

CHAPTER 18

Health-Related Quality of Life and Well-Being (HRQOL/WB)

Lead Agency

Centers for Disease Control and Prevention

Contents

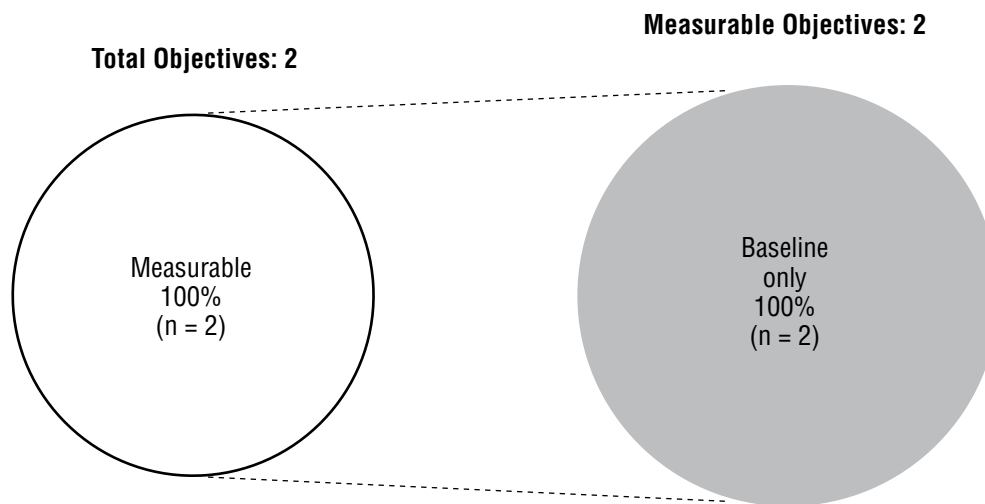
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Goal: Improve health-related quality of life and well-being for all individuals.

This chapter includes objectives that monitor the proportion of adults who self-report good or better physical health and mental health. The [Reader's Guide](#) provides a step-by-step explanation of the content of this chapter, including criteria for highlighting objectives in the Selected Findings.¹

Status of Objectives

Figure 18-1. Midcourse Status of the Health-Related Quality of Life and Well-Being Objectives



The two objectives in the Health-Related Quality of Life and Well-Being Topic Area were measurable² (Figure 18-1, Table 18-1). Both these objectives had baseline data only³ (Table 18-2).

Selected Findings

- In 2010, the age-adjusted proportion of **adults who self-reported good or better physical health** (HRQOL/WB-1.1) was 78.8%. Only baseline data were available for this objective, so progress toward the 2020 target could not be assessed (Table 18-2).
 - » In 2010, there were statistically significant disparities by sex, race and ethnicity, education, family income, and geographic location in the age-adjusted proportion of adults who self-reported good or better physical health (Table 18-3, HRQOL/WB-1.1).
- In 2010, the age-adjusted proportion of **adults who self-reported good or better mental health** (HRQOL/WB-1.2) was 79.1%. Only baseline data were available

for this objective, so progress toward the 2020 target could not be assessed (Table 18-2).

- » In 2010, there were statistically significant disparities by sex, race and ethnicity, education, family income, and geographic location in the age-adjusted proportion of adults who self-reported good or better mental health (Table 18-3, HRQOL/WB-1.2).

More Information

The two objectives in this chapter are measured by eight questions from the Patient Reported Outcomes Measurement Information System (PROMIS) Global Health Measure, which assesses global physical, mental, and social health-related quality of life.⁴ Objective HRQOL/WB-1.1 uses data from a summary of responses to four questions which cover overall self-rated physical health, activities of daily living, fatigue, and pain. Objective HRQOL/WB-1.2 uses data from a summary of responses to four questions which cover overall quality of life, self-rated mental health, satisfaction with

social activities and relationships, and recent emotional problems. For each objective, responses to four questions are combined and the data are divided into two main categories: good or better health vs. fair or poor health.

Readers interested in more detailed information about the objectives in this topic area are invited to visit the HealthyPeople.gov website, where extensive substantive and technical information is available:

- For the background and importance of the topic area, see: <http://www.healthypeople.gov/2020/topics-objectives/topic/health-related-quality-of-life-well-being>
- For data details for each objective, including definitions, numerators, denominators, calculations, and data limitations, see: <http://www.healthypeople.gov/2020/topics-objectives/topic/health-related-quality-of-life-well-being/objectives>
Select an objective, then click on the “Data Details” icon.
- For objective data by population group (e.g., sex, race and ethnicity, or family income), including rates, percentages, or counts for multiple years, see: <http://www.healthypeople.gov/2020/topics-objectives/topic/health-related-quality-of-life-well-being/objectives>
Select an objective, then click on the “Data2020” icon.

Data for the measurable objectives in this chapter were from the following data source:

- National Health Interview Survey:
<http://www.cdc.gov/nchs/nhis.htm>

Footnotes

¹The **Technical Notes** provide more information on Healthy People 2020 statistical methods and issues.

²**Measurable** objectives had a national baseline value.

³**Baseline only**—The objective only had one data point, so progress toward target attainment could not be assessed.




⁴Hays RD, Bjorner J, Revicki RA, Spritzer KL, Cella D. Development of physical and mental health summary scores from the Patient Reported Outcomes Measurement Information System (PROMIS) global items. *Quality of Life Research* 18(7):873–80. 2009. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/19543809>

Suggested Citation

National Center for Health Statistics. Chapter 18: Health-Related Quality of Life and Well-Being. *Healthy People 2020 Midcourse Review*. Hyattsville, MD. 2016.

Table 18-1. Health-Related Quality of Life and Well-Being Objectives

LEGEND

-  Data for this objective are available in this chapter's Midcourse Progress Table.
-  Disparities data for this objective are available, and this chapter includes a Midcourse Health Disparities Table.
-  A state or county level map for this objective is available at the end of the chapter.

Not Applicable Midcourse data availability is not applicable for developmental and archived objectives. **Developmental** objectives did not have a national baseline value. **Archived** objectives are no longer being monitored due to lack of data source, changes in science, or replacement with other objectives.













Objective Number	Objective Statement	Data Sources	Midcourse Data Availability
HRQOL/WB-1.1	Increase the proportion of adults who self-report good or better physical health	National Health Interview Survey (NHIS), CDC/NCHS	 
HRQOL/WB-1.2	Increase the proportion of adults who self-report good or better mental health	National Health Interview Survey (NHIS), CDC/NCHS	 

Table 18–2. Midcourse Progress for Measurable¹ Health-Related Quality of Life and Well-Being Objectives

LEGEND											
	Target met or exceeded ^{2,3}		Improving ^{4,5}		Little or no detectable change ⁶⁻¹⁰		Getting worse ^{11,12}		Baseline only ¹³		Informational ¹⁴
Objective Description	Baseline Value (Year)	Midcourse Value (Year)	Target	Movement Toward Target ¹⁵	Movement Away From Baseline ¹⁶	Movement Statistically Significant ¹⁷					
 ¹³ HRQOL/WB-1.1 Adults self-reporting good or better physical health (age-adjusted, percent, ≥18 years)	78.8% (2010)		79.8%								
 ¹³ HRQOL/WB-1.2 Adults self-reporting good or better mental health (age-adjusted, percent, ≥18 years)	79.1% (2010)		80.1%								

NOTES

See [HealthyPeople.gov](https://www.healthypeople.gov) for all Healthy People 2020 data. The **Technical Notes** provide more information on the measures of progress.

FOOTNOTES

¹**Measurable** objectives had a national baseline value.

Target met or exceeded:

²At baseline the target was not met or exceeded and the midcourse value was equal to or exceeded the target. (The percentage of targeted change achieved was equal to or greater than 100%.)

³The baseline and midcourse values were equal to or exceeded the target. (The percentage of targeted change achieved was not assessed.)

Improving:

⁴Movement was toward the target, standard errors were available, and the percentage of targeted change achieved was statistically significant.

⁵Movement was toward the target, standard errors were not available, and the objective had achieved 10% or more of the targeted change.

Little or no detectable change:

⁶Movement was toward the target, standard errors were available, and the percentage of targeted change achieved was not statistically significant.

⁷Movement was toward the target, standard errors were not available, and the objective had achieved less than 10% of the targeted change.

⁸Movement was away from the baseline and target, standard errors were available, and the percentage change relative to the baseline was not statistically significant.

⁹Movement was away from the baseline and target, standard errors were not available, and the objective had moved less than 10% relative to the baseline.

¹⁰There was no change between the baseline and the midcourse data point.

Getting worse:

¹¹Movement was away from the baseline and target, standard errors were available, and the percentage change relative to the baseline was statistically significant.

¹²Movement was away from the baseline and target, standard errors were not available, and the objective had moved 10% or more relative to the baseline.

FOOTNOTES—Continued

¹³**Baseline only:** The objective only had one data point, so progress toward target attainment could not be assessed.

¹⁴**Informational:** A target was not set for this objective, so progress toward target attainment could not be assessed.

¹⁵For objectives that **moved toward** their targets, movement toward the target was measured as the percentage of targeted change achieved (unless the target was already met or exceeded at baseline):

$$\text{Percentage of targeted change achieved} = \frac{\text{Midcourse value} - \text{Baseline value}}{\text{HP2020 target} - \text{Baseline value}} \times 100$$

¹⁶For objectives that **moved away** from their baselines and targets, movement away from the baseline was measured as the magnitude of the percentage change from baseline:

$$\text{Magnitude of percentage change from baseline} = \frac{|\text{Midcourse value} - \text{Baseline value}|}{\text{Baseline value}} \times 100$$

¹⁷Statistical significance was tested when the objective had a target and at least two data points, standard errors of the data were available, and a normal distribution could be assumed. Statistical significance of the percentage of targeted change achieved or the magnitude of the percentage change from baseline was assessed at the 0.05 level using a normal one-sided test.

DATA SOURCES

HRQOL/WB-1.1 National Health Interview Survey (NHIS), CDC/NCHS
 HRQOL/WB-1.2 National Health Interview Survey (NHIS), CDC/NCHS

Table 18–3. Midcourse Health Disparities¹ for Population-based Health-Related Quality of Life and Well-Being Objectives

Most favorable (least adverse) and least favorable (most adverse) group rates and summary disparity ratios^{2,3} for selected characteristics at the midcourse data point

Population-based Objectives		Characteristics and Groups																																	
		Sex		Race and Ethnicity						Education ⁴					Family Income ⁵				Disability		Location														
Male	Female	Summary Disparity Ratio ²	American Indian or Alaska Native	Asian	Native Hawaiian or other Pacific Islander	Two or more races	Hispanic or Latino	Black, not Hispanic	White, not Hispanic	Summary Disparity Ratio ³	Less than high school	High school graduate	At least some college	Associate's degree	4-year college degree	Advanced degree	Summary Disparity Ratio ³	Poor	Near-poor	Middle	Near-high	High	Summary Disparity Ratio ³	Persons with disabilities	Persons without disabilities	Summary Disparity Ratio ²	Metropolitan	Nonmetropolitan	Summary Disparity Ratio ²						
HRQOL/WB-1.1 Adults self-reporting good or better physical health (age-adjusted, percent, ≥18 years) (2010)				1.094*												1.153*							1.186*						1.208*						1.064*
HRQOL/WB-1.2 Adults self-reporting good or better mental health (age-adjusted, percent, ≥18 years) (2010)				1.050*												1.156*							1.179*						1.204*						1.052*

NOTES

See [HealthyPeople.gov](https://www.healthypeople.gov) for all Healthy People 2020 data. The **Technical Notes** provide more information on the measures of disparities.

FOOTNOTES

¹**Health disparities** were assessed among population groups within specified demographic characteristics (sex, race and ethnicity, educational attainment, etc.). This assessment did not include objectives that were not population-based, such as those based on states, worksites, or those monitoring the number of events.

²When there were only two groups (e.g., male and female), the **summary disparity ratio** was the ratio of the higher to the lower rate.

³When there were three or more groups (e.g., white non-Hispanic, black non-Hispanic, Hispanic) and the most favorable rate (R_a) was the highest rate, the **summary disparity ratio** was calculated as R_a/R_b , where R_b = the average of the rates for all other groups. When there were three or more groups and the most favorable rate was the lowest rate, the summary disparity ratio was calculated as R_a/R_b .

FOOTNOTES—Continued

⁴Unless otherwise footnoted, data do not include persons under age 25 years.

⁵Unless otherwise footnoted, the poor, near-poor, middle, near-high, and high income groups are for persons whose family incomes were less than 100%, 100%–199%, 200%–399%, 400%–599%, and at or above 600% of the poverty threshold, respectively.

*The summary disparity ratio was significantly greater than 1.000. Statistical significance was assessed at the 0.05 level using a normal one-sided test on the natural logarithm scale.

DATA SOURCES

HRQOL/WB-1.1 National Health Interview Survey (NHIS), CDC/NCHS
 HRQOL/WB-1.2 National Health Interview Survey (NHIS), CDC/NCHS