OUTCOME-BASED QUALITY MONITORING REPORTS:

TECHNICAL DOCUMENTATION OF MEASURES

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OUTCOME-BASED QUALITY MONITORING REPORTS:
TECHNICAL DOCUMENTATION OF MEASURES

This document includes definitions of measures that appear in Outcome-Based Quality Monitoring 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 Monitoring User's Manual*, which is available from the Centers for Medicare & Medicaid Services (CMS) in three parts[1]:

1. Quality Monitoring Using Case Mix and Adverse Event Outcome Reports;

2. Accessing Outcome-Based Quality Monitoring Reports;

3. APPENDIX: Guidelines for Reviewing Case Mix and Adverse Event Outcome Reports.

- **Episodes of Care Included in Case Mix and Adverse Event Reports**

The unit of analysis for both case mix and adverse event 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, will not be included in the 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.

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[1] The three sections of the *Outcome-Based Quality Monitoring User's Manual* are available for download from the CMS web site at: *http://www.cms.hhs.gov/oasis/obqm.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 1.20-1.40 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. Several adverse event outcome measures are calculated using data from the episode of care end point assessment only, while other adverse event outcome measures used data from both the beginning and end assessments.

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.

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.
　　Medicare HMO (%)
　　　　1 if M0150_CPAY_MCARE_HMO = 1;
　　　　0 otherwise.

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[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.

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.

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]

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]

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]

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.

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

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

"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.

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]

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.

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.

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:

Home Care Diagnosis Code	Corresponding Severity Rating
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.
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.

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] minus M0030_START_CARE_DT, rounded to days plus 1
>For episodes beginning with ROC assessment:
>>M0906_DC_TRAN_DTH_DT[2] minus M0032_ROC_DT, rounded to days plus 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.

ADVERSE EVENT OUTCOME TRANSFORMATION DOCUMENTATION

Thirteen adverse event outcome measures appear on the Adverse Event Outcome Report:

      Emergent Care for Injury Caused by Fall or Accident at Home
      Emergent Care for Wound Infections, Deteriorating Wound Status
      Emergent Care for Improper Medication Administration, Medication Side Effects
      Emergent Care for Hypo/Hyperglycemia
      Development of Urinary Tract Infection
      Increase in Number of Pressure Ulcers
      Substantial Decline in 3 or More Activities of Daily Living
      Substantial Decline in Management of Oral Medications
      Unexpected Nursing Home Admission
      Discharged to the Community Needing Wound Care or Medication Assistance
      Discharged to the Community Needing Toileting Assistance
      Discharged to the Community with Behavioral Problems
      Unexpected Death

The transformation documentation below indicates, for each measure that appears in the Adverse Event Outcome Report, the name of the measure as it appears on the report, followed by a formula or logical expression indicating how the measure is calculated from specific OASIS data fields.

Emergent Care for Injury Caused by Fall or Accident at Home
    1 if M0100_ASSMT_REASON[2] = 06,07,09 and M0840_ECR_INJURY[2] = 1;
    0 if M0100_ASSMT_REASON[2] = 06,07,09 and M0830_EC_UNKNOWN[2] = 0 and
        (M0830_EC_NONE[2] = 1 or M0840_ECR_UNKNOWN[2] = 0);
    MISSING Otherwise.

Emergent Care for Wound Infections, Deteriorating Wound Status
    1 if M0100_ASSMT_REASON[2] = 06,07,09 and M0840_ECR_WOUND[2] = 1;
    0 if M0100_ASSMT_REASON[2] = 06,07,09 and M0830_EC_UNKNOWN[2] = 0 and
        (M0830_EC_NONE[2] = 1 or M0840_ECR_UNKNOWN[2] = 0);
    MISSING Otherwise.

Emergent Care for Improper Medication Administration, Medication Side Effects
    1 if M0100_ASSMT_REASON[2] = 06,07,09 and M0840_ECR_MEDICATION[2] = 1;
    0 if M0100_ASSMT_REASON[2] = 06,07,09 and M0830_EC_UNKNOWN[2] = 0 and
        (M0830_EC_NONE[2] = 1 or M0840_ECR_UNKNOWN[2] = 0);
    MISSING Otherwise.

Emergent Care for Hypo/Hyperglycemia
    1 if M0100_ASSMT_REASON[2] = 06,07,09 and M0840_ECR_HYPOGLYC[2] = 1;
    0 if M0100_ASSMT_REASON[2] = 06,07,09 and M0830_EC_UNKNOWN[2] = 0 and
        (M0830_EC_NONE[2] = 1 or M0840_ECR_UNKNOWN[2] = 0);
    MISSING Otherwise.

Development of Urinary Tract Infection
    1 if M0100_ASSMT_REASON[2] = 09 and M0510_UTI = 00 AND M0510_UTI[2] = 01;
    0 if M0100_ASSMT_REASON[2] = 09 and M0510_UTI = 00 AND M0510_UTI[2] = 00;
    MISSING Otherwise.

Increase in Number of Pressure Ulcers
    1 if PRESSURE1 < 16 and
        PRESSURE2 > PRESSURE1;
    0 if M0100_ASSMT_REASON[2] = 09 and PRESSURE1 < 16, and
        PRESSURE2 <= PRESSURE1;
    MISSING Otherwise.

    This measure requires the computation of two interim measures. PRESSURE1
    represents the number of stageable pressure ulcers at SOC/ROC while PRESSURE2
    represents the number of stageable pressure ulcers at DC.

    PRESSURE1
        M0450_NBR_PRSULC_STG1 + M0450_NBR_PRSULC_STG2 +
        M0450_NBR_PRSULC_STG3 + M0450_NBR_PRSULC_STG4
    if M0100_ASSMT_REASON[2] = 09 and M0440_LESION_OPEN_WND = 1 and
        M0445_PRESS_ULCER = 1;
    0 if M0100_ASSMT_REASON[2] = 09 and (M0440_LESION_OPEN_WND = 0 or
        M0445_PRESS_ULCER = 0);
    MISSING otherwise.

    PRESSURE2
        M0450_NBR_PRSULC_STG1[2] + M0450_NBR_PRSULC_STG2[2] +
        M0450_NBR_PRSULC_STG3[2] + M0450_NBR_PRSULC_STG4[2]
    if M0100_ASSMT_REASON[2] = 09 and M0440_LESION_OPEN_WND[2] = 1 and
        M0445_PRESS_ULCER[2] = 1;
    0 if M0100_ASSMT_REASON[2] = 09 and (M0440_LESION_OPEN_WND[2] = 0 or
        M0445_PRESS_ULCER[2] = 0);
    MISSING otherwise.

Substantial Decline in 3 or more Activities of Daily Living
    1 if M0280_LIFE_EXPECTANCY = 00 and TOTAL >= 3;
    0 if M0280_LIFE_EXPECTANCY = 00 and TOTAL < 3;
    MISSING Otherwise.

    This measure also requires the computation of interim measures. DECLINE1 through
    DECLINE5 represent a decline by two or more points in grooming ability, bathing ability,
    toileting ability, transferring ability, and ability to ambulate, respectively. If a patient has
    non-missing data for three or more of the DECLINE measures, TOTAL represents the sum
    of the DECLINE measures, otherwise TOTAL is missing and the adverse event measure
    is missing.

DECLINE1
1 if M0100_ASSMT_REASON[2] = 09 and
     ((M0640_CUR_GROOMING = 00 and M0640_CUR_GROOMING[2] = 02,03) or
     (M0640_CUR_GROOMING = 01 and M0640_CUR_GROOMING[2] = 03));
0 if M0100_ASSMT_REASON[2] = 09 and
     ((M0640_CUR_GROOMING = 00 and M0640_CUR_GROOMING[2] = 00,01) or
     (M0640_CUR_GROOMING = 01 and M0640_CUR_GROOMING[2] = 00,01,02));
MISSING Otherwise.

DECLINE2
1 if M0100_ASSMT_REASON[2] = 09 and
     ((M0670_CUR_BATHING = 00 and M0670_CUR_BATHING[2] = 02,03,04,05) or
     (M0670_CUR_BATHING = 01 and M0670_CUR_BATHING[2] = 03,04,05) or
     (M0670_CUR_BATHING = 02 and M0670_CUR_BATHING[2] = 04,05) or
     (M0670_CUR_BATHING = 03 and M0670_CUR_BATHING[2] = 05));
0 if M0100_ASSMT_REASON[2] = 09 and
     ((M0670_CUR_BATHING = 00 and M0670_CUR_BATHING[2] = 00,01) or
     (M0670_CUR_BATHING = 01 and M0670_CUR_BATHING[2] = 00,01,02) or
     (M0670_CUR_BATHING = 02 and M0670_CUR_BATHING[2] = 00,01,02,03) or
     (M0670_CUR_BATHING = 03 and M0670_CUR_BATHING[2] = 00,01,02,03 or 04));
MISSING Otherwise.

DECLINE3
1 if M0100_ASSMT_REASON[2] = 09 and
     (M0680_CUR_TOILETING = 00 and M0680_CUR_TOILETING[2] = 02,03,04) or
     (M0680_CUR_TOILETING = 01 and M0680_CUR_TOILETING[2] = 03,04) or
     (M0680_CUR_TOILETING = 02 and M0680_CUR_TOILETING[2] = 04);
0 if M0100_ASSMT_REASON[2] = 09 and
     (M0680_CUR_TOILETING = 00 and M0680_CUR_TOILETING[2] = 00,01) or
     (M0680_CUR_TOILETING = 01 and M0680_CUR_TOILETING[2] = 00,01,02) or
     (M0680_CUR_TOILETING = 02 and M0680_CUR_TOILETING[2] = 00,01,02,03);
MISSING Otherwise.

DECLINE4
1 if M0100_ASSMT_REASON[2] = 09 and
     ((M0690_CUR_TRANSFERRING = 00 and
     M0690_CUR_TRANSFERRING[2] = 02,03,04,05) or
     (M0690_CUR_TRANSFERRING = 01 and
     M0690_CUR_TRANSFERRING[2] = 03,04,05) or
     (M0690_CUR_TRANSFERRING = 02 and
     M0690_CUR_TRANSFERRING[2] = 04,05) or
     (M0690_CUR_TRANSFERRING = 03 and M0690_CUR_TRANSFERRING[2] = 05));
0 if M0100_ASSMT_REASON[2] = 09 and
     ((M0690_CUR_TRANSFERRING = 00 and
     M0690_CUR_TRANSFERRING[2] = 00,01) or
     (M0690_CUR_TRANSFERRING = 01 and
     M0690_CUR_TRANSFERRING[2] = 00,01,02) or
     (M0690_CUR_TRANSFERRING = 02 and
     M0690_CUR_TRANSFERRING[2] = 00,01,02,03) or
     (M0690_CUR_TRANSFERRING = 03 and
     M0690_CUR_TRANSFERRING[2] = 00,01,02,03,04);
MISSING Otherwise.

DECLINE5
1 if M0100_ASSMT_REASON[2] = 09 and
        ((M0700_CUR_AMBULATION = 00 and
        M0700_CUR_AMBULATION[2] = 02,03,04,05) or
        (M0700_CUR_AMBULATION = 01 and
        M0700_CUR_AMBULATION[2] = 03,04,05) or
        (M0700_CUR_AMBULATION = 02 and M0700_CUR_AMBULATION[2] = 04,05) or
        (M0700_CUR_AMBULATION = 03 and M0700_CUR_AMBULATION[2] = 05));
0 if M0100_ASSMT_REASON[2] = 09 and
        (M0700_CUR_AMBULATION = 00 and M0700_CUR_AMBULATION[2] = 00,01) or
        (M0700_CUR_AMBULATION = 01 and
        M0700_CUR_AMBULATION[2] = 00,01,02) or
        (M0700_CUR_AMBULATION = 02 and
        M0700_CUR_AMBULATION[2] = 00,01,02,03) or
        (M0700_CUR_AMBULATION = 03 and
        M0700_CUR_AMBULATION[2] = 00,01,02,03,04);
MISSING Otherwise.

TOTAL
        DECLINE1 + DECLINE2 + DECLINE3 + DECLINE4 + DECLINE5
if **three or more** of the DECLINE measures have non-missing data.
MISSING Otherwise.

Substantial Decline in Management of Oral Medications
        1 if M0100_ASSMT_REASON[2] = 09 and M0780_CUR_ORAL_MEDS = 00 and
        M0780_CUR_ORAL_MEDS[2] = 02;
        0 if M0100_ASSMT_REASON[2] = 09 and M0780_CUR_ORAL_MEDS = 00 and
        M0780_CUR_ORAL_MEDS[2] = 00,01;
        MISSING Otherwise.

Unexpected Nursing Home Admission
        1 if M0270_REHAB_PROGNOSIS = 01 and (NURSING1 = 1 or NURSING2 = 1 or
        NURSING3 = 1 or NURSING4 = 1);
        0 if M0270_REHAB_PROGNOSIS = 01 and
        ((NURSING1 = 0 and NURSING2 = 0 and NURSING3 = 0 and NURSING4 = 0) or
        M0100_ASSMT_REASON[2] = 09);
        MISSING Otherwise.

This measure requires the computation of interim measures, NURSING1 through
NURSING4, defined as follows:

NURSING1
MISSING if (M0100_ASSMT_REASON[2] not = 06 or 07) or M0900_NH_UNKNOWN = 1;
0 if M0855_INPAT_FACILITY[2] = 01,02,04 or M0900_NH_HOSPICE[2] = 0;
1 if M0900_NH_HOSPICE[2] = 1.

NURSING2
MISSING if (M0100_ASSMT_REASON[2] not = 06 or 07) or M0900_NH_UNKNOWN = 1;
0 if M0855_INPAT_FACILITY[2] = 01,02,04 or M0900_PERMANENT[2] = 0;
1 if M0900_NH_PERMANENT[2] = 1.

NURSING3
MISSING if (M0100_ASSMT_REASON[2] not = 06 or 07) or M0900_NH_UNKNOWN = 1;
0 if M0855_INPAT_FACILITY[2] = 01,02,04 or M0900_NH_UNSAFE_HOME[2] = 0;
1 if M0900_NH_UNSAFE_HOME[2] = 1.

NURSING4
MISSING if (M0100_ASSMT_REASON[2] not = 06 or 07) or M0900_NH_UNKNOWN = 1;
0 if M0855_INPAT_FACILITY[2] = 01,02,04 or M0900_NH_OTHER[2] = 0;
1 if M0900_NH_OTHER[2] = 1.

Discharged to the Community Needing Wound Care or Medication Assistance
    1 if M0100_ASSMT_REASON[2] = 09 and M0870_DSCHG_DISP[2] = 01 and
        M0300_CURR_RESIDENCE[2] = 01,02,03,05 and
        M0350_AP_HM_RESIDENT[2] = 0 and M0350_AP_PD_HELP[2] = 0 and
        M0570_WHEN_CONFUSED[2] = 03,04,NA and
        (M0460_PRBLM_ULCER[2] = 03,04 or M0488_STAT_PRB_SURGWND[2] = 03 or
        M0780_CUR_ORAL_MEDS[2] = 02);
    0 if M0100_ASSMT_REASON[2] = 09 and M0870_DSCHG_DISP[2] = 01 and
        (M0300_CURR_RESIDENCE[2] = 04 or
        M0350_AP_HM_RESIDENT[2] = 1 or M0350_AP_PD_HELP[2] = 1 or
        M0570_WHEN_CONFUSED[2] = 00,01,02 or
        (M0460_PRBLM_ULCER[2] = 01,02 and
        M0488_STAT_PRB_SURGWND[2] = 01,02 and
        M0780_CUR_ORAL_MEDS[2] = 00,01));
    MISSING Otherwise.

Discharged to the Community Needing Toileting Assistance
    1 if M0100_ASSMT_REASON[2] = 09 and M0870_DSCHG_DISP[2] = 01 and
        M0350_AP_HM_RESIDENT[2] = 0 and M0350_AP_PD_HELP[2] = 0 and
        (M0700_CUR_AMBULATION[2] = 03,04,05 and M0680_CUR_TOILETING[2] = 04);
    0 if M0100_ASSMT_REASON[2] = 09 and M0870_DSCHG_DISP[2] = 01 and
        (M0350_AP_HM_RESIDENT[2] = 1 or M0350_AP_PD_HELP[2] = 1 or
        (M0700_CUR_AMBULATION[2] = 00,01,02 and
        M0680_CUR_TOILETING[2] = 00,01,02,03));
    MISSING Otherwise.

Discharged to the Community with Behavioral Problems
    1 if M0100_ASSMT_REASON[2] = 09 and M0870_DSCHG_DISP[2] = 01 and
        M0350_AP_HM_RESIDENT[2] = 0 and M0350_AP_PD_HELP[2] = 0 and
        ((M0610_BD_MEM_DEFICIT[2] + M0610_BD_IMP_DECISN[2] +
        M0610_BD_VERBAL[2] + M0610_BD_PHYSICAL[2] +
        M0610_BD_SOC_INAPPRO[2] + M0610_BD_DELUSIONS[2]) >= 2);
    0 if M0100_ASSMT_REASON[2] = 09 and (M0870_DSCHG_DISP[2] = 01 and
        (M0350_AP_HM_RESIDENT[2] = 1 or M0350_AP_PD_HELP[2] = 1 or
        ((M0610_BD_MEM_DEFICIT[2] + M0610_BD_IMP_DECISN[2] +
        M0610_BD_VERBAL[2] + M0610_BD_PHYSICAL[2] +
        M0610_BD_SOC_INAPPRO[2] + M0610_BD_DELUSIONS[2]) < 2));
    MISSING Otherwise.

Unexpected Death
    1 if M0280_LIFE_EXPECTANCY = 00 and M0100_ASSMT_REASON[2] = 08;
    0 if M0280_LIFE_EXPECTANCY = 00 and M0100_ASSMT_REASON[2] = 06,07,09;
    MISSING Otherwise.