

**Emergency Department
Consumer Assessment of Healthcare
Providers and Systems Survey
(ED CAHPS® Survey)
Version 1.0**

Recommended Guidelines

July 2020



ED CAHPS[®] Survey (ED CAHPS), Version 1.0

Recommended Guidelines

ACKNOWLEDGMENTS

These Quality Assurance Guidelines were prepared under contract to the Centers for Medicare & Medicaid Services (CMS). The primary author is the RAND Corporation, assisted by the Health Services Advisory Group and CMS.

CMS is pleased to acknowledge the role of key experts and stakeholders in developing the ED CAHPS Survey and several hospitals across the United States in testing survey.

CMS would like to acknowledge that the layout and content of this document borrows from the HCAHPS Quality Assurance Guidelines, V15.0. Centers for Medicare & Medicaid Services, Baltimore, MD. 2020.

Table of Contents

1. Introduction.....	1
2. Recommended Survey Administration Procedures	3
2.1 Survey Instrument	3
2.2 Patient Eligibility.....	3
2.3 De-duplication	4
2.4 Sampling and Number of Completes.....	5
2.5 Modes of Survey Administration	6
2.6 Timing of Surveys	8
2.7 Proxy Responses.....	8
2.8 Scoring and Analysis.....	8
3. Recommended Technical Specifications	13
3.1 Random, Unique, De-Identified Tracking Number	13
3.2 File Specifications	13
3.3 Header Section.....	15
3.4 Patient Administrative Data Section.....	16
3.5 Patient Survey Data Section	19
3.6 Survey Disposition Codes	19
3.7 Assigning Bad Phone Number Disposition Codes	21
3.8 Decision Rules and Coding Guidelines	22
Mail Surveys	23
Telephone Surveys	24
Web Surveys	25
3.9 Definition of a Completed Survey.....	26
4. Web Survey Style Guide.....	28
4.1 General Guidelines	28
Accessibility	28
Responsive Design	28
Security Requirements	29
Print Survey Conformity	29
Survey Access	29
4.2 Survey Design	30
Basic Layout.....	30
Fonts	30
Color.....	30
Graphics	31
Navigation	31
Question Page Design	32

4.3 Page-Specific Guidelines.....	33
Login Page.....	33
Welcome Page.....	35
Question Page with Error Message	37
Thank You Page	38
5. Appendices.....	39
5.1 Sample Size Calculations	39
5.2 Mailed survey invitation example	40
5.3 Emailed survey invitation example	41
5.4 Screenshot samples of web survey (mobile)	42
5.5 Screenshot samples of web survey (desktop)	45
5.6 English Survey, Mail, Version 1.0	48
5.7 Spanish Survey, Mail, Version 1.0	56
5.8 English Survey, Telephone Script, Version 1.0.....	64
5.9 Recommended Data File Structure.....	78
Header Section	78
Patient Administrative Data Section	79
Patient Survey Data Section	86
References.....	95

Tables

Table 2.2. Schedule of ED CAHPS Contact Attempts	6
Table 2.3. ED CAHPS Survey Measures.....	10
Table A.1. Sample size needed to ensure adequate (0.70) reliability, by ED CAHPS Survey measure	39

Figures

Figure 4.1. Username and Password Login Page	34
Figure 4.2. PIN Login Page	34
Figure 4.3. Welcome Page	36
Figure 4.4. Error Message.....	38
Figure 4.5. Thank You Page	38

Abbreviations

AHRQ	Agency for Healthcare Research and Quality
CAHPS	Consumer Assessment of Healthcare Providers and Systems
CMS	Centers for Medicare & Medicaid Services
DTC	Discharged to Community
ED	Emergency Department
ED CAHPS	Emergency Department Consumer Assessment of Healthcare Providers and Systems
EDPEC	Emergency Department Patient Experience of Care
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems

1. Introduction

As the leading organization spearheading national implementation of patient experience of care surveys, the Centers for Medicare & Medicaid Services (CMS) has made considerable investments in developing and testing the Emergency Department (ED) Consumer Assessment of Healthcare Providers and Systems (CAHPS®) Survey. This work comprises a key contribution that CMS makes to one of the six priorities included in the Department of Health and Human Services' National Quality Strategy – ensuring patient and family engagement in care. The ED CAHPS Survey was designed to measure the experiences of patients (18 and older) with ED care and is intended for patients who are discharged to home following their ED visit (as opposed to being admitted to the hospital or other care facility).

The ED CAHPS Survey was developed, refined, and tested in 2012-2020 by the ED CAHPS Project Team which was composed of individuals from CMS, the RAND Corporation, and Health Services Advisory Group (HSAG). The ED CAHPS Project Team began development and testing of the survey in 2012. Earlier versions of the survey instrument were referred to as the Emergency Department Patient Experience of Care (EDPEC) Survey. The EDPEC Survey received the CAHPS® trademark in March 2020. The first iteration of the ED CAHPS Survey is ED CAHPS, Version 1.0.

The survey development process followed the principles and guidelines outlined by the Agency for Healthcare Research and Quality (AHRQ) and its CAHPS Consortium in developing a patient experience of care survey. These principles specify that survey questions should focus on aspects of care for which the patient is the best or only source of information, be understood and answered in a consistent way across a range of patients, ask patients only about care that they have experienced and can observe, and ask about aspects of health care delivery that patients deem important (AHRQ 2020).

The content and design of the survey were informed by (1) a literature review of existing surveys and measures of patient experience in the ED, (2) a Federal Register call for topic areas, (3) five focus groups conducted in two locations with racially, ethnically, and socioeconomically diverse patients, (4) multiple technical expert panels (TEP) conducted in 2012, 2017, and 2018 with health care providers and survey methodologists, (5) multiple rounds of English and Spanish cognitive interviews in 2012, 2016, and 2017 to refine item wording and response options, and (6) large-scale field experiments in 2014, 2016, and 2018 to examine mode of administration and feasibility of electronic modes.

Using information acquired during this development and testing, this document contains recommended guidelines for implementing the ED CAHPS Survey including:

- Recommended survey administration procedures including recommended modes of survey administration;

- Recommended technical specifications including a recommended data file layout for vendors administering the survey;
- Web survey style guide;
- Survey instrument (English and Spanish) and survey invitation materials for mail and telephone modes, and screenshots of a web survey example.

By providing these materials and the survey instrument, CMS aims to encourage hospital-based EDs to consider use of the ED CAHPS Survey to measure patient experience. Data derived from the ED CAHPS Survey can help EDs to better understand their patients' experience of care, assist in targeting quality improvement efforts, and ultimately improve patient experience. A hospital-based ED can administer the ED CAHPS Survey for itself, or engage a survey vendor to do so. If a hospital-based ED administers the survey, then the terms "vendor" and "survey vendor" in these Guidelines refer to the hospital itself.

In the future, CMS may issue additions, further explanations, or corrections to the ED CAHPS Recommended Guidelines, as needed, or new versions of these Guidelines. For more information or if you have any questions, please contact: ED_Survey@cms.hhs.gov.

Please use the following citation when referencing this document: *Emergency Department Consumer Assessment of Healthcare Providers and Systems (ED CAHPS®) Survey, Version 1.0. Recommended Guidelines. Centers for Medicare & Medicaid Services, Baltimore, MD. July 2020.*

2. Recommended Survey Administration Procedures

This chapter describes the recommended survey administration procedures for the ED CAHPS Survey. Topics include:

- Survey instrument
- Patient eligibility
- De-duplication
- Sampling and number of completes
- Modes of survey administration
- Timing of surveys
- Proxy responses
- Scoring and analysis

2.1 Survey Instrument

The ED CAHPS Survey is composed of 35 items (see Section 5.5). Survey content covers the following topics: Going to the emergency room, During this emergency room visit, People who took care of you, Leaving the emergency room, Overall experience, Your health care, and About you. It is strongly recommended that the survey be administered without any alteration to the content of survey items or the response options, or to the order of the survey items and response options as presented in the survey instrument.

The ED CAHPS Project Team strongly recommends that if any supplemental items are added to the ED CAHPS Survey, they follow survey item #35 (i.e., the final item) so to not disrupt the patient's progression through the core items. The ED CAHPS Project Team further recommends that any supplemental items that are added to the survey be kept to a minimum so not to diminish the survey response rate.

2.2 Patient Eligibility

The ED CAHPS Project Team recommends that the following categories of patients be deemed ineligible to participate in the ED CAHPS Survey:

- Patients under the age of 18

- Patients who were not discharged to home (i.e., patients with a discharge code other than 01 or 07¹)
- Patients who were admitted to the hospital from the ED
- Patients who left without being seen and did not receive a billing code
- Patient who died in the ED
- Patients who request that they not be contacted
- Court/law enforcement patients (i.e., prisoners) classified under admission source code 8 or discharge codes 21 and 87¹
- Patients with a foreign (Non-US or Non-US Territory address) home address
- Patients excluded because of state regulations that place further restrictions on who may be contacted after discharge

Identification of ineligible patients should be based on hospital administrative data. It is important that hospitals and survey vendors understand how patients in the following categories: left without being seen and did not receive a billing code, admitted to the hospital from the ED, and admitted to an observation unit from the ED, can be accurately identified using hospital administrative data. In addition, it is important that vendors obtain complete discharge codes in a timely manner to ensure that patients who are ineligible based on the above criteria (e.g., discharges other than home, and court/law enforcement patients) are appropriately identified prior to sampling.

The ED CAHPS Project Team recommends that all patients be included in the ED CAHPS Survey sample frame unless the hospital/survey vendor has evidence that a patient is ineligible. If information is missing on any variable that affects patient eligibility for the ED CAHPS Survey when the sample frame is constructed, the ED CAHPS Project Team recommends that the patient be included in the sample frame. Patients who are determined to be ineligible for the ED CAHPS Survey post-sampling can be removed at a later stage (e.g., during analysis).

2.3 De-duplication

The ED CAHPS Project Team recommends that ED patients' visits be de-duplicated within each calendar month within each ED, utilizing address information and the patient's medical record number (or other unique identifier). While patients are eligible to be included in the ED CAHPS sample in consecutive months, if a patient is discharged more than once within a given calendar

¹ National Uniform Billing Committee Official UB-04, Data Specifications Manual, Copyright 2018, by the American Hospital Association. If a more recent version of this manual is available, CMS recommends use of the more recent version.

month, only one discharge date should be included in the sample frame. The method used for de-duplicating depends on whether sampling is conducted continuously throughout the month, or is conducted only at the end of the month. Suggested approaches are described below.

- If continuous daily sampling is used, then include only the first discharge date identified in a single month.
- If weekly sampling is used, each weekly discharge list should be compared to the previous weekly discharge lists for the month. The first discharge encountered would be included in the sample frame and discharges encountered in subsequent weeks would be excluded from the sample frame. In the event a patient is listed with two discharges in the same week (provided the patient had not been included in the sample frame in an earlier week within the same month), then include only the last discharge date during the week in the sample frame. Each weekly discharge list should be compared to the previous discharge lists received in the month in order to exclude additional discharges for a particular patient.
- If end-of-the-month sampling is used, then include only the last discharge date of the month in the sample frame.

2.4 Sampling and Number of Completes

Based on reliability estimates for items from the 2016 mode experiment (Parast et al. 2019) and a feasibility test conducted in 2018 (Parast et al. 2019), Table A.1 in Section 5.1 indicates sample sizes needed to obtain adequate hospital-level reliability (0.70) for the composite and two global measures (see Scoring and Analysis section). The table displays sample sizes needed using both linear mean and top-box scoring. For example, to achieve adequate reliability (0.70) for the Overall ED Rating measure, a hospital-based ED would need 97 completed surveys if linear mean scoring were used to score survey items, or 104 completed surveys if top-box scoring were used.

Based on these results, a minimum of 375 completed surveys per hospital is recommended if linear mean scoring is used; a minimum of 450 completed surveys per hospital is recommended if top-box scoring is used. The number of patients to be sampled will also depend on the selected mode protocol, the hospital's email coverage, and the hospital's response rate. In terms of sampling approach, the ED CAHPS Project Team recommends that a simple random sample of eligible patients be drawn within each hospital.

Ability of Hospitals to Achieve Sample Targets

In general, it is reasonable to assume that about 20% of ED visits will result in a hospital admission (and thus not be eligible for the ED CAHPS Survey) and that 20% of ED visits will

not be eligible for the ED CAHPS Survey due to other patient eligibility requirements described above. Conservatively estimating a response rate of 20% and assuming sampling would occur throughout the year, a hospital would need to have at least 3,125 ED visits annually (using linear mean scoring; 3,750 if using top-box scoring) to be expected to achieve the recommended number of completes. Therefore, administration of the ED CAHPS Survey is not recommended for hospitals with fewer than 3,125 (if using linear mean scoring; or 3,750 if using top-box scoring) ED visits annually. Based on these estimates, it is expected that the majority of US hospitals (86-88%) would have a sufficient number of ED visits annually.

2.5 Modes of Survey Administration

There are three recommended modes of survey administration for the ED CAHPS Survey: (1) Standard mixed mode (i.e., mail-telephone), (2) Web-telephone mode, and (3) Web-mail-telephone mode. The selection of these recommended modes was informed by results of several field tests, including a randomized mode experiment conducted in 2016 (Parast et al. 2019), a feasibility test conducted in 2016 (Mathews et al. 2019), and another feasibility test conducted in 2018 (Parast et al. 2019). For all modes, the first attempt to reach the patient should be sent between 48 hours and 35 days after the ED discharge. The detailed protocol for each recommended mode is described below. Day 1 represents the day the first survey or invitation is sent, and the timing of subsequent contact attempts is counted from that day. Table 2.2 shows the schedule of contact attempts in tabular format. The Appendix contains a sample mailed survey invitation (Section 5.2), a sample emailed survey invitation (Section 5.3), sample screenshots of the web survey on a mobile device (Section 5.4) and on a desktop computer (Section 5.5), the survey instrument in English (Section 5.6), the survey instrument in Spanish (Section 5.7), and a sample telephone script (Section 5.8).

Table 2.2. Schedule of ED CAHPS Contact Attempts

Mode Day	Standard Mixed Mode	Web-Telephone Mode	Web-Mail-Telephone Mode
1 (First contact)	Mail out packet	Email web link	Email web link
2		First reminder email	First reminder email
4		Second reminder email	Second reminder email
6		Phone calls begin	Mail out packet
22	Phone calls begin		Phone calls begin
35	Phone calls end	Phone calls end	Phone calls end

Standard Mixed Mode (Mail-Telephone) Procedures. The first attempt to reach the patient is via mail. The mailing packet should include:

- Patient's name and address
- ED name
- Date of ED visit
- Individual's unique tracking number (see Section 3.1)
- Cover letter (see Section 5.2)
- The ED CAHPS survey instrument (see Section 5.6 and 5.7)
- Pre-paid business reply envelope

Patients who have not responded via mail by day 21 are to be contacted by telephone beginning on day 22 (see Section 5.8). These cases should be called for a period of two weeks with up to five call attempts. The five calls should be made over a minimum of eight days and should be varied by day of the week and time of day. Data collection should be closed out for a sampled patient by five weeks (35 calendar days) following the mailing of the survey.

Web-Telephone Mode. The first attempt to reach the patient is via email with a web link for survey administration (see Section 5.3). Email reminders should be sent on days 2 and 4 until web completion occurs. Patients who have not responded via web are to be contacted by phone beginning on day 6 with up to five call attempts (see Section 5.8). The five calls should be made over a minimum of eight days and should be varied by day of the week and time of day. Data collection should be closed out for a sampled patient by five weeks (35 calendar days) following the first email contact attempt.

Web-Mail-Telephone Procedures. The first attempt to reach the patient is via email with a web link for survey administration (See Section 5.3). Email reminders should be sent on days 2 and 4 until web completion occurs. Patients who have not responded via web are to be contacted by mail on day 6. The mailing packet is to include:

- Patient's name and address
- ED name
- Date of ED visit
- Individual's unique tracking number (see Section 3.1)
- Cover letter (see Section 5.2)
- The ED CAHPS survey instrument (see Section 5.6 and 5.7)
- Pre-paid business reply envelope

Patients who have not responded via mail are then to be contacted by phone beginning on day 22 with up to five call attempts (see Section 5.8). The five calls should be made over a minimum of

eight days and should be varied by day of the week and time of day. Data collection should be closed out for a sampled patient by five weeks (35 calendar days) following the initial email contact attempt.

Web Survey. If a web survey is used, the ED CAHPS Project Team recommends that the format of the web survey parallel the mailed survey to the extent possible (see Section 5.4 and 5.5 for sample screenshots of the ED CAHPS web survey).

2.6 Timing of Surveys

Regardless of survey mode, the ED CAHPS Project Team recommends that survey vendors initiate contact with sampled patients between 48 hours and 35 days after their ED date of discharge. Patients should not be surveyed during their ED visit, at discharge from the ED, or in the 48 hours following discharge. This will allow enough time to pass for the patient to return home and feel settled after his or her ED visit. Patients should **not** be given the survey while they are still in the ED.

Survey vendors are encouraged to work with their hospital clients to facilitate contact with discharged to home ED patients as quickly as possible within this window.

Regardless of survey mode protocol, it is recommended that the data collection field period should close 35 days from the time of initial contact attempt.

2.7 Proxy Responses

The ED CAHPS Project Team recommends that proxy assistance be allowed on the ED CAHPS Survey. The survey instrument collects information on use of proxy assistance and an indicator of whether the proxy was with the patient in the ED during the visit. The ED CAHPS Project Team also recommends that proxy assistance information be used in case-mix adjustment of ED scores (see Scoring and Analysis Section).

2.8 Scoring and Analysis

Item Scoring. The ED CAHPS Project Team recommends that evaluative items be scored using either linear mean scoring or top-box scoring (see Technical Details section for more detail regarding adjusted score calculation). When using linear mean scoring, response options should be rescaled from 0 (worst) to best (100) with equal intervals between each option. For example, for question 7, “Before giving you medicine, did the doctors or nurses tell you what the medicine was for?” which has response options “Yes, definitely,” “Yes, somewhat” and “No,” the

response option “Yes, definitely” should be coded as 100; a “Yes, somewhat” should be coded as 50; and “No” should be coded as 0 when using linear mean scoring.

When using top-box scoring, the most positive response option, such as “Always”, “Yes, definitely,” and response options “9” and “10” for Overall Rating, Question 23, should be recoded to 100 and all other response options should be recoded as 0. For example, for question 7, “Before giving you medicine, did the doctors or nurses tell you what the medicine was for?, the response option “Yes, definitely” should be coded as 100, and “Yes, somewhat” and “No” should be coded as 0 when using top-box scoring. For survey items with Yes/No response options, the linear mean and top-box scoring methods are identical (“Yes” is recoded as 100; “No” is recoded as 0). See Technical Details below for full information on recoding items for scoring purposes.

Linear scoring is sometimes preferred to top-box scoring because it gives “partial credit” for intermediate response options, such as “Yes, somewhat”, and thus captures the full range of responses. However, consumers often prefer top-box scoring due to ease of interpretation (e.g., 60% of patients said “Yes, definitely” doctors or nurses told them what the medicine was for).

If an evaluative item is a dependent item (i.e., if based on their responses to a prior question, patients may have been asked to skip the respective item, described further in Chapter 3) such as Question 7, all patients who screen out of the question should not be scored (i.e., set the score to have a missing value) using either scoring method, regardless of whether or not the patients provided an answer to the respective item.

The ED CAHPS Project Team recommends that only completed surveys (defined in Chapter 3) be included when calculating item and measure scores (i.e., exclude cases determined to be ineligible, break-offs or cases who only partially completed the survey).

Measure Scoring. Table 2.3 lists the measures developed for the ED CAHPS Survey along with the items (Q1 denotes question number 1) that comprise each measure.

Case-mix Adjustment. If survey response data are to be used to calculate and compare hospital-based ED scores (e.g., compare multiple hospitals or compare scores from a single hospital over time [only if the case mix of patients changed substantially over time]), it is strongly recommended that scores be adjusted for differences in the case-mix of respondents; case-mix is sometimes referred to as patient-mix. At a minimum, the ED CAHPS Project Team recommends that scores be adjusted for patients’ age, education, self-rated health status, language spoken at home, reason for the ED visit, whether the patient was taken to the ED in an ambulance, whether

the patient had a proxy answer for them, whether the patient used proxy assistance in some way other than answering for them, and response percentile.

Response percentile (reflecting lag time) is generally defined (e.g., in the CAHPS Hospital Survey [HCAHPS]) by first calculating the number of days between an eligible patient’s discharge date and the date that data collection activities ended (i.e., date of response for responders, or date that the fielding period closed for non-responders), and then calculating the percentile of this quantity amongst all eligible patients within each ED, within each survey mode. We additionally recommend that for modes involving email as the first mode of survey invitation (web-telephone mode and web-telephone-mail mode), response percentile be calculated stratified by “web survey access.” (i.e., stratifying by (a) those with a valid email (and consent to email where required), meaning all patients who could have possibly accessed the web survey given the observed information vs. (b) everyone else.)

Table 2.3. ED CAHPS Survey Measures

Composite measure: Getting timely care
How long until someone talked to you about the reason for the ER visit (Q3)
Did you get care within 30 minutes of getting to the ER (Q4)
Composite measure: How well doctors and nurses communicate
How often nurses treated you with courtesy and respect (Q11)
How often nurses listened to you carefully (Q12)
How often nurses explained things in a way you could understand (Q13)
How often doctors treated you with courtesy and respect (Q14)
How often doctors listened to you carefully (Q15)
How often doctors explained things in a way you could understand (Q16)
Composite measure: Communication about medications
Doctors or nurses asked you about all the medicines you were taking (Q5)
Doctors or nurses told you what medicine was for (Q7)
Doctors or nurses explained possible side effects of medicines (Q8)
Doctors or nurses told you what medicine was for (at discharge) (Q18)
Composite measure: Communication about follow-up
Talk with you about follow-up care before leaving ER (Q19)
Info on how to get follow up before leaving ER (Q21)
Info on symptoms to look out for at home (Q22)
Global measure: Overall ED rating (Q23)
Global measure: Willingness to recommend the ED (Q24)

Mode Adjustments. Mode adjustments are currently not available for the three recommended mode protocols for this survey. In the absence of such mode adjustments, caution is needed if comparisons are made between EDs that use different modes for data collection.

Technical Details. The ED CAHPS Project Team recommends that if item or measure scores are to be calculated, the following steps take place. It is recommended that responses to the survey items used in each ED CAHPS Survey measure (Table 2.3) be scored linearly (or top-box), case-mix adjusted and rescaled to produce a 0-100 score.

First, items are scored as follows (which is parallel to the adjustment approach used within the HCAHPS Survey² (HCAHPS, 2020a)):

- If using **linear mean scoring**, for items with response options Never / Sometimes / Usually / Always, “Never” = 1; “Sometimes” = 2; “Usually” = 3; and “Always” = 4. For items with response options Yes / No, “Yes”=1; and “No”=0. For items with response options Yes, definitely / Yes, somewhat / No, “Yes, definitely”=2; “Yes, somewhat”=1; “No”=0. For the item with response options Less than 5 minutes / 5 to 15 minutes / More than 15 minutes, “Less than 5 minutes”=3; “5 to 15 minutes”=2; “More than 15 minutes” =1. For the item with response options 0-10, “0”=0; “1” =1; “2”=2; “3”=3; “4”=4; “5”=5; “6”=6; “7”=7; “8”=8; “9”=9; “10”=10. For the item with response options Definitely no / Probably no / Probably yes / Definitely yes, “Definitely no”=0; “Probably no”=1; “Probably yes”=2; “Definitely yes”=3.
- If using **top-box scoring**, for items with response options Never / Sometimes / Usually / Always, “Never” = 0; “Sometimes” = 0; “Usually” = 0; and “Always” = 1. For items with response options No / Yes, “No”=0; and “Yes”=1. For items with response options No / Yes, somewhat / Yes, definitely, “No”=0; “Yes, somewhat”=0; “Yes, definitely”=1. For the item with response options Less than 5 minutes / 5 to 15 minutes / More than 15 minutes, “Less than 5 minutes”=1; “5 to 15 minutes”=0; “More than 15 minutes” =0. For the item with response options 0 - 10, “0”=0; “1” =0; “2”=0; “3”=0; “4”=0; “5”=0; “6”=0; “7”=0; “8”=0; “9”=1; “10”=1. For the item with response options Definitely no / Probably no / Probably yes / Definitely yes, “Definitely no”=0; “Probably no”=0; “Probably yes”=0; “Definitely yes”=1.
- Using either scoring approach, patients who screen out of the question should not be scored (i.e., if the patient provided a response, set the score to have a missing value).

² <https://hcahpsonline.org>

Second, these scores should be adjusted for the effects of case mix and survey mode (when mode adjustments are made available). To adjust for differences in case mix, the ED CAHPS Project Team recommends that scores be adjusted (using linear regression) for patient's age, education, self-rated health status, language spoken at home, reason for the ED visit, whether the patient was taken to the ED in an ambulance, whether the patient had a proxy answer for them, and whether the patient used proxy assistance in some way other than answering for them.

Third, each item score should be transformed into a 0-100 score using the following conversion: let M = the adjusted ED-level item mean score; let R = the lowest possible response to the item (e.g., 0); let K = the highest possible response to the item (e.g., 4). The transformed 0-100 score is then: $100 * (M - R) / (K - R)$.

Lastly, if calculating a measure score (as opposed to an item score), one should take the average of the item scores among items within the measure (Table 2.3).

3. Recommended Technical Specifications

To promote more uniform survey implementation and standardized data collection, the ED CAHPS Project Team recommends that the following procedures and specifications, which parallel those used in the HCAHPS Survey, be followed. However, they are not mandatory.

The following technical specifications are patterned after those in the HCAHPS Survey Quality Assurance Guidelines, V.15.0 (HCAHPS, 2020b). This section contains information about preparing the ED CAHPS Survey data files for analysis, including information on recommendations for coding and interpreting ambiguous or missing data elements in returned surveys.

3.1 Random, Unique, De-Identified Tracking Number

The ED CAHPS Project Team recommends that the survey vendor assign each patient in the sample a random, unique, de-identified patient identification number (Patient ID). This Patient ID is used to track and report whether the patient has returned the survey. Any de-identified combination of up to 16 letters and numbers may be used. The Patient ID should not include any combination of letters or numbers that can otherwise identify the patient. For example, the discharge date, the birth date (month, date and/or year) and hospital ID number (i.e., patient's hospital medical record number) should not be combined in any manner to generate the Patient ID.

3.2 File Specifications

The ED CAHPS Project Team recommends that survey vendors organize survey data into monthly files and specifically use a flat ASCII file format such that there is one record for each sampled patient, both eligible and ineligible. The ED CAHPS Project Team recommends that each record consist of three parts:

1. Header Section
2. Patient Administrative Data Section
3. Patient Survey Data Section

More detailed descriptions of each of these recommended sections is provided below. For further details on the recommended ASCII file record layouts for the ED CAHPS Survey, see Section 5.9.

Header Section

Each record of the monthly data file should begin with the Header Section. The Header Section contains identification and sampling information that is applicable to every sampled record in that month. The Header Section includes but is not limited to: hospital's name; CMS Certification Number (CCN), formerly known as the Medicare Provider Number; National Provider Identifier (NPI), which is an optional field; the discharge year and month; mode of survey administration; the number of eligible discharges; and the number of sampled discharges. Header information should be populated for all sampled patients. A complete layout of the Header Section can be found in Section 5.9.

Patient Administrative Data Section

The second part of the recommended submission file is the Patient Administrative Data Section. This record contains de-identified information on each patient, including but not limited to discharge date; Patient ID; patient discharge status; final survey status; survey completion mode; primary language; primary ICD-10 diagnostic code; survey language in which the survey was administered or attempted to be administered; lag time (number of days from discharge to survey completion or field period end); gender; age at visit; emergency severity index; race/ethnicity; payer for medical care received; and mode of arrival. Some of this information comes from the survey vendor's survey records, while other information is taken from the patient's hospital administrative record.

The Patient Administrative Data Section is recommended for each patient sampled for the ED CAHPS Survey, whether or not the patient responded to the survey. A complete layout of the Patient Administrative Data Section can be found in Section 5.9.

Patient Survey Data Section

The third part of the data record is the Patient Survey Data Section, which contains the actual survey responses to the ED CAHPS Survey from every patient who completed or partially completed a survey. If a Patient Survey Data Section is being populated for a given patient, all response fields should have a valid value, which can include "M – Missing" or "88 – Not Applicable."

Section 5.9 also includes a description of the file layout for the Patient Survey Data Section, including the valid codes for each data element as well as a description of the codes.

3.3 Header Section

This section describes the recommended content and layout of the Header Section of the file. All fields in the Header Section should have a valid value entered. A complete layout of the Header Section can be found in the Section 5.9.

- The “Survey Mode” field should be coded with the survey mode for the hospital.
- The “Eligible Discharges” field should include the count of patients who are eligible for the ED CAHPS Survey, even if the patient’s information is received from the hospital with discharge dates that are beyond the initial contact period specified for the survey.
- In calculating the “Eligible Discharges” field, the number of eligible discharges in the sample frame in the month should not include patients who are determined to be ineligible or excluded, regardless of whether they are selected for the survey sample. “Sample Size” can therefore be larger than the number of “Eligible Discharges.” For example, if a patient was selected for the survey sample and later determined to be ineligible (i.e., “Final Survey Status” code of “3 – Ineligible: Not in eligible population”), then the patient should be subtracted from the number of eligible discharges in the month. However, this does NOT apply to “Final Survey Status” codes of “2 – Ineligible: Deceased,” “4 – Ineligible: Language barrier,” or “5 – Ineligible: Mental/Physical incapacity.” See Example 1 below.
- If a patient is not selected for the survey sample and is later determined to be ineligible (for example, if the patient is later found to be ineligible due to an updated discharge status code), then the patient should be subtracted from the number of eligible discharges in the month. See Example 2 below.

Example 1: Eligible Discharges Calculations		
100	=	Number of eligible patients in original sample frame (Eligible Discharges)
100	=	Number of patients selected for sample (Sample Size)
2	=	Number of patients with “Final Survey Status” code of “2 – Ineligible: Deceased”
5	=	Number of patients with “Final Survey Status” code of “3 – Ineligible: Not in eligible population”
2	=	Number of patients with “Final Survey Status” code of “4 – Ineligible: Language Barrier”
4	=	Number of patients with “Final Survey Status” code of “5 – Ineligible: Mental/Physical incapacity”
95	=	Number reported in the “Eligible Discharges” field

In this example:

- The initial “Eligible Discharges” is 100 and “Sample Size” is 100 (i.e., census sampling)
- Five patients were subtracted from the “Eligible Discharges” because they had a “Final Survey Status” code of “3 – Ineligible: Not in eligible population,” resulting in 95 “Eligible Discharges”
- Patients with a Final Survey Status code of 2, 4 or 5 were not subtracted
- In the Header Record, “Sample Size” of 100 is larger than the number of “Eligible Discharges” of 95

Example 2: Eligible Discharges Calculations		
100	=	Number of eligible patients in original sample frame (Eligible Discharges)
50	=	Number of patients selected for sample (Sample Size)
2	=	Number of patients with “Final Survey Status” code of “2 – Ineligible: Deceased”
5	=	Number of patients with “Final Survey Status” code of “3 – Ineligible: Not in eligible population”
2	=	Number of patients with “Final Survey Status” code of “4 – Ineligible: Language Barrier”
4	=	Number of patients with “Final Survey Status” code of “5 – Ineligible: Mental/Physical incapacity”
10	=	Number of patients not selected for the survey sample but deemed ineligible after sampling due to an updated discharge status code
85	=	Number reported in the “Eligible Discharges” field

- In this example:
- The initial “Eligible Discharges” is 100 and “Sample Size” is 50
 - The final “Eligible Discharges” is 85
 - Five patients were subtracted from the “Eligible Discharges” because they had a “Final Survey Status” code of “3 – Ineligible: Not in eligible population”
 - Patients with Final Survey Status code of 2, 4 and 5 were not subtracted
 - Ten patients were subtracted from the “Eligible Discharges” because they had an updated ineligible discharge code, resulting in 85 “Eligible Discharges”

3.4 Patient Administrative Data Section

This section describes the recommended content and layout of the Patient Administrative Data Section of the file. A complete layout of this section can be found in the Section 5.9. All fields in the Patient Administrative Data Record should have a valid value. Use code “M–Missing/Don’t Know” for all missing fields, with the following exception: the “language” field should be completed with the appropriate valid value indicating the survey language in which the survey was administered, even if a patient does not complete the survey.

- Patient administrative information should be populated for all patients selected for the survey sample, including patients found to be ineligible prior to survey administration.
 - If a patient is found to be ineligible or excluded after the sample is drawn, the patient should be assigned a “Final Survey Status” code of “3 – Ineligible: Not in eligible population.”
 - If the patient is selected for the ED CAHPS Survey and based on the patient’s discharge date the specified initial contact period has lapsed prior to any

contact attempt, then the patient should be assigned a “Final Survey Status” code of “8 – Non-Response: Non-response after maximum attempts.”

- The “Survey Completion Mode” field should be submitted if “Final Survey Status” is “1 – Completed survey” or “6 – Non-response: Break off.”
- Since all recommended mode protocols include a telephone component, the “**Number Survey Attempts – Telephone**” field should always be populated.
- The “**Lag Time**” should be calculated for each patient in the sample and is defined as the number of days between the patient’s discharge date from the hospital and the date that data collection activities ended for the patient.
 - All surveys (i.e., “Final Survey Status” codes of 1, 2, 3, 4, 5, 6, 7, 8, 9, or M) should contain the actual lag time
 - Surveys should NOT have a lag time coded as “8 – Not Applicable”
 - The following are brief illustrations of how lag time would be determined for each Final Survey Status in ED CAHPS:
 - **Completed survey** (code 1): Lag time is the number of days between the patient’s discharge date from the hospital and the receipt of a completed web survey, mail survey, or the completion of a telephone survey
 - **Ineligible: Deceased** (code 2): Lag time is the number of days between the patient’s discharge date from the hospital and the date it is determined that the patient is deceased
 - **Ineligible: Not in eligible population** (code 3): Lag time is the number of days between the patient’s discharge date from the hospital and the date it is determined that the patient is not eligible for the ED CAHPS Survey
 - **Ineligible: Language barrier** (code 4): Lag time is the number of days between the patient’s discharge date from the hospital and the date it is determined that a language barrier prevents the patient from completing the ED CAHPS Survey
 - **Ineligible: Mental/physical incapacity** (code 5): Lag time is the number of days between the patient’s discharge date from the hospital and the date it is determined that a mental or physical incapacity prevents the patient from completing the ED CAHPS Survey
 - **Non-response: Break off** (code 6): Lag time is the number of days between the patient’s discharge date from the hospital and the date the patient “breaks off” or fails to complete the ED CAHPS Survey after the survey has started
 - **Non-response: Refusal** (code 7): Lag time is the number of days between the patient’s discharge date from the hospital and the date the

patient (or someone on the patient’s behalf) refuses to take the ED CAHPS Survey

- **Non-response: Non-response after maximum attempts** (code 8): Lag time is the number of days between the patient’s discharge date from the hospital and the date of the final attempt (Mail: non-return of the second mailing of survey; Telephone: fifth call attempt) to administer the ED CAHPS Survey
- **Non-response: Bad/no phone number** (code 9): Lag time is the number of days between the patient’s discharge date from the hospital and the date it is determined that the patient’s actual telephone number is not viable

To illustrate the calculation of lag time, two examples are provided:

Patient A: Lag Time Calculation: Mail	
Mode of Survey Administration	Mail-phone (Standard Mixed Mode)
Discharge Date	July 1
Date of Mail Attempt	August 5 (35 days after discharge)
Date of First Phone Attempt	August 26 (21 days after mail attempt)
Date Data Collection Activities Ended for this Patient	September 9 (35 days after mail attempt) Patient never returned the ED CAHPS Survey or responded to phone attempts
ED CAHPS Final Survey Status	Code as “8 – Non-response: non-response after maximum attempts” because the data collection protocol of 35 days has been reached and the patient has not responded
Lag Time	Calculated as 70 Days (number of days between the patient’s discharge [July 1] from the hospital to the date data collection activities ended [September 9])

Patient B: Lag Time Calculation: Telephone	
Mode of Survey Administration	Web-phone
Discharge Date	July 1
Date of First Attempt	July 3 (48 hours after discharge)
Date Data Collection Activities Ended for this Patient	August 7 (35 days after first contact attempt) Patient never completed the web survey and did not respond to phone attempts
ED CAHPS Final Survey Status	Code as “8 – Non-response: non-response after maximum attempts” because the data collection protocol of 35 days had ended and the patient had not been reached although five phone attempts were made

Lag Time	Calculated as 37 Days (number of days between the patient’s discharge from the hospital [July 1] to the date data collection activities ended [August 7])
-----------------	---

3.5 Patient Survey Data Section

This section describes the recommended content and layout of the Patient Survey Data Section of the file. A complete layout of this section can be found in the Section 5.9. All survey responses as provided by the patient for each survey item should be entered in this section.

- All survey questions should have a valid value. For “Final Survey Status” of “1 – Completed survey” or “6 – Non-Response: Break-off,” code missing answers as “M – Missing/Don’t Know,” unless the questions were appropriately skipped dependent questions which would be coded as “8 – Not Applicable”
- Patients may select more than one response category in Question 32, “*What is your race? Please choose one or more.*”, and Question 34, “*How did that person help you? Mark one or more.*”
 - Mail Survey
 - Enter **all** of the categories that the patient has selected. For example, for any race category not selected, enter “0.” If no race categories are selected, enter “M – Missing/Don’t Know” for all race categories.
 - Telephone Survey
 - Enter all of the categories that the patient has selected. For example, if the patient responds “Yes” to a race category, enter “1.” If the patient responds “No” to a race category, enter “0.” If the patient does not provide a response to any of the race categories or skips the question, enter “M – Missing/Don’t Know.”
 - Web Survey
 - Record **all** of the categories that the patient has selected. For example, for any race category not selected, enter “0.” If no race categories are selected, enter “M – Missing/Don’t Know” for all race categories.

3.6 Survey Disposition Codes

Maintaining up-to-date dispositions of survey codes is an important part of the ED CAHPS Survey administration process. Using the random, unique, de-identified Patient ID, the survey vendor should assign each patient in the sample a survey status code, which is used to track and report whether the patient has completed a survey or requires further follow-up. Typically, survey status codes are either interim (which indicate the status of each sampled patient during

the data collection period), or final (which indicate the final outcome of each patient surveyed at the end of data collection, that is – “Final Survey Status”). Interim disposition codes are expected to be used only for internal tracking purposes. The data files that are used for any analyses should contain the ED CAHPS final survey status codes. Interim survey status codes allow the survey vendor to calculate and report the number of completed questionnaires and the response rate at any time during the data collection period. After data collection is completed, the survey vendor assigns each sampled patient a final survey status code.

The following table provides details on the recommended assignment of the “Final Survey Status” field. Note that while there is a disposition code related to bad/no telephone number, there is no disposition code for bad email address or bad mailing address because the web survey and mailed survey are not the final modes of invitation for any of the recommended mode protocols. Thus, bad email address or bad mailing address cannot be an explanation for non-response.

Final Survey Status / Disposition Codes	
Code	Description
1	<p>Completed survey</p> <p>Survey vendors assign a patient a “Final Survey Status” code of “1 – Completed survey” when the patient answers at least 50 percent of the questions applicable to all patients (questions 1, 2, 3, 4, 5, 6, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24). Dependent items (described in Section 3.8), Your Health Care questions and About You questions do not count against the required 50 percent. There should be no evidence that the patient is ineligible.</p>
2	<p>Ineligible: Deceased</p> <p>Survey vendors assign a “Final Survey Status” code of “2 – Ineligible: Deceased” when the patient was alive at the time of discharge but deceased by time of survey administration.</p>
3	<p>Ineligible: Not in Eligible population</p> <p>Survey vendors assign a “Final Survey Status” code of “3 – Ineligible: Not in eligible population” when there is evidence that the patient is ineligible. All patients are eligible unless they are in one of the following ineligible groups:</p> <ul style="list-style-type: none"> • Patients under the age of 18 • Patients who were not discharged home (i.e., patients with a discharge code other than “01” or “07”) • Patients who died in the ED • Patients who request that they not be contacted (those who sign “no publicity” requests while hospitalized or otherwise directly request not to be contacted) • Court/law enforcement patients (i.e., prisoners) with an “Admission Source” of “8 – Court/Law enforcement,” “Discharge Status” of “21 – Discharged/Transferred to court/law enforcement,” or “Discharge Status” of “87 – Discharged/Transferred to court/law enforcement with a planned acute care hospital inpatient readmission.” • Patients with a foreign (Non-US or Non-US Territory address) home address (the U.S. territories – Virgin Islands, Puerto Rico, Guam, American Samoa, and Northern Mariana Islands are not considered foreign addresses and therefore, are not excluded) • Patients who are excluded because of state regulations that place further restrictions on which patients may be contacted after discharge • Patients who left without being seen and did not receive a billing code

	<ul style="list-style-type: none"> • Patients who were admitted to the hospital or to an observation unit from the ED
4	<p>Ineligible: Language barrier Survey vendors assign a “Final Survey Status” code of “4 – Ineligible: Language barrier” when there is evidence that the patient does not read or speak the language in which the survey is being administered.</p>
5	<p>Ineligible: Mental or physical incapacity Survey vendors assign a “Final Survey Status” code of “5 – Ineligible: Mental/physical incapacity” when the patient is unable to complete the survey because he/she is mentally or physically incapacitated. This includes patients who are visually/hearing impaired.</p>
6	<p>Non-response: Break-off Survey vendors assign a “Final Survey Status” code of “6 – Non-response: Break-off” when a patient provides a response to at least one ED CAHPS question, but answered too few questions to meet the criteria for a completed survey</p>
7	<p>Non-response: Refusal Survey vendors assign a “Final Survey Status” code of “7 – Non-response: Refusal” when a patient returns a blank survey with a note stating they do not wish to participate, or when a patient responds to an email stating they do not wish to participate, or when a patient verbally refuses to begin the survey. Surveys completed by a proxy respondent are coded as “7 – Non-response: Refusal.”</p>
8	<p>Non-response: Non-response after maximum attempts Survey vendors assign a “Final Survey Status” code of “8 – Non-response: Non-response after maximum attempts” when one of the following occurs:</p> <ul style="list-style-type: none"> • There is no evidence to suggest that a patient’s contact information is bad (e.g., bad telephone number) or • If after the maximum number of attempts, the patient has not completed the survey by the end of the survey administration time period (i.e., 35 days from initial contact), or • If the survey is returned by mail or completed by telephone with a lag time from discharge greater than 70 days <p>Note: If a patient is selected for the ED CAHPS Survey and based on the patient’s discharge date the 35-day initial contact period has lapsed prior to any contact attempt, then the patient should be assigned a “Final Survey Status” code of “8 – Non-Response: Non-response after maximum attempts.” In addition, a Discrepancy Report should be filed to account for patient information received beyond the 35-day initial contact protocol.</p>
9	<p>Non-response: Bad/no telephone number This disposition code applies to the web-phone, web-mail-phone, and mail-phone modes of administration. Survey vendors assign a “Final Survey Status” code of “9 – Non-response: Bad/no phone number” when there is evidence that a patient’s telephone number is bad (e.g., no telephone number available or a disconnected telephone number, etc.).</p>

3.7 Assigning Bad Phone Number Disposition Codes

The “Final Survey Status” codes of “8 – Non-response after maximum attempts,” and “9 – Non-response: Bad/no phone number” should be assigned based on the viability (i.e., the ability to work successfully) of the telephone number for the patient. Hospitals or survey vendors should track the viability of the mailing address, telephone number, and email address for each patient during survey administration. In general, the contact information is assumed to be viable unless there is sufficient evidence to suggest otherwise. If the evidence is insufficient, the

hospital/survey vendor should continue attempting to contact the patient until the required number of attempts has been exhausted.

Attempts should be made to contact every eligible patient drawn into the sample, whether or not they have a complete mailing address, telephone number, and/or email address. Survey vendors have flexibility in not sending mail surveys to patients without mailing addresses. However, survey vendors should first make every reasonable attempt to obtain a patient's address including re-contacting the hospital client to inquire about an address update for patients with no mailing address. Survey vendors should use commercial software or other means to update addresses, telephone numbers, and/or email addresses provided by the hospital for sampled patients. If the hospital/survey vendor is unsuccessful in obtaining a viable mailing address, telephone number, and/or email address, the ED CAHPS Project Team recommends that vendors retain a record of their attempts to acquire the missing information.

To provide some examples, the following may be considered as reasonable evidence of non-viability of a patient's mailing address:

- The hospital does not provide an address in the patient discharge list, and the hospital or its survey vendor is unable to obtain an address for the patient
- Mail is returned marked "Address Unknown"
- Mail is returned marked "Moved – No Forwarding Address"

The following may be considered as reasonable evidence of non-viability of a patient's email address:

- Bounced back email invitation indicating the email was undeliverable
- An email address in an incorrect format e.g., with no @ symbol

The following may be considered as reasonable evidence of non-viability of a patient's telephone number:

- The hospital does not provide a telephone number in the patient discharge list, and the hospital or its survey vendor is unable to obtain a telephone number for the patient
- The telephone interviewer dials the patient's telephone number and receives a message that the telephone number is non-working or out of order, and no updated number is available or obtained
- The telephone interviewer dials the patient's telephone number, speaks to a person, and is informed that he/she has the wrong telephone number and other attempts to obtain the correct telephone number are not successful

3.8 Decision Rules and Coding Guidelines

The ED CAHPS Survey recommended decision rules and coding guidelines have been developed to address situations in which survey responses are ambiguous, missing or provided

incorrectly, and to capture appropriate information for data submission. The ED CAHPS Project Team recommends that hospitals and survey vendors use the following guidelines to ensure valid and consistent coding of these situations.

Mail Surveys

A common problem in mail surveys is ambiguity of responses on returned questionnaires. In order to ensure uniformity in data coding, hospitals and survey vendors should strictly apply the following guidelines. Survey vendors that scan or key-enter mail surveys should employ the following decision rules for resolving common ambiguous situations.

- If a mark falls between two response options but is obviously closer to one than the other, then select the choice to which the mark is closest
- If a mark falls equidistant between two response options, then code the value of the item as “M – Missing/Don’t Know”
- If a value is missing, then code the response as “M – Missing/Don’t Know.” Survey vendors should not impute a response; in other words, do not try to determine what the patient would have responded for the missing value based on answers to other questions.
- When more than one response option is marked, code the value as “M – Missing/Don’t Know”
 - Exception: Question 32, “What is your race? Please choose one or more.” For Question 32, enter responses for ALL of the categories that the respondent has selected.
 - Exception: Question 34, “How did that person help you? Mark one or more.” For Question 34, enter responses for ALL of the categories that the respondent has selected.

In instances where there are multiple marks but the patient’s intent is clear, survey vendors should code the survey with the patient’s clearly identified intended response.

Decision Rules for Screener and Dependent Questions: Mail Surveys

There are several items in the ED CAHPS Survey that can and should be skipped by certain patients. These items form skip patterns. Five questions in the ED CAHPS Survey serve as screener questions (Questions 6, 9, 17, 20 and 33) that determine whether the associated dependent questions require an answer. The following decision rules are provided to assist in the coding of patient responses to skip pattern questions.

Decision rules for coding **screener questions** 6, 9, 17, 20, 33:

- Enter the value provided by the patient. Do not impute a response based on the patient’s answers to the dependent questions.
- If the screener question is left blank, then code it as “M – Missing/Don’t Know.” Do not impute a response based on the patient’s answers to the dependent questions.

Decision rules for coding **dependent questions** 7, 8, 10, 18, 21, 34 and 35:

- If the corresponding screener question is answered such that the dependent question(s) should have been answered according to the specific skip pattern and the dependent question(s) is left blank, then code the dependent question(s) as “M – Missing/Don’t Know”
- If the corresponding screener question is answered such that the dependent question(s) should have been answered according to the specific skip pattern and the dependent question(s) is not left blank, then enter the value provided by the patient for the dependent questions(s)
- If the corresponding screener question is answered such that the dependent question(s) should not have been answered according to the specific skip pattern and the dependent question(s) is left blank, then code the dependent question(s) as “88 – Not Applicable”
- If the corresponding screener question is answered such that the dependent question(s) should not have been answered according to the specific skip pattern and the dependent question(s) is not left blank, then enter the value provided by the patient for the dependent question(s). However, as described in Chapter 2, for the purpose of scoring items and measures, set scores for such instances to be missing.
- If the corresponding screener question is left blank and the dependent question(s) is left blank, then code both the corresponding screener question and dependent question(s) as “M – Missing/Don’t Know”
- If the corresponding screener question is left blank and the dependent questions(s) is not left blank, then code the corresponding screener question as “M – Missing/Don’t know” and enter the value provided by the patient for the dependent questions(s)

Telephone Surveys

It is important for telephone interviewers to be able to appropriately skip dependent questions while conducting the ED CAHPS Survey. In order to uniformly code ED CAHPS data, survey vendors should strictly apply the following guidelines.

Skip Patterns: Telephone Surveys

For the telephone survey mode, skip patterns should be programmed into the electronic telephone interviewing system.

- If screener questions 6, 9, 17, 20 and 33 are answered such that patients should skip the dependent questions as specified by the skip pattern in the survey, then the corresponding dependent questions should be skipped.
- In these instances, appropriately skipped dependent questions should be coded as “88 – Not Applicable.” For example, if a respondent answers “No” to Question 20 of the ED CAHPS Survey, the program should skip Question 21 and go to Question 22. Question 21 should then be coded as “88 – Not Applicable.” Coding may be done automatically by the telephone interviewing system or later during data preparation.
- In instances where an interviewer is unable to obtain a response to a screener question, the screener question and any question in the skip pattern should be coded as “M – Missing/Don’t know.” For example, if a respondent does not provide an answer to Question 20 of the ED CAHPS Survey and the interviewer selects “M – Missing/Don’t know” to Question 20, then the telephone interviewing system should be programmed to skip Question 21 and go to Question 22. Question 21 should then be coded as “M – Missing/Don’t know.” Coding may be done automatically by the telephone interviewing system or later during data preparation.

Web Surveys

The web survey should be programmed to appropriately skip dependent questions while administering the ED CAHPS Survey. In order to uniformly code ED CAHPS data, survey vendors should strictly apply the following guidelines.

Skip Patterns: Web Surveys

For the web survey mode, skip patterns should be programmed into the web survey system.

- If screener questions 6, 9, 17, 20 and 33 are answered such that patients should skip the dependent questions as specified by the skip pattern in the survey, then the corresponding dependent questions should not be presented to the patient.
 - In these instances, appropriately skipped dependent questions should be coded as “88 – Not Applicable.” For example, if a respondent answers “No” to Question 20 of the ED CAHPS Survey, the program should skip Question 21 and go to Question 22. Question 21 should then be coded as “88 – Not Applicable.” Coding may be done automatically by the web survey system or later during data preparation.
- If the patient does not answer screener questions 6, 9, 17, 20 and 33, the corresponding dependent questions should not be presented to the patient. The web survey system should therefore code the screener question and any question in the skip pattern as “M – Missing/Don’t know.” For example, if a patient does not provide an answer to Question 20 of the ED CAHPS Survey, the web survey system should be programmed to skip Question 21 and go to Question 22. Questions 20 and 21 should then be coded as “M –

Missing/Don't know." Coding may be done automatically by the web survey system or later during data preparation.

3.9 Definition of a Completed Survey

The ED CAHPS Project Team recommends that survey vendors assign a patient's survey a "Final Survey Status" code of "1 – Completed survey" when at least 50 percent of the questions applicable to all patients in the 35 item ED CAHPS Survey (questions 1, 2, 3, 4, 5, 6, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24) are answered. Dependent questions, Your Health Care questions and About You questions do not count against the required 50 percent. Any valid response should be counted as having answered the question.

As noted earlier, the ED CAHPS Project Team strongly recommends that if any supplemental items are added to the ED CAHPS Survey, they follow survey item #35 (i.e., the final item). The rules for defining a completed survey pertain to the 35 ED CAHPS Survey items and ignore any supplemental items that may have been added.

The following steps describe how to determine if a survey is completed:

Step 1 - Sum the number of questions that have been answered by the patient that are applicable to all patients (i.e., questions 1, 2, 3, 4, 5, 6, 9, 11, 12, 13, 14, 15, 16, 17, 19, 20, 22, 23, 24).

R = total number of questions answered

Step 2 – Divide the total number of questions answered by 19, which is the total number of questions applicable to all patients, and then multiply by 100.

Percentage Complete = $(R/19) \times 100$

Step 3 – If the Percentage Complete is at least 50 percent, then assign the survey a "Final Survey Status" code of "1 – Completed survey."

The following examples illustrate how to determine if a survey is "completed."

Determining if a Survey is Completed: Example A

A mail survey is returned to the hospital/survey vendor. Of the questions that are applicable to all patients, the patient answered the following: 1, 2, 3, 4, 5, 6, 9, 11, 12, 13, 14. The remaining items applicable to everyone were left blank or were coded as "M – Missing/Don't know."

Step 1:

R = total number of questions answered = 11

Step 2:

Percentage Complete = $(11/19) \times 100 = 57.9\%$

Step 3:

Percentage Complete = 57.9% which meets the criteria for a completed survey ($\geq 50\%$). Hospital/Survey vendor assigns a "Final Survey Status" code of "1 – Completed survey" to this survey.

Determining if a Survey is Completed: Example B

A web survey is completed using the web survey system. Of the questions that are applicable to all patients, the patient answered the following: 1, 2, 3, 4, 5, and 6. The remaining items applicable to everyone were left blank or were coded as "M – Missing/Don't know."

Step 1:

R = total number of questions answered = 6

Step 2:

Percentage Complete = $(6/19) \times 100 = 31.6\%$

Step 3:

Percentage Complete = 31.6% which does not meet the criteria for a completed survey ($\geq 50\%$). Hospital/Survey vendor assigns a "Final Survey Status" code of code of "6 – Non-response: Break off" to this survey.

4. Web Survey Style Guide

4.1 General Guidelines

Accessibility

The ED CAHPS Project Team recommends that the web survey comply with the requirements of Section 508 of the Rehabilitation Act,³ as they apply to the specifications of the desktop and mobile versions of the web survey instrument.

The web survey instrument (or “form”) should be programmed ensuring that:

- Assistive technology devices will read the form in same order it is meant to be filled in.
- The relationship between the form field and the field label is clear.
- The form is navigable via the keyboard with or without assistive technology.

There are three methods that may be used when creating HTML forms:

- Using the title attribute to identify the input for the form field.
- Using Explicit Labels: Explicit labels include the “for” attribute in the “Label” element and the “Id” attribute in the “Input” element.
- Using Implicit Labels: Implicit Labels use tables for form layout, both the title and the form field should be in the same table cell.

The survey questionnaire structure should be used to define the navigation of form fields whenever possible.

For more information, see: HHS Research-Based Web Design & Usability Guidelines⁴, Section 9.1.

Responsive Design

The web survey instrument should respond to different browser sizes and work across platforms, automatically and optimally resizing for the screen on which it is viewed. This includes, but is not limited to, programming the web survey instrument to enable a mobile-optimized visual

³ Available at <https://www.section508.gov/manage/laws-and-policies>

⁴ U.S. Department of Health and Human Services. *Research-Based Web Design & Usability Guidelines*. Retrieved from https://www.hhs.gov/sites/default/files/research-based-web-design-and-usability-guidelines_book.pdf on January 31, 2020.

display (“mobile optimization”). Key components of a mobile-optimized web survey instrument include:

- Using large input fields (e.g., radio buttons, check boxes) to facilitate selection.
- Allowing the option to select an answer choice by clicking not only the input field (e.g., radio buttons, check boxes) themselves, but the entire corresponding answer choice label.
- Setting relative font sizes 20%-25% bigger compared to the desktop version to display the text in larger font size.
- Using smaller font size on headers compared to the desktop version.
- Placing the “Back” and “Next” buttons statically at the bottom of the web form, rather than floating them at the bottom of the screen to always be visible.

Security Requirements

The web survey data tables and data storage should be compliant with security standards specified by the hospital and survey vendor.

Print Survey Conformity

The print version of the survey has been designed with purposeful use of font styles. The web survey instrument should retain all underlining and font styles from the print version.

Survey Access

Respondents can access the web survey three ways, via:

- *Direct-link hyperlink* embedded in invitations sent via email, to be clicked to access the survey automatically.
- *Unique username and password combination* provided in an invitation letter or email, to be manually typed into the correspondingly-programmed login page.
 - It is recommended that the username and password be short and easy to enter (i.e., limit or omit use of alphanumeric combinations, mixed-case, special characters, etc.)
 - It is recommended that the web survey URL be as short as possible and use recognizable words or logical acronyms (i.e., limit or omit use of complex alphanumeric combinations, special characters, etc.)
- *Unique PIN* provided in an invitation letter or email, to be manually typed into the correspondingly-programmed login page.
 - It is recommended that the PIN be short and easy to enter (i.e., limit or omit use of mixed case, special characters, etc.)
 - It is recommended that the web survey URL be as short as possible and use recognizable words or logical acronyms (i.e., limit or omit use of complex alphanumeric combinations, special characters, etc.)

Entry pages to web surveys represent potential respondents' first opportunity to consciously reconsider their participation in a web survey. For this reason, regardless of chosen access method, barriers to accessing the web survey should be kept low; the interface and mechanism for doing so should be kept as user-friendly as possible.

4.2 Survey Design

Basic Layout

Each page should include the following elements:

- Descriptive page headers
- Content applicable to the specific page type (i.e., login, welcome, question, and thank you)
 - Suggested layouts for each page type are provided under the page-specific guidelines in Section 4.3 of this document.
- Clearly-labeled navigation buttons,
- Informational footer
 - Exact phrasing of the footer text is up to hospital/survey vendor discretion, but it is recommended that footer text include, at a minimum, an email address for the survey respondent to contact with questions or problems.

Fonts

Use of 12-point (or larger) Verdana (preferred) or Arial font for standard text and links is recommended. Exceptions to this rule include heading styles (H1, H2, H3, etc.), which may use serif fonts for design purposes. Additionally, fonts should be selected that will allow the user to increase and decrease text size using the browser functionality. For more information, see HHS Research-Based Web Design & Usability Guidelines, Chapter 11.

As specified in Section 4.1, in the mobile-optimized version of the web survey instrument, relative font should be set 20%-25% bigger compared to the desktop version.

Color

For standard text it is recommended for maximum legibility to use black text on a plain, high-contrast, non-patterned background. For more information, see HHS Research-Based Web Design & Usability Guidelines, Section 11.1.

For links, it is recommended to use default text link colors such as blue for unvisited links, and purple for visited links for maximum ease of use. Ensure that all links sharing the same target

(e.g., external websites) change colors as well. For more information, see HHS Research-Based Web Design & Usability Guidelines, Chapter 10.

For choosing color combinations for other features such as banners, buttons, backgrounds, or headers, it is recommended the planned combination be evaluated using a color contrast checker such as the one found at <https://webaim.org/resources/contrastchecker/>.

Graphics

In general, it is recommended to avoid graphics and other visual elements as these are not integral to the implementation of the survey HHS Research-Based Web Design & Usability Guidelines, Section 14.9. Where used, ensure graphics are reflective of and sensitive to respondent diversity per HHS Research-Based Web Design & Usability Guidelines, Section 14.8.

As specified in Section 4.1, the web survey instrument overall, including graphics, should be programmed to appropriately scale for different display sizes and device types to accommodate a mobile-optimized interface.

Navigation

Action Buttons

Action button on landing/login page and welcome page should be labeled with clear, user-friendly instructional text, such as “Login” and “Start” or “Start Survey”. For button background and text color combinations, it is recommended to use black text on a plain, high-contrast, non-patterned background per HHS Research-Based Web Design & Usability Guidelines, Section 11.1, and to use a color contrast checker when choosing color combinations.

Navigation Buttons

Active survey windows should display standard “Back” and “Next” buttons at the bottom left and right of the web form, respectively. It is recommended that these buttons be labeled with their function (i.e., “Back” and “Next”) per HHS Research-Based Web Design & Usability Guidelines, Section 11.1. The buttons may also take the shape of the corresponding directional arrow.

Back and next buttons should not appear on login/landing or welcome pages. Those pages should use Action Buttons, as described in the previous section.

Progress Indicator

Given the relatively short survey length and evidence of potential distraction from their use, it is recommended that the web survey not use a progress bar or other progress indicator.

Question Page Design

Question Display Functionality

It is recommended that the web survey instrument be programmed using a “paging” design, by which one survey question is displayed per page and respondents advance to subsequent questions through the use of navigation buttons. This is preferable over a “scrolling” design, by which multiple (or all) questions are displayed on a single screen, as it (1) reduces the potential for lost data when respondents exit the survey without submitting their answers and (2) makes the survey taking experience more user-friendly when built-in skip patterns lead to the addition or removal of individual questions.

Question Skipping

It is recommended that skipping of survey questions be discouraged but permitted. It is recommended that following the first skip attempt (i.e., leave a question unanswered) an error message be displayed that encourages selection of an answer choice. See the Question Page with Error Message sub-section for error message wording suggestions and other information.

If, after display of the error message, a respondent re-attempts to advance to the next question without answering the current, the web survey instrument should allow this to occur without further prompting.

Question and Answer Choice Formatting

Questions should be placed at the top of the screen below the header, followed by the answer choices. It is recommended that answer choices be programmed with control functionality that allows respondents to (1) select their chosen response by clicking on either the radio button itself or its label (as described as a minimum recommendation for mobile-optimized versions in Section 4.1 above), and (2) clear (i.e., deselect) an erroneously-chosen response by repeating the same action. It is also recommended that text wrapping of response options be minimized as much as possible.

The list of answer choices should be formatted to correspond with the question type:

Radio buttons should be used for single-choice responses, e.g., when respondents need to choose one, and only one, response from a list of mutually exclusive options. Additional information on the use of radio buttons can be found at:

- For mutually exclusive selections: HHS Research-Based Web Design & Usability Guidelines, Section 13.9
- For minimum number of selections: HHS Research-Based Web Design & Usability Guidelines, Section 13.23

Check boxes should be used for multiple-choice responses, e.g., when respondents may choose one or more items from a list of possible choices. Each check box should be able to be selected independently of all other check boxes. Additional information on the use of check boxes can be found at: HHS Research-Based Web Design & Usability Guidelines, Section 13.15.

Action Buttons

Question pages should be made navigable using standard “Back” and “Next” buttons displayed at the bottom left and right, respectively. It is recommended that the action buttons be labeled with their function (i.e., “Back” and “Next”). Alternatively, the buttons may also take the shape of the corresponding directional arrow. It is recommended that the “Next” button color match the chosen header (bar) color, whereas the “Back” button be gray.

4.3 Page-Specific Guidelines

Login Page

If respondents do not access the web survey via a personalized direct-link hyperlink that takes them directly to the survey’s Welcome page (recommended for email invitations), the web survey URL included in the invitation letter or email should be directed to a login page that can take one of two formats:

- A login page with a username and password box (see Figure 4.1), or
- A login page with a single box to enter a PIN (see Figure 4.2)

These login credentials will have been provided to the respondent in the invitation letter or email. It is up to hospital/survey vendor discretion which method is used.

Figure 4.1. Username and Password Login Page

The screenshot shows a login page with a green header bar containing the text "Survey Name". Below the header is a white area with the following elements: "Intro Text" which reads "To access the survey, please enter your username and password, and click the Login button."; a "Form" section containing two input fields, the first labeled "Username" and the second labeled "Password"; and an "Action Button" which is a green button labeled "Login". At the bottom is a grey "Footer" bar with the text "If you have any questions or problems, please contact our Technical Support Team by email at helpdesk@yourcompany.com".

Figure 4.2. PIN Login Page

The screenshot shows a login page with a green header bar containing the text "Survey Name". Below the header is a white area with the following elements: "Intro Text" which reads "To start the survey, please enter your PIN, and click the Login button."; a "Form" section containing a single input field labeled "PIN"; and an "Action Button" which is a green button labeled "Login". At the bottom is a grey "Footer" bar with the text "If you have any questions or problems, please contact our Technical Support Team by email at helpdesk@yourcompany.com".

The following guidelines apply to both login question formats.

Page Fonts, Colors, Graphics, Headers

Fonts, colors, graphics, and headers should be selected based on the specifications outlined in this Chapter.

Intro Text

The login page should display a brief sentence directing respondents to enter their username and password or PIN—depending on hospital/survey vendor-selected login method—and then click the Login button.

Action Button

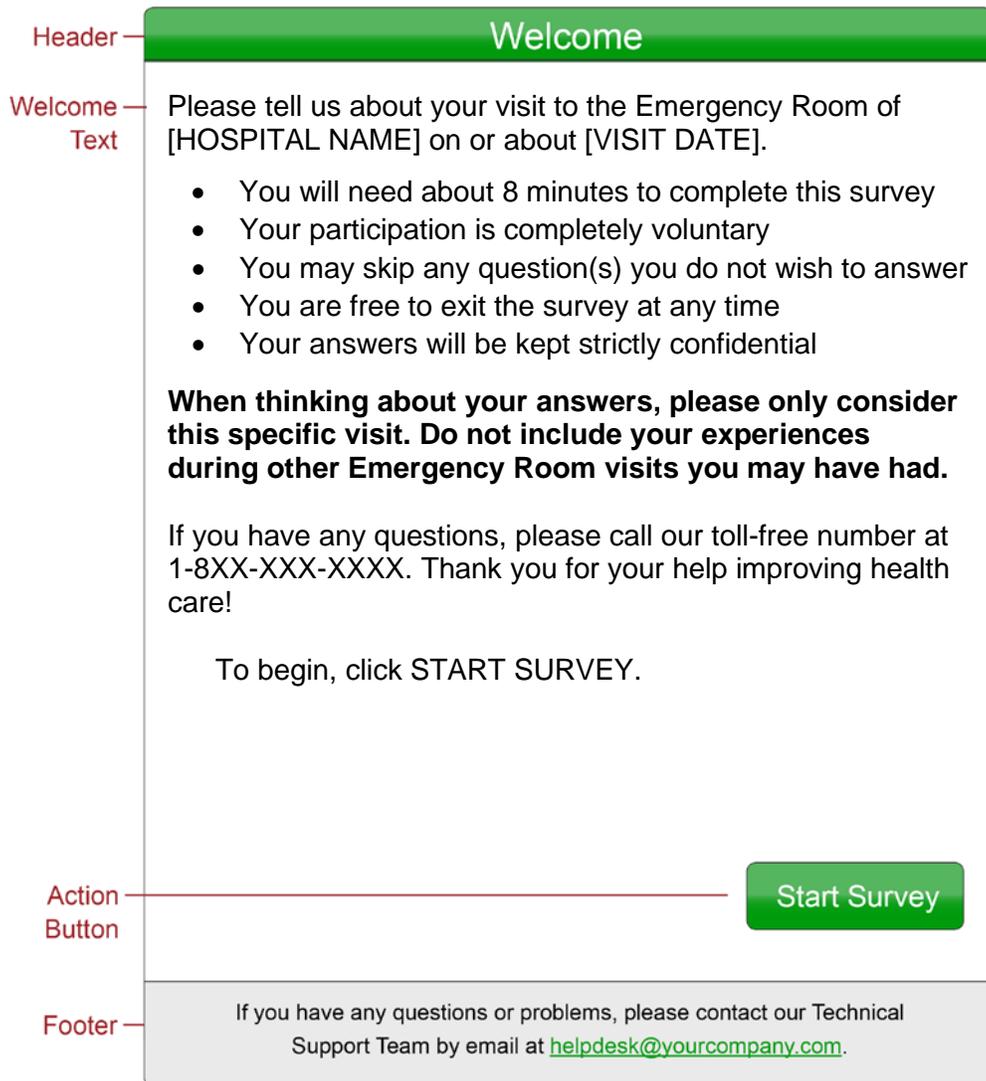
To maximize usability and set the Login page apart from the Welcome page that immediately follows, the button text for the Login page should say “Login” (rather than “Start” or “Start Survey”, which is the label recommended for the action button on the Welcome page).

The Action button should be formatted based on the specifications outlined in Section 4.2. It is recommended that the button color coordinate with the color theme of the overall web survey instrument.

Welcome Page

Upon entering their login credentials or clicking the direct-link hyperlink, respondents are taken to the Welcome page. This page should provide the respondent with information about the survey and be individualized to each respondent (e.g., show their hospital name, visit date, etc.), along with any required disclosures. The Welcome page should organize text in a clear manner; a bullet-centric format that offsets key information in bolded font has been found in cognitive testing to be preferable over a uniform paragraph of text; see Figure 4.3 below.

Figure 4.3. Welcome Page



Page Fonts, Colors, Graphics, Headers

Fonts, colors, graphics, and headers should be selected based on the specifications outlined in this Chapter.

Welcome Text Content

Welcome text should read similar to and contain all the key elements included in the sample text provided in the example below. Autofill the [TEXT IN BRACKETS] from the data file.

Example: WELCOME TEXT FOR COPY/PASTE

Please tell us about your visit to the Emergency Room of [HOSPITAL NAME] on or about [VISIT DATE].

- You will need about 8 minutes to complete this survey
- Your participation is completely voluntary
- You may skip any question(s) you do not wish to answer
- You are free to exit the survey at any time
- Your answers will be kept strictly confidential

When thinking about your answers, please only consider this specific visit. Do not include your experiences during other Emergency Room visits you may have had.

If you have any questions, please call our toll-free number at 1-8XX-XXX-XXXX. Thank you for your help improving health care!

To begin, click START SURVEY.

Action Button

To maximize usability, the buttons displayed on the welcome page should be labeled with “Start” or “Start Survey” (rather than “Login” or “Next”, to distinguish this page from the preceding Login and following content pages that use these action button labels, respectively). It is recommended that the button color coordinate with the color theme of the overall web survey instrument.

Question Page with Error Message

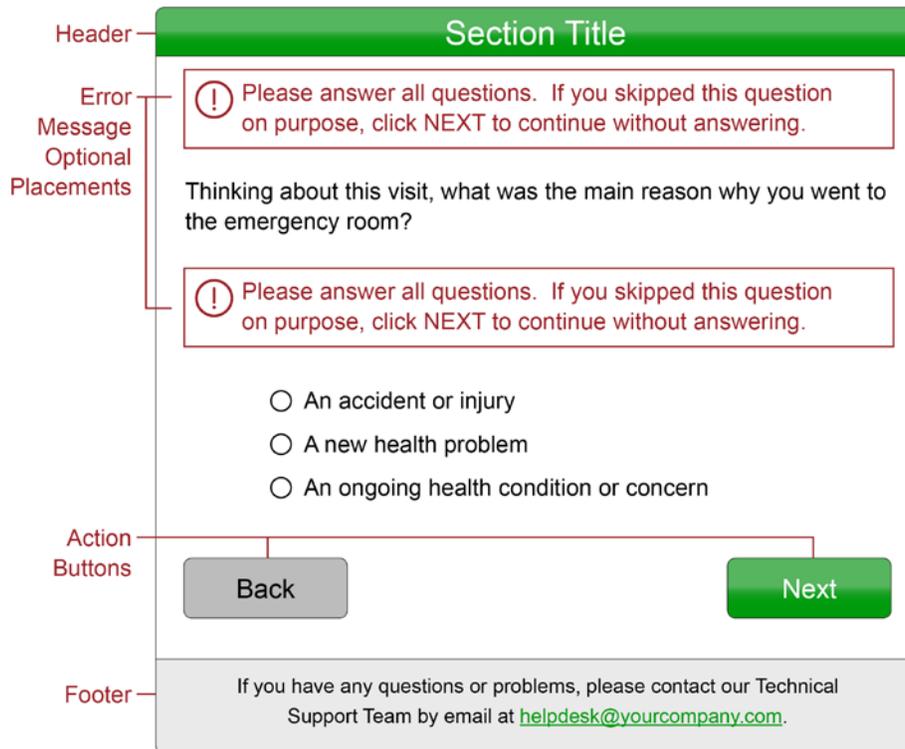
Header

Headers should be displayed on each question page showing the name of the survey section in which the question is located, corresponding to the section titles shown in the print survey. Though Verdana or Arial font are preferred, serif fonts may be used for headings for design purposes. Selected header font should be consistent throughout the site.

Error Message

As described previously, it is recommended that an error message be displayed when respondents attempt to advance to the next question having left a question unanswered. Red font is recommended to maximize noticeability. Placement of the error message (i.e., above or below the question text) is up to hospital/survey vendor discretion. It is recommended that the error message text displayed when respondents attempt to advance to the next question having left a question unanswered read: “Please answer all questions. If you skipped this question on purpose, click NEXT to continue without answering” (see Figure 4.4).

Figure 4.4. Error Message

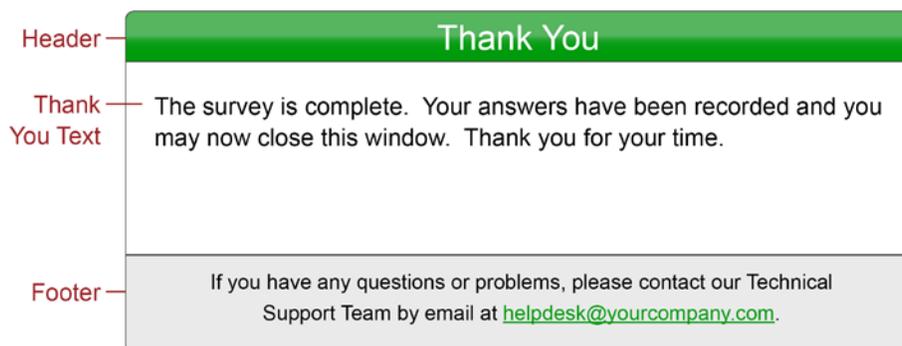


Thank You Page

Thank You Text

Message styling and text can be customized, but recommendations are to include (1) an indication that respondents have reached the end of the survey, and (2) an expression of appreciation for their participation (see Figure 4.5).

Figure 4.5. Thank You Page



5. Appendices

5.1 Sample Size Calculations

Table A.1. Sample size needed to ensure adequate (0.70) reliability, by ED CAHPS Survey measure⁵

Survey Composite and Global Measures	Number of completed surveys needed ^a
Getting timely care	31/32
How well doctors and nurses communicate	85/113
Communication about medications ^b	363/447
Communication about follow-up ^b	256/336
Overall ED rating	97/104
Willingness to recommend the ED	44/52

^aThe number before the slash (/) applies to linear mean scoring; the number after the slash applies to top-box scoring

^bCalculations for these composite measures were derived from a 2018 feasibility test because item content and wording differed from the instrument used in the 2016 mode experiment

⁵ Reliability/sample size estimates from the 2016 Mode Experiment are preferred because they are based on a larger and more representative set of hospitals. However, items in two composite measures (Communication about medications and Communication about follow-up) were changed subsequent to the Mode Experiment, thus 2018 Feasibility Test results are used for these calculations.

5.2 Mailed survey invitation example

[SAMPLED PATIENT NAME]
[ADDRESS]
[CITY, STATE ZIP]

Dear Patient:

Our records show that you recently visited the emergency room at [HOSPITAL NAME] on or around [INSERT ER VISIT DATE]. We are asking you to complete a short survey about your experience.

The goal of this survey is to understand and improve emergency room care. It will take you about 8 minutes to complete. We hope that you will take the time to fill it out.

To ensure confidentiality, this survey is not administered by your hospital but by an independent third party, [VENDOR NAME]. If you have any questions about the survey, please call our toll-free number [PHONE NUMBER].

Thank you for helping us improve your health care. Your participation is greatly appreciated.

[SIGNATURE BLOCK OF HOSPITAL OR VENDOR]

5.3 Emailed survey invitation example

SUBJECT LINE: Please tell us about your recent emergency room visit at [HOSPITAL NAME]

Dear Patient:

Our records show that you recently visited the emergency room at [HOSPITAL NAME] on or around [VISIT DATE]. We are asking you to complete a short survey about your experience.

To take the survey, please click [here](#). [EMBEDDED PERSONALIZED LINK TO SURVEY]

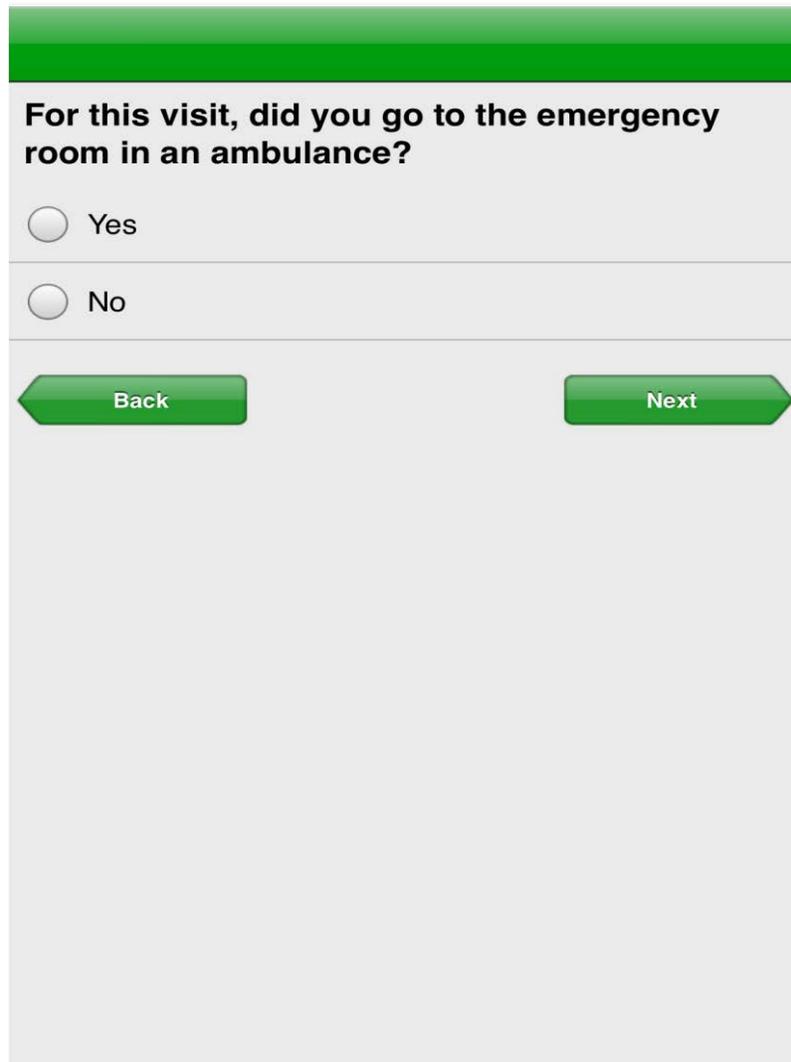
The goal of this survey is to understand and improve emergency room care. The survey will take you about 8 minutes to complete. We hope that you will take the time to fill it out.

To ensure confidentiality, this survey is not administered by your hospital but by an independent third party, [VENDOR NAME]. If you have any questions about the survey, please call our toll-free number 1-8XX-XXX-XXXX.

Thank you for helping us improve your health care. Your participation is greatly appreciated.

[SIGNATURE BLOCK OF HOSPITAL OR VENDOR]

5.4 Screenshot samples of web survey (mobile)



A screenshot of a mobile web survey interface. At the top, there is a solid green horizontal bar. Below it, the question text is displayed in bold black font: "For this visit, did you go to the emergency room in an ambulance?". Underneath the question, there are two radio button options: "Yes" and "No". At the bottom of the form, there are two green buttons with white text: "Back" on the left and "Next" on the right. The background of the form is a light gray gradient.

For this visit, did you go to the emergency room in an ambulance?

Yes

No

[Back](#) [Next](#)

During this emergency room visit, how often did doctors explain things in a way you could understand?

- Never
- Sometimes
- Usually
- Always

Back

Next

What is the highest grade or level of school that you have completed?

- 8th grade or less
- Some high school, but did not graduate
- High school graduate or GED
- Some college or 2-year degree
- 4-year college graduate
- More than 4-year college degree

Back

Next

5.5 Screenshot samples of web survey (desktop)



For this visit, did you go to the emergency room in an ambulance?

- Yes
- No

Back

Next



During this emergency room visit, how often did doctors explain things in a way you could understand?

- Never
- Sometimes
- Usually
- Always

Back

Next



What is the highest grade or level of school that you have completed?

- 8th grade or less
- Some high school, but did not graduate
- High school graduate or GED
- Some college or 2-year degree
- 4-year college graduate
- More than 4-year college degree

Back

Next

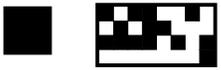
About Your Emergency Room Visit

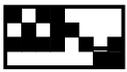
All information that will let someone identify you will be kept private. We will not share your personal information with anyone without your permission, except as required by law. You may choose to answer this survey or not. If you choose not to, this will not affect the health care you get.

Once you complete the survey, place it in the envelope that was provided, seal the envelope, and return the envelope to:

[NAME OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]
[RETURN ADDRESS OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]

If you want to know more about this study, please call [NAME OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL] at (XXX) XXX-XXXX. All calls to that number are free.





SURVEY INSTRUCTIONS

- ◆ Answer all the questions by checking the box to the left of your answer.
- ◆ To indicate an answer selected was in error, clearly draw a line through the box and select another box.
- ◆ You are sometimes told to skip over some questions in this survey. When this happens, you will see an arrow with a note that tells you what question to answer next, like this:

Yes

No → If No, Go to Question 1

You may notice a number on the survey. This number is used to let us know if you returned your survey so we don't have to send you reminders.

All of the questions in the survey ask about the emergency room visit named in the cover letter.

GOING TO THE EMERGENCY ROOM

1. Thinking about this visit, what was the main reason you went to the emergency room?
 - An accident or injury
 - A new health problem
 - An ongoing health condition or concern
2. For this visit, did you go to the emergency room in an ambulance?
 - Yes
 - No
3. When you first arrived at the emergency room, how long was it before someone talked to you about the reason you were there?
 - Less than 5 minutes
 - 5 to 15 minutes
 - More than 15 minutes

DURING THIS EMERGENCY ROOM VISIT

4. During this emergency room visit, did you get care within 30 minutes of getting to the emergency room?
 - Yes
 - No
5. During this emergency room visit, did the doctors or nurses ask about all of the medicines you were taking?
 - Yes
 - No
6. During this emergency room visit, were you given any medicine while you were there?
 - Yes
 - No → If No, Go to Question 9
 - Don't know → If Don't know, Go to Question 9



7. Before giving you medicine, did the doctors or nurses tell you what the medicine was for?

- Yes, definitely
- Yes, somewhat
- No

8. Before giving you medicine, did the doctors or nurses describe possible side effects to you in a way you could understand?

- Yes, definitely
- Yes, somewhat
- No

9. During this emergency room visit, did you have a blood test, x-ray, or any other test?

- Yes
- No → If No, Go to Question 11

10. During this emergency room visit, did doctors or nurses give you as much information as you wanted about the results of these tests?

- Yes, definitely
- Yes, somewhat
- No

PEOPLE WHO TOOK CARE OF YOU

Please answer the following questions about the people who took care of you during this emergency room visit.

11. During this emergency room visit, how often did nurses treat you with courtesy and respect?

- Never
- Sometimes
- Usually
- Always

12. During this emergency room visit, how often did nurses listen carefully to you?

- Never
- Sometimes
- Usually
- Always

13. During this emergency room visit, how often did nurses explain things in a way you could understand?

- Never
- Sometimes
- Usually
- Always

14. During this emergency room visit, how often did doctors treat you with courtesy and respect?

- Never
- Sometimes
- Usually
- Always

15. During this emergency room visit, how often did doctors listen carefully to you?

- Never
- Sometimes
- Usually
- Always

16. During this emergency room visit, how often did doctors explain things in a way you could understand?

- Never
- Sometimes
- Usually
- Always

LEAVING THE EMERGENCY ROOM

17. Before you left the emergency room, did a doctor or nurse tell you that you should take any medicine at home?

- Yes
- No → If No, Go to Question 19

18. Before you left the emergency room, did a doctor or nurse tell you what the medicine was for?

- Yes, definitely
- Yes, somewhat
- No

19. Before you left the emergency room, did a doctor, nurse, or other staff talk with you about follow-up care?

- Yes, definitely
- Yes, somewhat
- No

20. Did you need information about how to get follow-up care?

- Yes
- No → If No, Go to Question 22

21. Did a doctor, nurse, or other staff give you information about how to get follow-up care?

- Yes
- No

22. Before you left the emergency room, did a doctor, nurse, or other staff give you information about what symptoms or health problems to look out for at home?

- Yes, definitely
- Yes, somewhat
- No



OVERALL EXPERIENCE

Please answer the following questions about your visit to the emergency room named in the cover letter. Do not include any other emergency room visits in your answers.

23. Using any number from 0 to 10, where 0 is the worst emergency room care possible and 10 is the best emergency room care possible, what number would you use to rate your care during this emergency room visit?

- 0 Worst emergency room care possible
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 Best emergency room care possible

24. Would you recommend this emergency room to your friends and family?

- Definitely no
- Probably no
- Probably yes
- Definitely yes

YOUR HEALTH CARE

25. In the last 6 months, how many times have you visited any emergency room to get care for yourself? Please include the emergency room visit you have been answering questions about in this survey.

- 1 time
- 2 times
- 3 times
- 4 times
- 5 to 9 times
- 10 or more times

26. Not counting the emergency room, is there a doctor's office, clinic, or other place you usually go if you need a check-up, want advice about a health problem, or get sick or hurt?

- Yes
- No

ABOUT YOU

There are only a few remaining items left.

27. In general, how would you rate your overall health?

- Excellent
- Very good
- Good
- Fair
- Poor

28. In general, how would you rate your overall mental or emotional health?

- Excellent
- Very good
- Good
- Fair
- Poor

29. What is the highest grade or level of school that you have completed?

- 8th grade or less
- Some high school, but did not graduate
- High school graduate or GED
- Some college or 2-year degree
- 4-year college graduate
- More than 4-year college degree

30. What language do you mainly speak at home?

- English
- Spanish
- Chinese
- Russian
- Vietnamese
- Portuguese
- Some other language (please print):

31. Are you of Spanish, Hispanic or Latino origin or descent?

- No, not Spanish/Hispanic/Latino
- Yes, Puerto Rican
- Yes, Mexican, Mexican American, Chicano
- Yes, Cuban
- Yes, other Spanish/Hispanic/Latino

32. What is your race? Please choose one or more.

- White
- Black or African American
- Asian
- Native Hawaiian or other Pacific Islander
- American Indian or Alaska Native

33. Did someone help you complete this survey?

- Yes
- No → Thank you. Please return the completed survey in the postage-paid envelope.

34. How did that person help you? Mark one or more.

- Read the questions to me
- Wrote down the answers I gave
- Answered the questions for me
- Translated the questions into my language
- Helped in some other way (please print):

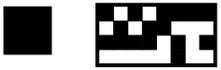
35. Was the person who helped you with you at any time during this emergency room visit?

- Yes
- No

THANK YOU

Please return the completed survey in the postage-paid envelope.

**[NAME OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]
[RETURN ADDRESS OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]**





5.7 Spanish Survey, Mail, Version 1.0

Sobre su Visita a la Sala de Emergencias

Toda la información que pueda identificarlo se mantendrá privada. Nosotros no compartiremos su información personal con nadie sin su permiso, a menos que lo requiera la ley. Usted puede contestar esta encuesta o no. Si usted decide no contestar la encuesta, esto no afectará la atención médica que usted reciba.

Cuando haya completado la encuesta, póngala dentro del sobre que le enviamos y selle el sobre, y regrese el sobre a:

[NAME OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]
[RETURN ADDRESS OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]

Si desea más información sobre este estudio, por favor llame al/ a la [NAME OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL] al XXX-XXX-XXXX. Todas las llamadas a ese número son gratuitas.





INSTRUCCIONES

- ◆ Conteste todas las respuestas marcando el cuadrado que aparece a la izquierda de la respuesta que usted elija.
- ◆ Para indicar que una respuesta fue elegida por error, marque una línea a través del cuadrado y elija otro cuadrado.
- ◆ A veces hay que saltarse alguna pregunta del cuestionario. Cuando esto ocurra, verá una flecha con una nota que le indicará la siguiente pregunta a la que tiene que pasar. Por ejemplo:

Sí

No → Si contestó "No", pase a la pregunta 1

Usted tal vez note un número en el cuestionario. Este número se usa para dejarnos saber que ha regresado su cuestionario y no tener que mandarle recordatorios.

Todas las preguntas de este cuestionario son sobre la visita a la sala de emergencias que está nombrada en la carta de presentación.

CUANDO FUE A LA SALA DE EMERGENCIAS

1. Pensando en esta visita, ¿cuál fue la razón, principal por la que usted fue a la sala de emergencias?
 - Un accidente o una lesión
 - Un nuevo problema de salud
 - Un problema de salud que haya tenido antes
2. Para esta visita, ¿fue usted a la sala de emergencias en una ambulancia?
 - Sí
 - No
3. Desde el primer momento en que usted llegó a la sala de emergencias, ¿cuánto tiempo pasó antes de que alguien le hablara de la razón por la que usted estaba allí?
 - Menos de 5 minutos
 - Entre 5 y 15 minutos
 - Más de 15 minutos

DURANTE ESTA VISITA A LA SALA DE EMERGENCIAS

4. Durante esta visita a la sala de emergencias, ¿recibió usted atención dentro de los 30 minutos después de llegar a la sala de emergencias?
 - Sí
 - No
5. Durante esta visita a la sala de emergencias, ¿los doctores o enfermeras le preguntaron cuáles eran todas las medicinas que estaba usted tomando?
 - Sí
 - No
6. Durante esta visita a la sala de emergencias, ¿le dieron a usted alguna medicina mientras estaba allí?
 - Sí
 - No → Si contestó "No", pase a la pregunta 9
 - No Sé → Si contestó "No Sé", pase a la pregunta 9



7. Antes de darle una medicina, ¿los doctores o las enfermeras le dijeron a usted para qué era la medicina?

- Sí, definitivamente
- Sí, hasta cierto punto
- No

8. Antes de darle una medicina, ¿los doctores o las enfermeras le explicaron los efectos secundarios posibles de una manera que usted pudiera entender?

- Sí, definitivamente
- Sí, hasta cierto punto
- No

9. Durante esta visita a la sala de emergencias, ¿le hicieron una prueba de sangre, rayos X o alguna otra prueba?

- Sí
- No → Si contestó "No", pase a la pregunta 11

10. Durante esta visita a la sala de emergencias, ¿los doctores o las enfermeras le dieron tanta información como usted quería acerca de los resultados de estas pruebas?

- Sí, definitivamente
- Sí, hasta cierto punto
- No

LAS PERSONAS QUE LE ATENDIERON

Por favor responda a las siguientes preguntas sobre las personas que le atendieron a usted durante esta visita a la sala de emergencias.

11. Durante esta visita a la sala de emergencias, ¿con qué frecuencia las enfermeras le trataban con cortesía y respeto?

- Nunca
- A veces
- La mayoría de las veces
- Siempre

12. Durante esta visita a la sala de emergencias, ¿con qué frecuencia las enfermeras le escuchaban con atención?

- Nunca
- A veces
- La mayoría de las veces
- Siempre

13. Durante esta visita a la sala de emergencias, ¿con qué frecuencia las enfermeras le explicaban las cosas de una manera que usted pudiera entender?

- Nunca
- A veces
- La mayoría de las veces
- Siempre

14. Durante esta visita a la sala de emergencias, ¿con qué frecuencia los doctores le trataban con cortesía y respeto?

- Nunca
- A veces
- La mayoría de las veces
- Siempre



15. Durante esta visita a la sala de emergencias, ¿con qué frecuencia los doctores le escuchaban con atención?

- Nunca
- A veces
- La mayoría de las veces
- Siempre

16. Durante esta visita a la sala de emergencias, ¿con qué frecuencia los doctores le explicaban las cosas de una manera que usted pudiera entender?

- Nunca
- A veces
- La mayoría de las veces
- Siempre

CUANDO SALIÓ DE LA SALA DE EMERGENCIAS

17. Antes de que usted se fuera de la sala de emergencias, ¿un doctor o una enfermera le dijo que usted tenía que tomar alguna medicina cuando ya estuviera en su casa?

- Sí
- No → Si contestó "No", pase a la pregunta 19

18. Antes de que usted se fuera de la sala de emergencias, ¿un doctor o una enfermera le dijo para que era la medicina?

- Sí, definitivamente
- Sí, hasta cierto punto
- No

19. Antes de que se fuera de la sala de emergencias, ¿un doctor, una enfermera, u otro personal habló con usted sobre la atención médica que necesitaría después de salir?

- Sí, definitivamente
- Sí, hasta cierto punto
- No

20. ¿Necesitó información sobre cómo obtener la atención médica que necesitaría después de salir?

- Sí
- No → Si contestó "No", pase a la pregunta 22

21. ¿Un doctor, una enfermera, u otro personal le dio a usted información sobre cómo obtener la atención médica que necesitaría después de salir?

- Sí
- No

22. Antes de que se fuera de la sala de emergencias, ¿un doctor, una enfermera, u otro personal le dio información sobre los síntomas o problemas de salud de los que tendría usted que estar pendiente cuando estuviera en su casa?

- Sí, definitivamente
- Sí, hasta cierto punto
- No



SU EXPERIENCIA EN LA SALA DE EMERGENCIAS

Por favor conteste las siguientes preguntas sobre su visita a la sala de emergencias cuyo nombre aparece en la carta de presentación. No incluya ninguna otra visita a una sala de emergencias en sus respuestas.

23. Usando un número del 0 al 10, el 0 siendo la peor atención en la sala de emergencias posible y el 10 la mejor atención en la sala de emergencias posible, ¿qué número usaría para calificar su atención durante esta visita a la sala de emergencias?

- 0 La peor atención posible en la sala de emergencias
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10 La mejor atención posible en la sala de emergencias

24. ¿Les recomendaría usted esta sala de emergencias a sus amigos y familiares?

- Definitivamente no
- Probablemente no
- Probablemente sí
- Definitivamente sí

SU ATENCIÓN MÉDICA

25. En los últimos 6 meses, ¿cuántas veces fue usted a alguna sala de emergencias para recibir atención médica? Por favor incluya la visita a la sala de emergencias sobre la que ha estado contestando las preguntas de esta encuesta.

- 1 vez
- 2 veces
- 3 veces
- 4 veces
- 5 a 9 veces
- 10 veces o más

26. Sin contar la sala de emergencias, ¿hay algún consultorio médico, clínica u otro lugar al que usted acostumbre ir cuando necesita un chequeo, quiere consejos sobre un problema de salud, o si se enferma o lastima?

- Sí
- No

ACERCA DE USTED

Sólo quedan unas cuantas preguntas.

27. En general, ¿cómo calificaría toda su salud?

- Excelente
- Muy buena
- Buena
- Regular
- Mala

28. En general, ¿cómo calificaría toda su salud, mental o emocional?

- Excelente
- Muy buena
- Buena
- Regular
- Mala

29. ¿Cuál es el grado o nivel escolar más alto que ha **completado**?

- 8 años de escuela o menos
- 9 - 12 años de escuela, pero sin graduarse
- Graduado de la escuela de secundaria, Diploma de escuela de secundaria (*high school*), preparatoria, o su equivalente (o GED)
- Algunos cursos universitarios o un título universitario de un programa de 2 años
- Título universitario de 4 años
- Título universitario de más de 4 años

30. ¿**Principalmente** qué idioma habla en casa?

- Inglés
- Español
- Chino
- Ruso
- Vietnamita
- Portugués
- Algún otro idioma (escriba en letra de molde):

31. ¿Es usted de ascendencia u origen español, hispano o latino?

- No, ni español/hispano/latino
- Sí, puertorriqueño
- Sí, mexicano, mexicano americano, chicano
- Sí, cubano
- Sí, otro español/hispano/latino

32. ¿A qué raza pertenece? Por favor marque una o más.

- Blanca
- Negra o afro americana
- Asiática
- Nativa de Hawái o de otras islas del Pacífico
- Indígena Americana o nativa de Alaska

33. ¿Le ayudó alguien a responder a esta encuesta?

- Sí
- No → **Gracias. Por favor devuelva el cuestionario cuando lo haya completado en el sobre con el porte o franqueo pagado.**

34. ¿Cómo le ayudó la persona? Marque todas las que apliquen.

- Me leyó las preguntas
- Anotó las respuestas que le di
- Contestó las preguntas por mí
- Tradujo las preguntas a mi idioma
- Me ayudó de otra manera (Escriba en letra de molde):

35. ¿La persona que le ayudó estuvo con usted en cualquier momento durante esta visita a la sala de emergencias?

- Sí
- No



GRACIAS

Por favor devuelva el cuestionario cuando lo haya completado en el sobre con el porte o franqueo pagado.

**[NAME OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]
[RETURN ADDRESS OF SURVEY VENDOR OR SELF-ADMINISTERING HOSPITAL]**



5.8 English Survey, Telephone Script, Version 1.0

Overview

This telephone interview script is provided to assist interviewers while attempting to reach the patient. The script explains the purpose of the survey and confirms necessary information about the patient.

General Interviewing Conventions and Guidelines

- The telephone introduction script and ED CAHPS questions should be read verbatim
- Practice pronouncing the patient's name before initiating the call
- You might prefer to include the day of the week, e.g., Monday, with the discharge date (MM/DD/YYYY) to improve patient recall.
- All text that appears in lowercase letters is intended to be read out loud
- Text in UPPERCASE letters is intended **not** to be read out loud
 - However, YES and NO response options might be read as needed
- We suggest that all questions and all answer categories be read exactly as they are worded
 - During the course of the survey, the use of **neutral** acknowledgment words such as the following may be helpful:
 - Thank you
 - Alright
 - Okay
 - I understand, or I see
 - Yes, Ma'am
 - Yes, Sir
- Reading the scripts from the interviewer screens is recommended; reciting the survey from memory can lead to unnecessary errors and missed updates to the scripts
- The interviewer might need to adjust the pace of the ED CAHPS Survey interview to be conducive to the needs of the respondent
- We highly suggest that no changes be made to the order of the ED CAHPS Survey questions or answer categories
- All transitional phrases should be read
- Text that is underlined is intended to be emphasized
- Characters in < > brackets are not intended to be read aloud
- [Square brackets] are used to show programming instructions that should not actually appear on electronic telephone interviewing system screens
- Only one language (i.e., English, Spanish, Chinese, or Russian) should appear on the electronic interviewing system screen
- MISSING/DON'T KNOW (DK) should be a valid response option for each item in the electronic telephone interviewing system script; however, this option is not intended to be read out loud to the patient. MISSING/DON'T KNOW response options allow the telephone interviewer to go to the next question if a patient is unable to provide a response for a given question (or refuses to provide a response). In the survey file layouts, a value of MISSING/DON'T KNOW is usually coded as "M - MISSING/DON'T KNOW."
- The survey is designed such that skip patterns be programmed into the electronic telephone interviewing system
 - We suggest that appropriately skipped questions be coded as "8 - Not applicable." For example, if a patient answers "No" to Question 9 of the ED CAHPS Survey, the

program should skip Question 10, and go to Question 11. Question 10 must then be coded as "8 - Not applicable." Coding might be done automatically by the telephone interviewing system or later during data preparation.

- When a response to a screener question is not obtained, we suggest that the screener question and any questions in the skip pattern should be coded as "M – MISSING/DON'T KNOW." For example, if the patient does not provide an answer to Question 9 of the ED CAHPS Survey and the interviewer selects "MISSING/DON'T KNOW" to Question 9, then the telephone interviewing system should be programmed to skip Question 10, and go to Question 11. Question 10 must then be coded as "M – MISSING/DON'T KNOW." Coding might be done automatically by the telephone interviewing system or later during data preparation.

INITIATING CONTACT

START

Hello, may I please speak to [SAMPLED PATIENT NAME]?

<1> YES [GO TO INTRO]

<2> NO [REFUSAL]

<3> NO, NOT AVAILABLE RIGHT NOW [SET CALLBACK]

IF ASKED WHO IS CALLING: This is [INTERVIEWER NAME] calling from [SURVEY VENDOR] on behalf of [HOSPITAL NAME]. We are conducting a survey about healthcare. Is [SAMPLED PATIENT NAME] available?

IF ASKED WHETHER PERSON CAN SERVE AS PROXY FOR SAMPLED PATIENT: I am calling to invite [SAMPLED PATIENT NAME] to take part in an interview about (his/her) experiences with health care. (He/She) can identify someone to complete the interview on (his/her) behalf. I would need to speak with [SAMPLED PATIENT NAME] briefly about that.

IF THE SAMPLED PATIENT OR IDENTIFIED PROXY IS NOT AVAILABLE: Can you tell me a convenient time to call back to speak with (him/her)?

IF THE SAMPLED PATIENT OR IDENTIFIED PROXY SAYS THIS IS NOT A GOOD TIME: If you don't have the time now, when is a more convenient time to call you back?

IF ASKED IF YOU WOULD LIKE TO SPEAK TO "SR." OR "JR.": I would like to speak with [SAMPLED PATIENT NAME] who is approximately [SAMPLED PATIENT'S AGE] years old.

IF SOMEONE OTHER THAN THE SAMPLED PATIENT ANSWERS THE PHONE, RECONFIRM THAT YOU ARE SPEAKING WITH THE SAMPLED PATIENT WHEN HE OR SHE PICKS UP.

SPEAKING WITH SAMPLED PATIENT

INTRO

Hi, this is [INTERVIEWER NAME], calling on behalf of [HOSPITAL NAME]. (MIXED MODE OPTIONAL TO STATE: We mailed you a survey about your experience at [HOSPITAL NAME] a few weeks ago and now we would like to follow up.) [HOSPITAL NAME] is participating in a survey about the care people receive in the emergency room. Participation in the survey is completely voluntary and will not affect your health care or your benefits. It should take about 8 minutes [OR HOSPITAL/SURVEY VENDOR SPECIFY] to answer. You may skip any question you do not want to answer and can stop your participation at any time.

This call may be monitored (OPTIONAL TO STATE: and/or recorded) for quality improvement purposes. If you need help in completing this interview, you can have a family member or close friend help you to answer the questions. If you feel you are unable to complete the interview, you can have a family member or close friend do the interview for you. This person needs to be someone who knows you very well and would be able to accurately answer questions about your visit to [HOSPITAL NAME].

Can we begin the interview, or is there someone who could help you answer the interview, or who could do the interview for you?

- <1> YES, SAMPLED PATIENT WILL DO INTERVIEW [GO TO S1]
- <2> YES, PROXY WILL HELP SAMPLED PATIENT WITH INTERVIEW [GO TO PROXY1]
- <3> YES, PROXY WILL DO INTERVIEW FOR SAMPLED PATIENT [GO TO PROXY2]
- <4> NO, NOT AVAILABLE RIGHT NOW [SET CALLBACK]
- <5> NO, SAMPLED PATIENT UNABLE AND NO PROXY AVAILABLE [CODE AS ILL/INCAPABLE]
- <6> NO [REFUSAL]

NOTE: THE STATED NUMBER OF MINUTES TO COMPLETE THE SURVEY MUST BE AT LEAST 8 MINUTES. IF SUPPLEMENTAL ITEMS ARE ADDED TO THE SURVEY, THIS NUMBER SHOULD BE INCREASED ACCORDINGLY.

COLLECTING PROXY INFORMATION

PROXY1

What is the name of the person who can help you to answer the interview?

[COLLECT FIRST AND LAST NAME OF PROXY]

Is that person there right now?

- <1> YES [GO TO S1]
- <2> NO [SCHEDULE CALLBACK]
- <3> REFUSAL

PROXY2

What is the name of the person who is going to answer the interview on your behalf?

[COLLECT FIRST AND LAST NAME OF PROXY]

Do I have your permission to conduct the interview with this person on your behalf?

- <1> YES [GO TO PROXY_INTRO]
- <2> NO [REFUSAL]

PROXY_INTRO

Hi, this is [INTERVIEWER NAME], calling on behalf of [HOSPITAL NAME]. [HOSPITAL NAME] is participating in a survey about the care people receive in the emergency room. [SAMPLED PATIENT NAME] gave us your name and indicated that you were knowledgeable about the care he/she received in the emergency room.

This survey is part of a national initiative to measure the quality of care in emergency rooms. Participation in the survey is completely voluntary and will not affect your health care or your benefits. It should take about 8 minutes (OR HOSPITAL/SURVEY VENDOR SPECIFY) to answer.

As you answer the questions in this interview, please remember that you are answering the questions for [SAMPLED PATIENT NAME]. Please answer the questions based on (his/her) recent experiences in the emergency room.

This call may be monitored (and/or recorded) for quality improvement purposes.

S1 IF SPEAKING WITH SAMPLED PATIENT: Our records show that you visited the emergency room at [HOSPITAL NAME] on or about [ED VISIT DATE (MM/DD/YYYY)]. Is that right?

IF SPEAKING WITH PROXY:

Our records show that [SAMPLED PATIENT NAME] visited the emergency room at [HOSPITAL NAME] on or about [ED VISIT DATE (MM/DD/YYYY)]. Is that right?

READ YES/NO RESPONSE CHOICES ONLY **IF NECESSARY**

- <1> YES [GO TO S2]
- <2> NO [GO TO INEL1]
- <3> DON'T KNOW [GO TO INEL1]
- <4> REFUSAL [GO TO INEL1]

S2 Thank you. Let's begin the survey.

CONFIRMING INELIGIBLE PATIENTS

INEL1 IF SPEAKING TO SAMPLED PATIENT: Were you ever in the emergency room at this hospital?

IF SPEAKING TO PROXY: Was [SAMPLED PATIENT NAME] ever in the emergency room at this hospital?

<1> YES [GOTO INEL2]
<2> NO [GOTO INEL_END]

INEL2

IF SPEAKING TO SAMPLED PATIENT: Were you a patient at this hospital in the last year?

IF SPEAKING TO PROXY: Was [SAMPLED PATIENT NAME] at this hospital in the last year?

<1> YES [GOTO INEL3]
<2> NO [GOTO INEL_END]

INEL3

When was this?

IF ANY DATE WAS WITHIN TWO WEEKS OF [DISCHARGE DATE (mm/dd/yyyy)], GO TO S2; OTHERWISE, GO TO INEL_END.

INEL_END

Thank you for your time. It looks like we made a mistake. Have a good (day/evening).

BEGIN ED CAHPS QUESTIONS

Q1_INTRO Please answer the questions in this survey about your emergency room visit at [HOSPITAL NAME] on or about [ED VISIT DATE]. When thinking about your answers, do not include any other emergency room visits.

Q1 Thinking about this visit, what was the main reason you went to the emergency room? Would you say...

<1> An accident or injury,
<2> A new health problem, or
<3> An ongoing health condition or concern?

<M> MISSING/DON'T KNOW

Q2 For this visit, did you go to the emergency room in an ambulance?

<1> YES
<2> NO

<M> MISSING/DON'T KNOW

Q3 When you first arrived at the emergency room, how long was it before someone talked to you about the reason you were there? Would you say...

<1> Less than 5 minutes,
<2> 5 to 15 minutes, or

- <3> More than 15 minutes?
<M> MISSING/DON'T KNOW
- Q4 During this emergency room visit, did you get care within 30 minutes of getting to the emergency room?
- <1> YES
<2> NO
<M> MISSING/DON'T KNOW
- Q5 During this emergency room visit, did the doctors or nurses ask about all of the medicines you were taking?
- <1> YES
<2> NO
<M> MISSING/DON'T KNOW
- Q6 During this emergency room visit, were you given any medicine while you were there?
- <1> Yes
<2> No [GO TO Q9]
<3> Don't know [GO TO Q9]
<M> MISSING/DK
- Q7 Before giving you medicine, did the doctors or nurses tell you what the medicine was for? Would you say...
- <1> Yes, definitely,
<2> Yes, somewhat, or
<3> No?
[<88> NOT APPLICABLE]
<M> MISSING/DON'T KNOW
- Q8 Before giving you medicine, did the doctors or nurses describe possible side effects to you in a way you could understand?
- <1> Yes, definitely,
<2> Yes, somewhat, or
<3> No?
[<88> NOT APPLICABLE]
<M> MISSING/DON'T KNOW
- Q9 During this emergency room visit, did you have a blood test, x-ray, or any other test?
- <1> YES

<2> NO [GO TO Q11]

<M> MISSING/DON'T KNOW

Q10 During this emergency room visit, did doctors or nurses give you as much information as you wanted about the results of these tests? Would you say...

- <1> Yes, definitely,
- <2> Yes, somewhat, or
- <3> No?

[<88> NOT APPLICABLE]

<M> MISSING/DON'T KNOW

Q11 Please answer the following questions about the people who took care of you during this emergency room visit.

During this emergency room visit, how often did nurses treat you with courtesy and respect? Would you say...

- <1> Never,
- <2> Sometimes,
- <3> Usually, or
- <4> Always?

<M> MISSING/DON'T KNOW

Q12 During this emergency room visit, how often did nurses listen carefully to you? Would you say...

- <1> Never,
- <2> Sometimes,
- <3> Usually, or
- <4> Always?

<M> MISSING/DON'T KNOW

Q13 During this emergency room visit, how often did nurses explain things in a way you could understand? Would you say...

- <1> Never,
- <2> Sometimes,
- <3> Usually, or
- <4> Always?

<M> MISSING/DON'T KNOW

Q14 During this emergency room visit, how often did doctors treat you with courtesy and respect? Would you say...

- <1> Never,

- <2> Sometimes,
- <3> Usually, or
- <4> Always?

<M> MISSING/DON'T KNOW

Q15 During this emergency room visit, how often did doctors listen carefully to you? Would you say...

- <1> Never,
- <2> Sometimes,
- <3> Usually, or
- <4> Always?

<M> MISSING/DON'T KNOW

Q16 During this emergency room visit, how often did doctors explain things in a way you could understand? Would you say...

- <1> Never,
- <2> Sometimes,
- <3> Usually, or
- <4> Always?

<M> MISSING/DON'T KNOW

Q17 The next questions are about leaving the emergency room.

Before you left the emergency room, did a doctor or nurse tell you that you should take any medicine at home?

- <1> YES
- <2> NO [GO TO Q19]

<M> MISSING/DON'T KNOW

Q18 Before you left the emergency room, did a doctor or nurse tell you what the medicine was for? Would you say...

- <1> Yes, definitely,
- <2> Yes, somewhat, or
- <3> No?

[<88> NOT APPLICABLE]

<M> MISSING/DON'T KNOW

Q19 Before you left the emergency room, did a doctor, nurse, or other staff talk with you about follow-up care? Would you say...

- <1> Yes, definitely,
- <2> Yes, somewhat, or

<3> No?

<M> MISSING/DON'T KNOW

Q20 Did you need information about how to get follow-up care?

<1> YES

<2> NO [GO TO Q22]

<M> MISSING/DON'T KNOW

Q21 Did a doctor, nurse, or other staff give you information about how to get follow-up care?

<1> YES

<2> NO

[<88> NOT APPLICABLE]

<M> MISSING/DON'T KNOW

Q22 Before you left the emergency room, did a doctor, nurse, or other staff give you information about what symptoms or health problems to look out for at home? Would you say...

<1> Yes, definitely,

<2> Yes, somewhat, or

<3> No?

<M> MISSING/DON'T KNOW

Q23 Please answer the following questions about your visit to [HOSPITAL NAME]. Do not include any other emergency room visits in your answers.

Using any number from 0 to 10, where 0 is the worst emergency room care possible and 10 is the best emergency room care possible, what number would you use to rate your care during this emergency room visit?

<0> WORST EMERGENCY ROOM CARE POSSIBLE

<1>

<2>

<3>

<4>

<5>

<6>

<7>

<8>

<9>

<10> BEST EMERGENCY ROOM CARE POSSIBLE

<M> MISSING/DON'T KNOW

Q24 Would you recommend this emergency room to your friends and family? Would you say...

- <1> Definitely no,
- <2> Probably no,
- <3> Probably yes, or
- <4> Definitely yes?

<M> MISSING/DON'T KNOW

Q25 In the last 6 months, how many times have you visited any emergency room to get care for yourself? Please include the emergency room visit you have been answering questions about in this survey. Would you say...

- <1> 1 time,
- <2> 2 times,
- <3> 3 times,
- <4> 4 times,
- <5> 5 to 9 times, or
- <6> 10 or more times?

<M> MISSING/DON'T KNOW

Q26 Not counting the emergency room, is there a doctor's office, clinic, or other place you usually go if you need a check-up, want advice about a health problem, or get sick or hurt?

- <1> YES
- <2> NO

<M> MISSING/DON'T KNOW

Q27 There are only a few remaining items left. This next set of questions is about you.

In general, how would you rate your overall health? Would you say that it is...

- <1> Excellent,
- <2> Very good,
- <3> Good,
- <4> Fair, or
- <5> Poor?

<M> MISSING/DON'T KNOW

Q28 In general, how would you rate your overall mental or emotional health? Would you say that it is...

- <1> Excellent,
- <2> Very good,
- <3> Good,
- <4> Fair, or

<5> Poor?

<M> MISSING/DON'T KNOW

Q29 What is the highest grade or level of school that you have completed?

Please listen to all six response choices before you answer. Would you say...

- <1> 8th grade or less,
- <2> Some high school, but did not graduate,
- <3> High school graduate or GED,
- <4> Some college or 2-year degree,
- <5> 4-year college graduate, or
- <6> More than 4-year college degree?

<M> MISSING/DON'T KNOW

Q30 What language do you mainly speak at home? Please listen to all seven response choices before you answer. Would you say that you mainly speak...

IF THE PATIENT REPLIES WITH MULTIPLE LANGUAGES, PROBE: Would you say that you mainly speak [LANGUAGE A] or [LANGUAGE B]?

IF THE PATIENT REPLIES THAT THEY SPEAK AMERICAN PLEASE CODE AS 1 – ENGLISH.

- <1> English,
- <2> Spanish,
- <3> Chinese,
- <4> Russian,
- <5> Vietnamese,
- <6> Portuguese, or
- <9> Some other language? (SPECIFY:)

<M> MISSING/DON'T KNOW

Q31 Are you of Spanish, Hispanic or Latino origin or descent?

- <X> YES
- <1> NO [GO TO Q32]

<M> MISSING/DON'T KNOW

Would you say you are... (READ ALL RESPONSE CHOICES)

- <2> Puerto Rican,
- <3> Mexican, Mexican American, Chicano,
- <4> Cuban, or
- <5> Other Spanish/Hispanic/Latino?

<M> MISSING/DON'T KNOW

Q32 When I read the following, please tell me if the category describes your race. I am required to read all five categories. Please answer "Yes" or "No" to each of the categories.

READ ALL RACE CATEGORIES, PAUSING AT EACH RACE CATEGORY TO ALLOW RESPONDENT TO REPLY TO EACH RACE CATEGORY.

IF THE RESPONDENT REPLIES, "WHY ARE YOU ASKING MY RACE?": We ask about your race for demographic purposes. We want to make sure that the people we survey accurately represent the racial diversity in this country.

IF THE RESPONDENT REPLIES, "I ALREADY TOLD YOU MY RACE": I understand, however the survey requires me to ask about all races so results can include people who are multiracial. If the race does not apply to you please answer "No." Thanks for your patience.]

Q32A Are you White?

- <1> YES/WHITE
- <2> NO/NOT WHITE

- <M> MISSING/DON'T KNOW

Q32B Are you Black or African American?

- <1> YES/BLACK OR AFRICAN AMERICAN
- <2> NO/NOT BLACK OR AFRICAN AMERICAN

- <M> MISSING/DON'T KNOW

Q32C Are you Asian?

- <1> YES/ASIAN
- <2> NO/NOT ASIAN

- <M> MISSING/DON'T KNOW

Q32D Are you Native Hawaiian or other Pacific Islander?

- <1> YES/NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER
- <2> NO/NOT NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER

- <M> MISSING/DON'T KNOW

Q32E Are you American Indian or Alaska Native?

<1> YES/AMERICAN INDIAN OR ALASKA NATIVE
<2> NO/NOT AMERICAN INDIAN OR ALASKA NATIVE

<M> MISSING/DON'T KNOW

<THIS QUESTION TO BE COMPLETED BY THE INTERVIEWER>
Q33 DID SOMEONE HELP THE RESPONDENT COMPLETE THIS SURVEY?

<1> YES
<2> NO [GO TO END]

<M> MISSING/DON'T KNOW

<THIS QUESTION TO BE COMPLETED BY THE INTERVIEWER>
Q34 HOW DID THAT PERSON HELP THE RESPONDENT COMPLETE THE SURVEY?
[PROGRAMMING SPECIFICATIONS: THE CATI SYSTEM SHOULD BE PROGRAMMED TO ALLOW THE INTERVIEWER TO SELECT MULTIPLE RESPONSES.]

READ THE QUESTIONS TO THE RESPONDENT

<1> YES
<2> NO

[<88> NOT APPLICABLE]
<M> MISSING/DON'T KNOW

REPEATED THE ANSWERS RESPONDENT GAVE

<1> YES
<2> NO

[<88> NOT APPLICABLE]
<M> MISSING/DON'T KNOW

ANSWERED THE QUESTIONS FOR RESPONDENT

<1> YES
<2> NO

[<88> NOT APPLICABLE]
<M> MISSING/DON'T KNOW

TRANSLATED THE QUESTIONS INTO RESPONDENT'S LANGUAGE

<1> YES
<2> NO

[<88> NOT APPLICABLE]
<M> MISSING/DON'T KNOW

HELPED IN SOME OTHER WAY (SPECIFY:)

<1> YES

<2> NO

[<88> NOT APPLICABLE]

<M> MISSING/DON'T KNOW

Q35 Was [NAME OF PROXY] with you at any time during this emergency room visit?

<1> YES

<2> NO

[<88> NOT APPLICABLE]

<M> MISSING/DON'T KNOW

END Those are all the questions I have for you. Thank you for your time.

5.9 Recommended Data File Structure

To promote more uniform survey implementation and standardized data collection, the ED CAHPS Project Team recommends the use of the data file structure described below, which parallel those used in the HCAHPS Survey. However, they are not mandatory.

Header Section

Field Name	Description	Starting Position in Record	Field Length	Valid Values
PROVIDER_NAME	Name of the Hospital	1	100	
PROVIDER_ID	CMS Certification Number	101	10	No dashes or spaces Valid 6 digit CMS Certification Number (formerly known as Medicare Provider Number)
DISCHARGE_YR	Year of discharge	111	4	YYYY (2020 or greater; cannot be 9999)
DISCHARGE_MONTH	Month of Discharge	115	2	MM (01–12 = January–December; cannot be 00, 13–99)
SURVEY_MODE	Mode of survey administration	117	1	1 = web-phone mode 2 = mail-phone 3 = web-mail-phone
NUMBER_ELIGIBLE_DISCHARGE	Number of eligible discharges in sample frame in the quarter within the hospital	118	10	<i>Note: Patients found to be ineligible during the survey administration process should be subtracted from the Eligible Discharges count</i>
SAMPLE_SIZE	Number of sampled discharges in the quarter within the hospital	128	10	

Patient Administrative Data Section

Field Name	Field Contents	Starting Position in Record	Field Length	Valid Values
DISCHARGE_DATE	Date of discharge	138	8	YYYYMMDD
PATIENT_ID	Random, unique, de-identified, patient ID assigned by hospital/survey vendor	146	16	Maximum of 16 characters
DISCHARGE_STATUS	Patient's discharge status	162	2	1 = Home care or self-care 2 = Short-term general hospital for inpatient care (<i>Exclude</i>) 3 = Medicare certified skilled nursing facility (<i>Exclude</i>) 4 = Intermediate care facility (<i>Exclude</i>) 5 = Designated cancer center or children's hospital (<i>Exclude</i>) 6 = Home with home health services (<i>Exclude</i>) 7 = Left against medical advice 20 = Expired (<i>Exclude</i>) 21 = Discharged/transferred to court/law enforcement (<i>Exclude</i>) 40 = Expired at Home (<i>Exclude</i>) 41 = Expired in medical facility (<i>Exclude</i>) 42 = Expired, Place Unknown (<i>Exclude</i>) 43 = Federal healthcare facility 50 = Hospice – home (<i>Exclude</i>) 51 = Hospice – medical facility (<i>Exclude</i>) 61 = Medicare-approved swing bed within hospital (<i>Exclude</i>) 62 = Inpatient rehabilitation facility (<i>Exclude</i>) 63 = Long-term care hospital (<i>Exclude</i>) 64 = Medicaid certified nursing facility (<i>Exclude</i>) 65 = Psychiatric hospital or psychiatric unit (<i>Exclude</i>) 66 = Critical Access Hospital (<i>Exclude</i>) 69 = Discharged/transferred to a designated disaster alternative care site (An alternate care site (ACS) provides basic patient care during a disaster response to a population that would otherwise be hospitalized or in a similar level

Field Name	Field Contents	Starting Position in Record	Field Length	Valid Values
				<p>of dependent care if those resources were available during the disaster. The federal government or state government should declare the disaster. ACS is not an institution; most likely it would be an armory or stadium. <i>(Exclude)</i></p> <p>70 = Discharge/transfer to health care institution not defined elsewhere in the code list <i>(Exclude)</i></p> <p>81 = Discharged to home or self-care with a planned acute care hospital inpatient readmission <i>(Exclude)</i></p> <p>82 = Discharged/transferred to a short term general hospital for inpatient care with a planned acute care hospital inpatient readmission <i>(Exclude)</i></p> <p>83 = Discharged/transferred to a Medicare certified skilled nursing facility (SNF) with a planned acute care hospital inpatient readmission <i>(Exclude)</i></p> <p>84 = Discharged/transferred to a facility that provides custodial or supportive care with a planned acute care hospital inpatient readmission <i>(Exclude)</i></p> <p>85 = Discharged/transferred to a designated cancer center or children's hospital with a planned acute care hospital inpatient readmission <i>(Exclude)</i></p> <p>86 = Discharged/transferred to home under care of organized home health service organization with planned acute care hospital inpatient readmission <i>(Exclude)</i></p> <p>87 = Discharged/transferred to court/law enforcement with a planned acute care hospital inpatient readmission <i>(Exclude)</i></p> <p>88 = Discharged/transferred to federal health care facility with a planned acute care hospital inpatient readmission <i>(Exclude)</i></p> <p>89 = Discharged/transferred to a hospital-based Medicare-approved swing bed with a planned acute care hospital inpatient readmission <i>(Exclude)</i></p> <p>90 = Discharged/transferred to an inpatient rehabilitation facility (IRF) including rehabilitation distinct part units of</p>

Field Name	Field Contents	Starting Position in Record	Field Length	Valid Values
				<p>a hospital with a planned acute care hospital inpatient readmission (<i>Exclude</i>)</p> <p>91 = Discharged/transferred to a Medicare certified long term care hospital (LTCH) with a planned acute care hospital inpatient readmission (<i>Exclude</i>)</p> <p>92 = Discharged/transferred to a Medicaid certified nursing facility with a planned acute care hospital inpatient readmission (<i>Exclude</i>)</p> <p>93 = Discharged/transferred to a psychiatric distinct part unit of a hospital with a planned acute care hospital inpatient readmission (<i>Exclude</i>)</p> <p>94 = Discharged/transferred to a critical access hospital (CAH) with a planned acute care hospital inpatient readmission (<i>Exclude</i>)</p> <p>95 = Discharged/transferred to another type of health care institution not defined elsewhere in this code list with a planned acute care hospital inpatient readmission (<i>Exclude</i>)</p> <p>M = Missing</p>
SURVEY_STATUS	Final Disposition of Survey	164	2	<p>1 = Completed survey</p> <p>2 = Ineligible: Deceased</p> <p>3 = Ineligible: Not in eligible population</p> <p>4 = Ineligible: Language barrier</p> <p>5 = Ineligible: Mental/physical incapacity</p> <p>6 = Non-response: Break off</p> <p>7 = Non-response: Refusal</p> <p>8 = Non-response: Non-response after maximum attempts</p> <p>9 = Non-response: Bad/no phone number</p>
SURVEY_COMPLETION_MODE	Survey Mode used to complete a survey administered; <i>if Survey</i>	166	1	<p>1 = mail</p> <p>2 = phone</p> <p>3 = web</p>

Field Name	Field Contents	Starting Position in Record	Field Length	Valid Values
	<i>Status is “1-Completed Survey” or “6-Non-response: Break off”</i>			
NUMBER_SURVEY_ATTEMPTS_TELEPHONE	Number of telephone attempts, <i>if (1) Survey Mode is “1-web-phone” or “2-mail-phone” or “3-web-mail-phone” AND (2) if “Survey Completion Mode” field is “2-phone”</i>	167	1	1 = First telephone attempt 2 = Second telephone attempt 3 = Third telephone attempt 4 = Fourth telephone attempt 5 = Fifth telephone attempt 8 = Not applicable
SURVEY_LANGUAGE	Identify survey language in which the survey was administered (or attempted to be administered)	168	1	1 = English 2 = Spanish 8 = Not applicable
LAG_TIME	Number of days between the patient’s discharge date and the end of data collection for that patient	169	3	000-365 888 = Not applicable <i>Note: The Lag Time should be included for all ED CAHPS Final Survey Status codes. It is anticipated that the Lag Time will not be coded as “Missing”</i>

Field Name	Field Contents	Starting Position in Record	Field Length	Valid Values
GENDER	Patient's gender	172	1	1 = Male 2 = Female M = Missing
AGE_AT_VISIT	Patient's age at ED visit	173	2	1 = 18–24 2 = 25–29 3 = 30–34 4 = 35–39 5 = 40–44 6 = 45–49 7 = 50–54 8 = 55–59 9 = 60–64 10 = 65–69 11 = 70–74 12 = 75–79 13 = 80–84 14 = 85–89 15 = 90 or older M = Missing/Unknown
PAYER_PRIMARY	Primary payer for medical care received <i>(not necessary for case-mix adjustment)</i>	174	1	1 = Medicare 2 = Medicaid 3 = Private 4 = Uninsured/No payer 5 = Other M = Missing
PAYER_SECONDARY	Secondary payer for medical care received <i>(not necessary for case-mix adjustment)</i>	175	1	1 = Medicare 2 = Medicaid 3 = Private

Field Name	Field Contents	Starting Position in Record	Field Length	Valid Values
				4 = Uninsured/No payer 5 = Other M = Missing
PAYER_OTHER	Other payer for medical care received (<i>not necessary for case-mix adjustment</i>)	176	1	1 = Medicare 2 = Medicaid 3 = Private 4 = Uninsured/No payer 5 = Other M = Missing
ESI_AT_VISIT	Emergency Severity Index 5-Level	177	1	1 = 1 2 = 2 3 = 3 4 = 4 5 = 5 M = Missing
RACE_ETHNICITY	Race/ethnicity (<i>not necessary for case-mix adjustment</i>)	178	1	1 = Non-Hispanic White 2 = Hispanic 3 = Black or African American 4 = Asian 5 = Native Hawaiian or other Pacific Islander 6 = American Indian or Alaska Native 7 = Multiracial 8 = Other M = Missing
ICD_10	ICD-10 primary diagnosis code	179	7	ICD-10 code with 3-7 letters/numbers
PRIMARY_LANGUAGE	Primary language	186	1	1 = English 2 = Spanish

Field Name	Field Contents	Starting Position in Record	Field Length	Valid Values
				3 = Other M = Missing
HAVE_EMAIL	Patient has email address available	187	1	1= Has email address in record 2 = Does not have email address in record M = Missing

Patient Survey Data Section

Field Name	Survey Question	Field Position	Valid Values
GTER_REASON	1. Thinking about this visit, what was the <u>main</u> reason you went to the emergency room? <input type="checkbox"/> An accident or injury <input type="checkbox"/> A new health problem <input type="checkbox"/> An ongoing health condition or concern	188	1 = An accident or injury 2 = A new health problem 3 = An ongoing health condition or concern M = Missing/Don't know
GTER_AMBULANCE	2. For this visit, did you go to the emergency room in an ambulance? <input type="checkbox"/> Yes <input type="checkbox"/> No	189	1 = Yes 2 = No M = Missing/Don't know
GTER_TIME2TALK	3. When you first arrived at the emergency room, how long was it before someone talked to you about the reason you were there? <input type="checkbox"/> Less than 5 minutes <input type="checkbox"/> 5 to 15 minutes <input type="checkbox"/> More than 15 minutes	190	1 = Less than 5 minutes 2 = 5 to 15 minutes 3 = More than 15 minutes M = Missing/Don't know
DERV_WT30MINS	4. During this emergency room visit, did you get care within 30 minutes of getting to the emergency room? <input type="checkbox"/> Yes <input type="checkbox"/> No	191	1 = Yes 2 = No M = Missing/Don't know
DERV_ASKMEDS	5. During this emergency room visit, did the doctors or nurses ask about <u>all</u> of the medicines you were taking? <input type="checkbox"/> Yes, definitely <input type="checkbox"/> Yes, somewhat <input type="checkbox"/> No	192	1 = Yes 2 = No M = Missing/Don't know
DERV_MEDS_SCR		193	1 = Yes

Field Name	Survey Question	Field Position	Valid Values
	6. During this emergency room visit, were you given any medicine? <input type="checkbox"/> Yes <input type="checkbox"/> No → If No, Go to Question 9 <input type="checkbox"/> Don't Know → If No, Go to Question 9		2 = No 3 = (Explicit) Don't know M = Missing/Don't know
DERV_MEDSREASON	7. Before giving you medicine, did the doctors or nurses tell you what the medicine was for? <input type="checkbox"/> Yes, definitely <input type="checkbox"/> Yes, somewhat <input type="checkbox"/> No	194	1 = Yes, definitely 2 = Yes, somewhat 3 = No 88= Not Applicable M = Missing/Don't know
DERV_MEDSSE	8. Before giving you medicine, did the doctors or nurses describe possible side effects to you in a way you could understand? <input type="checkbox"/> Yes, definitely <input type="checkbox"/> Yes, somewhat <input type="checkbox"/> No	196	1 = Yes, definitely 2 = Yes, somewhat 3 = No 88= Not Applicable M = Missing/Don't know
DERV_TESTS_SCR	9. During this emergency room visit, did you have a blood test, x-ray, or any other test? <input type="checkbox"/> Yes <input type="checkbox"/> No → If No, Go to Question 11	198	1 = Yes 2 = No M = Missing/Don't know
DERV_TESTRESINFO	10. During this emergency room visit, did doctors or nurses give you as much information as you wanted about the results of these tests? <input type="checkbox"/> Yes, definitely <input type="checkbox"/> Yes, somewhat <input type="checkbox"/> No	200	1 = Yes, definitely 2 = Yes, somewhat 3 = No 88= Not Applicable M = Missing/Don't know
PTCY_NURSECAR	11. During this emergency room visit, how often did nurses treat you with <u>courtesy and respect</u> ? <input type="checkbox"/> Never	202	1 = Never 2 = Sometimes

Field Name	Survey Question	Field Position	Valid Values
	<input type="checkbox"/> Sometimes <input type="checkbox"/> Usually <input type="checkbox"/> Always		3 = Usually 4 = Always M = Missing/Don't know
PTCY_NURSEL	12. During this emergency room visit, how often did nurses <u>listen carefully to you</u> ? <input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Usually <input type="checkbox"/> Always	203	1 = Never 2 = Sometimes 3 = Usually 4 = Always M = Missing/Don't know
PTCY_NURSEEAU	13. During this emergency room visit, how often did nurses <u>explain things</u> in a way you could understand? <input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Usually <input type="checkbox"/> Always	204	1 = Never 2 = Sometimes 3 = Usually 4 = Always M = Missing/Don't know
PTCY_DOCCAR	14. During this emergency room visit, how often did doctors treat you with <u>courtesy and respect</u> ? <input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Usually <input type="checkbox"/> Always	205	1 = Never 2 = Sometimes 3 = Usually 4 = Always M = Missing/Don't know
PTCY_DOCLC	15. During this emergency room visit, how often did doctors <u>listen carefully to you</u> ? <input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Usually	206	1 = Never 2 = Sometimes 3 = Usually 4 = Always M = Missing/Don't know

Field Name	Survey Question	Field Position	Valid Values
	<input type="checkbox"/> Always		
PTCY_DOCEAU	16. During this emergency room visit, how often did doctors <u>explain things</u> in a way you could understand? <input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Usually <input type="checkbox"/> Always	207	1 = Never 2 = Sometimes 3 = Usually 4 = Always M = Missing/Don't know
LER_PMEDS_SCR	17. Before you left the emergency room, did a doctor or nurse tell you that you should take any medicine at home? <input type="checkbox"/> Yes <input type="checkbox"/> No → If No, Go to Question 19	208	1 = Yes 2 = No M = Missing/Don't know
LER_PMEDSREASON	18. Before you left the emergency room, did a doctor or nurse tell you what the medicine was for? <input type="checkbox"/> Yes, definitely <input type="checkbox"/> Yes, somewhat <input type="checkbox"/> No	209	1 = Yes, definitely 2 = Yes, somewhat 3 = No 88 = Not Applicable M = Missing/Don't know
LER_FOLLOWUP_SCR	19. Before you left the emergency room, did a doctor, nurse, or other staff talk with you about follow-up care? <input type="checkbox"/> Yes, definitely <input type="checkbox"/> Yes, somewhat <input type="checkbox"/> No	211	1 = Yes, definitely 2 = Yes, somewhat 3 = No M = Missing/Don't know
LER_FOLLOWUP_NEED	20. Did you need information about how to get follow-up care? <input type="checkbox"/> Yes <input type="checkbox"/> No → If No, Go to Question 22	212	1 = Yes 2 = No M = Missing/Don't know

Field Name	Survey Question	Field Position	Valid Values
LER_FOLLOWUPINO	21. Did a doctor, nurse, or other staff give you information about how to get follow-up care? <input type="checkbox"/> Yes <input type="checkbox"/> No	213	1 = Yes 2 = No 88 = Not Applicable M = Missing/Don't know
LER_LOOKOUT	22. Before you left the emergency room, did a doctor, nurse, or other staff give you information about what symptoms or health problems to look out for at home? <input type="checkbox"/> Yes, definitely <input type="checkbox"/> Yes, somewhat <input type="checkbox"/> No	215	1 = Yes, definitely 2 = Yes, somewhat 3 = No M = Missing/Don't know
OE_RATECARE	23. Using any number from 0 to 10, where 0 is the worst emergency room care possible and 10 is the best emergency room care possible, what number would you use to rate your care during this emergency room visit? <input type="checkbox"/> 0 Worst emergency room care possible <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 Best emergency room care possible	216	0 = Worst emergency room care possible 1 = 1 2 = 2 3 = 3 4 = 4 5 = 5 6 = 6 7 = 7 8 = 8 9 = 9 10 = Best emergency room care possible M = Missing/Don't know

Field Name	Survey Question	Field Position	Valid Values
OE_RECOMMEND	24. Would you recommend this emergency room to your friends and family? <input type="checkbox"/> Definitely no <input type="checkbox"/> Probably no <input type="checkbox"/> Probably yes <input type="checkbox"/> Definitely yes	218	1 = Definitely no 2 = Probably no 3 = Probably yes 4 = Definitely yes M = Missing/Don't know
YHC_ERVP6MTHS	25. In the <u>last 6 months</u> , have you visited <u>any</u> emergency room to get care for yourself? Please include the emergency room visit you have been answering questions about in this survey. <input type="checkbox"/> 1 time <input type="checkbox"/> 2 times <input type="checkbox"/> 3 times <input type="checkbox"/> 4 times <input type="checkbox"/> 5 to 9 times <input type="checkbox"/> 10 or more times	219	1 = 1 time 2 = 2 times 3 = 3 times 4 = 4 times 5 = 5 to 9 times 6 = 10 or more times M = Missing/Don't know
YHC_DOCOFFICE_SCR	26. Not counting the emergency room, is there a doctor's office clinic, or other place you usually go if you need a check-up, want advice about a health problem, or get sick or hurt? <input type="checkbox"/> Yes <input type="checkbox"/> No	220	1 = Yes 2 = No M = Missing/Don't know
AY_OVERALLHEALTH	27. In general, how would you rate your overall health? <input type="checkbox"/> Excellent <input type="checkbox"/> Very good <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	221	1 = Excellent 2 = Very Good 3 = Good 4 = Fair 5 = Poor M = Missing/Don't know
AY_MENTALHEALTH	28. In general, how would you rate your overall <u>mental or emotional health</u> ?	222	1 = Excellent

Field Name	Survey Question	Field Position	Valid Values
	<input type="checkbox"/> Excellent <input type="checkbox"/> Very good <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor		2 = Very Good 3 = Good 4 = Fair 5 = Poor M = Missing/Don't know
AY_EDUCATION	29. What is the highest grade or level of school that you have <u>completed</u> ? <input type="checkbox"/> 8 th grade or less <input type="checkbox"/> Some high school, but did not graduate <input type="checkbox"/> High school graduate or GED <input type="checkbox"/> Some college or 2-year degree <input type="checkbox"/> 4-year college graduate <input type="checkbox"/> More than 4-year college degree	223	1 = 8th Grade or Less 2 = Some High School, But Did Not Graduate 3 = High School Graduate Or GED 4 = Some College Or 2-Year Degree 5 = 4-Year College Graduate 6 = More Than 4-Year College Degree M = Missing/Don't know
AY_LANGUAGE	30. What language do you <u>mainly</u> speak at home? <input type="checkbox"/> English <input type="checkbox"/> Spanish <input type="checkbox"/> Chinese <input type="checkbox"/> Russian <input type="checkbox"/> Vietnamese <input type="checkbox"/> Portuguese <input type="checkbox"/> Some other language	224	1 = English 2 = Spanish 3 = Chinese 4 = Russian 5 = Vietnamese 6 = Portuguese 9 = Some other language M = Missing/Don't know
AY_HISPANIC_SCR	31. Are you of Spanish, Hispanic or Latino origin or descent? <input type="checkbox"/> No, not Spanish/Hispanic/Latino <input type="checkbox"/> Yes, Puerto Rican <input type="checkbox"/> Yes, Mexican, Mexican American, Chicano <input type="checkbox"/> Yes, Cuban	225	1 = No, not Spanish /Hispanic/Latino 2 = Yes, Puerto Rican 3 = Yes, Mexican, Mexican American, Chicano 4 = Yes, Cuban 5 = Yes, other Spanish /Hispanic/Latino M = Missing/Don't know

Field Name	Survey Question	Field Position	Valid Values
	<input type="checkbox"/> Yes, other Spanish/Hispanic/Latino		
	32. What is your race? Please choose one or more.		
RACE_WHITE	a. White	226	1 = Yes 2 = No M = Missing/Don't know
RACE_BLACK	b. Black or African American	227	1 = Yes 2 = No M = Missing/Don't know
RACE_ASIAN	c. Asian	228	1 = Yes 2 = No M = Missing/Don't know
RACE_HAWAII_PACIFIC	d. Native Hawaiian or other Pacific Islander	229	1 = Yes 2 = No M = Missing/Don't know
RACE_NATAMER	e. American Indian or Alaska Native	230	1 = Yes 2 = No M = Missing/Don't know
AY_PROXY_SCR	33. Did someone help you complete this survey? <input type="checkbox"/> Yes <input type="checkbox"/> No → Thank you	231	1=Yes 2=No M = Missing/Don't know
	34. How did that person help you? Mark one or more.		
PROXY_READ	a. Read the questions to me	232	1 = Yes 2 = No 88= Not Applicable M = Missing/Don't know
PROXY_WROTE	b. Wrote down the answers I gave	234	1 = Yes

Field Name	Survey Question	Field Position	Valid Values
			2 = No 88= Not Applicable M = Missing/Don't know
PROXY_ANS	c. Answered the questions for me	236	1 = Yes 2 = No 88= Not Applicable M = Missing/Don't know
PROXY_TRANS	c. Translated the questions into my language	238	1 = Yes 2 = No 88= Not Applicable M = Missing/Don't know
PROXY_HELPOTH_TXT	d. Helped in some other way	240	1 = Yes 2 = No 88= Not Applicable M = Missing/Don't know
AY_PROXYATER	35. Was the person who helped you with you at any time during this emergency room visit?	242	1 = Yes 2 = No 88= Not Applicable M = Missing/Don't know

References

Agency for Healthcare Quality and Research (AHRQ). Consumer Assessment of Healthcare Providers and Systems (CAHPS) Surveys. <https://www.ahrq.gov/cahps/index.html> Accessed May 22, 2020.

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Survey. Centers for Medicare & Medicaid Services, Baltimore, MD. <https://www.hcahpsonline.org/en/survey-instruments/> Accessed January 30, 2020.

Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Survey. Quality Assurance Guidelines, V15.0. Centers for Medicare & Medicaid Services, Baltimore, MD. <https://www.hcahpsonline.org/en/quality-assurance/> Accessed May 22, 2020.

Mathews, M., L. Parast, A. Tolpadi, M. Elliott, E. Flow-Delwiche and K. Becker (2019). "Methods for Improving Response Rates in an Emergency Department Setting – A Randomized Feasibility Study." *Survey Practice* **12**(1): 0.29115/SP-22019-20007.

Parast, L., M. Mathews, M. Elliott, A. Tolpadi, E. Flow-Delwiche, W. Lehrman, D. Stark and K. Becker (2019). "Effects of Push-To-Web Mixed Mode Approaches on Survey Response Rates: Evidence from a Randomized Experiment in Emergency Departments." *Survey Practice* **12**(1): 0.29115/SP-22019-20008.

Parast, L., M. Mathews, A. Tolpadi, M. Elliott, E. Flow-Delwiche and K. Becker (2019). "National Testing of the Emergency Department Patient Experience of Care (EDPEC) Discharged to Community (DTC) Survey and Implications for Adjustment in Scoring." *Medical Care* **57**(1): 42-48.