

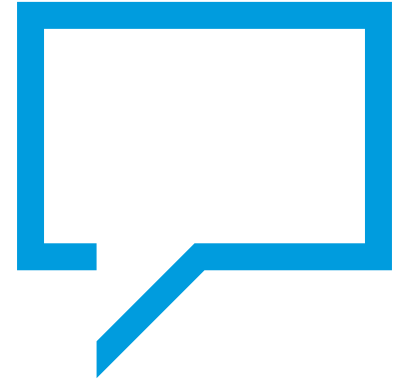
Quality Measures Technical Forum (QMTF)



June 6, 2024

CMS QMTF Chair:

***Carrie Sena
(CMS/CCSQ)***



MISSED OPPORTUNITIES IN HOSPITAL QUALITY MEASUREMENT DURING THE COVID-19 PANDEMIC:

A RETROSPECTIVE INVESTIGATION OF US HOSPITALS' CMS STAR RATINGS AND 30-DAY MORTALITY DURING THE EARLY PANDEMIC

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Quality Measure Technical Forum (QMTF)
June 6, 2024



DISCLOSURES:

- 1.) THE VIEWS/INFORMATION SHARED HERE ARE MY OWN, FOR THE PURPOSES OF EDUCATION, AND DO NOT NECESSARILY REPRESENT THE VIEWS OF MY EMPLOYER (MAYO CLINIC)**
- 2.) I HAVE PREVIOUSLY RECEIVED <\$5,000 IN CONSULTANT FEES FOR INDUSTRY-RELATED HOSPITAL QUALITY RESEARCH (DELTA AIRLINES)**

BMJ Open Missed opportunities in hospital quality measurement during the COVID-19 pandemic: a retrospective investigation of US hospitals' CMS Star Ratings and 30-day mortality during the early pandemic

Benjamin D Pollock ,¹ Subashnie Devkaran,^{2,3} Sean C Dowdy^{2,3}

INTRO



...many hospital quality reporting entities such as the [US News & World Report](#) and the [Centers for Medicare and Medicaid Services \(CMS\)](#) and [United Kingdom's Quality and Outcomes Framework](#) have limited pandemic era outcome data from their rankings, ratings and pay-for-performance programmes through the [exclusion of months or years of patient data for both COVID and non-COVID-related hospital encounters](#).

US NEWS BEST HOSPITALS



turning knowledge into practice

Methodology U.S. News & World Report 2022-23 Best Hospitals: Specialty Rankings

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To mitigate the impact of COVID-19-pandemic-associated disruptions on outcome measures, several exclusions were applied to visits occurring in 2020. First, visits in which a patient had a diagnosis of COVID-19 were excluded. Second, all visits occurring in March 2020 were excluded. Third, for each hospital, visits were excluded if they occurred during a month of 2020 in which the hospital's COVID-19 rate exceeded the national average.



CMS STAR RATING



Overall Hospital Quality Star Rating

Hospital-Specific Report User Guide

July 2022 Publication

Mortality * Denotes measure reporting periods that would have normally included 1Q and 2Q 2020

Measure	Dates
MORT-30-AMI	July 1, 2017 - December 1, 2019*
MORT-30-CABG	July 1, 2017 - December 1, 2019*
MORT-30-COPD	July 1, 2017 - December 1, 2019*
MORT-30-HF	July 1, 2017 - December 1, 2019*
MORT-30-PN	July 1, 2017 - December 1, 2019*
MORT-30-STK	July 1, 2017 - December 1, 2019*
PSI 04-SURG-COMP	July 1, 2018 - December 31, 2019*

Safety of Care * Denotes measure reporting periods that would have normally included 1Q and 2Q 2020

Measure	Dates
HAI-1	April 1, 2019 - December 31, 2019, July 1, 2020 - September 30, 2020*
HAI-2	April 1, 2019 - December 31, 2019, July 1, 2020 - September 30, 2020*

Patient Experience * Denotes measure reporting periods that would have normally included 1Q and 2Q 2020

Measure	Dates
H-COMP-1	January 1, 2019 - December 31, 2019
H-COMP-2	January 1, 2019 - December 31, 2019
H-COMP-3	January 1, 2019 - December 31, 2019

Measure	Dates
H-COMP-5	January 1, 2019 - December 31, 2019
H-COMP-6	January 1, 2019 - December 31, 2019
H-COMP-7	January 1, 2019 - December 31, 2019
H-CLEAN-HSP / H-QUIET-HSP	January 1, 2019 - December 31, 2019
H-HSP-RATING / H-RECMND	January 1, 2019 - December 31, 2019

Timely and Effective Care * Denotes measure reporting periods that would have normally included 1Q and 2Q 2020

Measure	Dates
IMM-3	October 1, 2019 - March 31, 2020
OP-10	July 1, 2019 - December 31, 2019*
OP-13	July 1, 2019 - December 31, 2019*
OP-18b	October 1, 2019 - December 31, 2019, July 1, 2020 - September 30, 2020*
OP-2	October 1, 2019 - December 31, 2019, July 1, 2020 - September 30, 2020*
OP-22	January 1, 2019 - December 31, 2019
OP-23	October 1, 2019 - December 31, 2019, July 1, 2020 - September 30, 2020*
OP-29	January 1, 2019 - December 31, 2019
OP-33	January 1, 2019 - December 31, 2019
OP-3b	October 1, 2019 - December 31, 2019, July 1, 2020 - September 30, 2020*
OP-8	July 1, 2019 - December 31, 2019*
PC-01	October 1, 2019 - December 31, 2019, July 1, 2020 - September 30, 2020*
SEP-1	October 1, 2019 - December 31, 2019, July 1, 2020 - September 30, 2020*

Measure	Dates
HAI-3	April 1, 2019 - December 31, 2019, July 1, 2020 - September 30, 2020*
HAI-4	April 1, 2019 - December 31, 2019, July 1, 2020 - September 30, 2020*
HAI-5	April 1, 2019 - December 31, 2019, July 1, 2020 - September 30, 2020*
HAI-6	April 1, 2019 - December 31, 2019, July 1, 2020 - September 30, 2020*
COMP-HIP-KNEE	April 1, 2017 - October 2, 2019*
PSI 90-Safety	July 1, 2018 - December 31, 2019*

Readmission * Denotes measure reporting periods that would have normally included 1Q and 2Q 2020

Measure	Dates
READM-30-CABG	July 1, 2017 - December 1, 2019*
READM-30-COPD	July 1, 2017 - December 1, 2019*
READM-30-Hip-Knee	July 1, 2017 - December 1, 2019*
READM-30-HOSP-WIDE	July 1, 2019 - December 1, 2019*
EDAC-30-AMI	July 1, 2017 - December 1, 2019*
EDAC-30-HF	July 1, 2017 - December 1, 2019*
EDAC-30-PN	July 1, 2017 - December 1, 2019*
OP-32	January 1, 2017 - December 24, 2019
OP-35 ADM	January 1, 2019 - December 1, 2019
OP-35 ED	January 1, 2019 - December 1, 2019
OP-36	January 1, 2019 - December 24, 2019

OBJECTIVE



Patient-centered thought experiment:

Imagine you are a patient needing coronary artery bypass grafting in July 2020, which of these would best represent your position and emotions?

- 1.) It is ok with me if the hospital care I receive is of poor quality or causes harm because I recognize there may be pandemic-related strains on the hospital.*
- 2.) I still want and expect high quality care and avoidance of harm, and I would select a higher quality hospital if given the choice.*

OBJECTIVE



Audience thought experiment:

In your mind, think of the 3 hospitals or health systems you are aware of that provided the best quality care during the pandemic.

How did they achieve this?

In your mind, think of the 3 hospitals or health systems you are aware of that provided the lowest quality care during the pandemic.

Why did they perform so poorly?

OBJECTIVE



*In a letter to CMS in 2021, we advocated for providing relevant information to assist patients and consumers to make informed decisions ...**We hypothesised that high- quality outcomes during the pandemic may reflect resiliency and a high reliability mindset...Analyses of hospital- level variation in pandemic- era outcomes could lead to the development of ‘lessons learnt’ or ‘best practices’ documentation, which could better prepare hospitals to maintain high- quality care delivery in the next pandemic or health system crisis.***

METHODS – DATA SOURCES

To conduct this analysis, we used the *Inpatient Standard Analytic File and Medicare Beneficiary Summary File 100% US national samples from 2020*. The study team has significant experience analysing these data sets.⁶ Specifically, we included all Medicare inpatient encounters from *1 April 2020 through 30 November 2020* and linked to *hospitals' CMS Star Ratings** using each hospital's unique 6- digit CMS provider IDs

*We used CMS Overall Hospital Star Ratings January 2020, as a snapshot of hospital's reported quality on the eve of the pandemic

METHODS – ANALYSIS



Encounter-level multivariate logistic regression:

*30-day mortality = age + sex + Elixhauser mortality index (continuous variable) + US Census Region (proxy for region-specific COVID burden) + month (April, May, June, July, August, September, October, November) + CMS Star Rating + COVID-19 diagnosis (U07.1) + COVID*CMS Star Rating*

METHODS – ANALYSIS



We reported risk- adjusted 30-day mortality ORs using 5-star hospitals as the reference group among both COVID and non-COVID beneficiaries.

ORs above 1.0 indicate worse relative 30- day mortality performance compared with 5- star hospitals, and ORs below 1.0 indicate better relative 30- day mortality compared with 5- star hospitals.

RESULTS - UNADJUSTED



Open access

Table 1 Characteristics of Medicare inpatient encounters from 1 April 2020 to 30 November 2020 by hospital-level CMS Star Rating

	1 star n=423 333, 9.5%	2 stars n=1 087 131, 24.3%	3 stars n=1 219 995, 27.3%	4 stars n=1 116 159, 25.0%	5 stars n=626 772, 14.0%	P value*
Age, mean (SD)	71.3 (13.7)	71.9 (13.2)	72.4 (13.0)	72.9 (12.7)	73.5 (12.3)	<0.0001
Female gender, n (%)	215 671 (51.0%)	567 615 (52.2%)	638 007 (52.3%)	584 446 (52.4%)	325 801 (52.0%)	<0.0001
Elixhauser mortality index, mean (SD)	8.8 (10.4)	8.6 (10.4)	8.6 (10.5)	8.5 (10.6)	8.6 (10.8)	<0.0001
US Census Bureau region						<0.0001
Midwest	33 425 (7.9%)	170 484 (15.7%)	278 554 (22.8%)	330 933 (29.7%)	185 570 (29.6%)	
Northeast	131 722 (31.1%)	198 326 (18.2%)	255 337 (20.9%)	178 690 (16.0%)	99 213 (15.8%)	
South	203 646 (48.1%)	561 791 (51.7%)	509 314 (41.8%)	404 584 (36.2%)	181 613 (29.0%)	
West	54 540 (12.9%)	156 530 (14.4%)	176 790 (14.5%)	201 952 (18.1%)	160 376 (25.6%)	
COVID-19 encounter (U07.1 ICD-10 code)	38 754 (9.2%)	84 846 (7.8%)	92 693 (7.6%)	75 595 (6.8%)	38 251 (6.1%)	<0.0001
30-day mortality, n (%)						
COVID-19 encounters	12 570 (32.4%)	24 480 (28.9%)	26 509 (28.6%)	20 021 (26.5%)	9 406 (24.6%)	<0.0001
Non-COVID encounters	39 198 (10.2%)	98 393 (9.8%)	106 390 (9.4%)	94 857 (9.1%)	48 191 (8.2%)	<0.0001



RESULTS - ADJUSTED

Risk-adjusted 30-day mortality OR†						
COVID-19 encounters	1.60 (1.55 to 1.66)	1.38 (1.34 to 1.42)	1.33 (1.30 to 1.37)	1.18 (1.15 to 1.22)	Reference	<0.0001
Non-COVID encounters	1.40 (1.38 to 1.42)	1.32 (1.30 to 1.33)	1.24 (1.23 to 1.26)	1.17 (1.16 to 1.19)	Reference	<0.0001

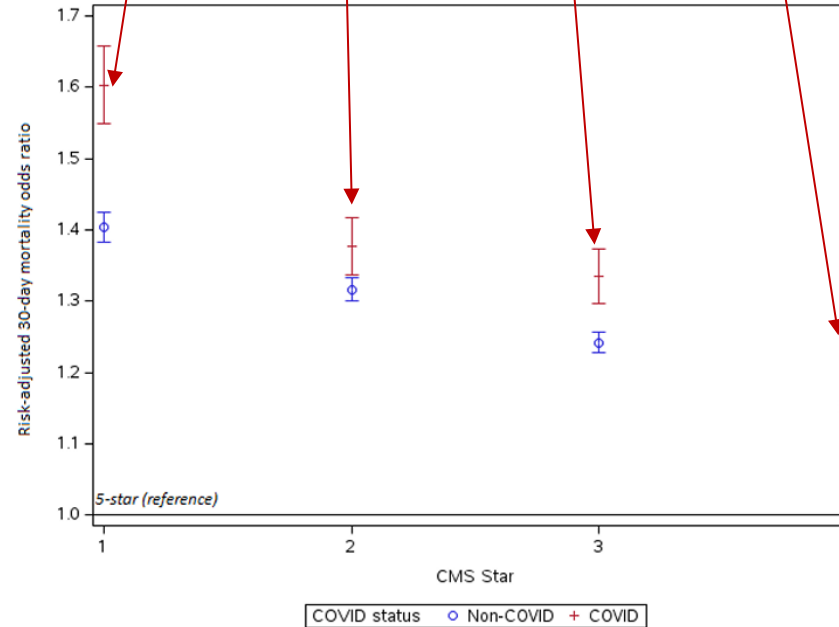


Figure 1 ORs and 95% CIs for risk-adjusted 30-day mortality among COVID and non-COVID encounters during early pandemic by CMS Hospital Overall Star Rating blue circles are non-COVID encounters (defined as absence of a U07.1 diagnosis code on the encounter claim), red lines are COVID encounters (defined as presence of a U07.1 diagnosis code on the encounter claim); the reference at 1.0 indicates the reference group (5-star hospitals). CMS, Centers for Medicare and Medicaid Services.



RESULTS – POST HOC SENSITIVITY ANALYSIS FOR REVIEWERS

As a post hoc sensitivity analysis, we examined the hospital- level correlation between the CMS Star Rating summary score (as a continuous variable) and the CMS Star mortality domain score, which contributes 22% of the weight of the overall Star Rating by calculating the coefficient of determination (r^2) between these two scores.

Coefficient of determination between CMS Star Rating summary score and the CMS Star Mortality Domain score was $r^2=0.10$

– SO –

even if some of this relationship is due to collinearity between all-patient mortality and AMI/HF/etc. mortality, it would still only explain 10% of our results at most

DISCUSSION

Our results indicated a significant and clear dose-response increase in early pandemic 30-day mortality among both non- COVID and COVID encounters corresponding with decreasing CMS Hospital Star Ratings

DISCUSSION

Does this prove that all highly rated hospitals performed well during the pandemic, and all low- rated hospitals performed poorly?

No, and therein lies the point...some hospitals outperformed their peers, whereas some under- performed.

DISCUSSION



*These results lend credence to our assertion that **we can analyse and learn from high-performing and low-performing hospitals during the pandemic, especially in relation to their pre-existing structures, processes and outcomes related to quality that may have allowed for greater pandemic era resiliency.** Such learning will not be possible if data continue to be partially or wholly excluded from hospital quality assessments, which are normally performed in the US, UK and Europe.*

DISCUSSION



How should we handle quality reporting differently in the event of a future pandemic?

- 1. Pandemic era hospital outcomes should be investigated and reported rather than a priori exclusion... regardless of whether analyses suggest that exclusions are warranted, the results of both sets of analyses should be publicly reported to allow stakeholders and health service researchers to assess both approaches*
- 2. New approaches to fairly and adequately risk-adjust for patient-level COVID-19 status and hospital-level COVID-19 pandemic burden should be prioritised, as is already being done for measures such as the Agency for Healthcare Research and Quality's Patient Safety Indicators.¹² We are not the first to suggest that quality measurement methodologies could maintain the traditional risk-adjustment paradigm through the pandemic.¹³*
- 3. Steps 1 & 2 will facilitate the identification of hospitals, which performed in the top or bottom percentiles of any given risk-adjusted quality outcome during the pandemic. Such analyses could support intentional inter-institution discussion or formation of an expert panel to develop 'resilience in quality' best practices for future pandemics*

The results from the analyses suggested in the three steps above need not involve financial punishment or quality reporting embarrassment for low performers or accolades for high-performers.

12.) Agency for Healthcare Research and Quality. AHRQ Qis fact sheet: Faqs on the SAS QI and Winqi V2022 software. 2022. Available: https://qualityindicators.ahrq.gov/News/ICD10_v2022_FAQ.pdf [Accessed 8 Apr 2023].
13.) Salmasian H, Beloff J, Resnick A, et al. Rethinking standardised infection rates and risk adjustment in the COVID- 19 era. *BMJ Qual Saf* 2021;30:588–90.

DISCUSSION



Continued advocacy for inclusion of COVID-era data in Hospital Ratings

We continue to advocate that quality reporting stakeholders should transparently report risk- adjusted pandemic era hospital quality outcomes as opposed to permitting potentially valuable insights into elude society's grasp and repeat the same mistakes in future pandemics. Health services researchers have made significant strides over the past several decades to cultivate a meaningful, risk- adjusted hospital quality reporting framework. This journey must continue in order to provide timely, valid, reliable hospital quality data, which best support the needs of our patients and the communities we are dedicated to serving.



DISCUSSION

How can we build resilience among lower reliability hospitals?

Resilience requires the same principle as a ‘good to great’ company described by Jim Collins:

‘a down-to-earth, pragmatic, committed-to-excellence process—a framework—kept each company, its leaders, and its people on track for the long haul...the victory of steadfast discipline over the quick fix.’



DISCUSSION

How can we build resilience among lower reliability hospitals?

IHI principles are a good starting point, but potentially may need pandemic-specific considerations or updates from future learning

WHITE PAPER: Whole System Quality: A Unified Approach to Building Responsive, Resilient Health Care Systems

The *Sustaining Improvement* IHI White Paper identifies six main drivers of quality control that represent the key elements of an effective quality control system within a health care organization.⁶³

- **Standardization:** Processes to define and disseminate standard work (what to do, how to do it, and why) span the organization.
- **Accountability:** Processes to review execution of standard work and fidelity are in place across the organization.
- **Visual management:** Process performance information is continuously available to synchronize staff attention and guide current activities.
- **Problem-solving:** Methods for surfacing and addressing problems that are solvable at the point of care, and for developing improvement capability, are broadly understood.
- **Escalation:** Point-of-care staff scope issues and escalate those that require management action to resolve (e.g., requiring cross-departmental coordination).
- **Integration:** Goals, standard work, and quality improvement project aims are integrated across organizational levels and coordinated among units and departments.

ADDITIONAL RESEARCH IN THE AREA OF PANDEMIC-ERA HOSPITAL QUALITY REPORTING



Open access

Research & reporting methodology

BMJ Open Quality Hospital quality reporting in the pandemic era: to what extent did hospitals' COVID-19 census burdens impact 30-day mortality among non-COVID Medicare beneficiaries?

Benjamin D Pollock ,¹ Sean C Dowdy^{1,2}

To cite: Pollock BD, Dowdy SC. Hospital quality reporting in the pandemic era: to what extent did hospitals' COVID-19 census burdens impact 30-day mortality among non-COVID Medicare beneficiaries? *BMJ Open Quality* 2023;12:e002269. doi:10.1136/bmjog-2023-002269

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ABSTRACT

Objectives Highly visible hospital quality reporting stakeholders in the USA such as the US News & World Report (USNWR) and the Centers for Medicare & Medicaid Services (CMS) play an important health systems role via their transparent public reporting of hospital outcomes and performance. However, during the pandemic, many such quality measurement stakeholders and pay-for-performance programmes in the USA and Europe have eschewed the traditional risk adjustment paradigm, instead choosing to pre-emptively exclude months or years of pandemic era performance data due largely to hospitals' perceived COVID-19 burdens. These data exclusions may lead patients to draw misleading conclusions about where to seek care, while also masking genuine improvements or deteriorations in hospital quality that may have occurred during the pandemic. Here, we assessed to what extent hospitals' COVID-19 burdens (proportion of hospitalised patients with COVID-19) were associated with their non-COVID 30-day mortality rates from March through November 2020 to inform whether inclusion of pandemic-era data may still be appropriate.

Design This was a retrospective cohort study using the 100% CMS Inpatient Standard Analytic File and Master Beneficiary Summary File to include all US Medicare inpatient encounters with admission dates

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Many hospital quality reporting stakeholders in the USA and Europe have excluded pandemic-era data from rankings, ratings and pay-for-performance programmes, indicating they do not intend to hold hospitals accountable for pandemic-era outcomes.

WHAT THIS STUDY ADDS

⇒ US hospitals' COVID-19 patient burdens explained only a small amount of the variation in 30-day mortality among elderly non-COVID patients during the early months of the pandemic, and hospitals' risk-adjusted performances did not vary meaningfully on average when high COVID burden months were excluded from the analysis.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ For non-COVID patient outcomes, evidence-based inclusion of pandemic-era data in hospital quality reporting is methodologically plausible and must be explored more rigorously rather than exclusion of months or years of patient outcomes data which may mask deteriorations in hospital quality unrelated to the pandemic.

RECALL: US NEWS BEST HOSPITALS



turning knowledge into practice

Methodology U.S. News & World Report 2022-23 Best Hospitals: Specialty Rankings

Murrey G. Olmsted
Rebecca Powell
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Denise Bell
Benjamin Silver
Marshica Stanley
Rebekah Torcasso Sanchez
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To mitigate the impact of COVID-19-pandemic-associated disruptions on outcome measures, several exclusions were applied to visits occurring in 2020. First, visits in which a patient had a diagnosis of COVID-19 were excluded. Second, all visits occurring in March 2020 were excluded. Third, for each hospital, visits were excluded if they occurred during a month of 2020 in which the hospital's COVID-19 rate exceeded the national average.

ADDITIONAL RESEARCH IN THE AREA OF PANDEMIC-ERA HOSPITAL QUALITY REPORTING

MAYO CLINIC



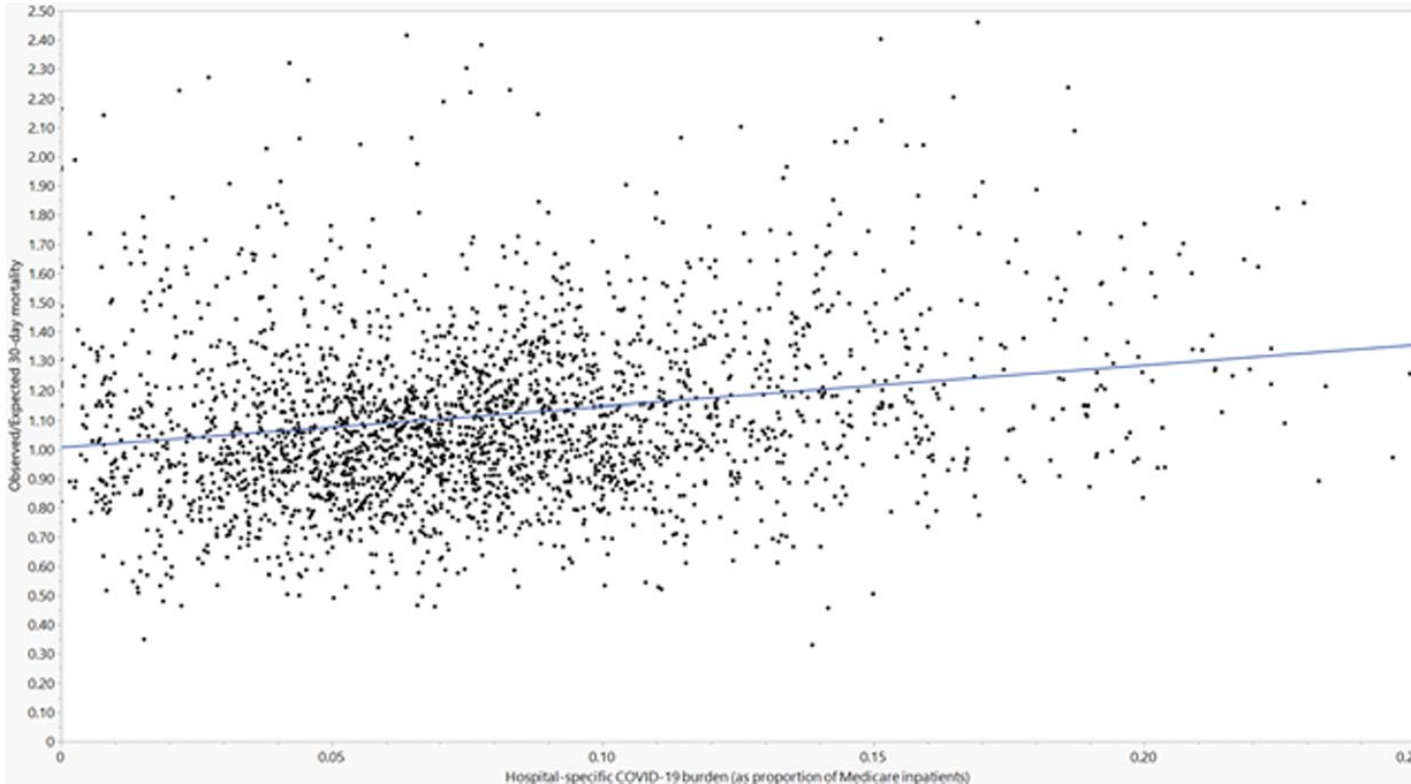
Table 1 Comparison of hospital-level characteristics when including all data versus excluding high-COVID burden months

Characteristic	All non-COVID inpatient encounters (n=2601 hospitals)	Non-COVID inpatient encounters with hospital-months excluded due to COVID-19 inpatient burden (n=2571 hospitals)*
Total encounters (median, IQR)	4 182 226	2 750 794
Age (median, IQR)	73 (71, 74)	73 (71, 74)
Female (%), (median, IQR)	53.1% (50.7%, 55.4%)	53.0% (50.4%, 55.6%)
Elixhauser comorbidities (%), (median, IQR)		
ALCOHOL	3.1% (2.2%, 4.1%)	3.1% (2.2%, 4.2%)
ANEMDEF	24.4% (19.8%, 29.3%)	24.5% (19.7%, 29.6%)
BLDLOSS	0.9% (0.6%, 1.3%)	0.9% (0.6%, 1.3%)
CHF	18.5% (15.6%, 21.5%)	18.4% (15.6%, 21.7%)
CHRNLLUNG	26.1% (22.1%, 30.1%)	26.1% (22.2%, 30.5%)
COAG	6.8% (5.2%, 8.5%)	6.9% (5.2%, 8.7%)
DEPRESS	14.6% (10.9%, 18.5%)	14.6% (11.0%, 18.6%)
DMCX	24.2% (20.4%, 28.1%)	24.3% (20.2%, 27.9%)
HTN_C	64.8% (61.2%, 67.8%)	64.7% (61.0%, 68.0%)
LIVER	4.6% (3.6%, 5.9%)	4.7% (3.6%, 6.0%)
LYMPH	1.1% (0.7%, 1.4%)	1.1% (0.7%, 1.5%)
LYTES	40.0% (34.9%, 44.9%)	39.9% (34.9%, 45.2%)
METS	3.0% (2.2%, 3.9%)	3.0% (2.2%, 4.0%)
NEURO	12.7% (11.0%, 14.7%)	12.6% (10.9%, 15.0%)
OBESE	16.1% (12.5%, 20.5%)	16.1% (12.4%, 20.6%)
PARA	4.6% (3.5%, 5.9%)	4.5% (3.4%, 5.9%)
PERIVASC	7.8% (6.2%, 9.5%)	7.8% (6.1%, 9.6%)
PSYCH	4.3% (3.2%, 5.7%)	4.3% (3.1%, 5.8%)
PULMCIRC	0.8% (0.6%, 1.1%)	0.8% (0.5%, 1.2%)
RENLFAIL	23.7% (20.0%, 27.2%)	24.0% (20.2%, 28.4%)
TUMOUR	3.3% (2.6%, 4.0%)	3.3% (2.6%, 4.1%)
WGHTLOSS	7.9% (5.4%, 10.9%)	8.0% (5.5%, 11.1%)
Observed mortality (%), (median, IQR)	9.9% (8.5%, 11.5%)	9.6% (8.1%, 11.3%)
Expected mortality (%), (median, IQR)	9.2% (8.4%, 10.1%)	8.8% (8.1%, 9.7%)
Hospital-specific pairwise relative difference in O/E (%), (median, IQR)	Reference	+3.7% (-2.5%, +6.7%)

*n=30 hospitals had all months excluded due to greater-than-average monthly COVID-19 patient burden. ALCOHOL, alcohol abuse; ANEMDEF, anaemia deficiency; BLDLOSS, blood loss anaemia; CHF, congestive heart failure; CHRNLLUNG, chronic pulmonary disease; COAG, coagulopathy; DEPRESS, depression; DMCX, diabetes with chronic complications; HTN_C, hypertension; LIVER, liver disease; LYMPH, lymphoma; LYTES, fluid and electrolyte disorders; METS, metastatic cancer; NEURO, other neurological disorders; OBESE, obesity; PARA, paralysis; PERIVASC, peripheral vascular disease; PSYCH, psychoses; PULMCIRC, pulmonary circulation disorder; RENLFAIL, renal failure; TUMOUR, solid tumour without metastasis; WGHTLOSS, weight loss.

With 1908/2571 (74.2%) of hospitals having relative differences within $\pm 10\%$ (eg, an O/E=1.10 or 0.90 vs an original O/E=1.00 when no months were excluded) and 2427 (94.4%) within $\pm 25\%$.

ADDITIONAL RESEARCH IN THE AREA OF PANDEMIC-ERA HOSPITAL QUALITY REPORTING



Our analysis indicated that during the initial period of the pandemic (April through November 2020),

only 6% of the variation in US hospitals' risk-adjusted non-COVID 30-day mortality could be explained by their COVID-19 census burdens.

...relationship was approximately linear, making it potentially amenable for adaptation as a post hoc hospital-level 'COVID- census- adjustment'



FURTHER DISCUSSION

How can this research impact patient safety and improve transparency and choice?

'*USNWR* rankings have a powerful ability to provide useful information about where patients should seek care at a specialty and overall hospital level.

Similarly, they can motivate hospitals to provide patient-centered care.

QUESTIONS & ANSWERS

