSING
THEN
 UTIL_CHRONIC_1 = 0.492240

IF UTIL_CHRONIC_2 IS MISSING
THEN
 UTIL_CHRONIC_2 = 0.358652

IF UTIL_CHRONIC_3 IS MISSING
THEN
 UTIL_CHRONIC_3 = 0.206196

IF UTIL_CHRONIC_4 IS MISSING
THEN
 UTIL_CHRONIC_4 = 0.046500

IF UTIL_CHRONIC_5 IS MISSING
THEN
 UTIL_CHRONIC_5 = 0.220780

IF UTIL_CHRONIC_6 IS MISSING
THEN
 UTIL_CHRONIC_6 = 0.501456

IF UTIL_CHRONIC_7 IS MISSING
THEN
 UTIL_CHRONIC_7 = 0.060669

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF UTIL_CHRONIC_8 IS MISSING
THEN
 UTIL_CHRONIC_8 = 0.231764

IF UTIL_CHRONIC_9 IS MISSING
THEN
 UTIL_CHRONIC_9 = 0.414404

IF UTIL_COGNITIVEFUNC IS MISSING
THEN
 UTIL_COGNITIVEFUNC = 0.529136

IF UTIL_CONFUSIONFREQ IS MISSING
THEN
 UTIL_CONFUSIONFREQ = 0.696222

IF UTIL_CQUIGN IS MISSING
THEN
 UTIL_CQUIGN = 2.118432

IF UTIL_DEPRESSION IS MISSING
THEN
 UTIL_DEPRESSION = 0.274644

IF UTIL_DYSPNEA IS MISSING
THEN
 UTIL_DYSPNEA = 1.319256

IF UTIL_EATING IS MISSING
THEN
 UTIL_EATING = 0.439560

IF UTIL_FREQASST IS MISSING
THEN
 UTIL_FREQASST = 4.268694

IF UTIL_GENDER IS MISSING
THEN
 UTIL_GENDER = 0.634744

IF UTIL_GROOMING IS MISSING
THEN
 UTIL_GROOMING = 0.934944

IF UTIL_HEARING IS MISSING
THEN
 UTIL_HEARING = 0.491824

IF UTIL_HOUSEKEEPING IS MISSING
THEN
 UTIL_HOUSEKEEPING = 3.121384

IF UTIL_INCONT IS MISSING
THEN
 UTIL_INCONT = 0.181448

IF UTIL_INCONTBASE IS MISSING
THEN
 UTIL_INCONTBASE = 0.879070

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF UTIL_INCONTCATH IS MISSING
THEN
 UTIL_INCONTCATH = 0.272752

IF UTIL_INCONTSEV IS MISSING
THEN
 UTIL_INCONTSEV = 0.983979

IF UTIL_INPT_1 IS MISSING
THEN
 UTIL_INPT_1 = 0.625216

IF UTIL_INPT_2 IS MISSING
THEN
 UTIL_INPT_2 = 0.105840

IF UTIL_INPT_3 IS MISSING
THEN
 UTIL_INPT_3 = 0.077632

IF UTIL_INTPAIN IS MISSING
THEN
 UTIL_INTPAIN = 0.134515

IF UTIL_LAUNDRY IS MISSING
THEN
 UTIL_LAUNDRY = 1.748072

IF UTIL_LIVE_1 IS MISSING
THEN
 UTIL_LIVE_1 = 0.274340

IF UTIL_LIVE_2 IS MISSING
THEN
 UTIL_LIVE_2 = 0.632368

IF UTIL_LOS_4MO IS MISSING
THEN
 UTIL_LOS_4MO = 0.021212

IF UTIL_LOSGT31 IS MISSING
THEN
 UTIL_LOSGT31 = 0.370160

IF UTIL_LOSGT62 IS MISSING
THEN
 UTIL_LOSGT62 = 0.087232

IF UTIL_LOWERDRESS IS MISSING
THEN
 UTIL_LOWERDRESS = 1.371904

IF UTIL_MAXIMUMSEV IS MISSING
THEN
 UTIL_MAXIMUMSEV = 2.445020

IF UTIL_MEALPREP IS MISSING
THEN
 UTIL_MEALPREP = 1.160004

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF UTIL_MEDREG IS MISSING
THEN
 UTIL_MEDREG = 0.841644

IF UTIL_NEWASSIST IS MISSING
THEN
 UTIL_NEWASSIST = 0.894622

IF UTIL_ORALMEDS IS MISSING
THEN
 UTIL_ORALMEDS = 0.850577

IF UTIL_OSTOMY IS MISSING
THEN
 UTIL_OSTOMY = 0.022434

IF UTIL_P_AMBULATION_OUT IS MISSING
THEN
 UTIL_P_AMBULATION_OUT = 0.979676

IF UTIL_P_BATHING_OUT IS MISSING
THEN
 UTIL_P_BATHING_OUT = 1.690136

IF UTIL_P_EATING_OUT IS MISSING
THEN
 UTIL_P_EATING_OUT = 0.321528

IF UTIL_P_GROOMING_OUT IS MISSING
THEN
 UTIL_P_GROOMING_OUT = 0.656864

IF UTIL_P_HOUSEKEEPING_OUT IS MISSING
THEN
 UTIL_P_HOUSEKEEPING_OUT = 2.210756

IF UTIL_P_LAUNDRY_OUT IS MISSING
THEN
 UTIL_P_LAUNDRY_OUT = 1.236704

IF UTIL_P_LOWERDRESS_OUT IS MISSING
THEN
 UTIL_P_LOWERDRESS_OUT = 0.872520

IF UTIL_P_MEALPREP_OUT IS MISSING
THEN
 UTIL_P_MEALPREP_OUT = 0.815936

IF UTIL_P_ORALMEDS_OUT IS MISSING
THEN
 UTIL_P_ORALMEDS_OUT = 0.722618

IF UTIL_P_PHONEUSE_OUT IS MISSING
THEN
 UTIL_P_PHONEUSE_OUT = 0.732614

IF UTIL_P_SHOPPING_OUT IS MISSING
THEN
 UTIL_P_SHOPPING_OUT = 1.605812

RISK FACTOR TRANSFORMATION DOCUMENTATION

**IF UTIL_P_TOILETING_OUT IS MISSING
THEN**

UTIL_P_TOILETING_OUT = 0.538672

**IF UTIL_P_TRANSFERRING_OUT IS MISSING
THEN**

UTIL_PTRANSFERRING_OUT = 0.679192

**IF UTIL_P_TRANSPORT_OUT IS MISSING
THEN**

UTIL_P_TRANSPORT_OUT = 0.802836

**IF UTIL_P_UPPERDRESS_OUT IS MISSING
THEN**

UTIL_P_UPPERDRESS_OUT = 0.737492

**IF UTIL_PAIN IS MISSING
THEN**

UTIL_PAIN = 1.239976

**IF UTIL_PAY_1 IS MISSING
THEN**

UTIL_PAY_1 = 0.935284

**IF UTIL_PHONEUSE IS MISSING
THEN**

UTIL_PHONEUSE = 0.832728

**IF UTIL_PRESSURE IS MISSING
THEN**

UTIL_PRESSURE = 0.073184

**IF UTIL_PRESSURESTATUS IS MISSING
THEN**

UTIL_PRESSURESTATUS = 0.157469

**IF UTIL_PRESSUREULCER IS MISSING
THEN**

UTIL_PRESSUREULCER = 0.160296

**IF UTIL_PRIOR_1 IS MISSING
THEN**

UTIL_PRIOR_1 = 0.208902

**IF UTIL_PRIOR_2 IS MISSING
THEN**

UTIL_PRIOR_2 = 0.030975

**IF UTIL_PRIOR_3 IS MISSING
THEN**

UTIL_PRIOR_3 = 0.097118

**IF UTIL_PRIOR_4 IS MISSING
THEN**

UTIL_PRIOR_4 = 0.139318

**IF UTIL_PRIOR_5 IS MISSING
THEN**

UTIL_PRIOR_5 = 0.014796

RISK FACTOR TRANSFORMATION DOCUMENTATION

IF UTIL_PRIOR_6 IS MISSING
THEN
 UTIL_PRIOR_6 = 0.111602

IF UTIL_PROBFREQ IS MISSING
THEN
 UTIL_PROBFREQ = 0.306468

IF UTIL_PROG IS MISSING
THEN
 UTIL_PROG = 0.904335

IF UTIL_REHAB IS MISSING
THEN
 UTIL_REHAB = 0.757504

IF UTIL_RESIDE_1 IS MISSING
THEN
 UTIL_RESIDE_1 = 0.768220

IF UTIL_RISK_1 IS MISSING
THEN
 UTIL_RISK_1 = 0.083944

IF UTIL_RISK_2 IS MISSING
THEN
 UTIL_RISK_2 = 0.143893

IF UTIL_RISK_3 IS MISSING
THEN
 UTIL_RISK_3 = 0.016142

IF UTIL_RISK_4 IS MISSING
THEN
 UTIL_RISK_4 = 0.012729

IF UTIL_ROCIND IS MISSING
THEN
 UTIL_ROCIND = .143724

IF UTIL_SEVERITY IS MISSING
THEN
 UTIL_SEVERITY = 2.367367

IF UTIL_SEVERITY2 IS MISSING
THEN
 UTIL_SEVERITY2 = 2.751812

IF UTIL_SHOPPING IS MISSING
THEN
 UTIL_SHOPPING = 2.292888

IF UTIL_SPEECH IS MISSING
THEN
 UTIL_SPEECH = 0.500148

IF UTIL_STASIS IS MISSING
THEN
 UTIL_STASIS = 0.028228

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IF UTIL_STASISSTATUS IS MISSING
THEN
 UTIL_STASISSTATUS = 0.064600

IF UTIL_STASISULCER IS MISSING
THEN
 UTIL_STASISULCER = 0.053507

IF UTIL_SURGICAL IS MISSING
THEN
 UTIL_SURGICAL = 0.296984

IF UTIL_SURGICALSTATUS IS MISSING
THEN
 UTIL_SURGICALSTATUS = 0.513856

IF UTIL_SURGICALWOUND IS MISSING
THEN
 UTIL_SURGICALWOUND = 0.470939

IF UTIL_TOILETING IS MISSING
THEN
 UTIL_TOILETING = 0.715276

IF UTIL_TRANSFERRING IS MISSING
THEN
 UTIL_TRANSFERRING = 0.955488

IF UTIL_TRANSPORT IS MISSING
THEN
 UTIL_TRANSPORT = 1.037188

IF UTIL_ULC_1 IS MISSING
THEN
 UTIL_ULC_1 = 0.061644

IF UTIL_ULC_2 IS MISSING
THEN
 UTIL_ULC_2 = 0.020984

IF UTIL_UPPERDRESS IS MISSING
THEN
 UTIL_UPPERDRESS = 1.076556

IF UTIL_UTI_OUT IS MISSING
THEN
 UTIL_UTI_OUT = 0.088495

IF UTIL_VISION IS MISSING
THEN
 UTIL_VISION = 0.318588