OVERVIEW OF THE FALL 2017 LEAPFROG HOSPITAL SAFETY GRADE

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Presentation Overview

- □ About the Leapfrog Hospital Safety Grade
- Updates to Measures
- Scoring Overview
- Details of the Courtesy Safety Grade Review Period
- Public Reporting
- Important Dates
- Questions



ABOUT THE LEAPFROG HOSPITAL SAFETY GRADE

What is the Leapfrog Hospital Safety Grade?

- The Leapfrog Hospital Safety Grade is an A, B, C, D, or F
 letter grade reflecting how safe hospitals are for patients.
- □ The Leapfrog Hospital Safety Grade launched in June 2012.
- The grade is issued two times per year: April and October.
 This fall will be the 12th release.
- More information is available at www.HospitalSafetyGrade.org



Who is eligible for a Leapfrog Hospital Safety Grade?

- General acute care hospitals with enough publicly reported data
 - Hospitals missing measure scores for more than 6 process measures
 OR more than 5 outcome measures do not receive a grade
- Certain types of hospitals cannot receive a grade because they do not participate in the CMS Inpatient Quality Reporting Program (the data source for ½ of the measures used in the Grade):
 - Critical access hospitals
 - PPS-exempt hospitals (i.e. cancer)
 - VA Hospitals
 - Indian Health Services
 - Specialty hospitals



Background on Maryland Hospitals

- To date Leapfrog has been unable to calculate Hospital Safety Grades for Maryland hospitals due to their waiver from the CMS IPPS Program
- Much of the data used to calculate the Hospital Safety Grades comes directly from CMS and is publicly reported on its Hospital Compare <u>website</u>:
 - 5 HCAHPS Domain Scores
 - 3 Hospital-Acquired Condition Measures
 - 5 NHSN Infection Measures
 - 7 Patient Safety Indicators



What's changed?

- Now available from CMS on Hospital Compare for Maryland hospitals:
 - 5 HCAHPS Domain Scores
 - 5 NHSN Infection Measures

- Available from the Maryland Health Care
 Commission (using the HSCRC Hospital Inpatient
 Discharge Data Medicare FFS only):
 - 3 Hospital-Acquired Condition Measures
 - 7 Patient Safety Indicators



8 UPDATES TO MEASURES

Measure Selection Criteria

- Measures are publicly-reported from national data sources, reflecting individual hospital results
 - Leapfrog Hospital Survey
 - Centers for Medicare and Medicaid Services data sets
 - American Hospital Association's Annual Survey and HIT Supplement
- Measures are endorsed or in use by a national measurement entity
- Measures are linked to patient safety ("freedom from harm")
 - Directly quantifying patient safety events
 - Assessing processes that lead to better outcomes
 - Identified by experts as important to patient safety



Updates to the Process/Structural Measure Domain

- NQF Safe Practices: Leapfrog has removed three NQF Safe Practices from the 2017 Leapfrog Hospital Survey. Therefore, these measures will be removed from the Hospital Safety Grade as well. The measure weights assigned to the three measures will be reapportioned to the remaining 12 measures within this domain.
- HCAHPS: Leapfrog will begin using the linear mean score in place of the 5-star rating for the five HCAHPS measures (i.e. doctor communication, nurse communication, staff responsiveness, communication about medicine, and discharge information) used in the Hospital Safety Grade. Hospitals can view their linear mean scores for each of the five HCAHPS measures included in the Hospital Safety Grade at https://data.medicare.gov/Hospital-Compare/Patient-survey-HCAHPS-Hospital/dgck-syfz.



Updates to the Outcome Measure Domain

- CLABSI and CAUTI: Due to an error at NHSN, CMS has suppressed all CLABSI and CAUTI data on Hospital Compare in the July update. Therefore, Leapfrog will be required to use the CLABSI and CAUTI data from the Spring 2017 Hospital Safety Grade. This data includes CLABSIs and CAUTIs in ICUs only, and does not incorporate the updated NHSN baselines or SIR methodology. The MRSA, C. Diff. and SSI Colon measures were not impacted by this issue. Therefore, Leapfrog will use the most current MRSA, C. Diff and SSI Colon SIRs available via the Leapfrog Hospital Survey or CMS Hospital Compare.
- PSIs: CMS has identified an error in the AHRQ Software and has therefore not updated the PSI rates on Hospital Compare in the July update. Therefore, Leapfrog will be required to use the PSI data from the Spring 2017 Hospital Safety Grade.



Process and Structural Measures

Measure Name	Primary Data Source	Secondary Data Source						
Process and Structural Measures (12)								
Computerized Physician Order Entry (CPOE)	2017 Leapfrog Hospital Survey	2016 HIT Supplement ⁱⁱ						
ICU Physician Staffing (IPS)	2017 Leapfrog Hospital Survey	2015 AHA Annual Survey i						
Safe Practice 1: Leadership Structures and Systems	2017 Leapfrog Hospital Survey	N/A						
Safe Practice 2: Culture Measurement, Feedback & Intervention	2017 Leapfrog Hospital Survey	N/A						
Safe Practice 4: Identification and Mitigation of Risks and Hazards	2017 Leapfrog Hospital Survey	N/A						
Safe Practice 9: Nursing Workforce	2017 Leapfrog Hospital Survey	N/A						
Safe Practice 19: Hand Hygiene	2017 Leapfrog Hospital Survey	N/A						
H-COMP-1: Nurse Communication	CMS	N/A						
H-COMP-2:Doctor Communication	CMS	N/A						
H-COMP-3: Staff Responsiveness	CMS	N/A						
H-COMP-5: Communication about Medicines	CMS	N/A						
H-COMP-6: Discharge Information	CMS	N/A						



ⁱ AHA Annual Survey, Health Forum, LLC, a subsidiary of the American Hospital Association

[&]quot;AHA Annual Survey © 2016 Health Forum, LLC

Outcome Measures

Measure Name	Primary Data Source	Secondary Data Source						
Outcome Measures (15)								
Foreign Object Retained	CMS	MHCC*						
Air Embolism	CMS	MHCC*						
Falls and Trauma	CMS	MHCC*						
CLABSI (ICU Only)	2016 Leapfrog Hospital Survey	CMS						
CAUTI (ICU Only)	2016 Leapfrog Hospital Survey	CMS						
SSI: Colon	2017 Leapfrog Hospital Survey	CMS						
MRSA	2017 Leapfrog Hospital Survey	CMS						
C. Diff.	2017 Leapfrog Hospital Survey	CMS						
PSI 3: Pressure Ulcer	CMS	MHCC*						
PSI 4: Death Among Surgical Inpatients	CMS	MHCC*						
PSI 6: latrogenic Pneumothorax	CMS	MHCC*						
PSI 11: Postoperative Respiratory Failure	CMS	MHCC*						
PSI 12: Postoperative PE/DVT	CMS	MHCC*						
PSI 14: Postoperative Wound Dehiscence	CMS	MHCC*						
PSI 15: Accidental Puncture or Laceration	CMS	MHCC*						

^{*} The Maryland Health Care Commission will provide HAC and PSI rates for Maryland hospitals only



Reporting Periods

Leapfrog Hospital Survey Measures

- The 2017 Leapfrog Hospital Survey includes several reporting periods. Because the data snapshot date is August 31, the reporting periods will be displayed as follows:
 - CPOE, ICU Physician Staffing, and the 5 NQF Safe Practices will be displayed as "2017"
 - MRSA, C. Diff, and SSI Colon will be displayed as 01/01/2016 12/31/2016
- The reporting period for CLABSI and CAUTI, which will come from the 2016 Leapfrog Hospital Survey, will be displayed as 01/01/2015 06/30/2016 to account for the two reporting periods available to hospitals on the 2016 Leapfrog Hospital Survey for these measures (i.e. hospitals submitting a survey prior to September 1 were required to report on CY2015 and hospitals submitting a survey on or after September 1 were required to report on the 12-months ending June 30, 2016)

MHCC Measures (for Maryland hospitals only)

- □ The reporting period for the three HAC measures align with CMS and will be displayed as 07/01/2014 09/30/2015
- The reporting period for the seven PSI measures has been modified to account for the date in which Maryland hospitals began recording present-on-admission and will be displayed as 10/01/2013 06/30/2015

CMS Measures

- A list of reporting periods for CMS measures is available online at https://www.medicare.gov/hospitalcompare/Data/Data-Updated.html
- The reporting period for CLABSI and CAUTI will be displayed as 01/01/2015 12/31/2015
- The reporting period for SSI: Colon, MRSA, and C. Diff will be displayed as 10/01/2015 09/30/2016
- The reporting period for the three HAC measures will be displayed as 07/01/2014 09/30/2015
- The reporting period for the seven PSIs will be displayed as 07/01/2013 06/30/2015



Measure Highlights

- 17 of the 27 measures have been updated since Spring 2017 (both primary and secondary data sources)
 - Leapfrog Hospital Survey Results for CPOE, ICU Physician Staffing, NQF Safe Practices, SSI: Colon, MRSA, and C. diff
 - CMS data for HCAHPS, HACs, SSI: Colon, MRSA, and C. diff
 - AHA HIT Supplement data for CPOE



SCORING OVERVIEW

Weighting Process

- □ Two measure domains, each weighted 50%:
 - Process/structural measures
 - Outcome measures
- Three criteria for weighting individual measures:
 - Strength of evidence (rating of 1 or 2)
 - Opportunity (rating of 1, 2, 3), based on coefficient of variation
 - Impact (rating of 1, 2, 3) based on:
 - \blacksquare number of patients possibly affected by the event (0, 1, 2, 3)
 - severity of harm to individual patients (1, 2, 3)
- Weight Score = [Evidence + (Opportunity x Impact)



Z-Score Methodology

- Standardizes data from individual measures with different scales
- Counts how many standard deviations a hospital's score on the measure is away from the mean
- Mean is set to 0
 - Negative z-score: worse than the mean
 - Positive z-score: better than the mean
- How to Calculate Z-Score from Raw Measure Score:
 - Process/structural measures:
 - (Raw Measure Score Mean)/Standard Deviation
 - Outcome Measures:
 - (Mean Raw Measure Score)/Standard Deviation



Overall Numerical Score

- Summation of z-score for each measure multiplied by the weight for each measure
- If measure has missing data, then the weight for that measure is re-apportioned to other measures within the same domain
- 3.0 is added to each hospital's final numerical score to avoid possible confusion with interpreting negative patient safety scores

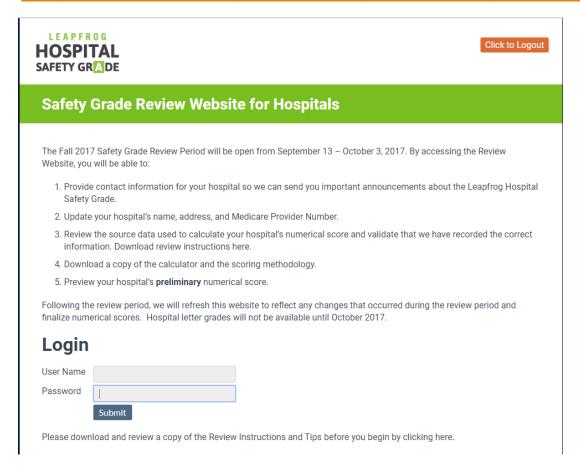
3.0 + CPOE z-score × CPOE weight + IPS z-score x IPS weight + CLABSI z-score × CLABSI weight etc.



DETAILS OF THE COURTESY SAFETY GRADE REVIEW PERIOD

Secure Website for Hospitals to Review their Safety Grade Data

http://www.HospitalSafetyGrade.org/data-review





Contact Information

22	*Is the hospital name and address displayed above correct? © Yes ® No Please provide the correct hospital name and address below. Information provided will be used to update your hospital's
*Is the hospital name and address displayed above correct? • Yes • No *Is your hospital's Medicare Provider Number (MPN) 34-0037 correct? • MPN is Correct	profile in our database. Your hospital's name and address will appear exactly as you indicate below on the public reporting website. Hospital Name Hospital City Hospital State Hospital ZIP
MPN is NOT Correct (If the MPN is not correct, please contact the Help D CEO First Name	lesk immediately.)
CEO Last Name CEO Email Address	
Contact First Name Contact Last Name	
Contact Title Contact Email Address	
Contact Phone Number	

Click here to continue



Source Data

Safety Grade Review Website for Hospitals

Hospital Source Data

Information about Source Data

The information in the table below represents your hospital's performance on each of the 27 measures used in the Hospital Safety Grade as of August 31, 2017 (the <u>Data Snapshot Date</u>). Please review this information to ensure that Leapfrog recorded the correct measure score from each publicly available data source.

You will need the following documents to complete the review process:

- Review Instructions
- Fall 2017 Calculator
- Policy on Correcting Data Used in the Hospital Safety Grade
- Scoring Methodology
- Changes to the Fall 2017 Hospital Safety Grade

If you find a data discrepancy (i.e. the measure score listed below does not match the public report as described in the <u>Review Instructions</u>), please contact the <u>Help Desk</u>.



Source Data

Name of the Measure	Type of Measure	Data Source/Links	Reporting Period	Measure Score	Does the measure score match the public report?
Computerized Physician Order Entry (CPOE)	Structure/ Process	2017 Leapfrog Hospital Survey	2017	Declined to Report	YesNo
ICU Physician Staffing	Structure/ Process	AHA Annual Survey	2015	5	YesNo
SP1 - Leadership Structures and Systems	Structure/ Process	2017 Leapfrog Hospital Survey	2017	Declined to Report	YesNo
SP 2 - Culture Measurement, Feedback and Intervention	Structure/ Process	2017 Leapfrog Hospital Survey	2017	Declined to Report	YesNo
SP 4 - Identification and Mitigation of Risks and Hazards	Structure/ Process	2017 Leapfrog Hospital Survey	2017	Declined to Report	● Yes ○ No
SP 9 - Nursing Workforce	Structure/ Process	2017 Leapfrog Hospital Survey	2017	Declined to Report	YesNo
SP 19 - Hand Hygiene	Structure/ Process	2017 Leapfrog Hospital Survey	2017	Declined to Report	YesNo
Communication with Nurse	Structure/ Process	<u>CMS</u>	10/01/2015 - 09/30/2016	85	YesNo
Communication with Doctor	Structure/ Process	<u>CMS</u>	10/01/2015 - 09/30/2016	85	YesNo
Staff Responsiveness	Structure/ Process	<u>CMS</u>	10/01/2015 - 09/30/2016	85	Yes No



What if the Measure Score Doesn't Match the Public Report?

- Hospitals are asked to contact the help desk immediately once they have confirmed the data source, measure, and reporting period.
- Hospitals must provide a copy of the public report that shows the different score.

If we find a recording error, we will update the score and re-issue a numerical score and safety grade.



Hospital Safety Grade Calculator

				Se	ptember/Octob	er 2017						
Measure Domain	Measure	Your Hospital's Score	Mean	Standard Deviation	Original Z- Score	Modified Z- Score	Evidence	Opportunity	Impact	Standard Weight	Your Final Weight	Weighted Measure Score
Domain	CPOE	Score	78.07	26.44	-2.9525	-2.9525	2	1.34	3	6.3%	6.3%	-0.1875
	IPS		45.39	43.77	-1.0369	-1.0369	2	1.96	3	8.3%	8.3%	-0.1873
ř	SP 1		116.33	7.20	-16.1535	-5.0000	1	1.06	2	3.3%	3.3%	-0.1648
sası	SP 2		114.20	18.05	-6.3259	-5.0000	1	1.16	2	3.5%	3.5%	-0.1750
_	SP 4		96.24	9.89	-9.7349	-5.0000	1	1.10	2	3.4%	3.4%	-0.1692
<u>ra</u>	SP 9		97.16	7.80	-12.4571	-5.0000	1	1.08	3	4.5%	4.5%	-0.2238
rctr	SP 19		57.36	7.07	-8.1095	-5.0000	2	1.12	2	4.5%	4.5%	-0.2241
Strı	H-COMP-1		90.94	2.17	-41.8614	-5.0000	1	1.02	2	3.2%	3.2%	-0.1608
ss/is	H-COMP-2		91.26	1.93	-47.3600	-5.0000	1	1.02	2	3.2%	3.2%	-0.1605
oce	H-COMP-3		84.02	3.54	-23.7019	-5.0000	1	1.04	2	3.3%	3.3%	-0.1628
Pre	H-COMP-5		77.79	3.40	-22.8584	-5.0000	1	1.04	2	3.3%	3.3%	-0.1629
	H-COMP-6		86.81	3.07	-28.2666	-5.0000	1	1.04	2	3.2%	3.2%	-0.1620
	Foreign Object Retained		0.02	0.06	0.3122	0.3122	1	3.00	2	4.2%	4.2%	0.0131
	Air Embolism		0.002	0.01	0.1411	0.1411	1	3.00	1	2.4%	2.4%	0.0034
	Falls and Trauma		0.37	0.38	0.9595	0.9595	2	2.04	3	4.9%	4.9%	0.0468
	CLABSI		0.49	0.47	1.0490	1.0490	2	1.95	3	4.7%	4.7%	0.0495
	CAUTI		0.55	0.49	1.1350	1.1350	2	1.88	3	4.6%	4.6%	0.0521
Ψ.	SSI: Colon		0.86	0.70	1.2260	1.2260	2	1.82	2	3.4%	3.4%	0.0414
eas	MRSA		0.95	0.75	1.2597	1.2597	2	1.79	3	4.4%	4.4%	0.0558
Σ	C. Diff		0.90	0.42	2.1460	2.1460	2	1.47	3	3.8%	3.8%	0.0824
) ŭ	PSI 3		0.44	0.41	1.0682	1.0682	1	1.94	3	4.1%	4.1%	0.0436
ıtç	PSI 4		137.02	18.76	7.3018	7.3018	1	1.14	2	2.0%	2.0%	0.1435
ō	PSI 6		0.41	0.09	4.6475	4.6475	1	1.22	2	2.1%	2.1%	0.0957
	PSI 11		13.91	4.64	2.9984	2.9984	1	1.33	2	2.2%	2.2%	0.0660
	PSI 12		5.12	1.88	2.7169	2.7169	1	1.37	2	2.2%	2.2%	0.0609
	PSI 14		2.32	0.38	6.1541	6.1541	1	1.16	2	2.0%	2.0%	0.1228
	PSI 15		1.43	0.49	2.9086	2.9086	1	1.34	3	3.0%	3.0%	0.0878
Process Me	Process Measure Score: -2.0398											
Outcome N	Measure Score:	0.9648										
Process/Ou	rocess/Outcome Combined Score: -1.0750											
Normalized	d Numerical Score:	1.9250										
Hospital Sa	fety Grade (Letter Grade):	Will not be calcu	ulated until after	r the Safety Grad	de Review Perio	d. Hospitals will	be notified via e	mail when the le	tter grades are	posted.		



Preview Preliminary Numerical Score

My Score

My Letter Grade

3.0457

TBD

More Information

Hospital Safety Grade Methodology (1 PDF file)

Hospital Safety Grade Calculator (1 Excel file)

Changes in Measure Weights (1 PDF file)

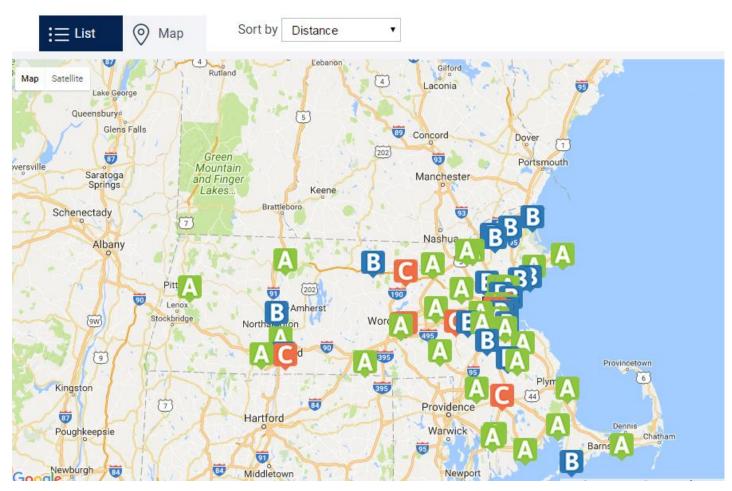


PUBLIC REPORTING

HospitalSafetyGrade.org



Search by Hospital Name and Location





Hospital Details

Beth Israel Deaconess Hospital Plymouth

275 Sandwich Street Plymouth, MA 02360-2196 Map and Directions

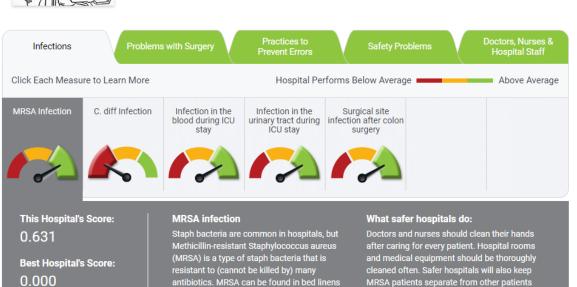
Learn how to use the Leapfrog Hospital Safety Grade





► Show Recent Past Grades

Detailed table view





Past Grades

Beth Israel Deaconess Hospital Plymouth

275 Sandwich Street Plymouth, MA 02360-2196 <u>Map and Directions</u>

Learn how to use the Leapfrog Hospital Safety Grade



This Hospital's Grade

SPRING 2017

Hide Recent Past Grades

2016

A

B

B

FALL 2016

SPRING 2016

FALL 2015

SPRING 2015

More about past grades



Detailed Table View for Hospitals

Beth Israel Deaconess Hospital Plymouth

275 Sandwich Street Plymouth, MA 02360-2196 <u>Map and Directions</u>





Outcomes measures include errors, accidents, and injuries that this hospital has publicly reported.

Measure	The Hospital's Score	Worst Performing Hospital	Avg. Performing Hospital	Best Performing Hospital	Data Source	Time Period Covered
Dangerous object left in patient's body What's This?	0	0.386	0.025	0.000	CMS	07/01/2013 - 06/30/2015
Air or gas bubble in the blood What's This?	0	0.093	0.002	0.000	CMS	07/01/2013 - 06/30/2015
Patient falls What's This?	0.623	1.944	0.390	0.000	CMS	07/01/2013 - 06/30/2015
Infection in the blood during ICU stay What's This?	0.000	2.393	0.486	0.000	2016 Leapfrog Hospital Survey	01/01/2015 - 06/30/2016
Infection in the urinary tract during ICU stay What's This?	0.397	2.130	0.548	0.000	2016 Leapfrog Hospital Survey	01/01/2015 - 06/30/2016
Surgical site infection after colon surgery What's This?	0.000	3.461	0.899	0.000	2016 Leapfrog Hospital Survey	01/01/2015 - 06/30/2016
MRSA Infection What's This?	0.631	3.968	0.862	0.000	2016 Leapfrog Hospital Survey	01/01/2015 - 06/30/2016
C. diff. Infection What's This?	1.172	2.386	0.893	0.000	2016 Leapfrog Hospital Survey	01/01/2015 - 06/30/2016
Dangerous bed sores What's This?	0.45	2.28	0.44	0.03	CMS	07/01/2013 - 06/30/2015
Death from treatable serious complications What's This?	138.73	184.16	136.80	70.79	CMS	07/01/2013 - 06/30/2015

Remember to print a copy of your Spring 2017 data and letter grade.



Measure Scores





Important Dates

- August 31 Data Snapshot Date
 - For hospitals that have submitted a Leapfrog Hospital Survey by August 31, 2017
 - On or around September 13 **E-mail** sent to the hospital CEO and primary survey contact listed in the profile section of the online Leapfrog Hospital Survey.
 - For Hospitals that have **not** submitted a Leapfrog Hospital Survey by August 31, 2017
 - On or around September 13 **Letter** will arrive to CEOs of hospitals receiving a Leapfrog Hospital Safety Grade.
 - Both e-mails and letters will include:
 - Information about the Leapfrog Hospital Safety Grade
 - Username/password to a secure website where hospitals can review the source data that Leapfrog used to calculate their numerical score
 - Links to the Hospital Safety Grade help desk and other helpful documents
- September 13 October 3 Courtesy 3-week Hospital Safety Grade Review Period
- September 20 Hospital Safety Grade Town Hall Call
- □ **Mid-October** 2-week letter grade embargo
- End of October Letter Grades will be published at <u>www.HospitalSafetyGrade.org</u>
- For more information about important dates, visit: http://www.hospitalsafetyscore.org/for-hospitals
 hospitals/updates-and-timelines-for-hospitals



More Information

 Hospital Safety Grade Help Desk: https://leapfrogscore.zendesk.com

 Hospital Safety Grade Website: www.HospitalSafetyGrade.org



QUESTIONS?