

Healthy People 2010 Operational Definition

5-10. Reduce the rate of lower extremity amputations in persons with diabetes.

National Data Sources	National Hospital Discharge Survey (NHDS), CDC, NCHS; National Health Interview Survey (NHIS), CDC, NCHS.
State Data Sources	State hospital discharge data systems; Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.
Healthy People 2000 Objective	Adapted from 17.10 (Diabetes and Chronic Disabling Conditions).
Changes since the 2000 Publication	Revised baseline (see Comments). Revised target (see Comments).
Measure	Rate per 1,000 population (age adjusted—see Comments).
Baseline (Year)	6.6 (1997-99)
Target	2.9
Target-Setting Method	55 percent improvement. For a discussion of target-setting methods, see Part A, section 4.
Numerator	Number of hospital discharges among U.S. civilian persons with diabetes (ICD-9-CM code 250) as any listed diagnosis and amputation of the lower limb (ICD-9-CM procedure code 84.1) as any listed procedure.
Denominator	Number of persons in the NHIS population who report that they have ever been diagnosed with diabetes.
Population Targeted	U.S. civilian population; U.S. civilian, noninstitutionalized population (see Comments).
Questions Used To Obtain the National Baseline Data	From the 1997-99 National Health Interview Survey [DENOMINATOR]: [For children under 18 years:] ➤ <i>Has a doctor or health professional told you that</i>

{sample child} has any of these conditions?

[List of conditions includes diabetes]

[For adults 18 years and older:]

[For females:]

- *Other than during pregnancy, have you EVER been told by a doctor or health professional that you have diabetes or sugar diabetes?*

[For males:]

- *Have you EVER been told by a doctor or health professional that you have diabetes or sugar diabetes?*

Yes

No

Borderline

Don't know

Refused

Expected Periodicity

Annual.

Comments

The numerator for this measure is obtained from the National Hospital Discharge System (NHDS) and uses any mention ICD-9-CM procedure code 84.1 to define amputation of the lower limb and ICD-9-CM code 250 as any listed diagnosis to identify persons with diabetes.⁵ Amputations due to trauma are not included. See Part A, section 8 for a discussion of morbidity classification and the Clinical Modification to the International Classification of Diseases (ICD-9-CM).

Adults are considered to have diabetes if they respond “yes” to either of the two questions listed above. Those who respond “borderline” are not included. Women who report that the only time they have been diagnosed with diabetes was during pregnancy (gestational diabetes) are also excluded.

The numerator and denominator of this measure refer to slightly different populations. The numerator includes the U.S. civilian population; the denominator includes only the U.S. civilian, noninstitutionalized population.

Children are considered to have diabetes if the adult proxy respondent reports that they have ever been told by a doctor that the child has diabetes.

The original baseline of 4.1 cases per 1,000 persons with diabetes was for data year 1997. The methodology was modified to 3 year moving

averages in order to increase the reliability of data for select population groups with small sample sizes. The revised baseline of 6.6 cases per 1,000 is for the period 1997-99.

The target was proportionally adjusted from 1.8 to 2.9 amputations per 1,000 persons with diabetes to reflect the revised baseline using the original target-setting methodology.

Data (except those by education status) are age adjusted to the 2000 standard population using the age groups 0-64, 65-74, and 75 years and over. Data by education status are age adjusted using the age groups 25-64, 65-74, and 75 years and over. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 7.

This objective is a modification of Healthy People 2000 objectives 17.10 and 17.10c, which tracked the proportion of persons with diabetes who had a hospital discharge with an amputation of the lower limb (excluding amputations due to trauma), using ICD-9-CM procedure codes 84.11 and 84.12. This measure expands the definition of the amputation of the lower limb to ICD-9-CM procedure code 84.1 and is age adjusted to the 2000 standard population.

For some measures, data do not meet the criteria for statistical reliability, data quality, or confidentiality and have been suppressed. Information on suppression of data for the major Healthy People 2010 data systems has been published in a *Healthy People Statistical Note*.¹

See Part C for a description of NHDS and NHIS and Appendix A for focus area contact information.

References

1. Klein, R.J.; Proctor, S.E.; Boudreault, M.A.; Turczyn, K.M. Healthy People 2010 Criteria for Data Suppression. *Statistical Notes* No. 24. Hyattsville, MD: National Center for Health Statistics. 2002.