



Tomorrow's Doctors, Tomorrow's Cures®

# Digging deeper into your Overall Hospital Star Rating with the AAMC's Hospital Compare Benchmark Report

---

Learn

---

Serve

---

Lead

Last Updated: April 2021



Association of  
American Medical Colleges

# What is CMS's Overall Hospital Star Rating?

- CMS assigns each hospital a rating from **one to five stars**, based on aggregating five domains called measure groups
  - Four measure groups weighted 22% each  
**Readmission, Mortality, Safety of Care, Patient Experience**
  - One measure group weighted 12%  
**Timely and Effective Care** (previously three separate groups: Effectiveness, Medical Imaging, and Timeliness)
- CMS updated the Overall Hospital Rating in April 2021, revised from the previous January 2020 release

# What is my Overall Hospital Star Rating?

- Your rating and drill down details are in Section 2 of the Summary tab of the AAMC Hospital Compare Benchmark Report

## 2 UPDATED Overall Hospital Star Rating

Your Star Rating

3 Stars



Your Peer Group\*

5 Measure Groups

\*Your peer group is based on the number of measure groups in which you have at least three measures reported. In order to receive an Overall Star Rating, you need at least three measures in each of at least three measure groups, with one of those groups being the Mortality or Safety of Care group. Therefore, your peer group can be 3 Measure Groups, 4 Measure Groups, or 5 Measure Groups.

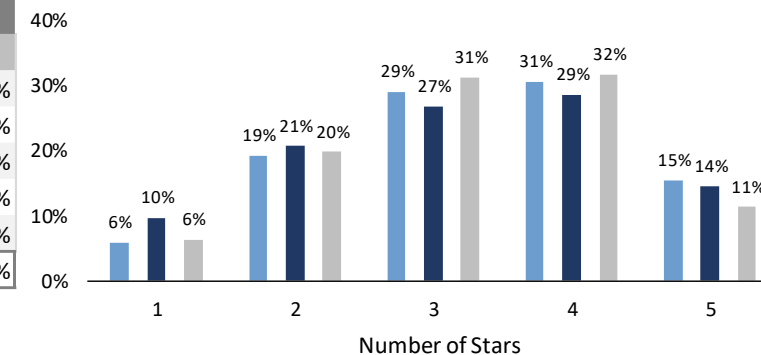
### Peer Group, COTH, and National Star Ratings Distribution

NEW FEATURE

Number of Stars	Your Peer Group (5 Measure Groups)		COTH Hospitals		All Hospitals	
	Count	Percent*	Count	Percent*	Count	Percent*
1 Star	144	6%	22	10%	228	6%
2 Stars	474	19%	47	21%	710	20%
3 Stars	713	29%	61	27%	1,119	31%
4 Stars	752	31%	65	29%	1,136	32%
5 Stars	381	15%	33	14%	407	11%
All Hospitals	2,464	100%	228	100%	3,600	100%

\*includes the percent of all hospitals in the cohort (e.g. % of all COTH)

Peer Group, COTH, and National Star Ratings Distribution:  
(Last updated April 2021)



# What factors are contributing to my Star Rating?

Your peer group

Your performance by measure group

CMS's assigned weights for each measure group

Your performance on each of 50+ measures

Weights for each measure

# What factors are contributing to my Star Rating?

Your peer group

Your performance by measure group

CMS's assigned weights for each measure group

Your performance on each of 50+ measures

Weights for each measure

# Your peer group

- Your Star rating is based on which peer group you are in



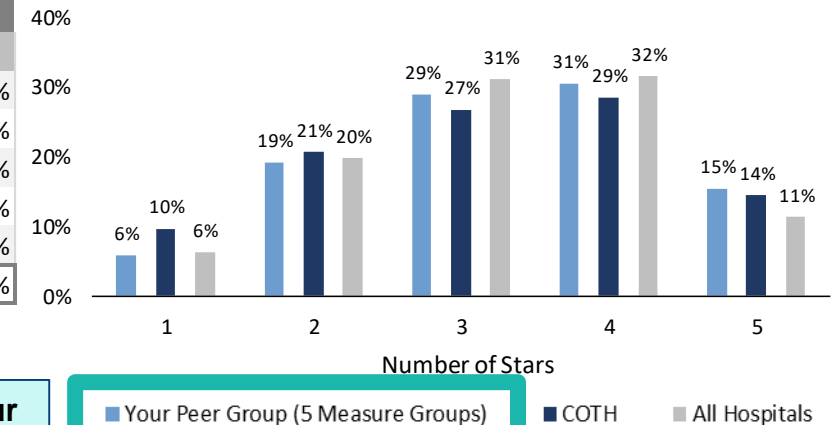
\*Your peer group is based on the number of measure groups in which you have at least three measures reported. In order to receive an Overall Star Rating, you need at least three measures in each of at least three measure groups, with one of those groups being the Mortality or Safety of Care group. Therefore, your peer group can be 3 Measure Groups, 4 Measure Groups, or 5 Measure Groups.

## Peer Group, COTH, and National Star Ratings Distribution

Number of Stars	Your Peer Group (5 Measure Groups)		COTH Hospitals		All Hospitals	
	Count	Percent*	Count	Percent*	Count	Percent*
1 Star	144	6%	22	10%	228	6%
2 Stars	474	19%	47	21%	710	20%
3 Stars	713	29%	61	27%	1,119	31%
4 Stars	752	31%	65	29%	1,136	32%
5 Stars	381	15%	33	14%	407	11%
All Hospitals	2,464	100%	228	100%	3,600	100%

\*includes the percent of all hospitals in the cohort (e.g. % of all COTH)

Peer Group, COTH, and National Star Ratings Distribution:  
(Last updated April 2021)



The revised Overall Hospital Star Rating methodology applies a peer grouping methodology based on your number of measure groups with at least three reported measures, grouping hospitals with the same number of such measure groups. In order to receive a Star Rating, you need at least three measures in each of at least three measure groups, with one of those groups being the Mortality or Safety of Care group. Therefore, your peer group can be 3 Measure Groups, 4 Measure Groups, or 5 Measure Groups.

# What factors are contributing to my Star Rating?

Your peer group

Your performance by measure group

CMS's assigned weights for each measure group

Your performance on each of 50+ measures

Weights for each measure

# Your performance by measure group

- Your performance by Measure Group: count of measures in each of three groups that are **better**, no different, and/or **worse** than the national average



Your performance by Measure Group

Measure Group*	Measure Group Weight as a % of Overall Star Rating	Used to Calculate Your Peer Group	Percent of Your Reported Measures That Are Better, No Different, and/or Worse than the National Average ■ = % better, ■ = % no different, ■ = % worse	Section of the Benchmarks tab (for more details)
Readmission	22%	Yes	9% better, 45% no different, 45% worse	Section 3
Mortality	22%	Yes	100% no different	Section 3
Safety of Care	22%	Yes	13% better, 75% no different, 13% worse	Section 3 and 4
Patient Experience**	22%	Yes		Section 5
Timely and Effective Care**	12%	Yes		Sections 6 and 7

\*In the April 2021 update, CMS did not provide overall ratings for each measure group relative to the national average; they instead provided counts of measures in each measure group that were better, no different, or worse than the national average.

\*\*CMS did not provide counts of measures that were better, no different, or worse than the national average for the Patient Experience or Timely and Effective Care measure group.

**In the April 2021 update, CMS reported performance by measure group differently than in January 2020. Instead of reporting a rating for each measure group of “better than,” “no different than,” or “worse than” the national average, they instead reported the number of measures within only three measure groups (Readmission, Mortality, and Safety of Care) that were “better than,” “no different than,” or “worse than” the national average. This reporting change is reflected in the above bar chart, which shows the percent of your reported measures that are better (green bar), no different (gray bar), and/or worse (red bar) than the national average.**



# What factors are contributing to my Star Rating?

Your peer group

Your performance by measure group

**CMS's assigned weights for each measure group**

Your performance on each of 50+ measures

Weights for each measure

# CMS's assigned weights for each measure group

- Impact of a measure group on your Star Rating =  
 (Your Performance) × (Measure Group Weight)



Your performance by Measure Group

Measure Group*	Measure Group Weight as a % of Overall Star Rating	Used to Calculate Your Peer Group?	Percent of Your Reported Measures That Are Better, No Different, and/or Worse than the National Average			Section of the Benchmarks tab (for more details)
			■ = % better	■ = % no different	■ = % worse	
Readmission	22%	Yes	9%	45%	45%	Section 3
Mortality	22%	Yes		100%		Section 3
Safety of Care	22%	Yes	13%	75%	13%	Section 3 and 4
Patient Experience**	22%	Yes				Section 5
Timely and Effective Care**	12%	Yes				Sections 6 and 7

\*In the April 2021 update, CMS did not provide overall ratings for each measure group relative to the national average; they instead provided counts of measures in each measure group that were better, no different, or worse than the national average.

\*\*CMS did not provide counts of measures that were better, no different, or worse than the national average for the Patient Experience or Timely and Effective Care measure group.

# What factors are contributing to my Star Rating?

Your peer group

Your performance by measure group

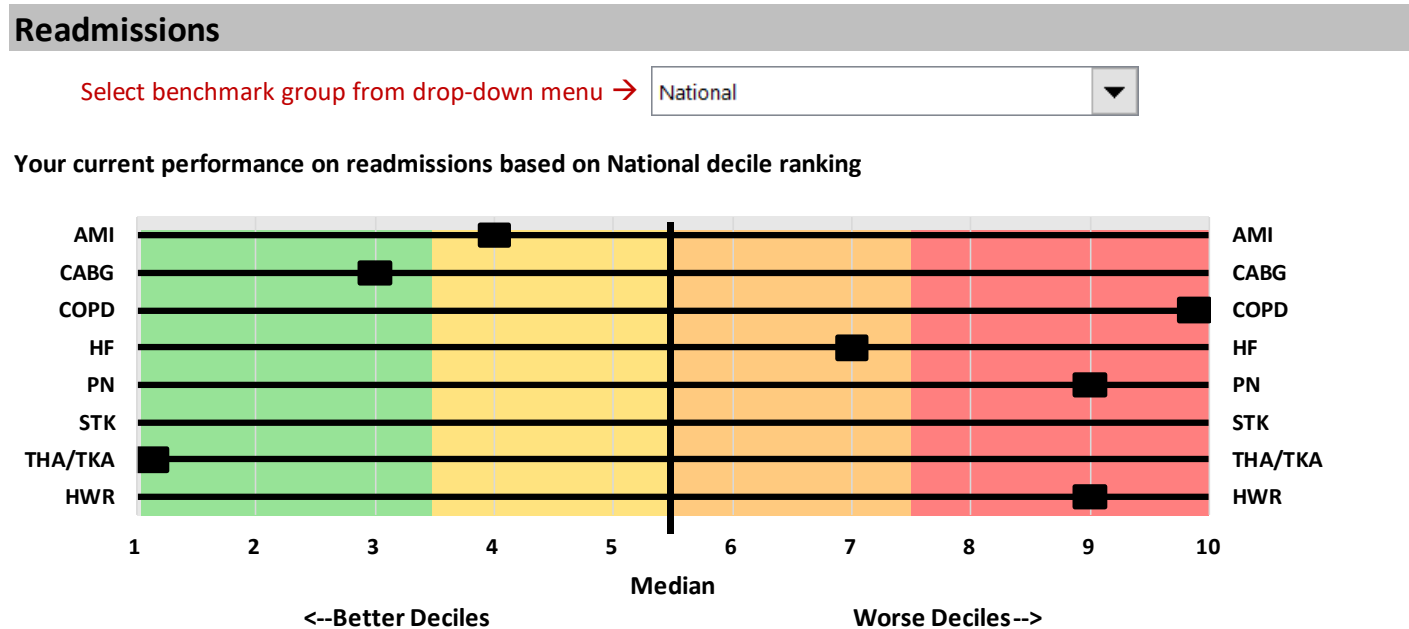
CMS's assigned weights for each measure group

**Your performance on each of 50+ measures**

Weights for each measure

# Your performance on each of 50+ measures

- Each measure group
  - ✓ contains up to 15 measures
  - ✓ scored by standardizing, comparing your rate to national mean
- The Benchmarks tab of the AAMC Hospital Compare Benchmark Report displays your performance on each measure



# Your performance on each of 50+ measures

- Summary tab identifies your 10 best and worst measures of these 50+ measures for the current and previous Star Rating period and outlines the percent of hospitals that your hospital outperforms on each

		Your Performance Rank Percent of hospitals that your hospital outperforms (0 to 99, higher is better) ■ = best 3 deciles, ■ = middle 4 deciles, ■ = worst 3 deciles	
		Your national rank in the <b>Apr 2021</b> Star Rating (out of 99)	Your national rank in the <b>Jan 2020</b> Star Rating (out of 99)
<b>Your worst performing measures*</b>			
Hospital Visits after OP Chemotherapy	Readmission	4	NA
HCAHPS: Responsiveness of Staff	Experience	6	7
SSI - Colon Surgery	Safety	9	20
COPD Readmission	Readmission	9	15
HCAHPS: Quietness of Hospital	Experience	11	9
HWR Readmission	Readmission	14	15
HCAHPS: Communication w/Doctors	Experience	17	13
HCAHPS: Understood Care after Discharge	Experience	18	28
<b>Your best performing measures*</b>			
		Your national rank in the <b>Apr 2021</b> Star Rating (out of 99)	Your national rank in the <b>Jan 2020</b> Star Rating (out of 99)
THA/TKA Readmission	Readmission	97	99
THA/TKA Complications	Safety	95	82
Hospital Visits after OP Surgery	Readmission	95	NA
CABG Mortality	Mortality	93	89
COPD Mortality	Mortality	89	61
ED Visits after OP Chemotherapy	Readmission	82	NA
CABG Readmission	Readmission	73	67
HF Mortality	Mortality	70	86

# What factors are contributing to my Star Rating?

Your peer group

Your performance by measure group

CMS's assigned weights for each measure group

Your performance on each of 50+ measures

**Weights for each measure**

# Weights for each measure

- Each measure has a weight (measure loading) within each measure group, determined by CMS. April 2021 methodology uses equal weights for all measures within a measure group, proportional to the number of measures a hospital reports within the group
- Summary tab includes a reference table of weights for the current and previous Star Rating period
- The table assumes all measures reported. If you are missing measures, CMS will equally up-weight the other measures within its measure group

Measure loading for all hospitals as a percent of all measures in a group: April 2021 Methodology vs. January 2020 Methodology

Measure	Measure Group	Measure loading as a % of all measures in a group*		Percentage point change in measure loading compared to Jan 2020
		Apr 2021	Jan 2020	
AMI Mortality	Mortality	14%	13%	1%
CABG Mortality	Mortality	14%	8%	6%
COPD Mortality	Mortality	14%	19%	-4%
HF Mortality	Mortality	14%	20%	-5%
PN Mortality	Mortality	14%	18%	-3%
PSI-4	Mortality	14%	9%	5%
Stroke Mortality	Mortality	14%	13%	1%
CAUTI	Safety	13%	0%	12%
Cdiff	Safety	13%	4%	9%
CLABSI	Safety	13%	1%	11%
MRSA Bacteremia	Safety	13%	4%	8%

# CMS-assigned weights for each measure

- What are the weights for my worst-performing measures? What about for my best-performing measures?

Your worst performing measures*	Measure Group	Your Performance Rank	
		Your national rank in the <b>Apr 2021</b> Star Rating (out of 99)	Your national rank in the <b>Jan 2020</b> Star Rating (out of 99)
Hospital Visits after OP Chemotherapy	Readmission	4	NA
HCAHPS: Responsiveness of Staff	Experience	6	7
SSI - Colon Surgery	Safety	9	20
COPD Readmission	Readmission	9	15
HCAHPS: Quietness of Hospital	Experience	11	9
HWR Readmission	Readmission	14	15
HCAHPS: Communication w/Doctors	Experience	17	13
HCAHPS: Understood Care after Discharge	Experience	18	28

Measure	Measure Group	Measure loading as a % of all measures in a group*		Percentage point change in measure loading compared to Jan 2020
		Apr 2021	Jan 2020	
AMI Mortality	Mortality	14%	13%	1%
CABG Mortality	Mortality	14%	8%	6%
COPD Mortality	Mortality	14%	19%	-4%
HF Mortality	Mortality	14%	20%	-5%
PN Mortality	Mortality	14%	18%	-3%
PSI-4	Mortality	14%	9%	5%
Stroke Mortality	Mortality	14%	13%	1%
CAUTI	Safety	13%	0%	12%
Cdiff	Safety	13%	4%	9%
CLABSI	Safety	13%	1%	11%
MRSA Bacteremia	Safety	13%	4%	8%
PSI-90	Safety	13%	64%	-52%
SSI - Abdominal Hysterectomy	Safety	13%	6%	7%
SSI - Colon Surgery	Safety	13%	6%	7%
UTI/TKA Complications	Safety	13%	15%	-2%



# Why did my Star Rating change?

Three common reasons:

- 1) CMS added new measures or removed measures from the Overall Hospital Star Rating
- 2) Measure loadings changed
- 3) Your measure performance changed

# Why did my Star Rating change?

- CMS added new measures in April 2021
- Performance on those measures included in the Summary tab

Newly added measures to Overall Star Rating**	Measure Group	Your national rank in the <b>Apr 2021</b> Star Rating (out of 99)
ED Visits after OP Chemotherapy	Readmission	82
Hospital Visits after OP Chemotherapy	Readmission	4
Hospital Visits after OP Surgery	Readmission	95

- Are they a new worst- or best-performing measure?

Your worst performing measures*	Measure Group	Your national rank in the <b>Apr 2021</b> Star Rating (out of 99)	Your national rank in the <b>Jan 2020</b> Star Rating (out of 99)
Hospital Visits after OP Chemotherapy	Readmission	4	NA
HCAHPS: Responsiveness of Staff	Experience	6	7
SSI - Colon Surgery	Safety	9	20
COPD Readmission	Readmission	9	15
HCAHPS: Quietness of Hospital	Experience	11	9
HWR Readmission	Readmission	14	15
HCAHPS: Communication w/Doctors	Experience	17	13
HCAHPS: Understood Care after Discharge	Experience	18	28

# Why did my Star Rating change?

- The Star Rating methodology changed in April 2021 to equal weights for measures within a measure group, causing large weight shifts for some measures
- If you did poorly on those highly-swinging measures, you might see it reflected in your Star Rating compared to January 2020

Measure loading for all hospitals as a percent of all measures in a group: April 2021 Methodology vs. January 2020 Methodology

Measure	Measure Group	Measure loading as a % of all measures in a group*		Percentage point change in measure loading compared to Jan 2020
		Apr 2021	Jan 2020	
AMI Mortality	Mortality	14%	13%	1%
CABG Mortality	Mortality	14%	8%	6%
COPD Mortality	Mortality	14%	19%	-4%
HF Mortality	Mortality	14%	20%	-5%
PN Mortality	Mortality	14%	18%	-3%
PSI-4	Mortality	14%	9%	5%
Stroke Mortality	Mortality	14%	13%	1%
CAUTI	Safety	13%	0%	12%
Cdiff	Safety	13%	4%	9%
CLABSI	Safety	13%	1%	11%
MRSA Bacteremia	Safety	13%	4%	8%
PSI-90	Safety	13%	64%	-52%

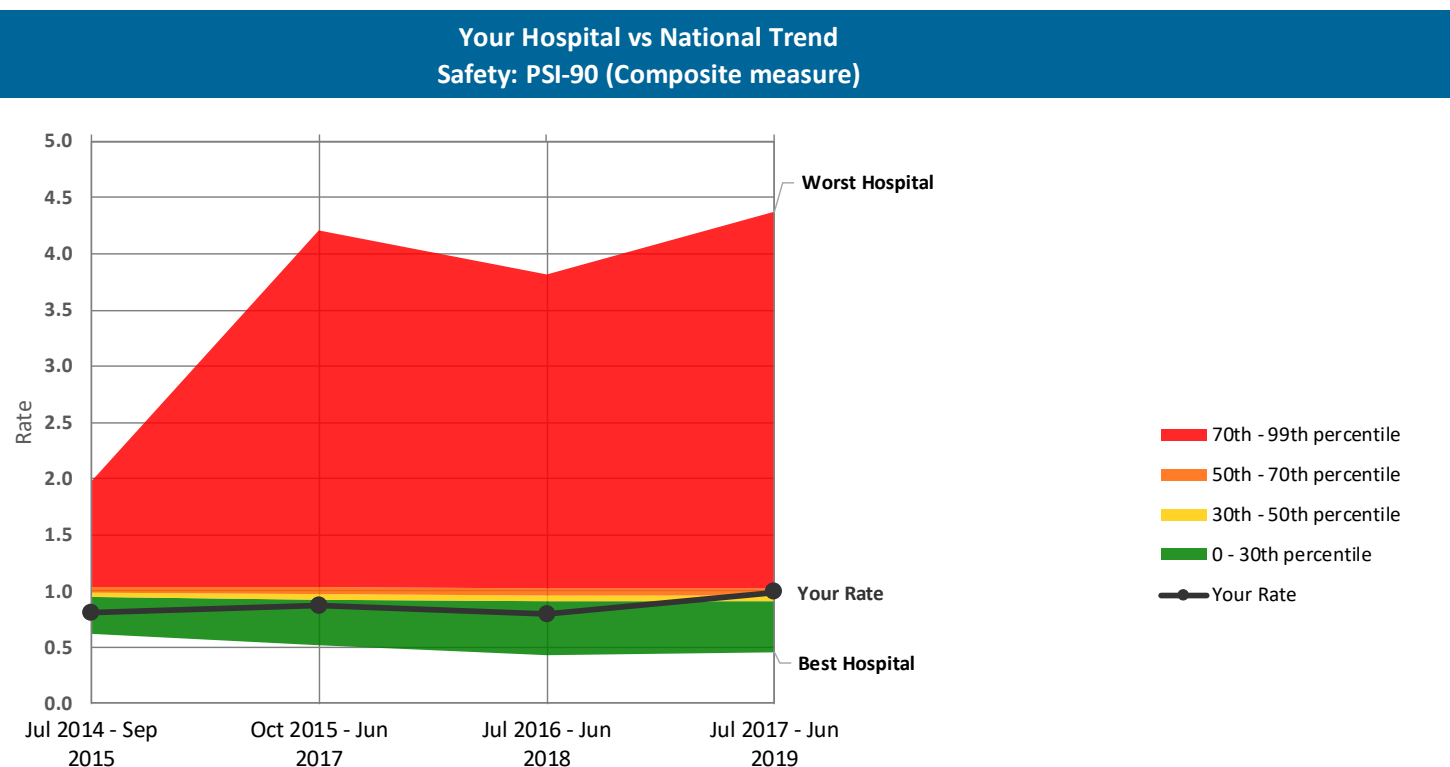
# Why did my Star Rating change?

- Identifying changes in performance on individual measures – look to rank in previous period compared to current

		Your Performance Rank Percent of hospitals that your hospital outperforms (0 to 99, higher is better) ■ = best 3 deciles, ■ = middle 4 deciles, ■ = worst 3 deciles	
Your worst performing measures*	Measure Group	Your national rank in the <b>Apr 2021</b> Star Rating (out of 99)	Your national rank in the <b>Jan 2020</b> Star Rating (out of 99)
Hospital Visits after OP Chemotherapy	Readmission	4	NA
HCAHPS: Responsiveness of Staff	Experience	6	7
SSI - Colon Surgery	Safety	9	20
COPD Readmission	Readmission	9	15
HCAHPS: Quietness of Hospital	Experience	11	9
HWR Readmission	Readmission	14	15
HCAHPS: Communication w/Doctors	Experience	17	13
HCAHPS: Understood Care after Discharge	Experience	18	28
Your best performing measures*	Measure Group	Your national rank in the <b>Apr 2021</b> Star Rating (out of 99)	Your national rank in the <b>Jan 2020</b> Star Rating (out of 99)
THA/TKA Readmission	Readmission	97	99
THA/TKA Complications	Safety	95	82
Hospital Visits after OP Surgery	Readmission	95	NA
CABG Mortality	Mortality	93	89
COPD Mortality	Mortality	89	61
ED Visits after OP Chemotherapy	Readmission	82	NA
CABG Readmission	Readmission	73	67
HF Mortality	Mortality	70	86

# Why did my Star Rating change?

- Even if my performance changed, was the change due to trends in my measure rate or did national comparison group change?
- Trending tabs in the report show how your rate and the national comparison have changed over time



# Problems with the Star Ratings Methodology

- Known biases in underlying measures and risk adjustment
- Limitations to the Overall Hospital Star Ratings scoring methodology
- For more information, see the AAMC's most recent letter to CMS regarding improvements to Star Ratings:  
<https://www.aamc.org/system/files/c/1/496514-aamccommentsonfutureimprovementstohospitalstarratingsmethodology.pdf>
- Also see AAMC's comments on the new Star Rating methodology as proposed in the CY2021 OPPS Proposed Rule  
<https://www.aamc.org/system/files/2020-10/occomm-hca-AAMC%20CY%202021%20OPPS%20Proposed%20Rule%20Comment%20Letter%2010.5.2020%20FINAL.pdf>

# Contact Information

To be added to the Hospital Compare distribution list, email [COTH@aamc.org](mailto:COTH@aamc.org) with your name, title, institution name, phone number, and mailing address.

## Questions about AAMC Quality Reports?

Brooke Kelly: [bkelly@aamc.org](mailto:bkelly@aamc.org); 202-741-5482

## Questions about policy issues in Medicare's quality programs?

Phoebe Ramsey: [pramsey@aamc.org](mailto:pramsey@aamc.org); 202-448-6636