HCAHPS Update Training

March 2018

HCAHPS Update Training

Welcome!

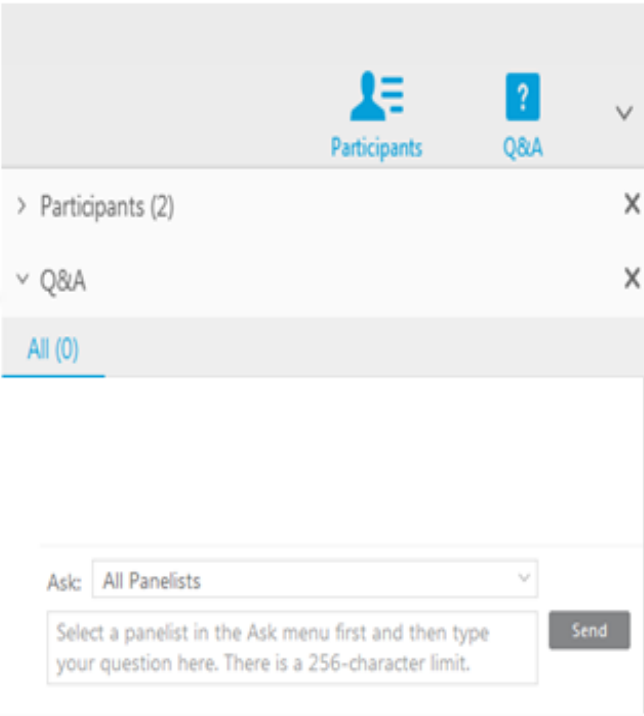In the Update Training session, we will present:

- HCAHPS Program Updates

- Updates to HCAHPS *Quality Assurance Guidelines V13.0* (QAG)

- Calculation of HCAHPS Scores: From Raw Data to Publicly Reported Scores

- Updated Patient-Mix Adjustment: Service Line and Gender

HCAHPS Update Training

Online Question Submission Illustration 1

HCAHPS Update Training

Online Question Submission *(cont'd)* Illustration 2

Online Question Submission *(cont'd)* Illustration 3

HCAHPS Program Updates
March 2018

Overview of HCAHPS Updates

- Department of Defense Hospitals Joining HCAHPS
- CMS Released New Pain Management Questions for HCAHPS Effective with January 1, 2018 Discharges and Forward
- HCAHPS Patient-Mix Adjustment for Service Line and Gender
- Reminders: Data Submission
- New Survey Development at CMS
- HCAHPS Never Rests
- More Information on HCAHPS

Department of Defense Hospitals Joining HCAHPS

- In 2018, Department of Defense (DoD) hospitals will begin to participate in the HCAHPS Survey
  - Approximately 40 hospitals will participate

CMS Releases New Pain Management Questions for HCAHPS

- Effective with January 1, 2018 Discharges and Forward

- CMS has developed new questions about pain
  - Replaced original pain questions

- Emphasis on communication about pain during hospital stay

- New items were proposed in FY 2018 IPPS Rule

New Service Line Adjustment Uses 5 Categories Rather than 3

- The HCAHPS Patient-Mix Adjustment (PMA) model has been updated to incorporate more detailed information about patient Service Line and Gender

- Prior to Quarter 1 2017, the patient-mix adjustment derived from this item distinguished between **Medical, Surgical,** and **Maternity** (3 categories)

- Beginning with Quarter 1 2017 discharges, the patient-mix adjustment will distinguish among **Female Medical**, **Male Medical**, **Female Surgical**, **Male Surgical**, and **Maternity** (5 categories)

  - Female Medical will serve as the reference category for this update

Reminders: Data Submission

- Encourage and assist client hospitals to promptly enter survey vendor authorizations in QualityNet Exchange to avoid errors

- Early submission of HCAHPS data provides time to correct errors (if any)

- Quality Checking data prior to submitting via QualityNet is important in order to avoid issues that could jeopardize hospitals APU

New Survey Development at CMS

- Emergency Department Patient Experience of Care (EDPEC) Survey
  - Development continues
- Information on CMS Patient Experience Surveys:

  https://www.cms.gov/Research-Statistics-Data-and-Systems/Research/CAHPS/index.html

HCAHPS Never Rests

- April 2018 publicly reported scores are based on more than 3.0 million completed surveys from patients at 4,364 hospitals

- Every day more than 8,200 patients complete the HCAHPS Survey

- HCAHPS is a component of HVBP and Hospital Compare Overall Star Ratings

- HCAHPS scores are used in the Comprehensive Care for Joint Replacement Program

More Information on HCAHPS

- Registration, applications, background information, reports, and HCAHPS *Executive Insight* :

    http://www.hcahpsonline.org

- Submitting HCAHPS data:

    https://www.qualitynet.org

- Publicly reported HCAHPS results:

    https://www.medicare.gov/hospitalcompare

- HCAHPS results Downloadable Database (DDB):

    https://Data.Medicare.gov

- HCAHPS in Hospital Value-Based Purchasing:

    https://www.qualitynet.org/dcs/ContentServer?c=Page&pagename=QnetPublic%2FPage%2FQnetTier2&cid=1228772039937

Updates to
HCAHPS *Quality Assurance Guidelines V13.0 (QAG)*

Participation and Program Requirements

- <u>Reminder</u>: The FY 2018 IPPS Final Rule incorporates the Final Rules from previous years
  - Refer to the following for details on HCAHPS requirements
    - FY 2011 IPPS Final Rule ([75 FR 50220](#))
    - FY 2012 IPPS Final Rule ([76 FR 51641 through 51643](#))
    - FY 2013 IPPS Final Rule ([77 FR 53537 through 53538](#))
    - FY 2014 IPPS Final Rule ([78 FR 50819 through 50820](#))
    - FY 2015 IPPS Final Rule ([79 FR 50319 through 50449](#))
    - FY 2016 IPPS Final Rule ([80 FR 49325 through 49843](#))
    - FY 2017 IPPS Final Rule ([81 FR 56762 through 57345](#))
    - FY 2018 IPPS Final Rule ([82 FR 35270 through 35393](#))

Participation and Program Requirements *(cont'd)*

- <u>Reminder</u>: HCAHPS Introduction Training
  - Hospitals/Survey vendors that are new to HCAHPS must participate in HCAHPS Introduction Training
  - New staff or subcontractors, or other organizations responsible for major functions of HCAHPS Survey administration, must participate in HCAHPS Introduction Training
  - Organizations already approved may be required to participate in HCAHPS Introduction Training
    - **Introduction to HCAHPS Training is no longer offered live but is self-paced, via the internet**
    - **It must be fully completed before carrying out HCAHPS Survey functions**

Participation and Program Requirements *(cont'd)*

- **Update: Minimum Business Requirements**
  - Certain requirements for hospitals/survey vendors seeking approval to administer the HCAHPS Survey **must be demonstrated within a recent time period, as specified in the Relevant Survey Experience section of the QAG V13.0**

Participation and Program Requirements *(cont'd)*

Criteria	Requirement	
	Self-administering Hospital	Survey Vendor
Survey Experience	➤ Hospital has conducted patient-specific surveys as an organization **within the most recent two-year time period** ➤ Mail, and/or Telephone, and/or Mixed Mode, and/or IVR survey experience **within the most recent two-year time period**	➤ Survey vendor has conducted patient-specific surveys as an organization **within the most recent three-year time period** ➤ Mail, and/or Telephone, and/or Mixed Mode, and/or IVR survey experience **within the most recent three-year time period**
Number of Years in Business	➤ Minimum three years	➤ Minimum four years
Number of Years Conducting Patient-Specific Surveys	➤ Minimum two years in each selected mode of administration **within the most recent two-year time period**	➤ Minimum three years in each selected mode of administration **within the most recent three-year time period**
Sampling Experience *Note: Hospitals/Survey vendors are responsible for conducting the sampling process and must not subcontract this activity.*	➤ One year prior experience selecting random sample based on specific eligibility criteria **within the most recent one-year time period**	➤ Two years prior experience selecting random sample based on specific eligibility criteria **within the most recent two-year time period** ➤ Work with contracted client hospital(s) to obtain patient data for sampling via HIPAA-compliant electronic data transfer processes ➤ Adequately document sampling process

Participation and Program Requirements *(cont'd)*

- <u>Reminder</u>: Quality Checks
  - Hospitals/Survey vendors must perform and document quality checks of electronic programming code periodically, **on an annual basis,** at a minimum

HCAHPS Update Training

Sampling

- **Update: Codes to Determine Service Line**
  - **MS-DRG Codes updated to V.35**
    - Strongly recommend use of MS-DRG V.35 codes to assign Service Line
    - Crosswalk table to MS-DRGs V.35 updated
  - Regardless of the methodology used, the hospital/survey vendor must maintain documentation that demonstrates how the codes are crosswalked to HCAHPS Service Lines

Sampling *(cont'd)*

- Clarification: Ineligible Discharge Status Code
  - Patients identified with discharge status code (UB-04 field location 17) "30 – Still a Patient" are **not** eligible for the HCAHPS Survey
    - These patients were never eligible for the HCAHPS Survey

Sampling *(cont'd)*

- Clarification: Eligibility
  - Observation patients who do not have an inpatient admission are not eligible for the HCAHPS Survey, **even if they have an overnight stay**

Sampling *(cont'd)*

- Clarification: Patient Discharge Files and Sample Frames

  – **All patient discharge files** and HCAHPS sample frames must be retained and easily accessible for a minimum of three years

Sampling *(cont'd)*

- Reminder: De-duplication
  - Hospitals/Survey vendors are required on a monthly basis to de-duplicate **eligible** patients based on household and multiple discharges within the same calendar month.
  - De-duplication must be performed using the **sample frame, not the sample,** within each calendar month, utilizing address information (or telephone number for Telephone, Mixed and IVR modes) and the patient's medical record number (or other unique identifier)

Sampling *(cont'd)*

- <u>Reminder</u>: DSRS Sampling Requirement
  - Hospitals/Survey vendors must submit an Exception Request Form for CMS approval to use DSRS
  - See the Exception Request/Discrepancy Report Processes chapter in the QAG V13.0

Survey Administration

- **Update: All Modes of Survey Administration**
  - In August 2017, CMS announced plans to replace the three Pain Management questions with three new questions that focus on Communication About Pain
    - **The new pain items are required on all surveys administered to patients discharged from January 1, 2018 and forward**

Survey Administration *(cont'd)*

- <u>Reminder</u>: All Modes of Survey Administration
  - Address and Telephone Number Updates
    - Hospitals/Survey vendors must use commercial software or other means to update addresses and telephone numbers provided by the hospital for sampled patients
    - It is strongly recommended that hospitals/survey vendors check the accuracy of all sampled patients' contact information prior to survey fielding

Survey Administration *(cont'd)*

- **Update: Mail and Mixed Survey Administration**
  - Quality Control Guidelines
    - Hospitals/Survey vendors are responsible for the quality of work performed by any subcontractor(s), such as printers and fulfillment houses
      - Hospitals/Survey vendors must conduct on-site verification of printing and mailing data collection processes
        - It is **strongly recommended that this is done on an annual basis**, at a minimum

Survey Administration *(cont'd)*

- **Update: Mail and Mixed Survey Administration**
  - Quality Control Guidelines *(cont'd)*
    - **If automated processes are being used to perform interval checks of survey material, then checks of the system or equipment must be performed regularly**
    - Hospitals/Survey vendors **must** retain a record of all quality control activities and document these activities in the hospitals'/survey vendors' QAPs
      - All materials relevant to survey administration are subject to review

Survey Administration *(cont'd)*

- ## Update: Telephone Only, Mixed Mode, IVR
  - Scheduled call backs
    - If the interviewer reaches the patient and is asked to call back at a more convenient time for the patient
      - **Hospitals/Survey vendors must schedule a telephone callback that accommodates the patient's request for a specific day and time**
      - **The call back must be scheduled at the patient's convenience between the hours of 9 AM and 9 PM respondent time within the data collection time period**

Survey Administration *(cont'd)*

- Clarification: Telephone Only, Mixed Mode, IVR
  - Call attempts
    - It is strongly recommended that telephone attempts are made not only on weekdays, but on weekends also

Survey Administration *(cont'd)*

- Clarification: Telephone Only, Mixed Mode, IVR
  - Survey Introduction and FAQs
    - The stated time to complete the survey must be **at least 8 minutes**

Survey Administration *(cont'd)*

- Clarifications: Telephone Only, Mixed Mode, IVR
  - Interviewer Guidelines
    - In instances where the patient is reluctant to answer "Yes" or "No" to the HCAHPS Survey question(s) and the patient's intended response(s), either positive or negative is <u>clear</u>, the patient's response should be accepted
    - Under no circumstances should interviewers invite a patient to discontinue the survey
      - When it is clear a respondent is likely to discontinue the survey, it is permissible for the interviewer to acknowledge the patient's difficulty and offer a few words of encouragement such as "we have just a few more questions to go"

Survey Administration *(cont'd)*

- ## Update: Telephone Only, Mixed Mode
  - Quality Control Guidelines
    - Hospitals/Survey vendors are responsible for the quality of work performed by any subcontractor(s), such as call centers
      - **Hospitals/Survey vendors must conduct on-site verification of call centers, including live call monitoring and floor rounding**
        - **It is strongly recommended that this is done on an annual basis, at a minimum**

Survey Administration *(cont'd)*

- ## Update: Telephone Only, Mixed Mode, IVR
  - Interviewing Systems
    - Survey administration must be conducted in accordance with the Telephone Consumer Protection Act (TCPA) regulations
    - Monitoring and recording of telephone calls
      - **Follow state regulations**

Data Specifications & Coding

- Clarification: 42 Calendar Day Initial Contact Period Rule
  - The "Eligible Discharges" field in the XML Header Record must include the count of patients who are **eligible** for the HCAHPS Survey
    - Include the patient even if the patient's information is received from the hospital with discharge dates that are beyond the 42 calendar day initial contact period
      - **these patients must NOT be included in the HCAHPS Survey sample nor included in the "Sample Size" field count**
    - **A Discrepancy Report must be filed when patient information is received beyond the 42 calendar day initial contact period**

Data Specifications & Coding *(cont'd)*

- **Update: File Specifications Changed to Version 4.1**
  - Appendix P – Data File Structure Version 4.1
  - Appendix Q – XML File Layout Version 4.1
    - Header Record
      - Determination of Service Line: "Methodology used by a facility to determine whether a patient falls into one of the three service line categories eligible for HCAHPS Survey"

Note: Version 4.0 applies to 1Q and 2Q 2018 patient discharges
  Version 4.1 applies to 3Q 2018 patient discharges and forward

Data Specifications & Coding *(cont'd)*

- <u>Reminder</u>: Switching Survey Vendors
  - Hospitals that choose to switch from one survey vendor to another can <u>*only*</u> do so at the beginning of a calendar quarter
  - The dates entered into the discharge and data transmission fields must be entered in accordance with HCAHPS protocols
    - <u>Transmission End Date</u> should be the last day for which the current survey vendor will be submitting data on the hospital's behalf
    - <u>Discharge End Date</u> should be the last day of the month the hospital will allow the current survey vendor to sample from eligible discharges. *The Discharge End Dates of the new and expiring survey vendor <u>cannot</u> overlap.*
    - Survey vendors should work closely with their hospital clients, who are unfamiliar with the QualityNet Secure Portal, to complete the authorization at least 90 days prior to the data submission deadline

Data Specifications & Coding *(cont'd)*

- <u>R</u>eminder: Survey Vendor Authorization Dates
  - It is strongly recommended that the Discharge End Date and the Transmission End Date **<u>be left blank</u>** unless the survey authorization is terminated

Data Specifications & Coding *(cont'd)*

<u>Reminder</u>: Header Record in File Layout
- Complete once per monthly file
  - The survey mode and sample type must be the same for all three months within a quarter. Once you have uploaded your first month of data, you have the ability to re-upload that month and change the survey mode or sample type.
  - Once you have uploaded data for two months within a given quarter, you are **<u>locked</u>** into that survey mode and sample type and **<u>cannot</u>** change it for that quarter

Data Specifications & Coding *(cont'd)*

- Reminder: For surveys done in Mixed Mode or IVR Mode, the Survey Completion Mode in the Patient Administrative Data Record **must** correspond with survey mode in the Header Record

Header Record	Patient Administrative Data Record
Survey Mode	Survey Completion Mode
"3-Mixed Mode"	"1-Mixed Mode – Mail"
	"2-Mixed Mode – Phone"
"4-IVR"	"3-IVR Mode – IVR"
	"4-IVR Mode – Phone"

Oversight Activities

- **Update: On-site visits/conference calls**
  - The HCAHPS Project Director/Manager must be present at any HCAHPS on-site visit or conference call
  - **If any HCAHPS processes are automated, then the programmer must be available during the visit or call to review the programming**

Oversight Activities *(cont'd)*

- Reminder: Survey Materials
  - Hospitals/Survey vendors must submit for review formatted survey materials (including required changes, effective with July 2018 patient discharges) to HCAHPS Technical Assistance by **Friday, April 6, 2018**
    - Hospital/Survey vendors must include transitional phrases to supplemental questions and placement in the survey

Oversight Activities *(cont'd)*

- <u>Reminder</u>: HCAHPS Attestation Statement
  - Includes notice that the Quality Assurance Plan (QAP) has been updated
    - Due by **Friday, April 6, 2018**
  - Attestation form is in Appendix X
  - The QAP should <u>not</u> be submitted at this time

Data Submission Timeline

Month of Patient Discharges	Data Submission Deadline	Review and Correct Period	File Specifications Version
October, November and December 2017 (4Q17)	April 4, 2018	April 5-11, 2018	Version 3.9
January, February and March 2018 (1Q18)	July 5, 2018	July 6-12, 2018	Version 4.0
April, May and June 2017 (2Q18)	October 3, 2018	October 4-10, 2018	Version 4.0
July, August and September 2018 (3Q18)	January 3, 2019	January 4-10, 2019	Version 4.1

Questions?

Calculation of HCAHPS Scores: from Raw Data to Publicly Reported Scores

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES
CENTER FOR MEDICARE

Overview

- **Process Raw HCAHPS Data**
- **Calculate HCAHPS Scores with Example**
  - HCAHPS Composite Measure Calculation
  - Patient-Mix Variables
  - Quarterly Weights
  - Final HCAHPS Scores

STEP 1: Process Raw HCAHPS Data

CMS
CENTERS FOR MEDICARE & MEDICAID SERVICES
CENTER FOR MEDICARE

Process Raw HCAHPS Data

- Remove surveys for patients determined to be **ineligible** for HCAHPS

- Exclude surveys for patients that do not meet HCAHPS criteria for survey **completeness**

- HCAHPS scores are calculated from <u>eligible</u> and <u>completed</u> surveys

Reminders about Ineligible Patients

- If patient is determined to be ineligible <u>pre-sampling</u>, do not sample and do not include in Eligible Discharge Size

- If patient is determined to be ineligible post-sampling, remove from the final Eligible Discharge Size

Reminder about 42-day Initial Contact Period

- The Eligible Discharge Size must include <u>all</u> patients eligible for HCAHPS, even if the patient's information is received from the hospital with discharge dates that are beyond the 42-day initial contact period

A Patient is Not Included in Score Calculations If…

- Not 18 years or older at time of admission
- Admission does not include at least one overnight stay
- Psychiatric MS-DRG/principal diagnosis at discharge
- "No-Publicity" patients
- Court/Law enforcement patients
- Foreign home address
- Discharged to hospice care
- Excluded due to state regulations
- Discharged to nursing homes and skilled nursing facilities
- 50% of the 18 core HCAHPS Survey items were not answered

STEP 2: HCAHPS Composite Measure Calculation

HCAHPS "Boxes"

- **"Top-Box":** most positive response category

- **"Middle-Box":** "in-between" response category

- **"Bottom-Box":** least positive response category

HCAHPS Composite Example

- **Nurse Communication, "Top-Box"**
  - **"Always"** is the most positive response category for all 3 questions that comprise Nurse Communication
    - Q1: Nurse courtesy and respect
    - Q2: Nurse listen
    - Q3: Nurse explain

HCAHPS Composite Example *(cont'd)*

1. **During this hospital stay, how often did nurses treat you with <u>courtesy and respect</u>?**

    [1]☐ Never

    [2]☐ Sometimes

    [3]☐ Usually

    [4]☐ Always

HCAHPS Composite Example *(cont'd)*

- Hospital A has 7 completed surveys

Survey ID	Q1 Response	Nurse1 Top-Box	Q2 Response	Nurse2 Top-Box	Q3 Response	Nurse3 Top-Box
001	**Always**	1	**Always**	1	**Always**	1
002	Sometimes	0	Never	0	Sometimes	0
003	**Always**	1	**Always**	1	**Always**	1
004	Usually	0	**Always**	1	**Always**	1
005	**Always**	1	**Always**	1	**Always**	1
006	**Always**	1	Usually	0	**Always**	1
007	**Always**	1	**Always**	1	**Always**	1

HCAHPS Composite Example *(cont'd)*

Calculate mean for each of Nurse1 Top-Box, Nurse2 Top-Box, and Nurse3 Top-Box:

Nurse1 Top-Box mean = (1+0+1+0+1+1+1) / 7 = 5/7

Nurse2 Top-Box mean = (1+0+1+1+1+0+1) / 7 = 5/7

Nurse3 Top-Box mean = (1+0+1+1+1+1+1) / 7 = 6/7

HCAHPS Composite Example *(cont'd)*

Nurse Communication composite score for Hospital A

Calculate the Nurse Communication composite mean (Y) as follows:

Y = (Nurse1 Top-Box mean + Nurse2 Top-Box mean + Nurse3 Top-Box mean) / 3 = (5/7 + 5/7 +6/7) / 3 = **0.762**

STEP 3: HCAHPS Patient-Mix Adjustment (PMA)

Patient-Mix Variables: Education

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

    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

Patient-Mix Variables: Education *(cont'd)*

Question 29 for Hospital A

- **Education**:
  - Derived from HCAHPS Survey (values range from 1 to 6)
  - Calculate the Education mean for Hospital A:

$$H_{EDUC} = (4+1+\ldots+3) / 7$$
$$= 22/7 = \textbf{3.14}$$

Survey ID	Education
001	4
002	1
003	6
004	5
005	1
006	2
007	3

Patient-Mix Variables: Overall Health

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

$^1\square$ Excellent

$^2\square$ Very Good

$^3\square$ Good

$^4\square$ Fair

$^5\square$ Poor

Patient-Mix Variables: Overall Health *(cont'd)*

Question 27 for Hospital A

- **Self-Rated Health**:
  - Derived from HCAHPS Survey (values range from 1 to 5)
  - Calculate the Self-Rated Health mean for Hospital A:

$$H_{HLTH} = (5+5+...+4) / 7$$
$$= 24/7 = \textbf{3.43}$$

Survey ID	Self-Rated Health
001	5
002	5
003	2
004	3
005	4
006	1
007	4

Patient-Mix Variables: Language Spoken at Home

32. What language do you <u>mainly</u> speak at home?

1☐ English

2☐ Spanish

3☐ Chinese

4☐ Russian

5☐ Vietnamese

6☐ Portuguese

9☐ Some other language (please print)

_____

Patient-Mix Variables: Language Spoken at Home *(cont'd)*

Language Spoken at Home for Hospital A

- Create 3 indicator (0 or 1) language variables: Spanish, Chinese, and Other Language (English is the reference)
- Other Language category includes Russian, Vietnamese, Portuguese, and Some Other Language patient responses

Survey ID	Q32	Spanish	Chinese	Other Lang
001	Spanish	1	0	0
002	Spanish	1	0	0
003	English	0	0	0
004	English	0	0	0
005	Vietnamese	0	0	1
006	Chinese	0	1	0
007	English	0	0	0

Patient-Mix Variables: Language Spoken at Home *(cont'd)*

For Hospital A, calculate mean of each of the 3 language variables

H_{SPA} = (1+1+0+0+0+0+0) / 7 = 2/7 = **0.29**

H_{CHI} = (0+0+0+0+0+1+0) / 7 = 1/7 = **0.14**

H_{OTH} = (0+0+0+0+1+0+0) / 7 = 1/7 = **0.14**

Patient-Mix Variables: Age Range

Age Ranges for Hospital A

- Create 7 indicator (0 or 1) age variables for each of the 8 age range groups (Age 85+ is the reference category):

Survey ID	Age 18-24	Age 25-34	Age 35-44	Age 45-54	Age 55-64	Age 65-74	Age 75-84
001	0	0	0	0	0	1	0
002	0	0	0	0	1	0	0
003	0	1	0	0	0	0	0
004	0	0	0	0	0	0	0
005	1	0	0	0	0	0	0
006	0	0	1	0	0	0	0
007	0	0	0	0	0	1	0

Patient-Mix Variables: Age Range *(cont'd)*

For Hospital A, calculate mean of each of the 7 age range variables

H_{18-24} = (0+0+0+0+1+0+0) / 7 = 1/7 = **0.14**

H_{25-34} = (0+0+1+0+0+0+0) / 7 = 1/7 = **0.14**

H_{35-44} = (0+0+0+0+0+1+0) / 7 = 1/7 = **0.14**

H_{45-54} = (0+0+0+0+0+0+0) / 7 = 0/7 = **0.00**

H_{55-64} = (0+1+0+0+0+0+0) / 7 = 1/7 = **0.14**

H_{65-74} = (1+0+0+0+0+0+1) / 7 = 2/7 = **0.29**

H_{75-84} = (0+0+0+0+0+0+0) / 7 = 0/7 = **0.00**

Patient-Mix Variables:
Service Line x Gender

Service Line x Gender for Hospital A

- Create an indicator (0 or 1) variable for Maternity, Female Surgical, Male Surgical, and Male Medical (Female Medical is reference category):

Survey ID	Service Line	Gender	Maternity	Female Surgical	Male Surgical	Male Medical
001	Surgical	M	0	0	1	0
002	Medical	F	0	0	0	0
003	Maternity	F	1	0	0	0
004	Medical	M	0	0	0	1
005	Maternity	F	1	0	0	0
006	Medical	M	0	0	0	1
007	Medical	F	0	0	0	0

Patient-Mix Variables:
Service Line x Gender *(cont'd)*

Calculate Hospital A's mean for each of the 4 Service Line x Gender variables

H_{MAT} = (0+0+1+0+1+0+0) / 7 = 2/7 = **0.29**

H_{FeSURG} = (0+0+0+0+0+0+0) / 7 = 0/7 = **0.00**

H_{MaSURG} = (1+0+0+0+0+0+0) / 7 = 1/7 = **0.14**

H_{MaMED} = (0+0+0+1+0+1+0) / 7 = 2/7 = **0.29**

Patient-Mix Variables: Service Line x Age

- **Service Line x Age Interaction Variables**
  - Create single variable called **Age** that takes on values 1 through 8, to indicate a patient's age range

Age Range:	18-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
Age:	1	2	3	4	5	6	7	8

Patient-Mix Variables:
Service Line x Age *(cont'd)*

Use variables **Surgical**, **Maternity**, and **Age** to create the following interaction variables:

- **Surgical*Age** = (Surgical) x (Age)
- **Maternity*Age** = (Maternity) x (Age)

Patient-Mix Variables:
Service Line x Age *(cont'd)*

Service Line x Age Interaction for Hospital A

Survey ID	Age	Maternity	Surgical	Maternity* Age	Surgical* Age
001	6	0	1	0*6 = 0	1*6 = 6
002	5	0	0	0*5 = 0	0*5 = 0
003	2	1	0	1*2 = 2	0*2 = 0
004	8	0	0	0*8 = 0	0*8 = 0
005	1	1	0	1*1 = 1	0*8 = 0
006	3	0	0	0*3 = 0	0*3 = 0
007	6	0	0	0*6 = 0	0*6 = 0

Patient-Mix Variables:
Service Line x Age *(cont'd)*

For Hospital A, calculate the mean for **Maternity x Age** and **Surgical x Age** variables:

$$H_{MAT*AGE} = (0+0+2+0+1+0+0) / 7 = 3/7 = \textbf{0.43}$$

$$H_{SURG*AGE} = (6+0+0+0+0+0+0) / 7 = 6/7 = \textbf{0.86}$$

Patient-Mix Variables: Response Percentile

- A survey's **Lag Time** is required to create the PMA variable **Response Percentile**

- All completed surveys for a given <u>month</u> and hospital are ranked by **Lag Time**

  - **Lag Time** = # of days between patient's discharge date and the date that data collection activities ended for the patient

$$\textbf{Response Percentile} = \frac{\textbf{Lag Time Rank}}{\textbf{Monthly Sample Size}}$$

Patient-Mix Variables:
Response Percentile *(cont'd)*

Response Percentile for Hospital A

Response Percentile = Lag Time Rank / Monthly Sample Size

Survey ID	Month	Lag Time (in days)	Lag Time Rank (by month)	Monthly Sample Size	Response Percentile
001	January	21	1	9	1/9
002	January	34	2	9	2/9
003	February	8	1	11	1/11
004	February	12	2	11	2/11
005	March	29	2	8	2/8
006	March	6	1	8	1/8
007	March	30	3	8	3/8

Patient-Mix Variables: Response Percentile *(cont'd)*

Calculate Hospital A's mean Response Percentile for the quarter

$$H_{RPCT} = [(1/9) + (2/9) + (1/11) + (2/11) + (2/8)$$
$$+ (1/8) + (3/8)] / 7$$
$$= 0.19$$

3 Components needed for Hospital Patient Mix-Adjustment (PMA)

- **Hospital means** for each patient-mix variable (just calculated)
- **National means** for each patient mix variable found on www.hcahpsonline.org
- Patient-level **Adjustments** for each patient-mix variable found on www.hcahpsonline.org

PMA Means for Hospital A

$H_{EDUC} = 3.14$	$H_{18-24} = 0.14$	$H_{MAT} = 0.29$
$H_{HLTH} = 3.43$	$H_{25-34} = 0.14$	$H_{FeSURG} = 0.00$
	$H_{35-44} = 0.14$	$H_{MaSURG} = 0.14$
$H_{SPA} = 0.29$	$H_{45-54} = 0.00$	$H_{MaMED} = 0.29$
$H_{CHI} = 0.14$	$H_{55-64} = 0.14$	
$H_{OTH} = 0.14$	$H_{65-74} = 0.29$	$H_{MAT*AGE} = 0.43$
	$H_{75-84} = 0.00$	$H_{SURG*AGE} = 0.86$
		$H_{RPCT} = 0.19$

National Means for Patient-Mix Variables:
Table 3 on www.hcahpsonline.org

Patient-Mix Adjustment (PMA)	National Mean
Education (per level; 1=8th grade or less and 6=More than 4-year college degree)	3.754
Self-Rated Health (per level; 1=Excellent and 5=Poor)	2.779
Response Percentile	13.1%
LANGUAGE SPOKEN AT HOME	
Spanish	4.8%
Chinese	0.4%
R/V/O (Russian, Vietnamese, Other)	1.9%
English (REFERENCE)	93.0%
AGE	
Age 18-24	2.9%
Age 25-34	9.0%
Age 35-44	5.9%
Age 45-54	8.7%
Age 55-64	18.6%
Age 65-74	27.00%
Age 75-84	19.7%
Age 85+ (REFERENCE)	8.2%
SERVICE LINE	
Male Medical	23.9%
Male Surgical	17.9%
Female Surgical	18.6%
Female Maternity	10.9%
Female Medical (REFERENCE)	28.7%
INTERACTIONS	
Surgical Line * Age[1]	2.010
Maternity Line * Age[1]	0.223

National Means for Patient-Mix Variables (from Table 3) *(cont'd)*

$M_{EDUC} = 3.754$	$M_{18\text{-}24} = 0.029$	$M_{MAT} = 0.109$
$M_{HLTH} = 2.779$	$M_{25\text{-}34} = 0.090$	$M_{FeSURG} = 0.186$
	$M_{35\text{-}44} = 0.059$	$M_{MaSURG} = 0.179$
$M_{SPA} = 0.048$	$M_{45\text{-}54} = 0.087$	$M_{MaMED} = 0.239$
$M_{CHI} = 0.004$	$M_{55\text{-}64} = 0.186$	
$M_{OTH} = 0.019$	$M_{65\text{-}74} = 0.270$	$M_{MAT*AGE} = 0.223$
	$M_{75\text{-}84} = 0.197$	$M_{SURG*AGE} = 2.010$
		$M_{RPCT} = 0.131$

Patient-Level Adjustments for Patient-Mix Variables:
Table 1 on www.hcahpsonline.org

Patient-Mix Adjustment (PMA)	Comm. with Nurses	Comm. with Doctors	Responsiveness of Hosp. Staff	Pain Management	Comm. About Medicines	Cleanliness of Hosp. Env.	Quietness of Hosp. Env.	Discharge Information	Care Transition Measures	Hospital Rating	Recommend the Hospital
Education (per level; 1=8th grade or less and 6=More than 4-year college degree)	1.43%	1.46%	2.37%	2.01%	2.68%	1.47%	3.43%	0.44%	-0.56%	2.50%	1.00%
Self-Rated Health (per level; 1=Excellent and 5=Poor)	4.88%	4.79%	6.28%	6.71%	4.99%	4.17%	4.32%	1.05%	6.35%	6.33%	5.56%
Response Percentile (per 1% of response percentile)	0.18%	0.18%	0.23%	0.17%	0.19%	0.07%	0.03%	0.04%	0.20%	0.17%	0.17%
Spanish	-0.71%	-2.57%	-1.42%	-4.91%	-2.87%	1.12%	-5.33%	-1.65%	0.02%	-11.94%	-9.31%
Chinese	7.03%	5.77%	7.68%	9.46%	4.90%	4.69%	-1.10%	-2.06%	12.97%	3.82%	3.62%
R/V/O (Russian, Vietnamese, Other)	1.05%	0.76%	2.39%	1.42%	-0.06%	2.52%	-6.42%	-0.47%	6.07%	1.40%	0.08%
English (REFERENCE)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Age 18-24	1.67%	0.77%	3.19%	5.31%	-9.05%	-0.09%	-4.23%	-3.86%	-8.68%	14.96%	12.42%
Age 25-34	-0.74%	-0.85%	-3.18%	1.84%	-12.02%	-0.90%	-5.88%	-4.28%	-12.10%	11.43%	7.77%
Age 35-44	-1.72%	-2.39%	-4.22%	0.69%	-13.57%	-0.16%	-4.68%	-4.43%	-12.28%	8.31%	5.06%
Age 45-54	-4.03%	-4.30%	-6.02%	-2.09%	-13.69%	-0.65%	-3.83%	-4.88%	-12.99%	3.88%	1.78%
Age 55-64	-4.93%	-5.14%	-6.88%	-3.71%	-12.51%	-0.27%	-2.28%	-5.16%	-12.04%	0.40%	-0.28%
Age 65-74	-5.41%	-5.76%	-6.46%	-4.99%	-10.42%	0.29%	-2.11%	-5.02%	-10.68%	-2.34%	-1.46%
Age 75-84	-3.15%	-3.49%	-3.65%	-2.89%	-5.55%	1.07%	-0.95%	-2.41%	-4.79%	-2.02%	-0.98%
Age 85+ (REFERENCE)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Male Medical	-1.01%	0.53%	-2.06%	-0.38%	-3.28%	-6.59%	0.29%	-2.35%	-0.87%	-0.38%	-2.08%
Male Surgical	-0.82%	-7.70%	-3.12%	-3.88%	-6.24%	-7.13%	-1.34%	-6.19%	-4.42%	-6.65%	-7.25%
Female Surgical	0.46%	-8.21%	-0.85%	-2.74%	-1.51%	0.03%	-2.93%	-5.08%	-2.95%	-5.65%	-4.98%
Female Maternity	-6.30%	-12.33%	-13.99%	-12.81%	-13.48%	-0.11%	-11.87%	-5.84%	-5.14%	-14.56%	-15.61%
Female Medical (REFERENCE)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Surgical Line * Age[‡]	-0.19%	0.33%	-0.35%	-0.50%	0.07%	-0.35%	0.13%	-0.22%	-0.01%	0.30%	0.21%
Maternity Line * Age[‡]	0.71%	1.09%	0.40%	1.18%	2.28%	0.09%	0.24%	0.92%	1.32%	2.66%	2.40%

Patient-Level Adjustments for Patient-Mix Variables (from Table 1) *(cont'd)*

$A_{EDUC} = 1.43\%$	$A_{18\text{-}24} = 1.67\%$	$A_{MAT} = -6.30\%$
$A_{HLTH} = 4.88\%$	$A_{25\text{-}34} = -0.74\%$	$A_{FeSURG} = 0.46\%$
	$A_{35\text{-}44} = -1.72\%$	$A_{MaSURG} = -0.82\%$
$A_{SPA} = -0.71\%$	$A_{45\text{-}54} = -4.03\%$	$A_{MaMED} = -1.01\%$
$A_{CHI} = 7.03\%$	$A_{55\text{-}64} = -4.93\%$	
$A_{OTH} = 1.05\%$	$A_{65\text{-}74} = -5.41\%$	$A_{MAT*AGE} = 0.71\%$
	$A_{75\text{-}84} = -3.15\%$	$A_{SURG*AGE} = -0.19\%$
		$A_{RPCT} = 0.18\%$

Using PMA Equation

PMA Equation:

$$PMA = A_{EDUC}*(H_{EDUC} - M_{EDUC}) + A_{HLTH}*(H_{HLTH} - M_{HLTH}) + A_{SPA}*(H_{SPA} - M_{SPA})$$
$$+ A_{CHI}*(H_{CHI} - M_{CHI}) + A_{OTH}*(H_{OTH} - M_{OTH}) + A_{RPCT}*(H_{RPCT} - M_{RPCT})$$
$$+ A_{1824}*(H_{1824} - M_{1824}) + A_{2534}*(H_{2534} - M_{2534}) + A_{3544}*(H_{3544} - M_{3544})$$
$$+ A_{4554}*(H_{4554} - M_{4554}) + A_{5564}*(H_{5564} - M_{5564}) + A_{6574}*(H_{6574} - M_{6574})$$
$$+ A_{7584}*(H_{7584} - M_{7584}) + A_{MAT}*(H_{MAT} - M_{MAT}) + A_{FeSURG}*(H_{FeSURG} - M_{FeSURG})$$
$$+ A_{MaSURG}*(H_{MaSURG} - M_{MaSURG}) + A_{MaMED}*(H_{MaMED} - M_{MaMED})$$
$$+ A_{MAT*AGE}*(H_{MAT*AGE} - M_{MAT*AGE}) + A_{SURG*AGE}*(H_{SURG*AGE} - M_{SURG*AGE})$$

Net Adjustment for Hospital A:

$$PMA = 0.0143*(3.14 - 3.754) + 0.0488*(3.43 - 2.779) + -0.0071*(0.29 - 0.048)$$
$$+ 0.0703*(0.14 - 0.004) + 0.0105*(0.14 - 0.019) + 0.180*(0.19 - 0.131)$$
$$+ 0.0167*(0.14 - 0.029) + -0.0074*(0.14 - 0.090) + -0.0172*(0.14 - 0.059)$$
$$+ -0.0403*(0.00 - 0.087) + -0.0493*(0.14 - 0.186) + -0.0541*(0.29 - 0.270)$$
$$+ -0.0315*(0.00 - 0.197) + -0.0630*(0.29 - 0.109) + 0.0046*(0.00 - 0.186)$$
$$+ -0.0082*(0.14 - 0.179) + -0.0101*(0.29 - 0.239)$$
$$+ 0.0071*(0.43 - 0.223) + -0.0019*(0.86 - 2.010) = \mathbf{0.045}$$

STEP 4: HCAHPS
Survey Mode Adjustment

Survey Mode Adjustment

- **Survey Mode Adjustment for Nurse Communication "Top-Box":**
  - Hospital A utilizes the **Telephone** mode

HCAHPS Composite or Item: "Top-Box"	**Telephone**	Mixed	Active IVR
Communication with Nurses ("Always")	**-4.2%**	-3.6%	-2.3%
Communication with Doctors ("Always")	-2.8%	-1.8%	0.3%
…	…	…	…
Hospital Rating ("9 or 10")	-2.0%	-3.0%	4.0%

STEP 5: Final Quarterly Adjusted Score and Four-Quarter Average

Quarterly HCAHPS Adjusted Score

The sum of the unadjusted composite score (Y), hospital PMA, and survey mode adjustment comprise a hospital's quarterly adjusted HCAHPS score (Y′)

Nurse Communication "Top-Box" for Hospital A:

Y′ = Y + PMA + Survey Mode Adjustment

    = 0.762 + 0.045 + -0.042

    = **0.765 (or 76.5%)**

Publicly Reported HCAHPS Scores and Quarterly Weights

Publicly reported HCAHPS scores are four-quarter hospital averages weighted proportionately to the number of eligible patients seen by the hospital in each of the four quarters

- A weight is calculated for each of the four quarters based on the number of eligible patients in the quarter out of the total eligible patients in the Reporting Period for a hospital:

Quarterly Weight = Quarterly Eligibles / Reporting Period Eligibles

Publicly Reported HCAHPS Scores and Quarterly Weights *(cont'd)*

For Hospital A for One Quarter:

- 80 eligible patients in the quarter out of 300 total eligible patients in the four-quarter Reporting Period would be a quarterly weight of:

  80 / 300 = 0.27

- Weighted quarterly score would be:

  (Y′) * (quarterly weight) = weighted quarterly score

  0.765 * 0.27 = 0.2066 **or** 20.66%

Publicly Reported HCAHPS Scores and Quarterly Weights *(cont'd)*

Nurse Communication For Hospital A:

- Adjusted "Top-Box" scores for Nurse Communication and Eligible patient count for 4 quarters of Reporting Period

Quarter	Eligible Patients	Weight	Unweighted Quarterly Score	Weighted Quarterly Score
1	70 / 300 =	23%	71.50%	16.45%
2	60 / 300 =	20%	78.80%	15.76%
3	90 / 300 =	30%	79.90%	23.97%
4	80 / 300 =	27%	76.50%	20.66%

- Weighted quarterly scores are summed to create final, rounded Publicly Reported HCAHPS Scores:

- 16.45% + 15.76% + 23.97% + 20.66% = 77%

Review of Score Calculation

- Identify eligible and completed surveys
- Calculate un-adjusted quarterly scores for each HCAHPS measure
- Calculate hospital-level patient-mix adjustment (PMA)
  – Requires calculation of means for all patient-mix variables and utilization of HCAHPS PMA Tables
- Application of survey mode adjustment
- Application of quarterly weights to quarterly scores
- Publicly reported HCAHPS scores = Four-quarter hospital averages weighted proportionately to the number of eligible patients seen by a hospital in each of the four quarters

Questions?

HCAHPS Update Training

Break

CMS
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Updated Patient-Mix Adjustment: Service Line and Gender

Reminder: HCAHPS Patient-Mix Adjustment

- CMS employs patient-mix adjustment to ensure fair comparisons across all hospitals participating in HCAHPS by adjusting for factors that are not under hospital control but which may affect HCAHPS scores

- Publicly reported patient-mix adjustments are patient-level, not hospital-level, adjustments
  - Hospital-level adjustments are a product of each patient-mix adjustment and the difference of each hospital's % of patients in the given patient-mix category from the corresponding national average

HCAHPS PMA Variables Prior to Q117

- Self-Rated Overall Health

- Education

- Language Spoken at Home

- Response Percentile

- Age (10-year categories)

- Service Line
  - Maternity
  - Surgical

- Service Line x Age Interaction

PMA Undergoes Continuous Refinement and Improvement

- Language spoken at home was originally 2 categories:
  - English
  - Non-English
- Since Q4 2013, language spoken at home includes 4 categories:
  - English
  - Spanish
  - Chinese
  - Other

Two Factors Drive the Importance of a PMA Adjuster

- How strongly the adjuster predicts CAHPS measures after controlling for other PMA variables
  - This is not changed for gender
- How much the adjuster varies across hospitals
  - This has increased for gender
- Gender is now a more important PMA variable than in previous CMS analysis

Adding VA Hospitals Increased Importance of Gender PMA

- VA hospitals have very high male proportions of patients

- Additional accounting for gender was needed for their comparisons with non-VA hospitals

- Does not require additional data collection
  - Gender already available

- Also improves PMA for <u>all</u> HCAHPS hospitals

Previous Adjustment for Service Line

- Since its national implementation in 2006, HCAHPS PMA differentiated between Medical, Surgical, and Maternity service lines
  - National distribution of service line rates:

	5th Percentile	Mean	95th Percentile
Medical	**26.0%**	**49.7%**	**100.0%**
Surgical	0.0%	37.6%	64.0%
Maternity	0.0%	12.7%	30.0%

Previous Adjustment for Maternity Service Line *(cont'd)*

- Top-Box patient-level adjustments ranged from -14.43% (Recommend) to +1.83% Cleanliness)

- 10 of 11 adjustments were negative, with a median of -11.85%

(Note: reference service line is Medical)

Previous Adjustment for Surgical Service Line *(cont'd)*

- Top-Box patient-level adjustments ranged from -8.69% (Doctor Communication) to +0.36% (Cleanliness)

- 8 of 11 adjustments were negative, with a median of -2.71%

(Note: reference service line is Medical)

Previous Maternity and Surgical Top-Box PMA Adjustments

HCAHPS Measure	Maternity Adjustment	Surgical Adjustment
Nurse Comm.	-6.40%	0.33%
Doctor Comm.	-13.17%	-8.69%
Staff Resp.	-13.48%	0.03%
Pain Mgmt.	-13.02%	-2.71%
RX Comm.	-11.85%	-1.39%
Cleanliness	1.83%	0.36%
Quietness	-11.59%	-1.80%
Discharge Info.	-5.49%	-4.39%
Care Transition	-5.02%	-3.15%
Rating	-13.01%	-5.71%
Recommend	-14.43%	-5.28%

March 2018

New Service Line Adjustments Uses 5 Categories Rather than 3:

	5th Percentile	Mean	95th Percentile
Female Medical	**8.9%**	**28.7%**	**63.2%**
Female Surgical	0.0%	18.6%	32.4%
Maternity	0.0%	12.7%	30.0%
Male Medical	3.5%	23.9%	48.1%
Male Surgical	0.0%	17.9%	27.7%

(Note: reference category is Female Medical)

General Adjustment Patterns for Service Line x Gender

- **Maternity** Top-Box patient-level adjustment continues to be most negative
  - Median patient-level adjustment across the 11 HCAHPS measures was **-12.33%** (relative to Female Medical)
- **Male Surgical** adjustments next most negative (median adjustment **-6.19**%)
- Median adjustment for **Female Surgical** was **-2.93%**, followed by **Male Medical** (median adjustment **-1.01%**)

Differences in Adjustment by Gender

- **Male Medical** adjustments generally more positive than Female Medical
  - Biggest difference with Cleanliness (-6.59%)
- **Male Surgical** adjustments generally more negative than Female Surgical
  - Biggest difference with Cleanliness (-7.16%)

HCAHPS Update Training

New Patient-Level Top-Box Adjustments for Service Line x Gender

HCAHPS Measure	Male Medical	Male Surgical	Female Surgical	Maternity
Nurse Comm.	-1.01%	-0.82%	0.46%	-6.30%
Doctor Comm.	0.53%	-7.70%	-8.21%	-12.33%
Staff Resp.	-2.06%	-3.12%	-0.85%	-13.99%
Pain Mgmt.	-0.38%	-3.88%	-2.74%	-12.81%
RX Comm.	-3.28%	-6.24%	-1.51%	-13.48%
Cleanliness	-6.59%	-7.13%	0.03%	-0.11%
Quietness	0.29%	-1.34%	-2.93%	-11.87%
Discharge Info.	-2.35%	-6.19%	-5.08%	-5.84%
Care Transition	-0.87%	-4.42%	-2.95%	-5.14%
Rating	-0.38%	-6.65%	-5.65%	-14.56%
Recommend	-2.08%	-7.25%	-4.98%	-15.61%

Effect of Implementing New PMA Model Small for Most Hospitals

- For 10 of 11 Top-Box measures (all but Cleanliness), the middle 98% of hospitals had adjustment changes between -1% and +1%

- Hospitals with unusually large or small proportions of female non-Maternity (Medical or Surgical) patients saw larger adjustments

Impact of New Service Line Categories Similar in Magnitude to Impact of New Language Categories

HCAHPS Measure	2014 Language Spoken at Home Update: STD DEV of Difference	2017 Service Line x Gender Update: STD DEV of Difference
Nurse Comm.	0.15	0.10
Doctor Comm.	0.16	0.05
Staff Resp.	0.21	0.20
Pain Mgmt.	0.32	0.07
RX Comm.	0.16	0.43
Cleanliness	0.15	**0.61**
Quietness	0.13	0.07
Discharge Info.	0.03	0.20
Care Transition	N/A	0.10
Rating	**0.63**	0.06
Recommend	0.38	0.20

March 2018

Timeline: Adjustment for Service Line x Gender

- New service line x gender adjuster variables went into effect beginning with 1Q17 score adjustments

- New adjustments will roll in one quarter at a time

- Detailed PMAs will continue to be posted on http://www.hcahpsonline.org

New Adjustments by Public Report

Public Report	Previous Adjustment	New Adjustment
October 2017	Q1 2016, Q2 2016 Q3 2016, Q4 2016	
December 2017	Q2 2016, Q3 2016, Q4 2016	Q1 2017
April 2018	Q3 2016, Q4 2016	Q1 2017, Q2 2017
July 2018	Q4 2016	Q1 2017, Q2 2017 Q3 2017
October 2018		Q1 2017, Q2 2017 Q3 2017, Q4 2017

Reminder: Update PMA Equation for Estimating HCAHPS Scores

Q4 2016 PMA Equation:

$$
\begin{aligned}
PMA = {} & A_{EDUC}*(H_{EDUC} - M_{EDUC}) + A_{HLTH}*(H_{HLTH} - M_{HLTH}) \\
& + A_{SPA}*(H_{SPA} - M_{SPA}) + A_{CHI}*(H_{CHI} - M_{CHI}) + A_{RVO}*(H_{RVO} - M_{RVO}) \\
& + A_{RPCT}*(H_{RPCT} - M_{RPCT}) + A_{1824}*(H_{1824} - M_{1824}) + A_{2534}*(H_{2534} - M_{2534}) \\
& + \ldots \\
& + \boxed{A_{MAT}*(H_{MAT} - M_{MAT}) + A_{SURG}*(H_{SURG} - M_{SURG})} \\
& + A_{MAT*AGE}*(H_{MAT*AGE} - M_{MAT*AGE}) + A_{SURG*AGE}*(H_{SURG*AGE} - M_{SURG*AGE})
\end{aligned}
$$

Q1 2017 PMA Equation:

$$
\begin{aligned}
PMA = {} & A_{EDUC}*(H_{EDUC} - M_{EDUC}) + A_{HLTH}*(H_{HLTH} - M_{HLTH}) \\
& + A_{SPA}*(H_{SPA} - M_{SPA}) + A_{CHI}*(H_{CHI} - M_{CHI}) + A_{RVO}*(H_{RVO} - M_{RVO}) \\
& + A_{RPCT}*(H_{RPCT} - M_{RPCT}) + A_{1824}*(H_{1824} - M_{1824}) + A_{2534}*(H_{2534} - M_{2534}) \\
& + \ldots \\
& + \boxed{\begin{aligned} & A_{MAT}*(H_{MAT} - M_{MAT}) + A_{FeSURG}*(H_{FeSURG} - M_{FeSURG}) \\ & + A_{MaSURG}*(H_{MaSURG} - M_{MaSURG}) + A_{MaMED}*(H_{MaMED} - M_{MaMED}) \end{aligned}} \\
& + A_{MAT*AGE}*(H_{MAT*AGE} - M_{MAT*AGE}) + A_{SURG*AGE}*(H_{SURG*AGE} - M_{SURG*AGE})
\end{aligned}
$$

Questions?

Next Steps

- Hospitals/Survey vendors:
  - Update QAP
  - Submit HCAHPS Attestation Statement
    - Due by April 6, 2018
    - Monitor the HCAHPS Web site for this document
  - Submit HCAHPS Survey materials
    - Due by April 6, 2018
  - Monitor the HCAHPS Web site:

    http://www.hcahpsonline.org

More Information and Resources

- Forms, background information, reports, and HCAHPS *Executive Insight*:

    http://www.hcahpsonline.org

- Submitting HCAHPS data:

    https://www.qualitynet.org

- Publicly reported HCAHPS results:

    https://www.medicare.gov/hospitalcompare

- HCAHPS results DDB:

    https://Data.Medicare.gov

Contact Us

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