

CHAPTER 17

Health Communication and Health Information Technology (HC/HIT)

Lead Agencies

Centers for Disease Control and Prevention

Office of Disease Prevention and Health Promotion, Office of the Assistant Secretary for Health, Office of the Secretary

Office of the National Coordinator for Health Information Technology, Office of the Secretary

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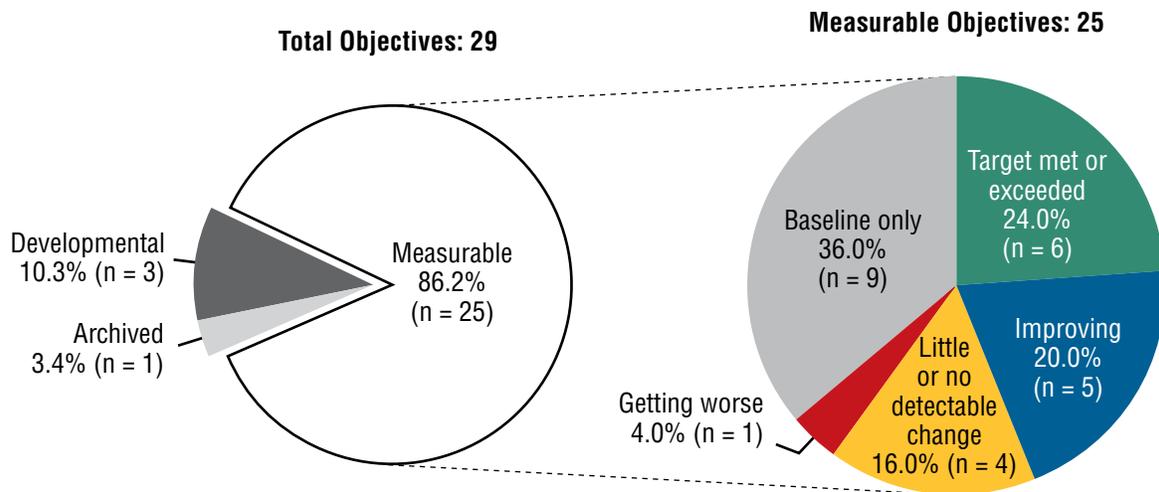
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Goal: Use health communication strategies and health information technology (IT) to improve population health outcomes and health care quality, and to achieve health equity.

This chapter includes objectives that monitor patient communication with health care providers, Internet access and use for health management, the quality of health-related websites, emergency risk messages, the use of social marketing in health promotion and disease prevention, and the use of electronic health records. 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 17-1. Midcourse Status of the Health Communication and Health Information Technology Objectives



Of the 29 objectives in the Health Communication and Health Information Technology Topic Area, 1 was archived,² 3 were developmental,³ and 25 were measurable⁴ (Figure 17-1, Table 17-1). The midcourse status of the measurable objectives was as follows (Table 17-2):

- 6 objectives had met or exceeded their 2020 targets,⁵
- 5 objectives were improving,⁶
- 4 objectives had demonstrated little or no detectable change,⁷
- 1 objective was getting worse,⁸ and
- 9 objectives had baseline data only.⁹

Selected Findings

Communication with Health Care Providers

Five of the eight objectives addressing communication with health care providers improved (Table 17-2).

Three objectives addressing communication with health care providers showed little or no detectable change.

- The proportion of **persons aged 18 and over who reported that their health care provider's instructions were easy to understand** (HC/HIT-1.1) increased from 64.1% in 2011 to 65.8% in 2012, moving toward the 2020 target (Table 17-2).
 - » In 2012, disparities in the proportion of persons who reported that their health care provider's instructions (HC/HIT-1.1) were easy to understand were statistically significant by education, family income, and disability status. The disparities by sex, race and ethnicity, and geographic location were not statistically significant (Table 17-3).
- The proportion of **persons aged 18 and over who reported that their health care provider always asked how instructions would be followed** (HC/HIT-1.2) demonstrated little or no detectable change between 2011 and 2012 (24.4% and 25.4%, respectively) (Table 17-2).

- » In 2012, disparities in the proportion of persons who reported that their health care provider always asked how instructions would be followed (HC/HIT-1.2) were statistically significant by education and family income. The disparities by sex, race and ethnicity, disability status, and geographic location were not statistically significant (Table 17–3).
 - The proportion of **persons aged 18 and over who reported that their health care provider always offered help in filling out forms** (HC/HIT-1.3) demonstrated little or no detectable change between 2011 and 2012 (14.8% and 15.6%, respectively) (Table 17–2).
 - » In 2012, disparities in the proportion of persons who reported that their health care provider always offered help in filling out forms (HC/HIT-1.3) were statistically significant by sex, education, and family income. The disparities by race and ethnicity, disability status, and geographic location were not statistically significant (Table 17–3).
 - Between 2007 and 2012, among persons aged 18 and over, the proportion who reported that their **health care provider always listened carefully to them** (HC/HIT-2.1) increased from 59.0% to 63.1%; that their **health care provider always explained things so that they could understand them** (HC/HIT-2.2) increased from 60.0% to 62.3%; that their **health care provider always showed respect for what they had to say** (HC/HIT-2.3) increased from 62.0% to 66.4%; and that their **health care provider always spent enough time with them** (HC/HIT-2.4) increased from 49.0% to 53.5%, all moving toward their respective 2020 targets (Table 17–2).
 - » In 2012, disparities in the proportion of persons who reported that their health care provider always listened carefully to them (HC/HIT-2.1) were not statistically significant by sex, race and ethnicity, education, or geographic location (Table 17–3).
 - » In 2012, disparities in the proportion of persons who reported that their health care provider always explained things so that they could understand them (HC/HIT-2.2) were statistically significant by race and ethnicity and education. The disparities by sex and geographic location were not statistically significant (Table 17–3).
 - » In 2012, disparities in the proportion of persons who reported that their health care provider always showed respect for what they had to say (HC/HIT-2.3) were not statistically significant by sex, race and ethnicity, education, or geographic location (Table 17–3).
 - The proportion of **persons aged 18 and over who reported that their health care provider always involved them in health care decisions** (HC/HIT-3) demonstrated little or no detectable change between 2007 and 2014 (51.6% and 52.1%, respectively) (Table 17–2).
 - » In 2012, disparities in the proportion of persons who reported that their health care provider always involved them in health care decisions (HC/HIT-3) were statistically significant by sex, race and ethnicity, and geographic location. The disparities by education and family income were not statistically significant (Table 17–3).
- ## Internet Access and Use
- Four of the five objectives monitoring **Internet access and use** had achieved their 2020 targets at midcourse (Table 17–2). One Internet access objective worsened.
- Between 2007 and 2014, the proportion of **persons aged 18 and over who used the Internet to keep track of personal health information** (HC/HIT-5.1) increased from 14.3% to 28.1%, and the proportion of **persons aged 18 and over who used the Internet to communicate with their health care provider** (HC/HIT-5.2) increased from 13.6% to 29.7%, exceeding their respective 2020 targets (Table 17–2).
 - » In 2014, disparities in the proportion of persons who used the Internet to keep track of personal health information (HC/HIT-5.1) were statistically significant by sex, education, family income, and geographic location. The disparity by race and ethnicity was not statistically significant (Table 17–3).
 - » In 2014, disparities in the proportion of persons who used the Internet to communicate with their health care provider (HC/HIT-5.2) were statistically significant by education, family income, and geographic location. The disparities by sex and race and ethnicity were not statistically significant (Table 17–3).
 - Between 2007 and 2014, the proportion of **persons aged 18 and over with access to the Internet** (HC/HIT-6.1) increased from 68.5% to 78.3%, and the proportion of **persons aged 18 and over who used**

mobile devices to access the Internet (HC/HIT-6.3) increased from 6.7% to 56.8%, exceeding their 2020 targets (Table 17-2).

- » In 2014, disparities in the proportion of persons with access to the Internet (HC/HIT-6.1) were statistically significant by race and ethnicity, education, family income, and geographic location. The disparity by sex was not statistically significant (Table 17-3).
- » In 2014, disparities in the proportion of persons who used mobile devices to access the Internet (HC/HIT-6.3) were statistically significant by sex, education, family income, and geographic location. The disparity by race and ethnicity was not statistically significant (Table 17-3).

- The proportion of **persons aged 18 and over with broadband Internet access** (HC/HIT-6.2) decreased from 75.6% in 2007 to 67.4% in 2014, moving away from the baseline and 2020 target (Table 17-2).
 - » In 2014, disparities in the proportion of persons with broadband Internet access (HC/HIT-6.2) were statistically significant by sex and race and ethnicity. The disparities by education, family income, and geographic location were not statistically significant (Table 17-3).

Health-related Conversations With Friends and Family Members

- The proportion of **adults aged 18 and over who talked to friends and family members about their health** (HC/HIT-7) increased from 79.5% in 2007 to 88.6% in 2013, exceeding the 2020 target (Table 17-2).
 - » In 2013, disparities in the proportion of adults who talked to friends and family members about their health (HC/HIT-7) were statistically significant by sex, race and ethnicity, and family income. The disparities by education and geographic location were not statistically significant (Table 17-3).

Health Websites

One of the three objectives monitoring access to health websites had data to measure progress.

- The proportion of **Internet users aged 18 and over who could easily access health information online** (HC/HIT-9) demonstrated little or no detectable change between 2007 and 2014 (37.3% and 37.8%, respectively) (Table 17-2).
 - » In 2014, disparities by sex, race and ethnicity, education, family income, and geographic location

in the proportion of Internet users who could easily access health information online (HC/HIT-9) were not statistically significant (Table 17-3).

Electronic Medical Records

- The proportion of **office-based medical practices that used electronic records** (HC/HIT-10) increased from 25.0% in 2007 to 68.9% in 2013, exceeding the 2020 target (Table 17-3).

More Information

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: <https://www.healthypeople.gov/2020/topics-objectives/topic/health-communication-and-health-information-technology>
- For data details for each objective, including definitions, numerators, denominators, calculations, and data limitations, see: <https://www.healthypeople.gov/2020/topics-objectives/topic/health-communication-and-health-information-technology/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: <https://www.healthypeople.gov/2020/topics-objectives/topic/health-communication-and-health-information-technology/objectives>
Select an objective, then click on the “Data2020” icon.

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

- CDC Crisis and Emergency Risk Communication Best Practices Study: <https://www.healthypeople.gov/2020/data-source/cdc-crisis-and-emergency-risk-communication-best-practices-study>
- Health Information National Trends Survey: <http://hints.cancer.gov/>
- Medical Expenditure Panel Survey: <http://meps.ahrq.gov/mepsweb/>
- National Ambulatory Medical Care Survey—Electronic Health Records Survey: <http://www.cdc.gov/nchs/ahcd.htm>

- National Quality Health Website Survey: <http://health.gov/communication/initiatives/hp-objectives.asp>
- National Survey of Public Health Competencies in Social Marketing: Survey of State Health Departments: <http://www.healthypeople.gov/2020/data-source/national-survey-of-public-health-competencies-in-social-marketing-survey-of-state>

Footnotes

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

²**Archived** objectives are no longer being monitored due to lack of data source, changes in science, or replacement with other objectives.

³**Developmental** objectives did not have a national baseline value.

⁴**Measurable** objectives had a national baseline value.

⁵**Target met or exceeded**—One of the following, as specified in the Midcourse Progress Table:

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

⁶**Improving**—One of the following, as specified in the Midcourse Progress Table:

- » Movement was toward the target, standard errors were available, and the percentage of targeted change achieved was statistically significant.
- » Movement was toward the target, standard errors were not available, and the objective had achieved 10% or more of the targeted change.

⁷**Little or no detectable change**—One of the following, as specified in the Midcourse Progress Table:

- » Movement was toward the target, standard errors were available, and the percentage of targeted change achieved was not statistically significant.
- » Movement was toward the target, standard errors were not available, and the objective had achieved less than 10% of the targeted change.
- » Movement was away from the baseline and target, standard errors were available, and the percentage change relative to the baseline was not statistically significant.
- » Movement was away from the baseline and target, standard errors were not available, and the objective had moved less than 10% relative to the baseline.
- » There was no change between the baseline and the midcourse data point.

⁸**Getting worse**—One of the following, as specified in the Midcourse Progress Table:

- » Movement was away from the baseline and target, standard errors were available, and the percentage change relative to the baseline was statistically significant.
- » Movement was away from the baseline and target, standard errors were not available, and the objective had moved 10% or more relative to the baseline.

⁹**Baseline only**—The objective only had one data point, so progress toward target attainment could not be assessed.

Suggested Citation

National Center for Health Statistics. Chapter 17: Health Communication and Health Information Technology. Healthy People 2020 Midcourse Review. Hyattsville, MD. 2016.

Table 17-1. Health Communication and Health Information Technology 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.
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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.
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Objective Number	Objective Statement	Data Sources	Midcourse Data Availability
HC/HIT-1.1	Increase the proportion of persons who report their health care provider always gave them easy-to-understand instructions about what to do to take care of their illness or health condition	Medical Expenditure Panel Survey (MEPS), AHRQ	 
HC/HIT-1.2	Increase the proportion of persons who report their health care provider always asked them to describe how they will follow the instructions	Medical Expenditure Panel Survey (MEPS), AHRQ	 
HC/HIT-1.3	Increase the proportion of persons who report their health care providers' office always offered help in filling out a form	Medical Expenditure Panel Survey (MEPS), AHRQ	 
HC/HIT-2.1	Increase the proportion of persons who report that their health care providers always listened carefully to them	Medical Expenditure Panel Survey (MEPS), AHRQ	 
HC/HIT-2.2	Increase the proportion of persons who report that their health care providers always explained things so they could understand them	Medical Expenditure Panel Survey (MEPS), AHRQ	 
HC/HIT-2.3	Increase the proportion of persons who report that their health care providers always showed respect for what they had to say	Medical Expenditure Panel Survey (MEPS), AHRQ	 
HC/HIT-2.4	Increase the proportion of persons who report that their health care providers always spent enough time with them	Medical Expenditure Panel Survey (MEPS), AHRQ	 
HC/HIT-3	Increase the proportion of persons who report that their health care providers always involved them in decisions about their health care as much as they wanted	Health Information National Trends Survey (HINTS), NIH/NCI	 
HC/HIT-4	(Developmental) Increase the proportion of patients whose doctor recommends personalized health information resources to help them manage their health	To be determined	Not Applicable
HC/HIT-5.1	Increase the proportion of persons who use the Internet to keep track of personal health information, such as care received, test results, or upcoming medical appointments	Health Information National Trends Survey (HINTS), NIH/NCI	 

Table 17–1. Health Communication and Health Information Technology Objectives—Continued

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.
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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
HC/HIT-5.2	Increase the proportion of persons who use the Internet to communicate with their health provider	Health Information National Trends Survey (HINTS), NIH/NCI	 
HC/HIT-6.1	Increase the proportion of persons with access to the Internet	Health Information National Trends Survey (HINTS), NIH/NCI	 
HC/HIT-6.2	Increase the proportion of persons with broadband access to the Internet	Health Information National Trends Survey (HINTS), NIH/NCI	 
HC/HIT-6.3	Increase the proportion of persons who use mobile devices	Health Information National Trends Survey (HINTS), NIH/NCI	 
HC/HIT-7	Increase the proportion of adults who report having friends or family members with whom they talk about their health	Health Information National Trends Survey (HINTS), NIH/NCI	 
HC/HIT-8.1	Increase the proportion of health-related websites that meet three or more evaluation criteria for disclosing information that can be used to assess information reliability	National Quality Health Website Survey, ODPHP	
HC/HIT-8.2	Increase the proportion of health-related websites that follow established usability principles	National Quality Health Website Survey, ODPHP	
HC/HIT-9	Increase the proportion of online health information seekers who report easily accessing health information	Health Information National Trends Survey (HINTS), NIH/NCI	 
HC/HIT-10	Increase the proportion of medical practices that use electronic health records	National Ambulatory Medical Care Survey—Electronic Health Records Survey (NAMCS–EHR)	
HC/HIT-11	(Archived) Increase the proportion of meaningful users of health information technology (HIT)		Not Applicable
HC/HIT-12.1	Increase the proportion of crisis and emergency risk messages embedded in print and broadcast news stories that explain what is known about the threat to human health	CDC Crisis and Emergency Risk Communication Best Practices Study, CDC/OADC	

Table 17–1. Health Communication and Health Information Technology Objectives—Continued

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.
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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.
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Objective Number	Objective Statement	Data Sources	Midcourse Data Availability
HC/HIT-12.2	Increase the proportion of crisis and emergency risk messages embedded in print and broadcast news stories that explain what is NOT known about the threat to human health	CDC Crisis and Emergency Risk Communication Best Practices Study, CDC/OADC	
HC/HIT-12.3	Increase the proportion of crisis and emergency risk messages embedded in print and broadcast news stories that explain how or why a crisis or emergency event happened	CDC Crisis and Emergency Risk Communication Best Practices Study, CDC/OADC	
HC/HIT-12.4	Increase the proportion of crisis and emergency risk messages embedded in print and broadcast news stories that promote steps the reader or viewer can take to reduce their personal health threat	CDC Crisis and Emergency Risk Communication Best Practices Study, CDC/OADC	
HC/HIT-12.5	Increase the proportion of crisis and emergency risk messages embedded in print and broadcast news stories that express empathy about the threat to human health	CDC Crisis and Emergency Risk Communication Best Practices Study, CDC/OADC	
HC/HIT-12.6	Increase the proportion of crisis and emergency risk messages embedded in print and broadcast news stories that express commitment from the responsible or responding entity	CDC Crisis and Emergency Risk Communication Best Practices Study, CDC/OADC	
HC/HIT-13.1	Increase the number of state health departments that report using social marketing in health promotion and disease prevention programs	National Survey of Public Health Competencies in Social Marketing (NSPHCSM): Survey of State Health Departments	
HC/HIT-13.2	(Developmental) Increase the proportion of schools of public health and accredited master of public health (MPH) programs that offer one or more courses in social marketing	To be determined	Not Applicable
HC/HIT-13.3	(Developmental) Increase the proportion of schools of public health and accredited MPH programs that offer workforce development activities in social marketing for public health practitioners	To be determined	Not Applicable

Table 17–2. Midcourse Progress for Measurable¹ Health Communication and Health Information Technology 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
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Objective Description	Baseline Value (Year)	Midcourse Value (Year)	Target	Movement Toward Target ¹⁵	Movement Away From Baseline ¹⁶	Movement Statistically Significant ¹⁷
 ⁴ HC/HIT-1.1 Persons whose health care provider gives easy-to-understand instructions (percent, 18+ years)	64.1% (2011)	65.8% (2012)	70.5%	26.6%		Yes
 ⁶ HC/HIT-1.2 Persons whose health care provider asks how instructions will be followed (percent, 18+ years)	24.4% (2011)	25.4% (2012)	26.9%	40.0%		No
 ⁶ HC/HIT-1.3 Persons whose health care provider offers help in filling out forms (percent, 18+ years)	14.8% (2011)	15.6% (2012)	16.3%	53.3%		No
 ⁴ HC/HIT-2.1 Persons reporting that their health care provider always listened carefully to them (percent, 18+ years)	59.0% (2007)	63.1% (2012)	65.0%	68.3%		Yes
 ⁴ HC/HIT-2.2 Persons reporting that their health care provider always explained things so they can understand (percent, 18+ years)	60.0% (2007)	62.3% (2012)	66.0%	38.3%		Yes
 ⁴ HC/HIT-2.3 Persons reporting that their health care provider always showed respect for what they have to say (percent, 18+ years)	62.0% (2007)	66.4% (2012)	68.2%	71.0%		Yes
 ⁴ HC/HIT-2.4 Persons reporting that their health care provider always spent enough time with them (percent, 18+ years)	49.0% (2007)	53.5% (2012)	54.0%	90.0%		Yes
 ⁶ HC/HIT-3 Persons reporting that their health care provider always involved them in health care decisions (percent, 18+ years)	51.6% (2007)	52.1% (2014)	56.8%	9.6%		No
 ² HC/HIT-5.1 Persons using the Internet to keep track of personal health information (percent, 18+ years)	14.3% (2007)	28.1% (2014)	15.7%	985.7%		
 ² HC/HIT-5.2 Persons using the Internet to communicate with their health care provider (percent, 18+ years)	13.6% (2007)	29.7% (2014)	15.0%	1150.0%		
 ² HC/HIT-6.1 Persons with access to the Internet (percent, 18+ years)	68.5% (2007)	78.3% (2014)	75.4%	142.0%		Yes
 ¹¹ HC/HIT-6.2 Persons with broadband Internet access (percent, 18+ years)	75.6% (2007)	67.4% (2014)	83.2%		10.8%	Yes
 ² HC/HIT-6.3 Persons using mobile devices for Internet access (percent, 18+ years)	6.7% (2007)	56.8% (2014)	7.4%	7157.0%		
 ² HC/HIT-7 Adults who talk to friends and family members about their health (percent, 18+ years)	79.5% (2007)	88.6% (2013)	87.5%	113.7%		Yes

Table 17–2. Midcourse Progress for Measurable¹ Health Communication and Health Information Technology Objectives—Continued

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
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Objective Description	Baseline Value (Year)	Midcourse Value (Year)	Target	Movement Toward Target ¹⁵	Movement Away From Baseline ¹⁶	Movement Statistically Significant ¹⁷
 ¹³ HC/HIT-8.1 Health websites meeting three or more evaluation criteria for assessing information reliability (percent)	58.0% (2014)		70.5%			
 ¹³ HC/HIT-8.2 Proportion of health-related websites that follow established usability principles	42.0% (2014)		55.7%			
 ⁶ HC/HIT-9 Internet users who can easily access health information (percent, 18+ years)	37.3% (2007)	37.8% (2014)	41.0%	13.5%		No
 ² HC/HIT-10 Office-based medical practices using electronic health records (percent)	25.0% (2007)	68.9% (2013)	27.5%	1756.0%		
 ¹³ HC/HIT-12.1 News stories on foodborne outbreaks and natural disasters that explain known threats to human health (percent)	83.5% (2010–2011)		88.9%			
 ¹³ HC/HIT-12.2 News stories on foodborne outbreaks and natural disasters that explain unknown threats to human health (percent)	21.4% (2010–2011)		27.5%			
 ¹³ HC/HIT-12.3 News stories on foodborne outbreaks and natural disasters that explain how the event occurred (percent)	15.5% (2010–2011)		20.9%			
 ¹³ HC/HIT-12.4 News stories on foodborne outbreaks and natural disasters that promote steps to reduce risk (percent)	25.4% (2010–2011)		31.8%			
 ¹³ HC/HIT-12.5 News stories on foodborne outbreaks and natural disasters that express empathy about the health risk (percent)	4.6% (2010–2011)		7.7%			
 ¹³ HC/HIT-12.6 News stories on foodborne outbreaks and natural disasters that express commitment from the responsible party (percent)	16.4% (2010–2011)		21.9%			
 ¹³ HC/HIT-13.1 State health departments using social marketing in health promotion/disease prevention programs (number)	8 (2012)		50			

Table 17–2. Midcourse Progress for Measurable¹ Health Communication and Health Information Technology Objectives—Continued

NOTES	DATA SOURCES
See HealthyPeople.gov for all Healthy People 2020 data. The Technical Notes provide more information on the measures of progress.	<p>HC/HIT-1.1 Medical Expenditure Panel Survey (MEPS), AHRQ</p> <p>HC/HIT-1.2 Medical Expenditure Panel Survey (MEPS), AHRQ</p> <p>HC/HIT-1.3 Medical Expenditure Panel Survey (MEPS), AHRQ</p> <p>HC/HIT-2.1 Medical Expenditure Panel Survey (MEPS), AHRQ</p> <p>HC/HIT-2.2 Medical Expenditure Panel Survey (MEPS), AHRQ</p> <p>HC/HIT-2.3 Medical Expenditure Panel Survey (MEPS), AHRQ</p> <p>HC/HIT-2.4 Medical Expenditure Panel Survey (MEPS), AHRQ</p> <p>HC/HIT-3 Health Information National Trends Survey (HINTS), NIH/NCI</p> <p>HC/HIT-5.1 Health Information National Trends Survey (HINTS), NIH/NCI</p> <p>HC/HIT-5.2 Health Information National Trends Survey (HINTS), NIH/NCI</p> <p>HC/HIT-6.1 Health Information National Trends Survey (HINTS), NIH/NCI</p> <p>HC/HIT-6.2 Health Information National Trends Survey (HINTS), NIH/NCI</p> <p>HC/HIT-6.3 Health Information National Trends Survey (HINTS), NIH/NCI</p> <p>HC/HIT-7 Health Information National Trends Survey (HINTS), NIH/NCI</p> <p>HC/HIT-8.1 National Quality Health Website Survey, ODPHP</p> <p>HC/HIT-8.2 National Quality Health Website Survey, ODPHP</p> <p>HC/HIT-9 Health Information National Trends Survey (HINTS), NIH/NCI</p> <p>HC/HIT-10 National Ambulatory Medical Care Survey—Electronic Health Records Survey (NAMCS—EHR)</p> <p>HC/HIT-12.1 CDC Crisis and Emergency Risk Communication Best Practices Study, CDC/OADC</p> <p>HC/HIT-12.2 CDC Crisis and Emergency Risk Communication Best Practices Study, CDC/OADC</p> <p>HC/HIT-12.3 CDC Crisis and Emergency Risk Communication Best Practices Study, CDC/OADC</p> <p>HC/HIT-12.4 CDC Crisis and Emergency Risk Communication Best Practices Study, CDC/OADC</p> <p>HC/HIT-12.5 CDC Crisis and Emergency Risk Communication Best Practices Study, CDC/OADC</p> <p>HC/HIT-12.6 CDC Crisis and Emergency Risk Communication Best Practices Study, CDC/OADC</p> <p>HC/HIT-13.1 National Survey of Public Health Competencies in Social Marketing (NSPHCSM): Survey of State Health Departments</p>
FOOTNOTES	
¹ Measurable objectives had a national baseline value.	
Target met or exceeded:	
² At 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%.)	
³ The baseline and midcourse values were equal to or exceeded the target. (The percentage of targeted change achieved was not assessed.)	
Improving:	
⁴ Movement was toward the target, standard errors were available, and the percentage of targeted change achieved was statistically significant.	
⁵ Movement 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:	
⁶ Movement was toward the target, standard errors were available, and the percentage of targeted change achieved was not statistically significant.	
⁷ Movement was toward the target, standard errors were not available, and the objective had achieved less than 10% of the targeted change.	
⁸ Movement was away from the baseline and target, standard errors were available, and the percentage change relative to the baseline was not statistically significant.	
⁹ Movement was away from the baseline and target, standard errors were not available, and the objective had moved less than 10% relative to the baseline.	
¹⁰ There was no change between the baseline and the midcourse data point.	
Getting worse:	
¹¹ Movement was away from the baseline and target, standard errors were available, and the percentage change relative to the baseline was statistically significant.	
¹² Movement was away from the baseline and target, standard errors were not available, and the objective had moved 10% or more relative to the baseline.	
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.	
¹⁵ For 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):	
$\text{Percentage of targeted change achieved} = \frac{\text{Midcourse value} - \text{Baseline value}}{\text{HP2020 target} - \text{Baseline value}} \times 100$	
¹⁶ For 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:	
$\text{Magnitude of percentage change from baseline} = \frac{ \text{Midcourse value} - \text{Baseline value} }{\text{Baseline value}} \times 100$	
¹⁷ Statistical 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.	

Table 17–3. Midcourse Health Disparities¹ for Population-based Health Communication and Health Information Technology 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	Sex		Race and Ethnicity							Education ⁴					Family Income ⁵					Disability			Location	
	Male	Female	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	Less than high school	High school graduate	At least some college	4-year college degree	Advanced degree	Poor	Near-poor	Middle	Near-high	High	Persons with basic activity limitations	Persons with complex activity limitations	Persons with neither basic nor complex activity limitations	Metropolitan	Nonmetropolitan
	Summary Disparity Ratio ²	Summary Disparity Ratio ²	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	
HC/HIT-1.1 Persons whose health care provider gives easy-to-understand instructions (percent, 18+ years) (2012)																								
HC/HIT-1.2 Persons whose health care provider asks how instructions will be followed (percent, 18+ years) (2012)																								
HC/HIT-1.3 Persons whose health care provider offers help in filling out forms (percent, 18+ years) (2012)																								
HC/HIT-2.1 Persons reporting that their health care provider always listened carefully to them (percent, 18+ years) (2012)																								
HC/HIT-2.2 Persons reporting that their health care provider always explained things so they can understand (percent, 18+ years) (2012)																								
HC/HIT-2.3 Persons reporting that their health care provider always showed respect for what they have to say (percent, 18+ years) (2012)																								
HC/HIT-2.4 Persons reporting that their health care provider always spent enough time with them (percent, 18+ years) (2012)																								

Table 17–3. Midcourse Health Disparities¹ for Population-based Health Communication and Health Information Technology Objectives—Continued

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	Sex		Race and Ethnicity							Education ⁴					Family Income ⁵					Disability			Location						
	Male	Female	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	Less than high school	High school graduate	At least some college	4-year college degree	Advanced degree	Poor	Near-poor	Middle	Near-high	High	Persons with basic activity limitations	Persons with complex activity limitations	Persons with neither basic nor complex activity limitations	Metropolitan	Nonmetropolitan					
	Summary Disparity Ratio ²	Summary Disparity Ratio ²	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ³	Summary Disparity Ratio ²	Summary Disparity Ratio ²						
HC/HIT-3 Persons reporting that their health care provider always involved them in health care decisions (percent, 18+ years) (2014)			1.115*								1.440*			a			1.123	b	c	d	e	f	1.074						1.207*
HC/HIT-5.1 Persons using the Internet to keep track of personal health information (percent, 18+ years) (2014)			1.224*								1.116			a			1.500*	b	c	d	e	f	1.563*						1.782*
HC/HIT-5.2 Persons using the Internet to communicate with their health care provider (percent, 18+ years) (2014)			1.155								1.083			a			1.808*	b		d	e	f	1.635*						1.621*
HC/HIT-6.1 Persons with access to the Internet (percent, 18+ years) (2014)			1.020								1.217*			a			1.354*	b	c	d	e	f	1.255*						1.084*
HC/HIT-6.2 Persons with broadband Internet access (percent, 18+ years) (2014)			1.125*								1.210*			a			1.077	b	c	d	e	f	1.163						1.018
HC/HIT-6.3 Persons using mobile devices for Internet access (percent, 18+ years) (2014)			1.172*								1.102			a			1.252*	b	c	d	e	f	1.241*						1.231*
HC/HIT-7 Adults who talk to friends and family members about their health (percent, 18+ years) (2013)			1.036*								1.080*			a			1.055	b	c	d	e	f	1.073*						1.003
HC/HIT-9 Internet users who can easily access health information (percent, 18+ years) (2014)			1.026								1.090			a			1.125	b	c	d	e	f	1.135						1.113

Table 17–3. Midcourse Health Disparities¹ for Population-based Health Communication and Health Information Technology Objectives—Continued

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_b/R_a , where R_a = 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 .

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.

FOOTNOTES—Continued

^aData are for persons who completed some college or received an associate's degree.

^bData are for persons whose families earned less than \$20,000.

^cData are for persons whose families earned \$20,000 to \$34,999.

^dData are for persons whose families earned \$35,000 to \$49,999.

^eData are for persons whose families earned \$50,000 to \$74,999.

^fData are for persons whose families earned \$75,000 or more.

DATA SOURCES

HC/HIT-1.1	Medical Expenditure Panel Survey (MEPS), AHRQ
HC/HIT-1.2	Medical Expenditure Panel Survey (MEPS), AHRQ
HC/HIT-1.3	Medical Expenditure Panel Survey (MEPS), AHRQ
HC/HIT-2.1	Medical Expenditure Panel Survey (MEPS), AHRQ
HC/HIT-2.2	Medical Expenditure Panel Survey (MEPS), AHRQ
HC/HIT-2.3	Medical Expenditure Panel Survey (MEPS), AHRQ
HC/HIT-2.4	Medical Expenditure Panel Survey (MEPS), AHRQ
HC/HIT-3	Health Information National Trends Survey (HINTS), NIH/NCI
HC/HIT-5.1	Health Information National Trends Survey (HINTS), NIH/NCI
HC/HIT-5.2	Health Information National Trends Survey (HINTS), NIH/NCI
HC/HIT-6.1	Health Information National Trends Survey (HINTS), NIH/NCI
HC/HIT-6.2	Health Information National Trends Survey (HINTS), NIH/NCI
HC/HIT-6.3	Health Information National Trends Survey (HINTS), NIH/NCI
HC/HIT-7	Health Information National Trends Survey (HINTS), NIH/NCI
HC/HIT-9	Health Information National Trends Survey (HINTS), NIH/NCI