

Welcome!

- **Audio for this event is available via GlobalMeet® Internet streaming.**
- **Connect via Chrome.**
- **No telephone line is required.**
- **Computer speakers or headphones are necessary to listen to streaming audio.**
- **Limited dial-in lines are available. Please request a dial-in line via the Ask a Question box.**
- **This event is being recorded.**



Troubleshooting Audio

Audio from computer speakers breaking up?

Audio suddenly stop?

Click Refresh

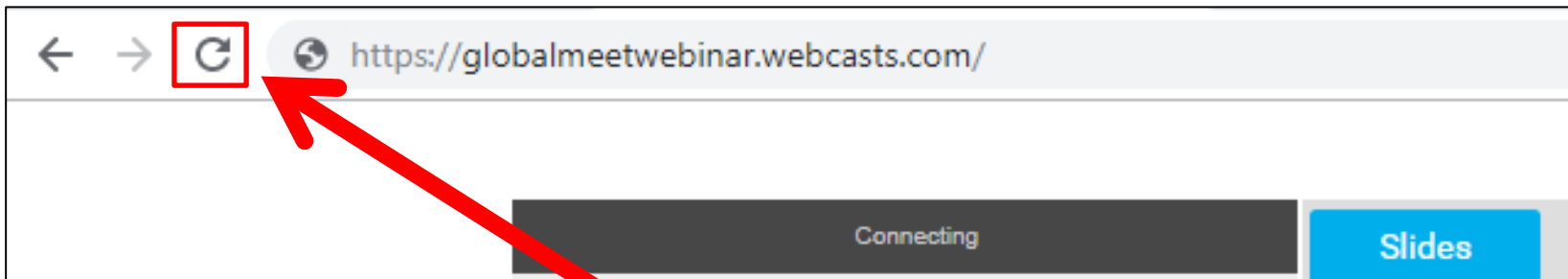
– or –

Press F5



F5 Key

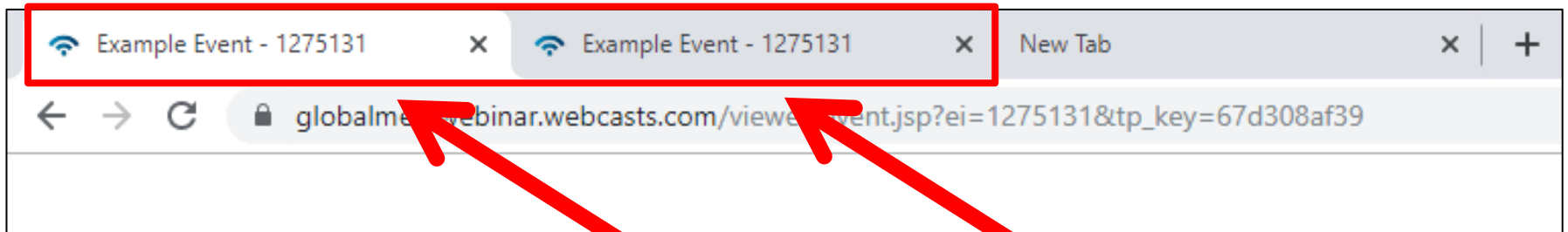
Top Row of Keyboard



Refresh

Troubleshooting Echo

- Hear a bad echo on the call?
- Echo is caused by multiple browsers/tabs open to a single event (multiple audio feeds).
- Close all but one browser/tab and the echo will clear.



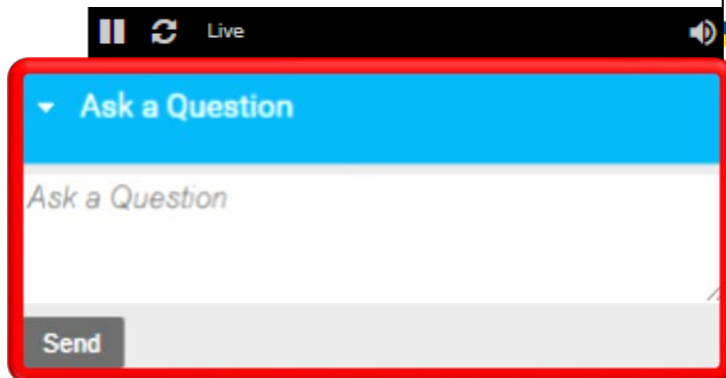
Example of Two Browsers/Tabs Open in Same Event

Submitting Questions

Type questions in the Ask a Question section, located on the left side of your screen.



Inpatient Value, Incentives, and Quality Reporting (VIQR) Outreach and Education Support Contractor



Today's Presentation



Overall Hospital Quality Star Ratings: Impact of the CMS Exception

May 13, 2022

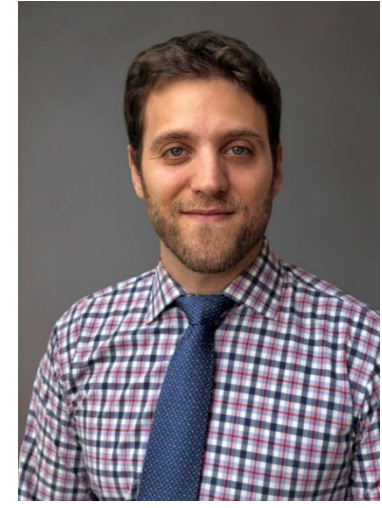
Speakers



Michelle Schreiber, MD
Deputy Director
Center for Clinical Standards
and Quality (CCSQ),
Quality Measures and Value
Based Incentives Group
(QMVIG), Centers for
Medicare & Medicaid
Services (CMS)



**Arjun K. Venkatesh, MD,
MBA, MHS**
Project Director
Yale New Haven Health
Services Corporation/
Center for Outcomes
Research and Evaluation
(YNHHS/CORE)



Steven Spivack, PhD, MPH
Project Lead
YNHHS/CORE

Agenda

1. Introduction
2. Overall Star Ratings Background
3. Impact of CMS Exceptions
4. 2022 Implementation

Acronyms and Abbreviations

ADM	admission	HWR	Hospital Wide Readmission
AMI	Acute Myocardial Infarction	IMM	Immunization
CABG	Coronary Artery Bypass Graft	N/A	Not Applicable
CAH	Critical Access Hospital	OP	Outpatient
CCSQ	Center for Clinical Standards and Quality	PC	Perinatal Care
CMS	Centers for Medicare & Medicaid Services	PSI	Patient Safety Indicator
CY	calendar year	Q	Quarter
COPD	Chronic Obstructive Pulmonary Disease	QMVIG	Quality Measures and Value Based Incentives Group
ED	Emergency Department	SEP	Sepsis
EDAC	Excess Days in Acute Care	TEP	Technical Expert Panel
H/K	Hip/Knee	v	Version
HAI	Hospital-Acquired Infection	VIQR	Value, Incentives, and Quality Reporting
HCAHPS	Hospital Consumer Assessment of Healthcare Providers and Systems Survey	vs	versus
HF	Heart Failure	WG	workgroup
HVBP	Hospital Value-Based Purchasing	YNHHS/ CORE	Yale New Haven Health Services Corporation/ Center for Outcome Research and Evaluation

Overall Hospital Quality Star Ratings: Impact of the CMS Exception

Overall Star Ratings Background

Project Overview and Background

- **Objective:**

Develop a methodology to summarize measure information on Care Compare in a way that is useful and easy to interpret for patients/caregivers.

- **Background:**

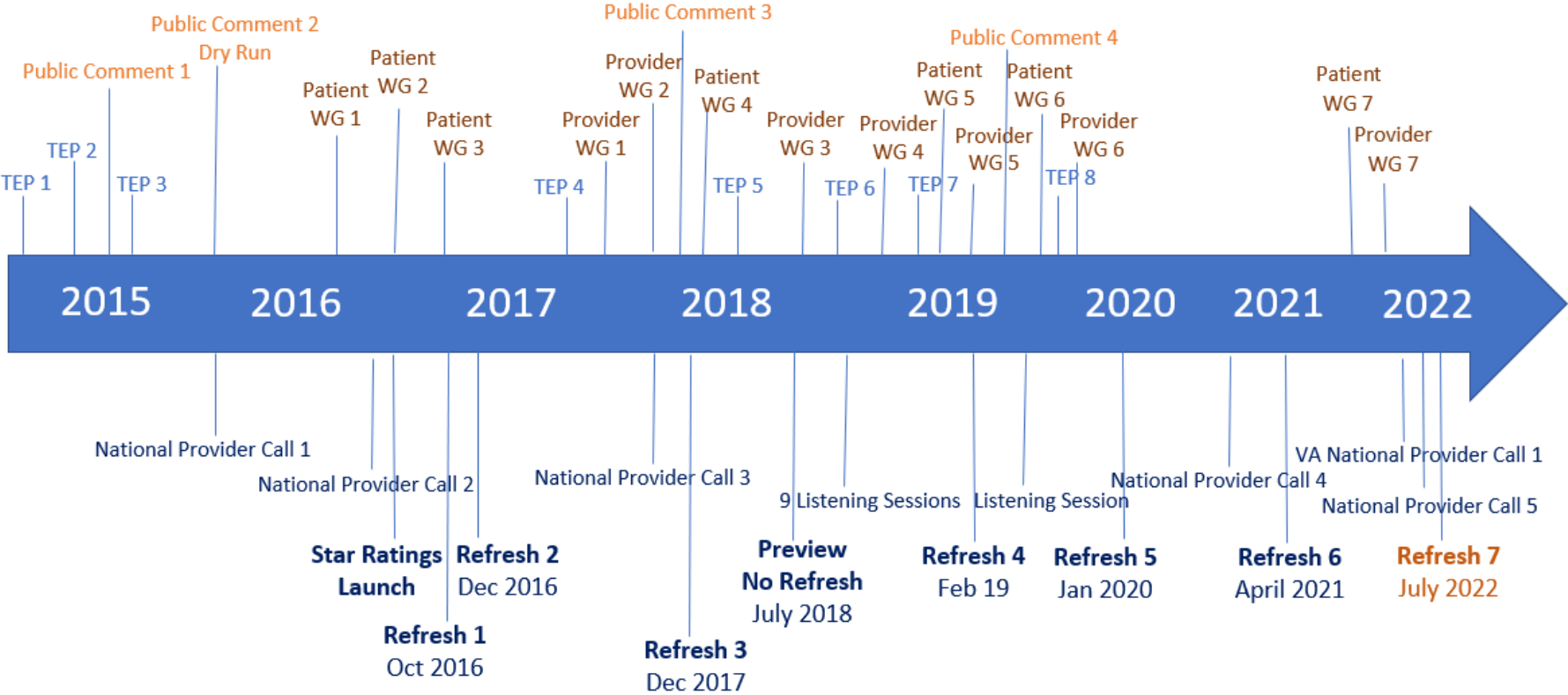
- 2015 - Star Ratings Dry Run (v1.0)
- 2016 - Star Rating officially launched (v2.0)
- 2017 - Star Ratings methods updated (v3.0)
- 2021 - Star Ratings methods updated (v4.0)
- 2022 - First Star Ratings refresh impacted by CMS COVID exception (v4.0)

Guiding Principles

- Use methods that:
 - Are scientifically valid.
 - Are inclusive of hospitals and measure information.
 - Account for heterogeneity of available measures and hospital reporting.
 - Accommodate changes in the underlying measures.
- Aim to fulfill:
 - Alignment with Care Compare and other CMS programs.
 - Transparency of methods.
 - Responsiveness to stakeholder input.

Historical Timeline

Development and Stakeholder Engagement



Implementation

Overall Hospital Quality Star Ratings: Impact of the CMS Exception

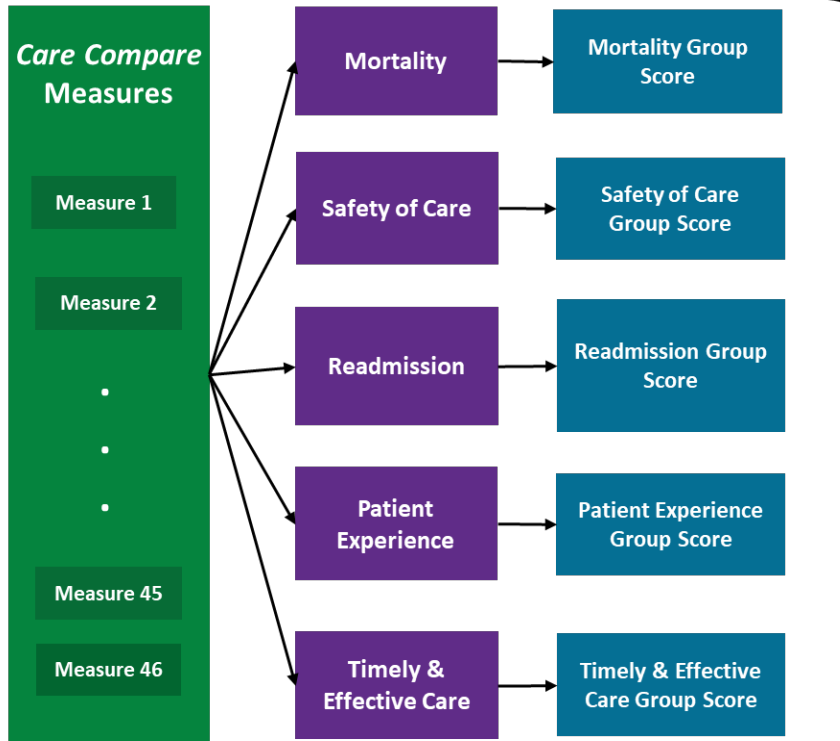
Current Star Ratings Methodology

Current Overall Star Rating Methodology

Step 1: Select Measures
Apply measure selection criteria each refresh and standardize scores

Step 2: Group Measures
Similar to HVBP and existing *Care Compare* display

Step 3: Calculate Group Score
Simple average of available measure scores, then standardized for combination



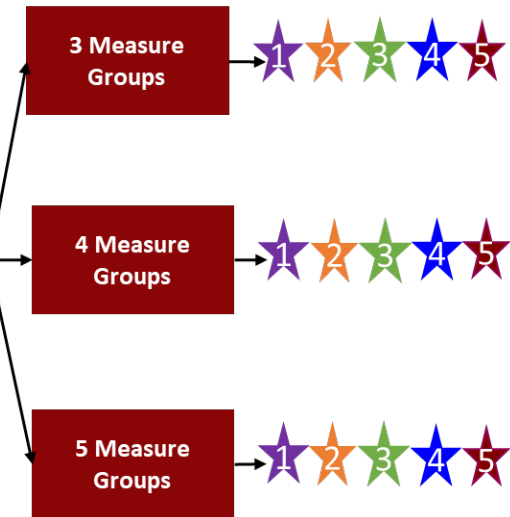
Step 4: Generate Summary Score
Policy-based weighted average of available hospital group scores

Hospital Summary Score

Step 5: Apply Reporting Thresholds
Hospitals must report 3 measures in at least 3 groups (one of which must be Mortality or Safety)

Step 6: Apply Peer Grouping
Group hospitals by number of measure groups with at least 3 measures

Step 7: Calculating Star Ratings
Use k-means clustering within each peer group to categorize summary scores into 5 star ratings



2022 Star Ratings Methodology Highlights

- Same methodology as 2021 Star Ratings, which was vetted and approved in rulemaking
- Designed to be flexible to changes in Care Compare measures and measurement periods
- Demonstrates the durability of the methods
- Today's discussion about underlying changes to the measures used to calculate Star Ratings
- Two Timely & Effective Care measures retired
 - OP-30
 - ED-2b

Overall Hospital Quality Star Ratings:
Impact of the CMS Exception

Impact of CMS Exceptions on Star Ratings Measures

CMS Exceptions: Background

CMS enacted a CMS exceptions policy in the first half of 2020 due to the impact of the pandemic on the health system.

- Rarely used policy for only extreme circumstances
- Prevents measures from using any data for any purposes between January 1, 2020–June 30, 2020

CMS Exceptions: Measurement Periods

- Nearly all measures used in Star Ratings are missing January 1, 2020–June 30, 2020, data.
- Measures approach the data waiver exception differently.
 - Use less data (e.g., 6 months instead of 12).
 - Freeze historical data until full data available. (Reuse same data that was included in 2021 Star Ratings).

CMS Exceptions: Mortality

Measure	Normal Reporting Period	Actual Reporting Period	Normal # Months vs. Actual # Months	Removed or Reused Data
AMI Mortality	3Q 2017–2Q 2020	3Q 2017–4Q 2019	36 vs. 29	Removed
CABG Mortality	3Q 2017–2Q 2020	3Q 2017–4Q 2019	36 vs. 29	Removed
COPD Mortality	3Q 2017–2Q 2020	3Q 2017–4Q 2019	36 vs. 29	Removed
HF Mortality	3Q 2017–2Q 2020	3Q 2017–4Q 2019	36 vs. 29	Removed
Pneumonia Mortality	3Q 2017–2Q 2020	3Q 2017–4Q 2019	36 vs. 29	Removed
Stroke Mortality	3Q 2017–2Q 2020	3Q 2017–4Q 2019	36 vs. 29	Removed
PSI-4	3Q 2018–2Q 2020	3Q 2018–4Q 2019	24 vs. 17	Removed

CMS Exceptions: Safety

Measure	Normal Reporting Period	Actual Reporting Period	Normal # Months vs. Actual # Months	Removed or Reused Data
HAI-1	4Q 2019–3Q 2020	2Q 2019–4Q 2019, 3Q 2020	12 vs. 12	Reused
HAI-2	4Q 2019–3Q 2020	2Q 2019–4Q 2019, 3Q 2020	12 vs. 12	Reused
HAI-3	4Q 2019–3Q 2020	2Q 2019–4Q 2019, 3Q 2020	12 vs. 12	Reused
HAI-4	4Q 2019–3Q 2020	2Q 2019–4Q 2019, 3Q 2020	12 vs. 12	Reused
HAI-5	4Q 2019–3Q 2020	2Q 2019–4Q 2019, 3Q 2020	12 vs. 12	Reused
HAI-6	4Q 2019–3Q 2020	2Q 2019–4Q 2019, 3Q 2020	12 vs. 12	Reused
H/K Complications	2Q 2017–1Q 2020	2Q 2017–4Q 2019	36 vs. 32	Removed
PSI-90	3Q 2018–2Q 2020	3Q 2018–4Q 2019	24 vs. 18	Removed

CMS Exceptions: Readmission

Measure	Normal Reporting Period	Actual Reporting Period	Normal # Months vs. Actual # Months	Removed or Reused Data
30-Day HWR	3Q 2019–2Q 2020	3Q 2019–4Q 2019	12 vs. 5	Removed
30-Day CABG	3Q 2017–2Q 2020	3Q 2017–4Q 2019	36 vs. 29	Removed
30-Day COPD	3Q 2017–2Q 2020	3Q 2017–4Q 2019	36 vs. 29	Removed
30-Day H/K	3Q 2017–2Q 2020	3Q 2017–4Q 2019	36 vs. 29	Removed
EDAC - AMI	3Q 2017–2Q 2020	3Q 2017–4Q 2019	36 vs. 29	Removed
EDAC - HF	3Q 2017–2Q 2020	3Q 2017–4Q 2019	36 vs. 29	Removed
EDAC - Pneumonia	3Q 2017–2Q 2020	3Q 2017–4Q 2019	36 vs. 29	Removed
OP-32	1Q 2017–4Q 2019	1Q 2017–4Q 2019	36 vs. 36	No Change
OP-35 ADM	1Q 2019–4Q 2019	1Q 2019–4Q 2019	12 vs. 11	Removed
OP-35 ED	1Q 2019–4Q 2019	1Q 2019–4Q 2019	12 vs. 11	Removed
OP-36	1Q 2019–4Q 2019	1Q 2019–4Q 2019	12 vs. 12	No Change

CMS Exceptions: Patient Experience

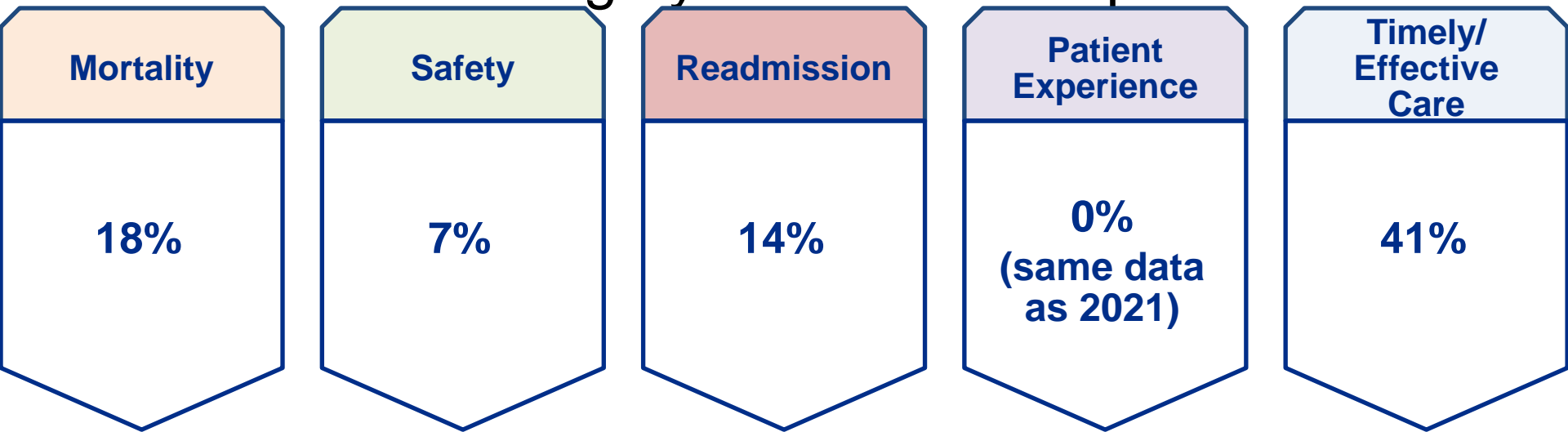
Measure	Normal Reporting Period	Actual Reporting Period	Normal # Months vs. Actual # Months	Removed or Reused Data
HCAHPS	4Q 2019–3Q 2020	1Q 2019–4Q 2019	12 vs. 12	Reused

CMS Exceptions: Timely/Effective Care

Measure	Normal Reporting Period	Actual Reporting Period	Normal # Months vs. Actual # Months	Removed or Reused Data
IMM-3	4Q 2019–1Q 2020	4Q 2019–1Q 2020	6 vs. 6	No Change
OP-10	3Q 2019–2Q 2020	3Q 2019–4Q 2019	12 vs. 6	Removed
OP-13	3Q 2019–2Q 2020	3Q 2019–4Q 2019	12 vs. 6	Removed
OP-18b	4Q 2019–3Q 2020	4Q 2019, 3Q 2020	12 vs. 6	Removed
OP-2	4Q 2019–3Q 2020	4Q 2019, 3Q 2020	12 vs. 6	Removed
OP-22	4Q 2019–3Q 2020	4Q 2019, 3Q 2020	12 vs. 6	Removed
OP-23	4Q 2019–3Q 2020	4Q 2019, 3Q 2020	12 vs. 6	Removed
OP-29	1Q 2019–4Q 2019	1Q 2019–4Q 2019	12 vs. 12	No Change
OP-33	1Q 2019–4Q 2019	1Q 2019–4Q 2019	12 vs. 12	No Change
OP-3b	4Q 2019–3Q 2020	4Q 2019, 3Q 2020	12 vs. 6	Removed
OP-8	3Q 2019–2Q 2020	3Q 2019–4Q 2019	12 vs. 6	Removed
PC-01	4Q 2019–3Q 2020	4Q 2019, 3Q 2020	12 vs. 6	Removed
SEP-1	4Q 2019–3Q 2020	4Q 2019, 3Q 2020	12 vs. 6	Removed

CMS Exceptions: Overall Impact

Percent of normal measurement period that is missing by Measure Group:



All measure groups, except Timely/Effective Care (12 percent), are worth 22 percent of Star Ratings score.

Overall Hospital Quality Star Ratings:
Impact of the CMS Exception

CMS Exceptions Impact Analyses

CMS Exceptions Impact: Background

- To understand the impact of the CMS exceptions on Star Ratings, we examined how shorter measurement periods impacted the following:
 - Number of hospitals receiving a Star Rating
 - Distribution of Star Ratings
 - Percentage of hospitals with Measure Group scores
 - Shifts in Peer Grouping
 - Changes in hospital characteristics
- Compared results of 2021 Star Ratings (October Care Compare data) with 2022 Star Ratings (July 2021 Care Compare preview period data).

Distribution of Overall Star Ratings by Year

In 2022 vs. 2021, 234 fewer hospitals get a Star Rating.

Overall Star Rating	2021 # Hospitals (%)	2022 # Hospitals (%)
★★★★★	455 (13.6%)	431 (13.8%)
★★★★	988 (29.4%)	895 (28.7%)
★★★	1018 (30.4%)	895 (28.7%)
★★	690 (20.6%)	702 (22.5%)
★	204 (6.1%)	198 (6.3%)

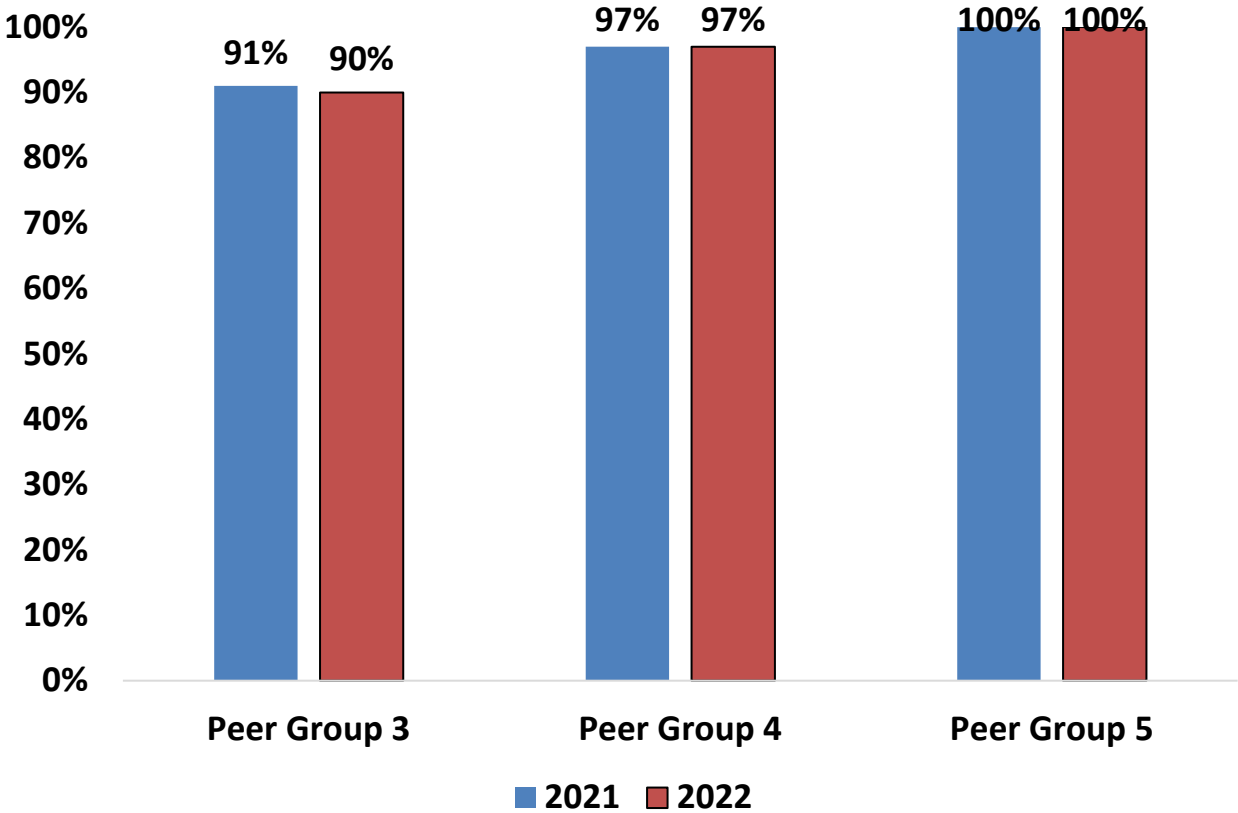
Distribution of Overall Star Ratings by Peer Group and Year

Overall Star Rating	2021			2022		
Peer Group	3 (n=337)	4 (n=553)	5 (n=2465)	3 (n=228)	4 (n=490)	5 (n=2403)
★★★★★	35 (10.4%)	39 (7.1%)	381 (15.5%)	19 (8.3%)	82 (16.7%)	330 (13.7%)
★★★★	93 (27.6%)	143 (25.9%)	752 (30.5%)	68 (29.8%)	143 (29.2%)	684 (28.5%)
★★★	111 (32.9%)	194 (35.1%)	713 (29.0%)	65 (28.5%)	138 (28.2%)	692 (28.8%)
★★	72 (21.4%)	144 (26.0%)	474 (19.2%)	59 (25.9%)	110 (22.4%)	533 (22.2%)
★	26 (7.7%)	33 (6.0%)	145 (5.9%)	17 (7.5%)	17 (3.5%)	164 (6.8%)

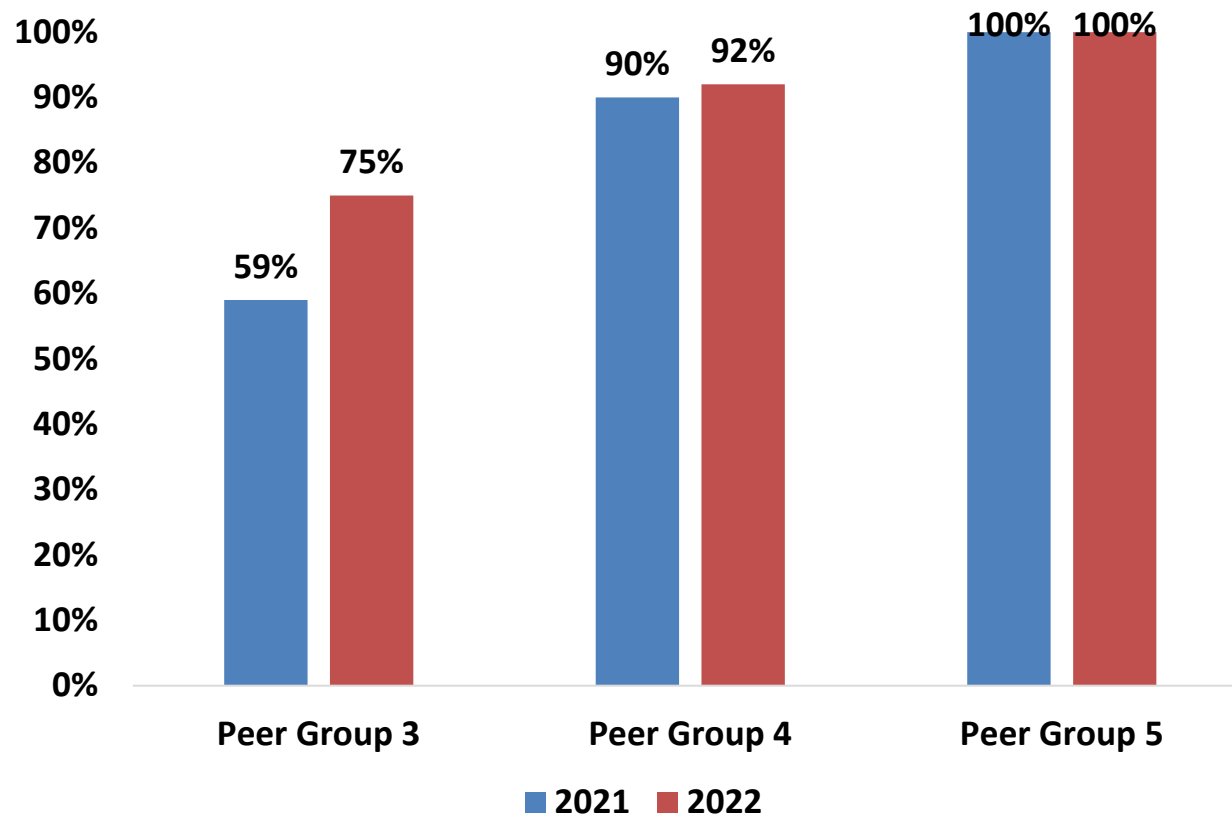
Similar distributions were for 3 and 5 Measure Group Peer Groups in 2022 and 2021.

Larger percentage of hospitals in 4 Measure Group Peer Group got 4 or 5 stars in 2022 vs 2021.

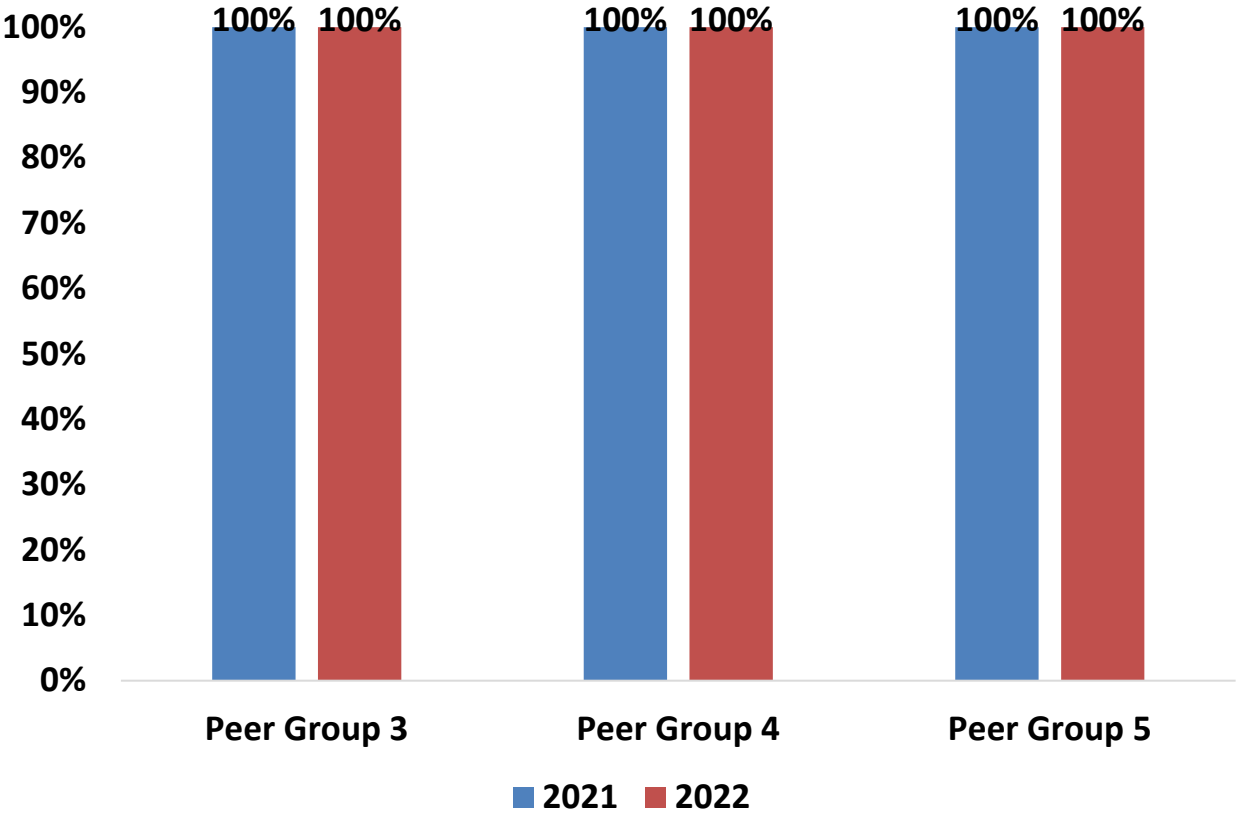
Percentage of Hospitals with Mortality Scores by Year and Peer Group



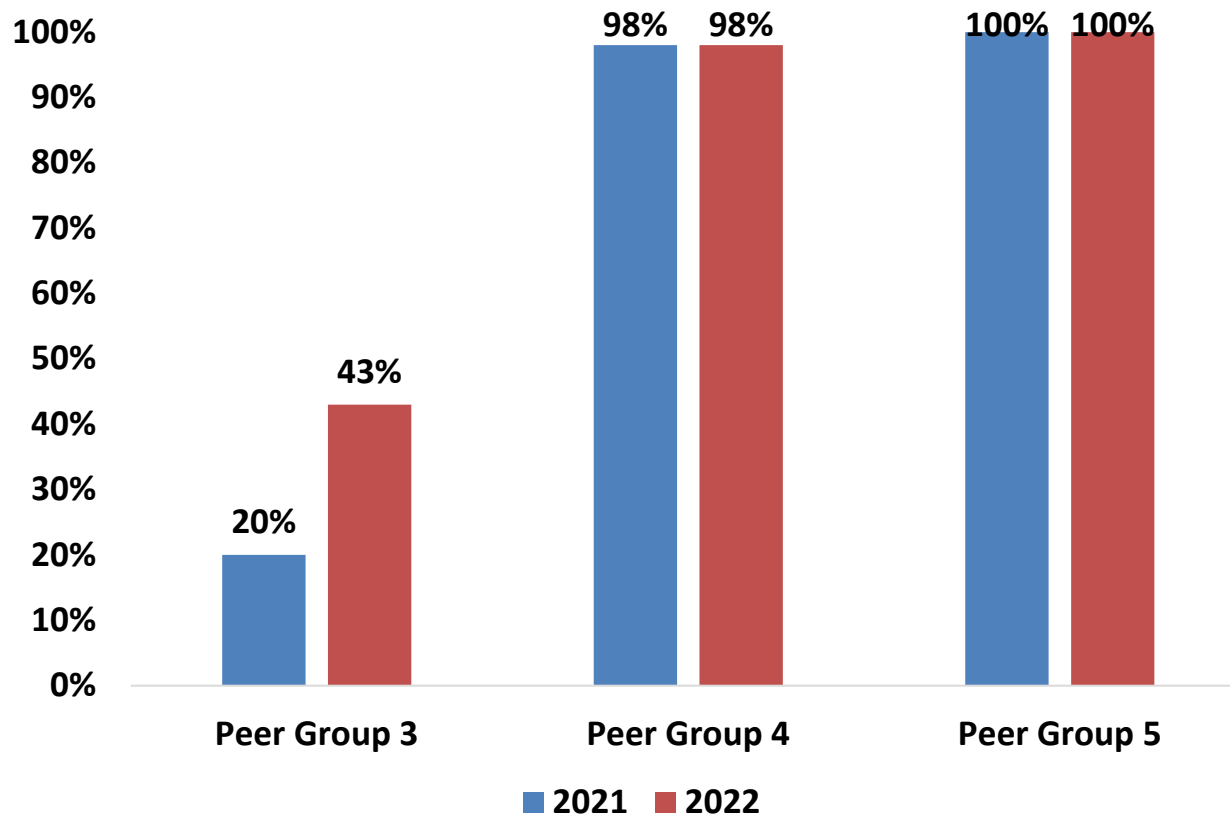
Percentage of Hospitals with Safety of Care Scores by Year and Peer Group



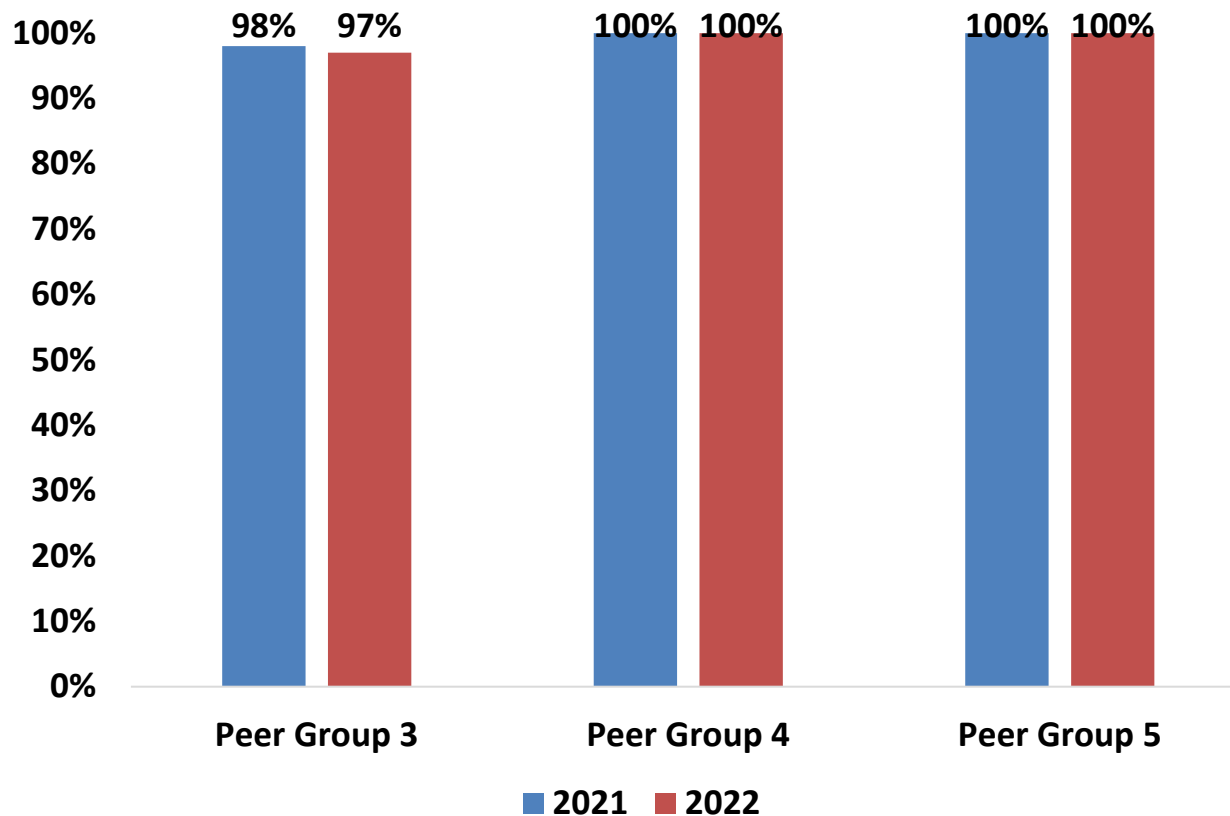
Percentage of Hospitals with Readmission Scores by Year and Peer Group



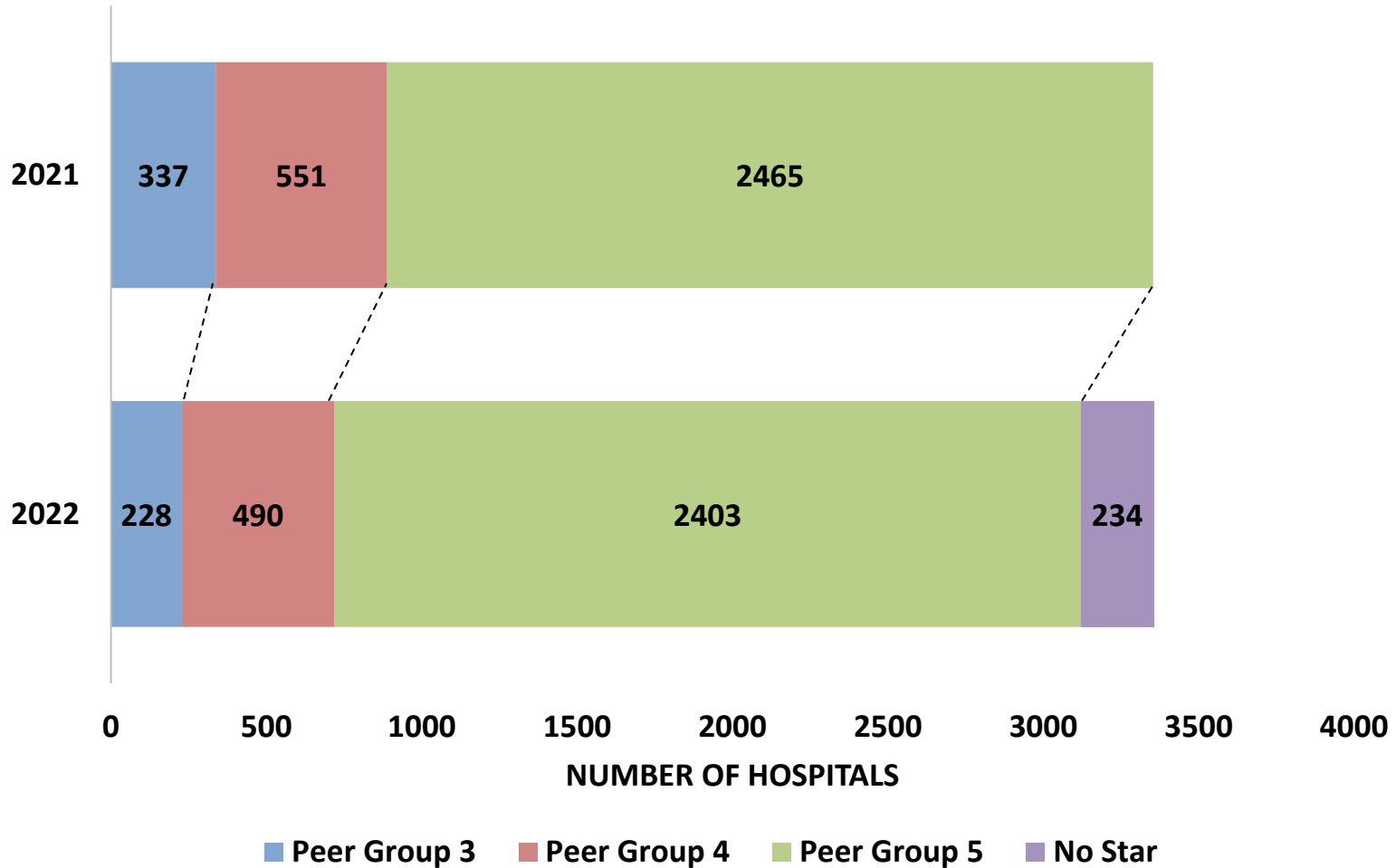
Percentage of Hospitals with Patient Experience Scores by Year and Peer Group



Percentage of Hospitals with Timely/Effective Care Scores by Year and Peer Group



Shifts in Number of Hospitals with a Star Rating by Year and Peer Group



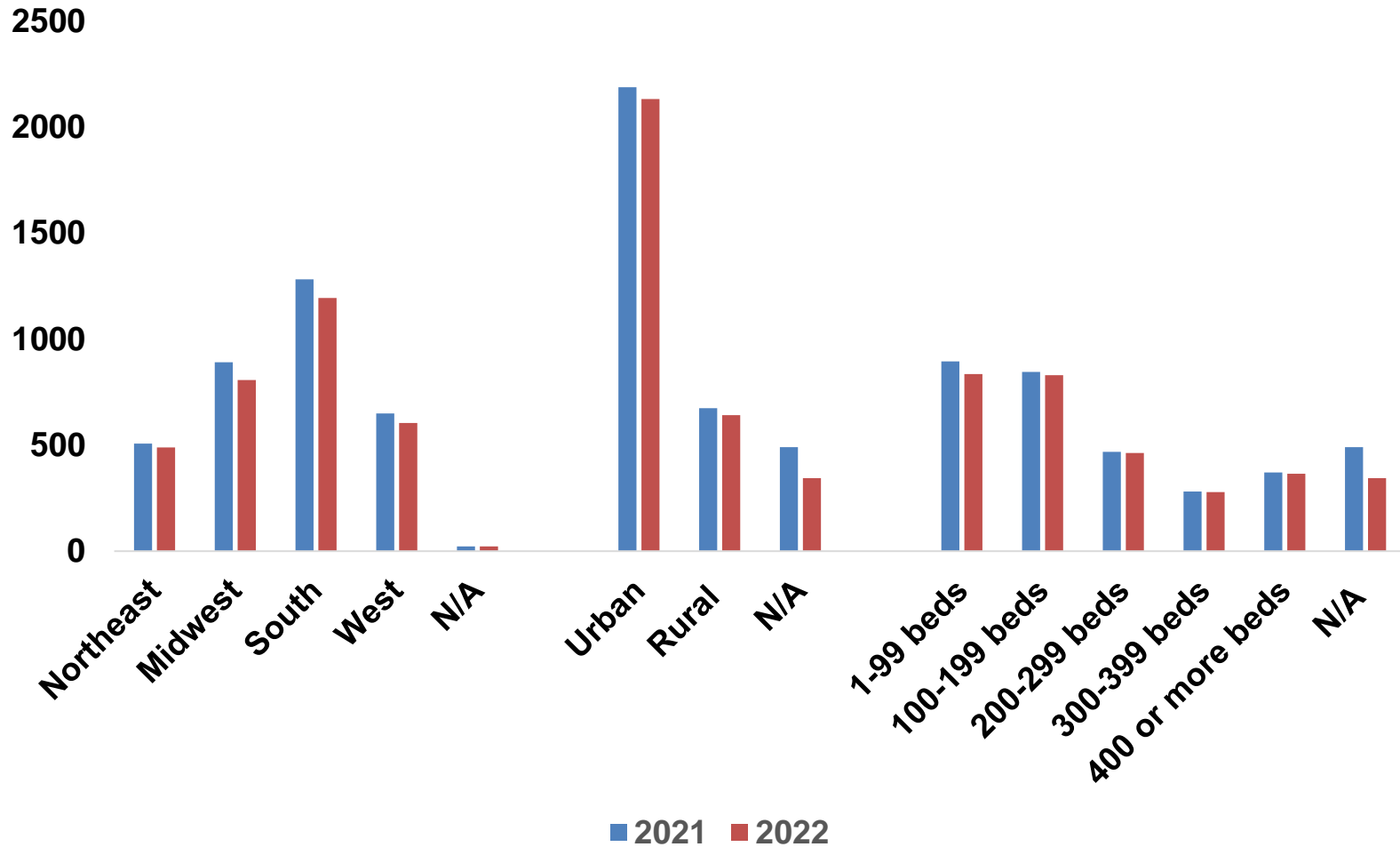
Shifts in Peer Group Assignments by Year

2021 Peer Group	2022 Peer Group			Total
	3	4	5	
3	171 (97%)	4 (2%)	1 (1%)	176
4	45 (9%)	415 (87%)	16 (3%)	476
5	4 (<1%)	65 (3%)	2386 (97%)	2455
Total	220	484	2403	3107

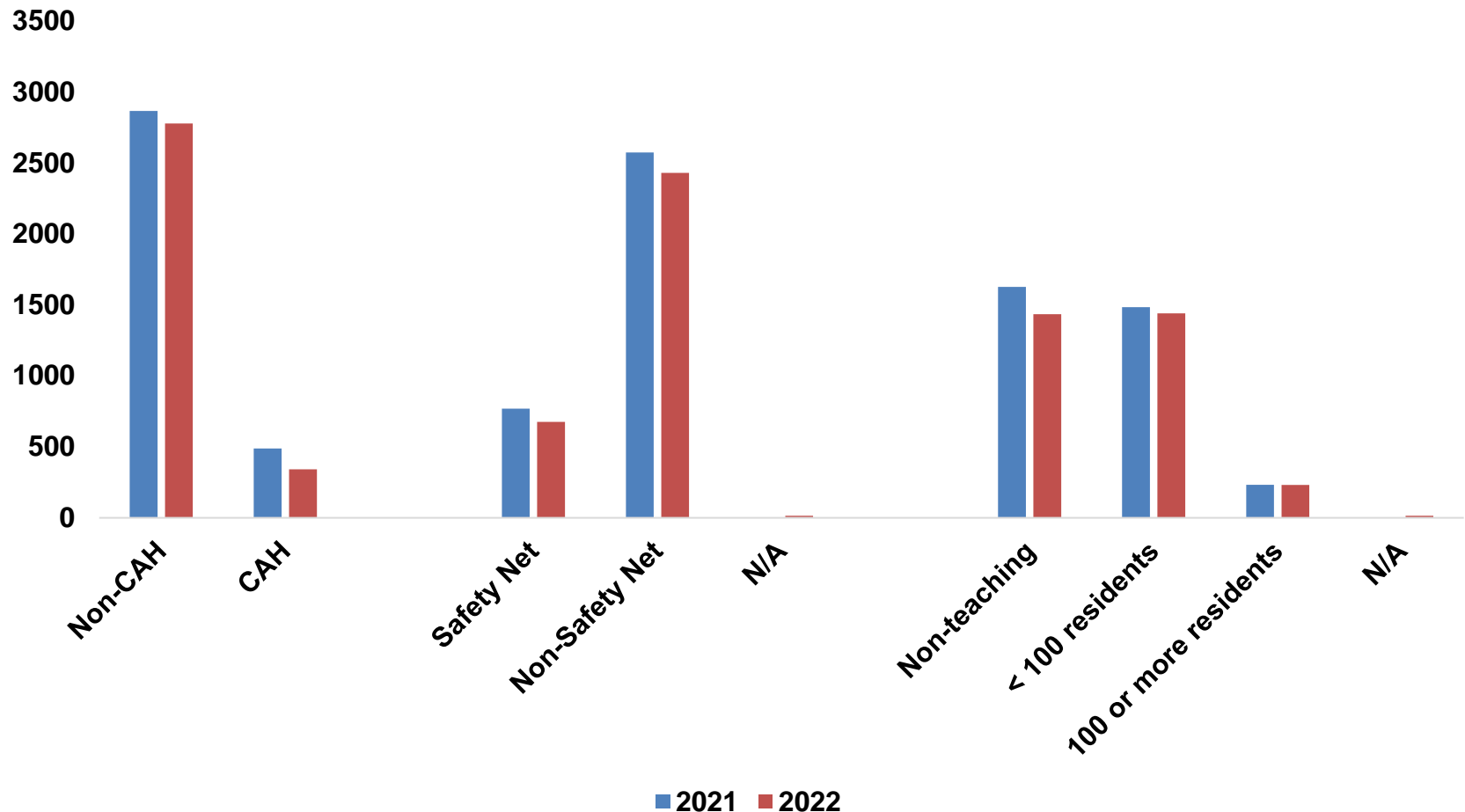
Vast majority of hospitals did not shift peer groups.

- 97% of hospitals are in 3 and 5 Measure Group Peer Group.
- 87% of hospitals are in 4 Measure Group Peer Group.
 - 9% shifted down a Peer Group.

Hospital Characteristics by Year



Hospital Characteristics by Year



2022 Implementation

- Preview period (May–June)
- 2022 refresh of Star Ratings (July)

Thank You

- For more information regarding Star Ratings, visit <https://qualitynet.cms.gov/inpatient/public-reporting/overall-ratings>.
- Please submit additional questions to the [QualityNet Question and Answer Tool](https://cmsqualitysupport.servicenow.com/qnet_qa):
https://cmsqualitysupport.servicenow.com/qnet_qa

Overall Hospital Quality Star Ratings: Impact of the CMS Exception

Questions

Continuing Education Approval

This program has been approved for [continuing education credit](#) for the following boards:

- **National credit**
 - Board of Registered Nursing (Provider #16578)
- **Florida-only credit**
 - Board of Clinical Social Work, Marriage & Family Therapy and Mental Health Counseling
 - Board of Registered Nursing
 - Board of Nursing Home Administrators
 - Board of Dietetics and Nutrition Practice Council
 - Board of Pharmacy

Note: To verify CE approval for any other state, license, or certification, please check with your licensing or certification board.

Disclaimer

This presentation was current at the time of publication and/or upload onto the Quality Reporting Center and QualityNet websites. Medicare policy changes frequently. Any links to Medicare online source documents are for reference use only. In the case that Medicare policy, requirements, or guidance related to this presentation change following the date of posting, this presentation will not necessarily reflect those changes; given that it will remain as an archived copy, it will not be updated.

This presentation was prepared as a service to the public and is not intended to grant rights or impose obligations. Any references or links to statutes, regulations, and/or other policy materials included in the presentation are provided as summary information. No material contained therein is intended to take the place of either written laws or regulations. In the event of any conflict between the information provided by the presentation and any information included in any Medicare rules and/or regulations, the rules and regulations shall govern. The specific statutes, regulations, and other interpretive materials should be reviewed independently for a full and accurate statement of their contents.

Overall Hospital Quality Star Ratings: Impact of the CMS Exception

Appendix

Median Measure Group Reporting by Year and Peer Group

	2021			2022		
Peer Group	3	4	5	3	4	5
Mortality	3	3	6	3	3	6
Safety	1	2	7	1	2	7
Readmissions	5	6	9	5	6	9
Patient Experience	0	8	8	0	8	8
Timely/Effective Care	5	8	11	3	5	7

Change Between Periods

Change in Stars	Peer Group Shift from 2021 to 2022				
	+2	+1	No Change	-1	-2
>-1	0	0	16	6	1
-1	0	2	582	31	0
0	0	7	1877	53	3
+1	1	8	473	18	0
>+1	0	3	24	2	0
Total	1	20	2972	110	4

- Similar number of hospitals moving peer groups experienced higher/lower Star Rating scores.
- Some hospitals will shift peer groups on a yearly basis, demonstrated by prior testing.