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Observation Status Stays May Result in Financial Losses for Children's Hospitals

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IRB Number: 00001070

Describe role of Submitting/Presenting Trainee in this project (limit 150 words):

The submitting author was involved in the conception of the study as well as the analysis and interpretation of data. The abstract was written by the primary author with input and contributions from the other authors.

Background:

Pediatric hospitalizations are classified as observation (obs) status or inpatient status using clinical criteria although care delivery and associated costs are often identical. Reimbursement for obs status is hypothesized to be lower than inpatient status, however this difference has not been previously quantified.

Objectives/Goal:

To compare the financial outcomes of obs and inpatient status stays within children's hospitals and to describe differences in cost coverage based on payor.

Methods/Design:

We performed a retrospective cohort analysis using administrative data from 15 tertiary care children's hospitals included within the Pediatric Health Information System (PHIS) database and Revenue Management Program (RMP) database between 1/1/2018 and 12/31/2018. Cost of hospitalization was estimated using PHIS and cost-to-charge ratios; reimbursement information was collected from the RMP database. All obs and inpatient status stays for children aged 0-18 years, excluding transfers, ICU stays, and surgical hospitalizations were analyzed. For each stay, we defined cost coverage as the ratio of reimbursement to cost of hospitalization (e.g., a cost coverage value of less than one indicates that the net cost exceeded reimbursement). Cost coverage ratios were summarized with medians and interquartile ranges and stratified by payor; statistical significance was determined using the Wilcoxon Rank-Sum test.

Results:

We identified 153,961 obs and inpatient status stays meeting inclusion criteria; thirty-five percent of all included stays were classified as obs status (4%-61%, Figure 1). We observed that the cost coverage was significantly greater for inpatient stays (1.1, IQR 0.5-2.0) compared to obs stays (0.8, IQR 0.3-1.6) (Table 1), and that public payor reimbursement of obs status stays resulted in the lowest cost coverage ratio (0.6, IQR 0.2-0.9, Table 2). Non-public payors for both obs and inpatient stays largely resulted in positive cost coverage ratios. Additionally, we noted high variability in both the proportion of obs status stays and cost coverage among included hospitals.

Conclusions:

Obs status stays result in reimbursement that is less than the cost of hospitalization more often than inpatient status stays and may represent a financial liability for children's hospitals, particularly those with high proportion of obs or public payor stays. Quantifying the financial consequence of obs status stays and describing factors associated with net financial losses for these stays is important for the financial health of children's hospitals.