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# **PSYCKES Preventable Hospitalization Indicators**

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June 2011

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Technical Specifications

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## Preventable Hospitalization Summary Indicator

### Description:

The percentage of Adult Medicaid enrollees/members of all ages currently identified as having 1 or more preventable Inpatient stays in the past 12 month among enrollees currently receiving services from an OMH licensed provider.

### Eligible Population:

Age: 18 years and older.

Inclusion Criteria: Medicaid enrollee/member who has received one or more services from an OMH licensed provider in the 9 months prior to the report date.

Exclusion Criteria: Transfers from another facility

Note. The preventable hospitalization indicators are based on the Agency for Health Care Research and Quality (AHRQ) Prevention Quality Indicators (PQI), which are intended to identify population rates of hospitalizations for conditions that with adequate outpatient care should be preventable. The AHRQ PQIs are considered area measures (intended to describe the rate within a certain geographic area). The PSYCKES indicators are intended to identify those NYS Medicaid members/enrollees who may benefit from better coordinated care in the community. More information regarding the AHRQ PQIs can be found at the [AHRQ Quality Indicators Website](#) .

## Adult Asthma Preventable Hospitalization Summary Indicator

### Description:

The percentage of Adult Medicaid enrollees/members of all ages currently identified as having 1 or more Asthma Inpatient stays (See Primary Diagnosis Codes in Table 1) in the past 12 month among enrollees currently receiving services from an OMH licensed provider.

### Eligible Population:

Age: 18 years and older.

Inclusion Criteria: Medicaid enrollee/member who has received one or more services from an OMH licensed provider in the 9 months prior to the report date.

Exclusion Criteria: Transfers from another facility and claims with major diagnostic categories of pregnancy, childbirth, or puerperium as well as cystic fibrosis and anomalies of the respiratory system in any diagnosis field.

Note. The preventable hospitalization indicators are based on the Agency for Health Care Research and Quality (AHRQ) Prevention Quality Indicators (PQI), which are intended to identify population rates of hospitalizations for conditions that with adequate outpatient care should be preventable. The AHRQ PQIs are considered area measures (intended to describe the rate within a certain geographic area). The PSYCKES indicators are intended to identify those NYS Medicaid members/enrollees who may benefit from better coordinated care in the community. More information regarding the AHRQ PQIs can be found at the [AHRQ Quality Indicators Website](#).

Adult Asthma Preventable Hospitalization	
<b>Numerator:</b>	
All non-maternal discharges of age 18 years and older with ICD-9-CM principal diagnosis code of asthma.	
Asthma ICD-9-CM diagnosis codes:	
49300 EXT ASTHMA W/O STAT ASTH	49321 CH OB ASTHMA W STAT ASTH
49301 EXT ASTHMA W STATUS ASTH	49322 CH OBS ASTH W ACUTE EXAC OCT00-
49302 EXT ASTHMA W ACUTE EXAC OCT00-	49381 EXERCSE IND BRONCHOSPASM OCT03-
49310 INT ASTHMA W/O STAT ASTH	49382 COUGH VARIANT ASTHMA OCT03-
49311 INT ASTHMA W STATUS ASTH	49390 ASTHMA W/O STATUS ASTHM
49312 INT ASTHMA W ACUTE EXAC OCT00-	49391 ASTHMA W STATUS ASTHMAT
49320 CH OB ASTH W/O STAT ASTH	49392 ASTHMA W ACUTE EXACERBTN OCT00-
Exclude cases:	
<ul style="list-style-type: none"> <li>• MDC 14 (pregnancy, childbirth, and puerperium)</li> <li>• MDC 15 (newborn and other neonates)</li> <li>• with any diagnosis code of cystic fibrosis and anomalies of the respiratory system transferring from another institution (ADMISSION_SOURCE_CD_E0138 <i>Not In ('4','5','6')</i>)</li> </ul>	
<i>ICD-9-CM diagnosis codes of cystic fibrosis and anomalies of the respiratory system</i>	
27700 CYSTIC FIBROS W/O ILEUS	7485 AGENESIS OF LUNG
27701 CYSTIC FIBROS W ILEUS	74860 LUNG ANOMALY NOS
27702 CYSTIC FIBROS W PUL MAN	74861 CONGEN BRONCHIECTASIS
27703 CYSTIC FIBROSIS W GI MAN	74869 LUNG ANOMALY NEC
27709 CYSTIC FIBROSIS NEC	7488 RESPIRATORY ANOMALY NEC
74721 ANOMALIES OF AORTIC ARCH	7489 RESPIRATORY ANOMALY NOS
7483 LARYNGOTRACH ANOMALY NEC	7503 CONG ESOPH FISTULA/ATRES
7484 CONGENITAL CYSTIC LUNG	7593 SITUS INVERSUS
	7707 PERINATAL CHR RESP DIS

Table 1: Diagnosis codes to specify Preventable Asthma Hospitalizations – based on Adult Asthma Admission Rate (PQI 15) AHRQ Quality Indicators

## Adult Diabetes Preventable Hospitalization Indicator

### Description:

The percentage of Adult Medicaid enrollees/members of all ages currently identified as having 1 or more preventable Diabetes Inpatient stays (See Primary Diagnosis Codes in Table 2) in the past 12 month among enrollees currently receiving services from an OMH licensed provider.

### Eligible Population:

Age: 18 years and older.

Inclusion Criteria: Medicaid enrollee/member who has received one or more services from an OMH licensed provider in the 9 months prior to the report date.

Exclusion Criteria: Transfers from another facility and claims with major diagnostic categories of pregnancy, childbirth, or puerperium in any diagnosis field.

Note. The preventable hospitalization indicators are based on the Agency for Health Care Research and Quality (AHRQ) Prevention Quality Indicators (PQI), which are intended to identify population rates of hospitalizations for conditions that with adequate outpatient care should be preventable. The AHRQ PQIs are considered area measures (intended to describe the rate within a certain geographic area). The PSYCKES indicators are intended to identify those NYS Medicaid members/enrollees who may benefit from better coordinated care in the community. More information regarding the AHRQ PQIs can be found at the [AHRQ Quality Indicators Website](#).

# Preventable Hospitalization Indicators Documentation

Adult Diabetes Preventable Hospitalization Indicator			
<b>Numerator:</b>			
All non-maternal/non-neonatal discharges of age 18 years and older with ICD-9-CM principal diagnosis code for short-term complications (ketoacidosis, hyperosmolarity, coma) or with ICD-9-CM principal diagnosis code for long-term complications (renal, eye, neurological, circulatory, or complications not otherwise specified) or uncontrolled diabetes (see below).			
Diabetes Short-term Complications ICD-9-CM diagnosis codes:			
25010	DM KETO T2, DM CONT	25022	DM W/ HYPROSM T2, DM UNCNT
25011	DM KETO T1, DM CONT	25023	DM W/ HYPROSM T1, DM UNCNT
25012	DM KETO T2, DM UNCONT	25030	DM COMA NEC TYP II, DM CNT
25013	DM KETO T1, DM UNCONT	25031	DM COMA NEC T1, DM CONT
25020	DM W/ HYPROSM T2, DM CONT	25032	DM COMA NEC T2, DM UNCONT
25021	DM W/ HYPROSM T1, DM CONT	25033	DM COMA NEC T1, DM UNCONT
Diabetes Long-term Complications ICD-9-CM diagnosis codes:			
25040	DM RENAL COMP T2 CONT	25070	DM CIRCU DIS T2 CONT
25041	DM RENAL COMP T1 CONT	25071	DM CIRCU DIS T1 CONT
25042	DM RENAL COMP T2 UNCNT	25072	DM CIRCU DIS T2 UNCNT
25043	DM RENAL COMP T1 UNCNT	25073	DM CIRCU DIS T1 UNCNT
25050	DM EYE COMP T2 CONT	25080	DM W COMP NEC T2 CONT
25051	DM EYE COMP T1 CONT	25081	DM W COMP NEC T1 CONT
25052	DM EYE COMP T2 UNCNT	25082	DM W COMP NEC T2 UNCNT
25053	DM EYE COMP T1 UNCNT	25083	DM W COMP NEC T1 UNCNT
25060	DM NEURO COMP T2 CONT	25090	DM W COMPL NOS T2 CONT
25061	DM NEURO COMP T1 CONT	25091	DM W COMPL NOS T1 CONT
25062	DM NEURO COMP T2 UNCNT	25092	DM W COMPL NOS T2 UNCNT
25063	DM NEURO COMP T1 UNCNT	25093	DM W COMPL NOS T1 UNCNT
Uncontrolled Diabetes ICD-9-CM diagnosis codes:			
25002	DM, T2, UNCONT		
25003	DM, T1, UNCONT		
Exclude cases:			
<ul style="list-style-type: none"> <li>transferring from another institution (ADMISSION_SOURCE_CD_E0138 Not In ('4','5','6'))</li> <li>MDC 14 (pregnancy, childbirth, and puerperium)</li> <li>MDC 15 (newborn and other neonates)</li> </ul>			

Table 2: Diagnosis codes to specify Preventable Diabetes Hospitalizations – based on AHRQ Indicators: Diabetes Short-term Complications Admission Rate (PQI 1) , Diabetes Long-term Complications Admission Rate (PQI 2), Uncontrolled Diabetes Admission Rate (PQI 14)

## Adult Dehydration Preventable Hospitalization Indicator

### Description:

The percentage of Adult Medicaid enrollees/members of all ages currently identified as having 1 or more Inpatient stays due to dehydration in the past 12 month among enrollees currently receiving services from an OMH licensed provider.

### Eligible Population:

Age: 18 years and older.

Inclusion Criteria: Medicaid enrollee/member who has received one or more services from an OMH licensed provider in the 9 months prior to the report date.

Exclusion Criteria: Transfers from another facility and claims with major diagnostic categories of pregnancy, childbirth, or puerperium in any diagnosis field.

Note. The preventable hospitalization indicators are based on the Agency for Health Care Research and Quality (AHRQ) Prevention Quality Indicators (PQI), which are intended to identify population rates of hospitalizations for conditions that with adequate outpatient care should be preventable. The AHRQ PQIs are considered area measures (intended to describe the rate within a certain geographic area). The PSYCKES indicators are intended to identify those NYS Medicaid members/enrollees who may benefit from better coordinated care in the community. More information regarding the AHRQ PQIs can be found at the [AHRQ Quality Indicators Website](#) .

## Adult Dehydration Preventable Hospitalization

### Numerator:

All non-maternal discharges of age 18 years and older with ICD-9-CM principal diagnosis code for hypovolemia.

Dehydration Admission ICD-9-CM diagnosis codes:

27650	VOL DEPLETION, UNSPECIFIED OCT06-	27652	HYPOVOLEMIA OCT06-
27651	DEHYDRATION OCT06-	2765	HYPOVOLEMIA

Exclude cases:

- transferring from another institution (ADMISSION\_SOURCE\_CD\_E0138 Not In ('4','5','6'))
- MDC 14 (pregnancy, childbirth, and puerperium)
- MDC 15 (newborn and other neonates)

Table 3: Diagnosis codes to specify Preventable Dehydration Hospitalizations – based on Adult Based on Dehydration Admission Rate (PQI 10)

## Production SAS/SQL syntax

/\*\*\*\*\*

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SAS Program Name: Adult\_Preventable\_Hospitalizations.SAS  
Written By: Nitin Gupta (Issdngx)  
Date Created: 05/05/2011;  
Input Data Source: PRDM.MEDICAID.EMEDNY\_CLAIM\_ENCT  
PRDM.MEDICAID.PROVIDER\_CURRENT  
PRDM.MEDICAID.RATE\_CODE

Output Data Source: Excel  
Location of Code: 'S:\Restricted\Medicaid Utilization\le- Medicaid\_PSYCKES\DAWG\CODE'  
Business Owner: Molly Finnerty / NYS OMH  
Requested By: Emily Leckman-Westin

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Purpose: Healthcare Research and Quality (AHRQ) Quality Indicators (QI) was designed to capitalize on the availability of administrative data on inpatient stays to produce information about 14 Prevention Quality Indicators (PQIs): Potentially avoidable hospitalizations for ambulatory care sensitive condition (ACSC) indicators, which involve admissions that evidence suggest

- \*\*\*\*\* Indicator would have \*\*\*\*\*;
- i. Diabetes Preventable Hosp
  - ii. Adult Asthma Preventable
  - iii. Dehydration
  - iv. Summary (any of above)

\*\*\*\*\*,

Usage/Instructions:

\*\* Macro Variables Used in Code \*\*

Load\_Start =  
Load\_End =  
Month =  
ReportDate =  
Load\_Date =  
Service\_Start

\*\*\*\*\*/

\* Kill job if error occurs;  
Options Errorabend;

\* Creating libraries to pre-development psyckes box ;  
Libname Medicaid;  
Libname Psy\_Dm;  
Libname Psyckes;

%Let Load\_Start = '1May2010:00:00:00'Dt;  
%Let Load\_End = '1May2011:00:00:00'Dt;  
%Let Month = May11;  
%Let ReportDate = '1May2011'd;  
%Let Load\_Date = '8May2011:00:00:00'Dt;  
%Let Service\_Start= '01Aug2010:00:00:00'Dt;

```

/***** Numerator -- Diabetes Complications *****/
-- Prevention Quality Indicators
-- Adults Who had Atleast one ER Medical,'Inpatient Medical in the Past 9 Months.
-- All Non-maternal/Non-neonatal discharges of age 18 years and older with ICD-9-CM principal diagnosis code for
short-term complications.
-- +
-- All Non-maternal/Non-neonatal discharges of age 18 years and older with ICD-9-CM principal diagnosis code for
LONG-term complications.
-- +
-- All non-maternal discharges of age 18 years and older with ICD-9-CM principal diagnosis code for Uncontrolled
Diabetes Admission Rate
-- +
-- Lower-extremity amputation in any field and diagnosis code of diabetes in any field.
-- *****/

```

**Proc Sql;**

```

Create Table Diabetes As
Select
    *
From (
    Select Distinct
        S.Recipient_Id_1010,
    (Case
        When(FLOOR((&ReportDate-Datepart(S.Date_of_birth_recipient_1180))/365.25))>= 18
            Then 'ADULTS'
        When(FLOOR((&ReportDate-Datepart(S.Date_of_birth_recipient_1180))/ 365.25))< 18
            Then 'KIDS'
        End) As Age
    From Medicaid.Emedny_claim_enct S
    Where (S.Rate_Code_2078 In (Select Distinct Rate_Code
        From Psyckes.Dim_Rate_Code Where
            Rate_Code_Group in ('IP28', 'IP31','IPOMH'))
    Or S.Detail_Catgy_Of_Service_F490 In (Select Distinct Detail_Catgy_Of_Serv_F490 From
        Psyckes.Dim_Category_Of_Service A Where Group_Included_Under_X2460 In ('HOSPITAL
        INPATIENT - PSYCHIATRIC', 'HOSPITAL INPATIENT - GENERAL'))
    Or Rate_Code_2078 ='1212' /*RTF*/
    Or (Invoice_type_3301 in ('11', '12')
    And Date_Discharge_3108 is not null))
    And Date_Of_Service_3013 Between &Load_Start And &Load_End
    And Load_Audit_Date <= &Load_Date
    And S.Primary_Diag_Code_3006 In (
        /* Diagnosis code for short-term Diabetes Complications */
        '25010', '25011', '25012', '25013', '25020', '25021',
        '25022', '25023', '25030', '25031', '25032', '25033',

        /* Diagnosis code for Long-term complications */
        '25040', '25041', '25042', '25043', '25050', '25051',
        '25052', '25053', '25060', '25061', '25062', '25063',
        '25070', '25071', '25072', '25073', '25080', '25081',
        '25082', '25083', '25090', '25091', '25092', '25093',

        /* Diagnosis code for Uncontrolled Diabetes Admission Rate */
        '25002', '25003',

        /* Lower-extremity amputation in any field and diagnosis code of diabetes in any field*/

```

# Preventable Hospitalization Indicators Documentation

```
'8410', '8411', '8412', '8413', '8414', '25000', '25001', '25002', '25003', '25010', '25011',  
'25012', '25013', '25020', '25021', '25022', '25023', '25030', '25031', '25032', '25033',  
'25040', '25041', '25042', '25043', '8415', '8416', '8417', '8418', '8419', '25050', '25051',  
'25052', '25053', '25060', '25061', '25062', '25063', '25070', '25071', '25072', '25073',  
'25080', '25081', '25082', '25083', '25090', '25091',  
'25092', '25093')
```

```
/* -- Building Exceptions on each Indicators  
-- Exclude cases:  
-- Transferring from another institution (SID ASOURCE=2) */  
  
And (S.ADMISSION_SOURCE_CD_E0138 Not In ('4','5','6')  
Or  
/* -- MDC 14 (pregnancy, childbirth, and puerperium) */  
S.SEC_DIAG_CODE_3007 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_1 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_2 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_3 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_4 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_5 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_6 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_7 Not Between '760' And '779'  
Or  
/* -- MDC 15 (newborn and other neonates) */  
S.SEC_DIAG_CODE_3007 Not Between '630' And '679' Or  
S.OMM_DIAG_CODE_W655_1 Not Between '630' And '679' Or  
S.OMM_DIAG_CODE_W655_2 Not Between '630' And '679' Or  
S.OMM_DIAG_CODE_W655_3 Not Between '630' And '679' Or  
S.OMM_DIAG_CODE_W655_4 Not Between '630' And '679' Or  
S.OMM_DIAG_CODE_W655_5 Not Between '630' And '679' Or  
S.OMM_DIAG_CODE_W655_6 Not Between '630' And '679' Or  
S.OMM_DIAG_CODE_W655_7 Not Between '630' And '679'  
Or  
/* -- Diagnosis for trauma diagnosis code in any field */  
S.SEC_DIAG_CODE_3007 Not In ('8950', '8971', '8951', '8972', '8960', '8973', '8961', '8974', '8962', '8975',  
'8963', '8976', '8970', '8977') Or  
S.OMM_DIAG_CODE_W655_1 Not In ('8950', '8971', '8951', '8972', '8960', '8973', '8961', '8974', '8962',  
'8975', '8963', '8976', '8970', '8977') Or  
S.OMM_DIAG_CODE_W655_2 Not In ('8950', '8971', '8951', '8972', '8960', '8973', '8961', '8974', '8962',  
'8975', '8963', '8976', '8970', '8977') Or  
S.OMM_DIAG_CODE_W655_3 Not In ('8950', '8971', '8951', '8972', '8960', '8973', '8961', '8974', '8962',  
'8975', '8963', '8976', '8970', '8977') Or  
S.OMM_DIAG_CODE_W655_4 Not In ('8950', '8971', '8951', '8972', '8960', '8973', '8961', '8974', '8962',  
'8975', '8963', '8976', '8970', '8977') Or  
S.OMM_DIAG_CODE_W655_5 Not In ('8950', '8971', '8951', '8972', '8960', '8973', '8961', '8974', '8962',  
'8975', '8963', '8976', '8970', '8977') Or  
S.OMM_DIAG_CODE_W655_6 Not In ('8950', '8971', '8951', '8972', '8960', '8973', '8961', '8974', '8962',  
'8975', '8963', '8976', '8970', '8977') Or  
S.OMM_DIAG_CODE_W655_7 Not In ('8950', '8971', '8951', '8972', '8960', '8973', '8961', '8974', '8962',  
'8975', '8963', '8976', '8970', '8977')  
))  
Where Age = 'ADULTS'  
;  
  
Quit  
;
```

```
/***** Numerator -- Adult Asthma Admission Rate *****/  
-- Prevention Quality Indicators  
-- Adults Who had Atleast one ER Medical, Inpatient Medical in the Past 9 Months.
```

# Preventable Hospitalization Indicators Documentation

-- All non-maternal discharges of age 18 years and older with ICD-9-CM principal diagnosis code of Asthma.  
-- \*\*\*\*\*/

## Proc Sql;

```
Create Table Asthma As
Select
    *
From (
    Select Distinct
        S.Recipient_Id_1010 ,
        (Case
            When(FLOOR((&ReportDate-Datepart(S.Date_of_birth_recipient_1180))/365.25))>= 18
                Then 'ADULTS'
            When(FLOOR((&ReportDate-Datepart(S.Date_of_birth_recipient_1180))/365.25))< 18
                Then 'KIDS'
            End) As Age
    From Medicaid.emedny_claim_enct S

    Where (S.Rate_Code_2078 In (Select Distinct Rate_Code From Psyckes.Dim_Rate_Code Where
        Rate_Code_Group in ('IP28', 'IP31', 'IPOMH'))
        Or S.Detail_Catgy_Of_Service_F490 In (Select Distinct Detail_Catgy_Of_Serv_F490 From
        Psyckes.Dim_Category_Of_Service A
        Where
        Group_Included_Under_X2460 In ('HOSPITAL INPATIENT - PSYCHIATRIC', 'HOSPITAL
        INPATIENT - GENERAL'))
        Or (Invoice_type_3301 in ('11', '12')
        Or Rate_Code_2078 ='1212' /*RTF*/
        And Date_Discharge_3108 is not null))
        And Date_Of_Service_3013 Between &Load_Start And &Load_End
        And Load_Audit_Date <= &Load_Date
        And S.Primary_Diag_Code_3006 In (
            /*-- diagnosis code of Asthma */
            '49300', '49301', '49302', '49310', '49311', '49312', '49320',
            '49321', '49322', '49381', '49382', '49390', '49391', '49392')

        /* -- Building Exceptions on each Indicators
        /* -- Exclude cases:

        /* -- • Transferring from another institution (SID ASOURCE=2) */
        And (S.Admission_Source_CD_E0138 Not In ('4', '5', '6')
        Or
        /* -- • MDC 14 (pregnancy, childbirth, and puerperium)*/
        S.SEC_DIAG_CODE_3007 Not Between '760' And '779' Or
        S.OMM_DIAG_CODE_W655_1 Not Between '760' And '779' Or
        S.OMM_DIAG_CODE_W655_2 Not Between '760' And '779' Or
        S.OMM_DIAG_CODE_W655_3 Not Between '760' And '779' Or
        S.OMM_DIAG_CODE_W655_4 Not Between '760' And '779' Or
        S.OMM_DIAG_CODE_W655_5 Not Between '760' And '779' Or
        S.OMM_DIAG_CODE_W655_6 Not Between '760' And '779' Or
        S.OMM_DIAG_CODE_W655_7 Not Between '760' And '779'
        Or
        /* -- • MDC 15 (newborn and other neonates)*/
        S.SEC_DIAG_CODE_3007 Not Between '630' And '679' Or
        S.OMM_DIAG_CODE_W655_1 Not Between '630' And '679' Or
        S.OMM_DIAG_CODE_W655_2 Not Between '630' And '679' Or
        S.OMM_DIAG_CODE_W655_3 Not Between '630' And '679' Or
        S.OMM_DIAG_CODE_W655_4 Not Between '630' And '679' Or
        S.OMM_DIAG_CODE_W655_5 Not Between '630' And '679' Or
        S.OMM_DIAG_CODE_W655_6 Not Between '630' And '679' Or
        S.OMM_DIAG_CODE_W655_7 Not Between '630' And '679'
        Or
        /* -- • Any Diagnosis Code of cystic fibrosis and anomalies of the respiratory system */
```

# Preventable Hospitalization Indicators Documentation

```
S.SEC_DIAG_CODE_3007 Not In ('27700', '7485', '27701', '74860', '27702', '74861',  
                             '27703', '74869', '27709', '7488', '74721', '7489', '7483', '3  
                             '7503', '7484', '7593', '7707'))
```

```
Where Age = 'ADULTS'
```

```
Quit
```

```
/*----- Numerator - Dehydration -----*/
```

```
-- Prevention Quality Indicators  
-- Adults Who had Atleast one ER Medical, Inpatient Medical in the Past 9 Months.  
-- All non-maternal discharges of age 18 years and older with ICD-9-CM principal diagnosis code for  
hypovolemia/Dehydration .  
-- *****/
```

```
Proc Sql;
```

```
    Create Table Dehydration As  
Select  
    *  
From (  
    Select Distinct  
        S.Recipient_Id_1010 ,  
    (Case  
        When(FLOOR((&ReportDate - Datepart(S.Date_of_birth_recipient_1180)) / 365.25)) >= 18  
            Then 'ADULTS'  
        When(FLOOR((&ReportDate - Datepart(S.Date_of_birth_recipient_1180)) / 365.25)) < 18  
            Then 'KIDS'  
        End) As Age
```

```
From Medicaid.Emedny_Claim_Enct S
```

```
Where (S.Rate_Code_2078 In (Select Distinct Rate_Code From Psyckes.Dim_Rate_Code Where  
Rate_Code_Group in ('IP28', 'IP31', 'IPOMH'))  
    Or S.Detail_Catgy_Of_Service_F490 In (Select Distinct Detail_Catgy_Of_Serv_F490 From  
Psyckes.Dim_Category_Of_Service A Where Group_Included_Under_X2460 In ('HOSPITAL INPATIENT -  
PSYCHIATRIC', 'HOSPITAL INPATIENT - GENERAL'))  
    Or (Invoice_type_3301 in ('11', '12'))  
    Or Rate_Code_2078 = '1212' /*RTF*/  
And Date_Discharge_3108 is not null)  
And Date_Of_Service_3013 Between &Load_Start And &Load_End  
And Load_Audit_Date <= &Load_Date  
And S.PRIMARY_DIAG_CODE_3006 In ( '27650', '27651', '27652', '2765' )
```

```
/*-- Building Exceptions on each Indicators
```

```
/*-- Exclude cases:
```

```
/*-- • transferring from another institution (SID ASOURCE=2) */
```

```
And (S.ADMISSION_SOURCE_CD_E0138 Not In ('4', '5', '6'))
```

```
Or
```

```
/* -- • MDC 14 (pregnancy, childbirth, and puerperium) */  
S.SEC_DIAG_CODE_3007 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_1 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_2 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_3 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_4 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_5 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_6 Not Between '760' And '779' Or  
S.OMM_DIAG_CODE_W655_7 Not Between '760' And '779'
```

```
Or
```

# Preventable Hospitalization Indicators Documentation

```
/*-- • MDC 15 (newborn and other neonates) */
S.SEC_DIAG_CODE_3007 Not Between '630' And '679' Or
S.OMM_DIAG_CODE_W655_1 Not Between '630' And '679' Or
S.OMM_DIAG_CODE_W655_2 Not Between '630' And '679' Or
S.OMM_DIAG_CODE_W655_3 Not Between '630' And '679' Or
S.OMM_DIAG_CODE_W655_4 Not Between '630' And '679' Or
S.OMM_DIAG_CODE_W655_5 Not Between '630' And '679' Or
S.OMM_DIAG_CODE_W655_6 Not Between '630' And '679' Or
S.OMM_DIAG_CODE_W655_7 Not Between '630' And '679'
))
Where Age = 'ADULTS'
;
Quit
;
*****
** Preparing data for Summarization Process;
*****

Data Diabetes; Set Diabetes;
Format Ind_Type Ind_Set $30.;
Format Report_Date mmddyy10.;
Keep Recipient_Id_1010 Report_date Ind_Type Ind_Set High_Risk_Ind Ind;
Ind_Type = 'PREVENTION_DIABETES';
High_Risk_Ind = 1;
Ind = 1;
Report_Date = &Reportdate;
Ind_Set = 'PREVENTION_INDICATOR_RS';

Run;

Data Asthma; Set Asthma;
Format Ind_Type Ind_Set $30.;
Format Report_Date mmddyy10.;
Keep Recipient_Id_1010 Report_date Ind_Type Ind_Set High_Risk_Ind Ind;
Ind_Type = 'PREVENTION_ASTHMA';
High_Risk_Ind = 1;
Ind = 1;
Report_Date = &Reportdate;
Ind_Set = 'PREVENTION_INDICATOR_RS';

Run;

Data Dehydration; Set Dehydration;
Format Ind_Type Ind_Set $30.;
Format Report_Date mmddyy10.;
Keep Recipient_Id_1010 Report_date Ind_Type Ind_Set High_Risk_Ind Ind;
Ind_Type = 'PREVENTION_DEHYDRATION';
High_Risk_Ind = 1;
Ind = 1;
Report_Date = &Reportdate;
Ind_Set = 'PREVENTION_INDICATOR_RS';

Run;

Data Prevention_Summary_Indicator;
Set Dehydration Asthma Diabetes;
Format Ind_Type Ind_Set $30.;
Format Report_Date mmddyy10.;
Keep Recipient_Id_1010 Report_date Ind_Type Ind_Set High_Risk_Ind Ind;
Ind_Type = 'PREVENTION_SUMMARY';
High_Risk_Ind = 1;
Ind = 1;
Report_Date = &Reportdate;
Ind_Set = 'PREVENTION_INDICATOR_RS';
```

# Preventable Hospitalization Indicators Documentation

Run;

\* Removing all Duplicates ;  
**Proc Sort** Data = Prevention\_Summary\_Indicator NoDups;  
By Recipient\_Id\_1010 Report\_date;

Run;

**Data** Prevention\_Indicator;  
Set Dehydration Asthma Diabetes Prevention\_Summary\_Indicator;

Run;

\* Removing all Duplicates ;  
**Proc Sort** Data = Prevention\_Indicator NoDups;  
By Recipient\_Id\_1010 Report\_date;

Run;

/\*\*\*\*\* extracting data from MH Clinic Service \*\*\*\*\*/

**Proc Sql;**

```
Create Table MHCLINICSERVICES_ADULTS As
Select
    *
From ( Select Distinct
        S.Recipient_Id_1010 ,
        (Case
            When (FLOOR( (&ReportDate -
Datepart(S.Date_of_birth_recipient_1180)) / 365.25)) >= 18
                Then 'ADULTS'
            When (FLOOR( (&ReportDate -
Datepart(S.Date_of_birth_recipient_1180)) / 365.25)) < 18
                Then 'KIDS'
            End) As Age
    From    Medicaid.Emedny_Claim_Enct S ,
           Medicaid.Omh_Rate_Code_Group R

    Where   S.Rate_Code_2078 = R.Rate_Code
    And     R.Rate_Code_Type IN ('SPECIALTY', 'REGULAR', 'INPATIENT')
    And     Date_Of_Service_3013 Between &Service_Start And &Load_End
    And     Load_Audit_Date <= &Load_Date
        )
Where Age = 'ADULTS'
;
```

**Quit**

;

\* Linking recipients with the MH Services ;

**Proc Sql;**

```
Create Table Prevention_Indicator_MH As
Select Distinct
    A.*
From    Prevention_Indicator A
Where   Recipient_Id_1010 In (Select Distinct Recipient_Id_1010 From
MHCLINICSERVICES_ADULTS)
Order by Recipient_Id_1010
```

# Preventable Hospitalization Indicators Documentation

Quit

Proc Sql;

```
Create Table MHCLINICSERVICES_Diabetes As
Select Distinct
    A.Recipient_Id_1010,
    &Reportdate As Report_date,
    'PrevHosp Diabetes' As Ind_Type,
    'Preventable Hospitalization' As Ind_Set,
    (Case
        When A.Recipient_Id_1010 In (Select Distinct Recipient_Id_1010 From
Prevention_Indicator_MH
        Where Ind_Type = 'PREVENTION_DIABETES' )
        Then 1
        Else 0
    End) AS High_Risk_Ind,
    1 AS Ind
From    MHCLINICSERVICES_ADULTS A
```

Quit

Proc Sql;

```
Create Table MHCLINICSERVICES_ASTHMA As
Select Distinct
    A.Recipient_Id_1010,
    &Reportdate As Report_date,
    'PrevHosp Asthma' As Ind_Type,
    'Preventable Hospitalization' As Ind_Set,
    (Case
        When A.Recipient_Id_1010 In (Select Distinct Recipient_Id_1010 From
Prevention_Indicator_MH
        Where Ind_Type = 'PREVENTION_ASTHMA' )
        Then 1
        Else 0
    End) AS High_Risk_Ind,
    1 AS Ind
From    MHCLINICSERVICES_ADULTS A
```

Quit

Proc Sql;

```
Create Table MHCLINICSERVICES_DEHYDRATION As
Select Distinct
    A.Recipient_Id_1010,
    &Reportdate As Report_date,
    'PrevHosp Dehydration' As Ind_Type,
    'Preventable Hospitalization' As Ind_Set,
    (Case
        When A.Recipient_Id_1010 In (Select Distinct Recipient_Id_1010 From
Prevention_Indicator_MH
        Where Ind_Type = 'PREVENTION_DEHYDRATION' )
        Then 1
        Else 0
    End) AS High_Risk_Ind,
```



# Preventable Hospitalization Indicators Documentation

```
connect to oracle (user=Psyckes_Medicaid_Dm password=***** path=psyckes);
execute (Exec PSYCKES_DBA_NEW.truncate_table(&table)) by oracle;
disconnect from oracle
```

---

18

---

```
Quit
```

```
;
```

```
* Shift data to oracle for Summarization ;
```

```
Proc Sql;
```

```
    Insert into
```

```
        Psyckes.Prevention_Indicator( sasdatefmt=(Report_Date=mmddy10. ))
```

```
    Select Distinct
```

```
        Recipient_Id_1010,
```

```
        Ind_Type,
```

```
        Ind_Set,
```

```
        &reportdate as Report_date ,
```

```
        High_Risk_Ind,
```

```
        Ind,
```

```
        "&SYSDATE9."D AS ROW_CREATED_DTM,
```

```
        'issdnxg' as ROW_CREATED_USERID
```

```
    From Prevention_Indicator
```

```
Quit
```

```
;
```