Hospital Price Transparency Perceptions and Observations in the United States: A Rapid Review

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Abstract

The Centers for Medicare and Medicaid (CMS) began implementing the Hospital Price Transparency Rule in 2019, requiring all participating hospitals to publish their chargemasters online (gross charges) for all services provided. Policy implementation at the organization level has been questionable, with patients and health care consumers left interpreting detailed hospital financial information available online. The research objective was to investigate price transparency perceptions and observations since the introduction of shoppable services price transparency mandates in 2021.

Methods:

Reviewers conducted a rapid review and identified and analyzed 20 articles and identified common themes.

Results and Conclusions:

Four underlying constructs surrounding hospital price transparency were identified: compliance and non-compliance with the CMS (2019) price transparency rule, pricing disparities, and accessibility/usability of public pricing information. The results of this rapid review provide insight for improving health service price transparency for the health care consumer and the potential limiting of follow-on surprise billing practices, while also helping to adapt policy on future price transparency initiatives.

Keywords:

hospital; price transparency; price estimate; charge master; surprise billing

Objectives

This rapid review provides an objective assessment of publications in quality peer-reviewed journals as related to U.S. hospital price transparency initiatives in an attempt to gain insight into perceptions and observations to-date by healthcare stakeholders. Hospitals are required to meet CMS price transparency initiatives if they accept and treat Medicare and Medicaid patients, yet interpretation and implementation efforts occur and need to be evaluated at the organization level (mutually exclusive among hospitals).

The rapid review process is often utilized in lieu of a full systematic review during time constraints, expertise, and/or absence of funding, and this simplified and fast synthesis of information has been deemed of value by industry stakeholders, especially during the COVID-19 pandemic [5, 6]. In the end, a codification of perspectives and observations related to price transparency initiatives will pro-vide policymakers with important information to better understand all healthcare industry stakeholders' use of hospital price information to further support overall care delivery.

Methods

This rapid review was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) and the Cochrane Handbook [7]. Articles included in the review focused on stakeholder perceptions and observations of hospital price transparency initiatives at the individual hospital level. Researchers focused on price transparency initiative studies and reports from all healthcare stakeholder perspectives (patient, provider, hospital leadership, etc). The search was conducted using the research database search string shown in Figure 1.

[("hospital*")] AND [("price transparency") OR ("price estimate*") OR ("charge master")]

Figure 1. Research database search string and Boolean search operators that yielded the highest frequency of results in the search.

Eligibility Criteria
The search process specifically targeted articles/studies of all types in the peer-reviewed literature library database. Articles had to be published in quality peer reviewed journals and available on the institution's the Ebson B. Stephens Company (EBSCO host) and PubMed (which queries MEDLINE). Five research databases were utilized in the search that a) increased the number of total search results for the review, while b) eliminating overall duplicate article findings: MEDLINE Complete, CINHAL Complete, Complementary Index, Academic Search Complete, and Business Source Complete.

Articles included in the review were assessed for strength of evidence by utilizing the Johns Hopkins evidence-based practice rating scale (JHNEBP), a tool used to assist in clinical decision making which includes an evidence appraisal step to determine strength of evidence (articles in the review).

Exclusion Process
Figure 2 illustrates the article exclusion process. The initial research database search yielded 6,949 results and the review team concluded the search and exclusion process with a final literature sample of 20 articles. Reviewers were guided by the lead researcher/author (C.L.) and related article coding efforts, possessing over ten years of healthcare leadership experience and published numerous rapid/systematic reviews.

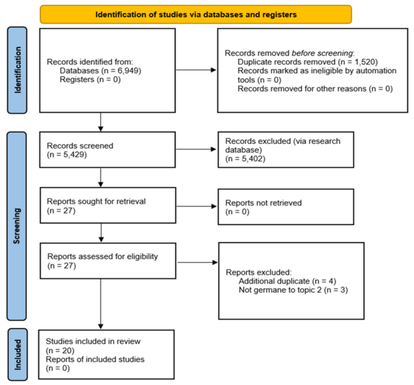

Figure 2. Preferred reporting items for systematic reviews and meta-analysis (PRISMA) figure that demonstrates the study selection process.

Results

In addition to the JHNEBP study design analysis (coded at the 2-member group level), an article summary, method used, and perspectives/observations are summarized. Articles are listed in alphabetical order by the first author's last name, after articles in this paper cited previously. research articles with strength of evidence ratings of level I and/or II are utilized in any systematic and/or rapid review, the researchers immediately identified a lack of published research in this segment of the U.S. healthcare industry to-date.

JHNEBP quality indicators were assigned to each article by the research team during the rapid review process. A majority of the articles were classified as quasi experimental (Level II), while half of the articles identified in the review were classified as either non-experimental (Level III) and opinion of nationally recognized experts based on research evidence/consensus panels (Level IV). The inclusion of articles classified with strength of evidence Level IV was decided upon as it added to the quality of the review and identified, underlying constructs. A summary of quality assessments for the identified articles is shown in Table 3.

Strength of Evidence	Frequency
I (Experimental/RCT)	1 (5%)
II (Quasi-experimental)	9 (45%)
III (Non-experimental, qualitative)	5 (25%)
IV (Opinion of nationally recognized experts based on research evidence/consensus panels)	5 (25%)
V (Opinions of industry experts not based on research evidence)	0 (0%)

Table 3. Summary of Quality Assessments

Underlying constructs related to price transparency perceptions and observations by and/all healthcare stakeholders were identified by the research team.
The constructs are identified with meta-data shown in Figure 3.

The most evident underlying construct in this review was hospital non-compliance with the CMS price transparency regulation requirements. Pricing disparities was the next prevalent construct identified in the rapid review with price differences identified and related to both between and within hospital chargemaster disparities.

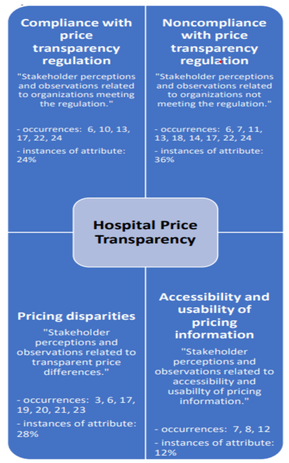

Figure 3. Occurrences of hospital price transparency underlying themes identified as observed in the literature.

Limitations

This was a convenience sample taken from articles focused on hospitals in the U.S. only to provide an assessment of perceptions and observations to-date surrounding the CMS hospital price transparency regulation for Medicare and/or Medicaid participating organizations. As a result, non-U.S. hospitals were not evaluated, as not appliable to this measure. However, as the U.S. and CMS continue to pursue this initiative, other countries may observe best practices of hospitals in their journey to meet this initiative and satisfy healthcare consumer needs of price transparency

Conclusions

Healthcare stakeholders deserve to know how much financial responsibility they will incur prior to receiving care at U.S. hospitals, as well as any/all healthcare organizations in addition to hospitals. CMS has initiated an attempt to alleviate healthcare consumer price concerns with U.S. hospitals. While still in the implementation stage and additional policy requirements forthcoming by CMS, the U.S. healthcare system has a long way to go to meet healthcare consumer expectations. Maintaining the distinction between charge (price) of care and cost of care (for the healthcare organization), other countries may benefit from observing healthcare stakeholders' perceptions and observations related to ongoing U.S. price transparency initiatives. Future research should further focus on the potential standardization of publicly displayed hospital fee schedules, methods to better end-user interpretation and use of such data,
and the information deduced from hospital websites.

Reference and Acknowledgment

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