



# the Ascom Report

Extending the reach of actionable  
insights for healthcare leaders.

*A quarterly report for hospital leaders, focused on breaking down silos, integrating systems, orchestrating workflows and enabling caregivers.*

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## HIGHLIGHTS

**The majority of patients are satisfied with their hospital experiences.** Seventy-two percent of HCAHPS respondents would “definitely” recommend their hospital to others, and on a scale of 0-10, 73 percent rated their satisfaction with their hospital experience a nine or ten.

**Because overall patient satisfaction is high, so are the thresholds required to earn stars.**

For most HCAHPS metrics, patient satisfaction equivalent to 85 percent or more is required to achieve just a mid-level (3 out of 5) star rating.

**Star Ratings are slow to change:** In our year-over-year comparison of star ratings across all hospitals, 61 percent remained unchanged. Only 18 percent of ratings improved over a 12-month period.

**Consistency is key to improvement.** As our study shows, improving patient satisfaction is less about eliminating bad experiences than it is about consistently delivering great ones across all HCAHPS domains.

**Clinical communications drive consistency.** It takes interoperable communications technology that seamlessly, consistently and accurately delivers timely information across the patient journey. In addition, some HCAHPS domains can be impacted quickly by solutions such as the Ascom Telligent Patient Response System and the Ascom Myco™ smartphone.

## President’s Message

Welcome to The Ascom Report, our new publication focused on helping hospitals improve clinical care and communications. The Ascom Report will cover a range of relevant topics at the intersection of technology and clinical care. We’ll draw on a range of sources—our proprietary databases and research, interviews with industry leaders, and the experience gathered from serving more than 1,700 hospitals in the US and Canada.

In this first issue, we’ll look at an issue that’s top of mind with many hospital leaders today – the HCAHPS patient satisfaction scores. Hospitals that participate in the Value-Based Purchasing program are working hard to capture their share of the \$1.9B incentive available in FY2019 – and to avoid performance penalties. As 25% of the Total Performance Score that drives these payments and penalties, HCAHPS has never been more relevant to the bottom line. Because of their visibility and the industry trend toward consumerism, many hospital leaders today are focused on the HCAHPS Star Ratings. This issue of The Ascom Report taps into Ascom’s comprehensive HCAHPS database to more closely examine these ratings and better understand:

- The role that technology might play in positively impacting performance
- The likelihood of achieving year-over-year improvement
- How HCAHPS Star Ratings are calculated
- How these ratings change over time
- What it takes to earn additional stars

For those readers who want to dig deeper into the data or have questions, please email us at [AscomMarketing@Ascom.com](mailto:AscomMarketing@Ascom.com). We hope you find this information useful. Please contact your Ascom Representative if you want to discuss this data or our relevant technology solutions further.

Warmest Regards,  
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## HCAHPS Overview

### Participants

4,909 hospitals participated in the most recent HCAHPS reporting period. Pediatric hospitals, psychiatric hospitals and other specialty hospitals are excluded. 3,529 hospitals qualified for star ratings and are included in this study. Of these, there are 3,367 hospitals for which at least two years of star ratings are available. These are included in our year-over-year comparisons.

### How Data is Collected

Hospitals collect ongoing inpatient satisfaction data by administering a standardized survey to qualifying, discharged patients. The results are submitted quarterly to the Centers for Medicare & Medicaid Services (CMS) which cleans, adjusts, tabulates and ultimately reports the data to the public.

### Types of HCAHPS Measures

Global Measures capture the patient’s overall rating of their hospital experience and their likelihood to recommend the hospital to others. Composite Measures are calculated based on combining patients’ responses to multiple questions covering nurse communication, doctor communication, staff responsiveness, communication about medicines, care transition and discharge information. Individual Measures are single questions used to measure room cleanliness and quietness at night.

### Star Ratings: Purpose & Methodology

Star ratings are intended to help consumers make informed choices about their care, putting more decision-making and purchasing power in their hands. CMS begins by tabulating the percentage of respondents who selected each answer to each HCAHPS question. Then, for each question, CMS converts these percentages to a linear mean score, which converts a hospital’s performance for each question to a single score between zero and 100. Finally, after some adjustment linear mean scores are clustered into five star categories for each HCAHPS domain.

## Average Patient Experience Rating by HCAHPS Metric

Domain	What is measured	Bottom-Box Rating		Top-Box Rating	
		Sometimes/Never	Usually	Always	Always
Cleanliness	Room and bathroom were clean	8%	17%	75%	
Communication about Medicines	Staff explained medicine before giving it to patient	17%	18%	66%	
Doctor Communication	Doctor communicated well	5%	14%	81%	
Nurse Communication	Nurse communicated well	5%	15%	80%	
Quietness	Area around patient’s room was quiet at night	10%	29%	61%	
Staff Responsiveness	Patient received help as soon as they wanted	9%	22%	70%	
		Disagree/Strongly Disagree	Agree	Strongly Agree	
Care Transition	Patient understood care when leaving hospital	5%	42%	53%	
		No		Yes	
Discharge Information	Patient was given information about what to do during their recovery at home	13%		87%	
		0 to 6	7 to 8	9 to 10	
Overall Hospital Rating	Overall rating of patient experience from 0 (lowest) to 10 (highest)	8%	20%	73%	
		No/Definitely No	Probably	Definitely	
Willingness to Recommend	Patient likelihood of recommending the hospital to others	5%	23%	72%	

Table 1

### US Hospital Patient Satisfaction

Before the star ratings launched in 2015, the most common way of reporting HCAHPS results was the “top-box” measure, the percent of respondents who indicated the highest possible satisfaction level for each question. **Table 1** shows an average of the top, middle and bottom-box percentages for each HCAHPS domain. For example, across the entire HCAHPS sample, eight percent of respondents indicated their room/bathroom was sometimes/never clean, 17 percent said it was usually clean, and 75 percent said it was always clean.

The ratings in **Table 1** indicate that most hospital patients are very satisfied with their experience. On a scale of zero to ten, 73 percent of respondents rated their overall satisfaction either nine or ten. And 72 percent of respondents said they would definitely recommend their hospital, with another 23 percent saying they would probably recommend it. Even the lowest-scoring attributes, quietness and care transition, had top-box scores over 50 percent.

### Current Hospital Star Ratings

While the top-box scores indicate high patient satisfaction, the star ratings portray a somewhat different story. **Table 2** shows the percentage of hospitals that have earned one through five stars for each of the HCAHPS domains. Despite most hospitals achieving top-box scores in the table above, most hospitals reside in the middle of the star distribution, with three or four stars.

### Why Star Ratings Don’t Follow Top-Box Results

The problem is that most hospital patients are very satisfied. Most hospitals have high satisfaction scores, which makes it difficult for any five-star rating system to differentiate hospitals when their performance is clustered so close together. High standards also come into play. HCAHPS aims higher than many of the more familiar consumer star ratings (49 percent of Yelp ratings are five stars, for example). Given the importance of what hospitals do, high standards should apply.

### Percent of Hospitals by Star Rating and Measure

HCAHPS Domain	Percent of Hospitals With:					Total	Mean
	1 Star	2 Stars	3 Stars	4 Stars	5 Stars		
<b>Composite Measures</b>							
Care Transition	5%	22%	31%	37%	4%	100%	3.14
Communication about Medicines	3%	21%	41%	25%	10%	100%	3.18
Discharge Information	3%	16%	44%	28%	9%	100%	3.23
Doctor Communication	3%	15%	32%	40%	10%	100%	3.39
Nurse Communication	3%	17%	48%	24%	9%	100%	3.20
Staff Responsiveness	3%	18%	37%	29%	14%	100%	3.32
<b>Individual Measures</b>							
Cleanliness	8%	27%	39%	19%	7%	100%	2.91
Quietness	13%	22%	32%	23%	10%	100%	2.95
<b>Global Measures</b>							
Overall Hospital Rating	2%	9%	38%	42%	10%	100%	3.50
Willingness to Recommend	5%	19%	46%	25%	5%	100%	3.05

Table 2

### Star Rating Thresholds

HCAHPS Domain	Linear Mean Score Cutoff to Achieve:			
	2 Stars	3 Stars	4 Stars	5 Stars
<b>Composite Measures</b>				
Care Transition	78	81	83	87
Communication about Medicines	72	77	81	85
Discharge Instructions	80	85	89	92
Doctor Communication	87	90	92	95
Nurse Communication	86	90	93	95
Staff Responsiveness	78	83	87	91
<b>Individual Measures</b>				
Cleanliness	83	87	91	94
Quietness	77	81	85	89
<b>Global Measures</b>				
Overall Rating	81	85	89	93
Willingness to Recommend	81	86	91	95

Table 3

### Hospitals' Year-Over-Year Change in Star Ratings

HCAHPS Domain	Percent of Hospitals with Star Ratings That:		
	Decreased	Didn't Change	Increased
<b>Composite Measures</b>			
Care Transition	24%	60%	16%
Communication about Medicines	12%	54%	34%
Discharge Instructions	33%	56%	10%
Doctor Communication	13%	56%	31%
Nurse Communication	42%	54%	5%
Staff Responsiveness	10%	64%	26%
<b>Individual Measures</b>			
Cleanliness	16%	60%	24%
Quietness	24%	63%	13%
<b>Global Measures</b>			
Overall Hospital Rating	10%	72%	13%
Willingness to Recommend	25%	66%	18%

Table 4

The HCAHPS star rating methodology results in high cutoffs for each star level and domain. For most HCAHPS domains, it takes a score of at least 85 out of 100 just to achieve a middle of the road, three-star rating. **Table 3** shows the linear mean scores (i.e. the percentage results for each question converted to a score from zero to 100) required to achieve each star level for each domain. For example, for the Care Transition domain it took a linear mean score of 78 out of 100 to achieve two stars; 81 to achieve three stars, 83 to achieve 4 stars, and 87 to achieve five stars.

### Year-Over-Year Changes in Star Ratings

Given the compact distribution of linear mean scores between two stars and five, it would seem simple and straightforward to improve star ratings. For example, in the nurse communication results, it only took a two-point increase in linear mean score, from 93 to 95, for a hospital to improve from four stars to five. Unfortunately, it's not that easy, as seen in **Table 4**. Most star ratings – 61 percent overall – didn't change at all over a 12-month period.

There are two main reasons that most star ratings don't change year-over-year. First, the quarterly HCAHPS results include four quarters' worth of survey data, it can take a while for improvements to show up in the ratings. The most recently available HCAHPS dataset (made public as of March 31, 2019) includes surveys received as of 9/30/2017, 12/31/2017, 3/31/2018 and 6/30/2018.

As a result, a hospital that achieves a significant improvement in patient satisfaction in its Q2 2018 surveys can still see its star ratings held back by its performance in the previous three quarters.

The second reason is the difficulty of the task at hand. As shown in the next section, it's not just a matter of providing excellent patient care – which is challenging enough – it's also a matter of providing it at the highest level of consistency.

## Consistency is the Key to Improving Star Ratings

Consistency is important at two levels. The first is across the HCAHPS domains. After all, while HCAHPS monitors several different individual domains, they all add up to a total experience across each individual patient’s journey. In fact, our correlation analysis between the linear mean scores for all HCAHPS domains found strong, positive correlations between nearly every combination of domains.

For all but a few exceptions, a patient’s satisfaction with one domain was strongly related to their satisfaction with all the others. If satisfaction for one domain was high, then satisfaction with all domains tended to be high and vice versa. Moreover, if satisfaction was consistently high across all domains, then the patient’s overall satisfaction with the hospital, and their likelihood to recommend the hospital tended to be high as well.

There are many implications of this finding but one that stands out, as discussed in the next section, is the importance of interoperable communications technology that seamlessly, consistently and accurately delivers timely information across the patient journey. The second important level of consistency is within the individual domains. As found in the comparison of bottom, middle and top-box scores at the beginning of this report, most patients’ HCAHPS responses indicate consistently positive experiences (represented by the top-box scores) across all HCAHPS domains.

A much smaller percentage of respondents indicate experiences that should have happened but either didn’t, or only happened occasionally (represented by the bottom-box scores).

As shown in **Table 5** – which focuses only on the hospitals that were able to earn one or more additional stars over a one year period – hospitals’ star ratings were much more likely to improve because of an increase in their top-box score, instead of due to a decrease in their bottom-box score.

## Changes to Top and Bottom Box Scores for hospitals that improved their HCAHPS star ratings

HCAHPS Domain	Average Decrease in Bottom Box Score	Average Increase in Top Box Score
<b>Composite Measures</b>		
Care Transition	-1.2%	4.5%
Communication about Medicines	-3.1%	3.8%
Discharge Information	-3.4%	3.4%
Doctor Communication	-5.1%	1.5%
Nurse Communication	-1.8%	4.8%
Staff Responsiveness	-1.3%	4.7%
<b>Individual Measures</b>		
Cleanliness	-2.5%	4.3%
Quietness	-1.7%	4.3%
<b>Global Measures</b>		
Overall Hospital Rating	-1.4%	3.0%

**Table 5**

For example, among hospitals that saw their Nurse Communication rating increase by one or more stars, their average top box score (percent of respondents who said that nurses Always communicated well) increased by 4.8 percent, while their average bottom box score (percent who said nurses Never or Sometimes communicated well) decreased by 1.8 percent. The message is clear. More often than not, earning an additional star was the result of increasing the percentage of patients who said that their hospital delivered services at the highest level of consistency.

## Delivering Consistently Great Experiences

Consistent patient experiences are only possible if caregivers have access to interoperable communications technology that seamlessly, consistently and accurately delivers timely information across the patient journey, while at the same time helping them to efficiently manage their workflows.

The Ascom Healthcare Platform breaks down silos and bridges clinical information gaps by seamlessly connecting patients, caregivers, medical devices and applications. The platform is interoperable with existing hospital information systems and devices,

and is flexible, scalable and customizable enough to meet the demands of clinical care.

While the Ascom Healthcare Platform provides an integrated approach to address all HCAHPS domains, there are several ways that it can support hospitals that want to focus on individual domains. For ideas, we reached out to several Ascom solutions experts and sales executives to get their perspectives. Following are highlights of their thoughts regarding some of the measures discussed above.

### Nurse Communication

A major issue here is the amount of time that nurses now spend away from the patient recording medical data, or out on floor tracking down other caregivers. Ascom’s Telligence Patient Response System enables caregivers to register data to the EHR/EMR from the bedside. It also enables a direct connection to colleagues through a bedside station, and facilitates requests, updates and alerts direct from the patient room.

## Integrate. Orchestrate. Enable.



### Staff Responsiveness

The Ascom Myco™ smartphones paired with a Secure Workflow Collaboration App (e.g. MHCURE™ etc.) enable patient requests to be sent directly to the responsible staff member without added time/steps. Purpose-built for healthcare, the smartphones enable voice calls and secure text messaging to support clinician communication and tele-tech workflows. The Ascom Myco enables role-based assignment to ensure alarms and requests are sent to the right caregiver. Reducing unnecessary interruptions can improve response times to actionable tasks. Task management not only logs patient requests, but also completion of the requested service, allowing better correlation between HCAHPS scores and delivery of care.

### Quietness

Instead of disruptive general alerts, patient calls and other messages can go directly and discreetly to caregivers' Ascom mobile devices. Configurable alarm filtering, custom escalation by alarm type and delays mean only actionable alarms are sent solely to the staff needing the information. As a result, caregivers gain more time for face-to-face care, walking distances are reduced and patients are less isolated and free to communicate person-to-person with their assigned caregivers.

### Communication About Medication

With the Telligence Patient Response System and Ascom orchestration software, hospitals can implement a “Meds-to-Beds” program that generates notifications to the pharmacy before discharge, enabling patients to fill prescriptions before leaving the hospital. This results in better, more-informed care coordination, improves overall clinical care and reduces the chance that patients will be discharged before they are ready.

### We're Here to Help

Ascom is a global leader in clinical communications, with a focus on mobile workflows and closing digital information gaps. Our solutions experts will listen to your needs and help you evaluate which components of the Ascom Healthcare Platform are most appropriate to help improve patient care and satisfaction. To learn more, contact [AscomMarketing@Ascom.com](mailto:AscomMarketing@Ascom.com).

<sup>1</sup>The data presented in this report are from the most recent publicly available release at the time of publication. This release, made available on March 31, 2019, covers July 1, 2017 through June 30, 2018. To measure year-over-year change, this most recent data is compared to HCAHPS data for the period July 1, 2016 through June 30, 2017.