

RESEARCH BRIEF

OUTPATIENT CARE
STANDARDS FOLLOWED
MORE CLOSELY AT
TOP-PERFORMING HOSPITALS

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OVERVIEW

The Centers for Medicare & Medicaid Services (CMS) Hospital Outpatient Quality Data Reporting Program (HOP QDRP) measures are national care standards based on scientific evidence. The *Thomson Reuters 100 Top Hospitals*[®] program conducted additional research around the 2011 study on these outpatient quality measures to ascertain whether there were differences in performance between winners of the *100 Top Hospitals* award and non-winners.

By reviewing how often hospitals included in the *100 Top Hospitals* study followed the HOP QDRP measures of care, we found that the winners performed significantly better than non-winners in two key measures concerning antibiotic use.

BACKGROUND

CMS modeled the HOP QDRP after their quality data reporting program for inpatient services, the Hospital Inpatient Quality Reporting Program.

To receive the full annual update to their outpatient prospective payment system rate, CMS requires hospitals to report data using these standardized measures of care. CMS began this requirement for payments beginning in calendar year 2009.

There are currently seven outpatient clinical quality of care measures in the HOP QDRP (Table 1).

TABLE 1: Hospital Outpatient Quality Data Reporting Program Measures

	MEASURE
1	Median Time to Fibrinolysis
2	Fibrinolytic Therapy Received Within 30 Minutes of Emergency Department Arrival
3	Median Time to Transfer to Another Facility for Acute Coronary Intervention
4	Aspirin at Arrival
5	Median Time to ECG
6	Prophylactic Antibiotic Initiated Within One Hour Prior to Surgical Incision
7	Prophylactic Antibiotic Selection for Surgical Patients

DATA AND METHODS

To analyze hospital performance on the HOP QDRP measures, we gathered HOP QDRP data for the 2,914 hospitals included in the *Thomson Reuters 100 Top Hospitals 2011* study.

The annual *100 Top Hospitals* study uses quantitative analysis to identify the hospitals with the best facility-wide performance using an independent and objective assessment of public data. The study is based on the *100 Top Hospitals National Balanced Scorecard*,¹ a set of measures that evaluate performance excellence in clinical care, patient perception of care, operational efficiency, and financial stability. The study has been conducted for 18 consecutive years.

To evaluate relative performance, we compared two groups of hospitals: those who won the *100 Top Hospitals* award in 2011 (winners), and those that did not win the award (non-winners). In the *100 Top Hospitals* study, hospitals are evaluated against similar hospitals, in terms of size and teaching status, using five comparison groups: major teaching; teaching; and large, medium, and small community hospitals. These groups were also used to stratify hospitals in this analysis.

We used data from the HOP QDRP measures for October 2008 through September 2009. (Note: CMS did not require reporting of HOP QDRP measures until January 2009.) HOP QDRP measures scores are available at hospitalcompare.hhs.gov.

RESULTS

For our analysis, we focused on the seven outpatient clinical measures included in the HOP QDRP (Table 1). Of these measures, only the following two had sufficient, appropriate data for our analysis:

- Measure 6, Prophylactic Antibiotic Initiated within One Hour Prior to Surgical Incision
- Measure 7, Prophylactic Antibiotic Selection for Surgical Patients

Measures 1 through 3 had very low reporting or insufficient case volume for less than 5 percent of hospitals. Measures 4 and 5 were also not reported or did not have sufficient volume for more than half of all hospitals. The sparse reporting on some measures could be due, in part, to the fact that CMS did not begin requiring hospitals to report HOP QDRP measures until January 2009; this was later than the data period we studied in this analysis, from October 2008 through September 2009.

After comparing scores for the two HOP QDRP measures with sufficient reporting volume, we found that the difference between the winning and non-winning hospital performance was statistically significant ($p = 0.05$) on both. The measure scores indicate the percentage of eligible patients for which the hospital used the practice (Table 2).

TABLE 2: Outpatient Quality Measure Use, 100 Top Hospitals Winners Versus Non-Winners

100 TOP HOSPITALS AWARD STATUS	HOSPITAL OUTPATIENT QUALITY DATA REPORTING PROGRAM MEASURE SCORE (PERCENTAGE OF ELIGIBLE PATIENTS FOR WHICH THE HOSPITAL USED THE PRACTICE)	
	6: PROPHYLACTIC ANTIBIOTIC INITIATED WITHIN ONE HOUR PRIOR TO SURGICAL INCISION	7: PROPHYLACTIC ANTIBIOTIC SELECTION FOR SURGICAL PATIENTS
Winning Hospitals	93.5%	94.7%
Non-Winning Hospitals	90.2%	93.2%
Winner Versus Non-Winner Statistical Significance	$p = 0.05$	$p = 0.05$

¹ Kaplan RS, Norton DP. The Balanced Scorecard: Measures that Drive Performance. *Harvard Bus Rev*, Jan-Feb 1992.

We also stratified the scores by the *100 Top Hospitals* study comparison groups. We found that winning hospitals performed better than non-winning hospitals in every comparison group and for both HOP QDRP measures. However, the only differences that were statistically significant ($p = 0.05$) were those for OP 6 in the small and medium community hospitals (Table 3).

TABLE 3: Outpatient Quality Measure Use, *100 Top Hospitals* Winners Versus Non-Winners, by Comparison Group

HOP QDRP MEASURE	100 TOP HOSPITALS AWARD STATUS	100 TOP HOSPITALS STUDY COMPARISON GROUP MEASURE SCORE (%)				
		MAJOR TEACHING	TEACHING	LARGE COMMUNITY	MEDIUM COMMUNITY	SMALL COMMUNITY
OP 6	Winning Hospitals	90.7	92.7	94.2	94.8	94.6
	Non-Winning Hospitals	88.8	91.1	91.7	90.2	88.7
OP 7	Winning Hospitals	94.2	94.6	93.9	95.4	95.3
	Non-Winning Hospitals	91.1	93.6	93.4	93.5	92.7

DISCUSSION

The objective of HOP QDRP is to improve the quality and safety of outpatient care through standardization. These measures are part of a larger group of conditions that CMS requires healthcare organizations to meet so they may begin and continue participating in the Medicare and Medicaid programs. To encourage participation and quality practices, CMS began tying HOP QDRP outcomes to outpatient prospective payment system payments in calendar year 2009.

Our analysis of these two measures supports that these practices could lead to fewer patient complications; patients who receive an antibiotic within an hour of surgical incision are less likely to get wound infections. Of course, it is necessary that the antibiotic administered be the right one for the type of surgery.²

CONCLUSION

Until now, the quality measures in the *100 Top Hospitals* studies have focused on inpatient care. We are undertaking new research like this to help build background and explore opportunities to include outpatient data in the formal *100 Top Hospital* studies.

By reviewing how often hospitals included in the *100 Top Hospitals* 2011 study followed the HOP QDRP measures of care, we found that the *100 Top Hospital* study winners performed significantly better than non-winners in two key measures concerning antibiotic use.

The HOP QDRP is a relatively new program — CMS only began requiring hospitals to report on these measures in January 2009. Lack of complete data limited our ability to study hospital differences. As the program matures and data becomes more robust, such analyses could reveal more differences in how closely hospitals are following these recommended practices.

² Bratzler DW, Houck PM. Antimicrobial Prophylaxis for Surgery: An Advisory Statement from the National Surgical Infection Prevention Project. *Clinical Infectious Diseases*. 2004;38:1706-15.

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