# Complete Summary

## TITLE

Ambulatory care management of diabetes: percent of patients with at least one hemoglobin A1c (HbA1c) test conducted in the measure look-back period (MEDDIC-MS SSI).

## SOURCE(S)

Department of Health and Family Services, Division of Health Care Financing, Bureau of Managed Health Care Programs. MEDDIC-MS SSI. Medicaid encounter data driven improvement core measure set for SSI managed care. Madison (WI): State of Wisconsin; 2002 Dec 1. 30 p.

# Brief Abstract

## DESCRIPTION

This measure tracks the delivery of hemoglobin A1c (HbA1c) testing among enrollees known to be diabetic. See the related NQMC measure summary, Ambulatory care management of diabetes: percent of patients with at least one low-density lipoprotein (LDL) test in the look-back period (MEDDIC-MS SSI).

## RATIONALE

This targeted improvement measure is designed to measure and improve performance of outpatient management services for people with Type 1 or Type 2 diabetes (see the "Burden of Illness" and "Utilization" fields in the Complete Summary).

## PRIMARY CLINICAL COMPONENT

Diabetes mellitus; hemoglobin A1c (HbA1c)

## DENOMINATOR DESCRIPTION

Supplemental Security Income (SSI) health maintenance organization/managed care organization (HMO/MCO) enrollees age 15 to 21 years and 22 to 75 years as of the measure end date who were continuously enrolled in the health maintenance organization (HMO) for at least 304 days immediately prior to the measure end date with no more than one gap in enrollment of not more than 45 days. The enrollee must have a total of not less than 259 enrolled days in the look-back period.

Enrollees must have been dispensed insulin and/or oral hypoglycemics/antihyperglycemics, based on American Hospital Formulary Service (AHFS) therapeutic codes, during the measure look back period on an ambulatory basis or had at least two encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one encounter in an acute inpatient or emergency room setting during the measure look-back period with a diagnosis of diabetes.

### NUMERATOR DESCRIPTION

The number of enrollees from the denominator who had at least one hemoglobin A1c (HbA1c) test conducted in the measure look-back period

## Evidence Supporting the Measure

### PRIMARY MEASURE DOMAIN

Process

### SECONDARY MEASURE DOMAIN

Not applicable

### EVIDENCE SUPPORTING THE MEASURE

A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence
A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences

## Evidence Supporting Need for the Measure

### NEED FOR THE MEASURE

Unspecified

## State of Use of the Measure

### STATE OF USE

Current routine use

### CURRENT USE

Decision-making by consumers about health plan/provider choice
External oversight/Medicaid
External oversight/State government program
Internal quality improvement

## Application of Measure in its Current Use

### CARE SETTING

Managed Care Plans

### PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Advanced Practice Nurses
Physicians

### LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Single Health Care Delivery Organizations

### TARGET POPULATION AGE

Age 15 to 21 years and 22 to 75 years

### TARGET POPULATION GENDER

Either male or female

### STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

## Characteristics of the Primary Clinical Component

### INCIDENCE/PREVALENCE

Unspecified

### ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

### BURDEN OF ILLNESS

Diabetes is known to be a major predisposing factor for numerous potentially serious health problems later in life, particularly blindness, kidney disease, and cardiovascular disease. The risk for these complications increases greatly when the disease is poorly managed.

### EVIDENCE FOR BURDEN OF ILLNESS

Diabetes Research Working Group. Conquering diabetes: a strategic plan for the 21st century. A report of the congressionally-established Diabetes Research

Working Group 1999. Bethesda (MD): National Institute of Diabetes and Digestive and Kidney Diseases; 1999. 129 p. (NIH Pub; no. 99-4398).

### UTILIZATION

Wisconsin hospital discharge data analysis has shown this measure to be of high clinical importance to enrollees in Medicaid (Aid to Families with Dependent Children/Healthy Start [AFDC/HS]), BadgerCare and Supplemental Security Income (SSI). For example, in 1998, diabetes was the principal diagnosis for 6,468 inpatient hospital discharges. Discharges for individuals under age 18 totaled 457, and 1,654 discharges occurred in the age cohort from age 18 to 44 years.

### EVIDENCE FOR UTILIZATION

Department of Health and Family Services, Bureau of Health Information. Hospital inpatient database. [database]. Madison (WI): State of Wisconsin; [cited 2003 Jun 09].

### COSTS

Unspecified

## Institute of Medicine National Healthcare Quality Report Categories

### IOM CARE NEED

Living with Illness

### IOM DOMAIN

Effectiveness

## Data Collection for the Measure

### CASE FINDING

Users of care only

### DESCRIPTION OF CASE FINDING

Enrollees who were continuously enrolled in the health maintenance organization (HMO) for at least 304 days immediately prior to the measure end date with no more than one gap in enrollment of not more than 45 days. The enrollee must have a total of not less than 259 enrolled days in the look-back period.

Enrollees must have been dispensed insulin and/or oral hypoglycemics/antihyperglycemics, based on American Hospital Formulary Service (AHFS) therapeutic codes, during the measure look back period on an ambulatory

basis or had at least two encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one encounter in an acute inpatient or emergency room setting during the measure look-back period with a diagnosis of diabetes.

## DENOMINATOR SAMPLING FRAME

Enrollees or beneficiaries

## DENOMINATOR (INDEX) EVENT

Clinical Condition
Encounter
Therapeutic Intervention

## DENOMINATOR INCLUSIONS/EXCLUSIONS

### Inclusions

Supplemental Security Income (SSI) health maintenance organization/managed care organization (HMO/MCO) enrollees age 15 to 21 years and 22 to 75 years as of the measure end date who were continuously enrolled in the health maintenance organization (HMO) for at least 304 days immediately prior to the measure end date with no more than one gap in enrollment of not more than 45 days. The enrollee must have a total of not less than 259 enrolled days in the look-back period (the measure look-back period is 12 months [365 days] from the measure end date).

Enrollees must have been dispensed insulin and/or oral hypoglycemics/antihyperglycemics, based on American Hospital Formulary Service (AHFS) therapeutic codes, during the measure look-back period on an ambulatory basis or had at least two encounters with different dates of service in an ambulatory setting or non-acute inpatient setting or one encounter in an acute inpatient or emergency room setting during the measure look-back period with a diagnosis of diabetes. Refer to the original measure document for a list of American Hospital Formulary Service, International Classification of Diseases, Ninth Edition, Clinical Modification (ICD-9-CM), Current Procedural Terminology (CPT 4/2001), and Uniform Billing (UB-92) codes.

### Exclusions

Exclude all enrollees with gestational diabetes, ICD-9-CM 648.0 in the look-back period.

## NUMERATOR INCLUSIONS/EXCLUSIONS

### Inclusions

The number of enrollees from the denominator with at least one hemoglobin A1c (HbA1c) test conducted in the measure look-back period. Encounter data will be used to identify services. Current Procedural Terminology 4 (CPT-4) and CPT 2001 code 83036.

Services provided prior to enrollment or during gaps in enrollment are counted in the numerator if identified in managed care organization (MCO) encounter data, previous health maintenance organization (HMO) encounter data, Division of Public Health (DPH) data, or fee-for-service (FFS) data.

Exclusions
Unspecified

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR TIME WINDOW

Fixed time period

DATA SOURCE

Administrative data

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

## Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Analysis by subgroup (stratification on patient factors)

DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

Two age cohorts are reported: Supplemental Security Income (SSI) health maintenance organization/managed care organization (HMO/MCO) enrollees age 15 to 21 years and 22 to 75 years.

STANDARD OF COMPARISON

External comparison of time trends
Internal time comparison
Prescriptive standard

### PRESCRIPTIVE STANDARD

Program-wide 2002 aggregate baselines and 2004 performance goals (with input from participating health maintenance organizations [HMOs] based on aggregate baselines) to be established. Goals will be ramped up over time to progressively drive performance improvement.

### EVIDENCE FOR PRESCRIPTIVE STANDARD

Department of Health and Family Services, Division of Health Care Financing, Bureau of Managed Health Care Programs. MEDDIC-MS SSI. Medicaid encounter data driven improvement core measure set for SSI managed care. Madison (WI): State of Wisconsin; 2002 Dec 1. 30 p.

## Evaluation of Measure Properties

### EXTENT OF MEASURE TESTING

This measure was tested and validated by an independent third party and subject to internal review in 2002 for the Medicaid Encounter Data Driven Improvement Core Measure Set (MEDDIC-MS). Modifications made to base measure for Supplemental Security Income (SSI) do not affect measure accuracy or validity.

### EVIDENCE FOR RELIABILITY/VALIDITY TESTING

Innovative Resources Group (IRG). Measure testing/validation reports for MEDDIC-MS. Brookfield (WI): Innovative Resources Group (IRG); 2002.

## Identifying Information

### ORIGINAL TITLE

Ambulatory care management of diabetes by age cohort.

### MEASURE COLLECTION

MEDDIC-MS (Medicaid Encounter Data Driven Improvement Core Measure Set). Rapid-cycle performance improvement measures system for Medicaid managed care.

### MEASURE SET NAME

MEDDIC-MS SSI (Medicaid Encounter Data Driven Improvement Core Measure Set for Supplemental Security Income). Measures applicable to SSI managed care population.

## MEASURE SUBSET NAME

Targeted Performance Improvement Measures (TPIM) -- SSI

## DEVELOPER

State of Wisconsin, Department of Health and Family Services

## ADAPTATION

Measure was not adapted from another source.

## RELEASE DATE

2002 Dec

## MEASURE STATUS

This is the current release of the measure.

## SOURCE(S)

Department of Health and Family Services, Division of Health Care Financing, Bureau of Managed Health Care Programs. MEDDIC-MS SSI. Medicaid encounter data driven improvement core measure set for SSI managed care. Madison (WI): State of Wisconsin; 2002 Dec 1. 30 p.

## MEASURE AVAILABILITY

The individual measure, "Ambulatory Care Management of Diabetes by Age Cohort," is published in "Medicaid Encounter Data Driven Improvement Core Measure Set for SSI Managed Care (MEDDIC-MS SSI)."

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## NQMC STATUS

This NQMC summary was completed by ECRI on January 30, 2004. The information was verified by the measure developer on February 9, 2004.

## COPYRIGHT STATEMENT

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