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Pediatric Inpatient Leaders, Views Changed with COVID-19: A Call to Re-engage in Quality Improvement

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INTRODUCTION

Improving patient care experiences is integral to the quality of care for hospitalized patients, including children and their families.[1–3] Effective quality improvement (QI) requires incremental changes guided by measurement, monitoring, and performance feedback,[4] all of which were challenged or disrupted by the 2019 coronavirus pandemic (COVID-19).[5–7] In response to the COVID-19 pandemic, many, if not all, hospital processes were impacted. As part of a larger study,[8–11] we had the opportunity to compare quality leaders' perceptions of using patient experience surveys before and during COVID-19. This commentary aims to share the perspectives of inpatient pediatric leaders before and during COVID-19, as these data highlight the need to re-engage in efforts to improve pediatric care experiences.

LEADERSHIP PERCEPTIONS OF QUALITY IMPROVEMENT USING CHILD HCAHPS

Starting in 2017, we partnered with a medium-sized 131-bed children's hospital that included pediatric and neonatal intensive care units within an urban, academic medical center on the West Coast. Our partner hospital began using the Child HCAHPS[12,13] survey in 2017 to collect patient experience data about care received by hospitalized children. We describe findings from the larger study elsewhere.[8–11] As part of their QI process, we administered a survey to assess quality leaders' perceptions of and experiences using the Child HCAHPS survey to monitor and improve the quality of care. This Children's Hospital Quality Leaders survey included 5 multi-item composite measures: *Perceptions of hospital priorities* (3 items); *Importance of patient experience relative to other goals* (3 items); *Agreement on validity of Child HCAHPS scores* (7 items); *Agreement on approaches that can improve Child HCAHPS scores* (12 items), and Child *HCAHPS domains hospital worked to improve* (18 items).

In addition, the survey included 6 single-item measures: Child HCAHPS results are provided promptly by vendor; Child HCAHPS sample size is large enough to meet [*Named Hospital's*] needs; frequency the respondent Received reports about patient experience; whether Reports received included Child HCAHPS global ratings (Yes/No); Reports included specific domains of Child HCAHPS patient experience (Yes/No), and Reports included patient comments from Child HCAHPS survey(Yes/No).[9]

The Children's Hospital physician leader of the pediatric quality committee sent a letter introducing the study and informing leaders about the survey. We emailed leaders to respond and provide informed consent by completing the online survey. We obtained cross-sectional survey data, including 32 survey responses (55% response rate) from hospital quality leaders before (2018–2019) and 36 during (2020–2021) COVID-19. Respondents were hospital leaders (53%) and pediatric/nursing directors (47%) (Fig. 1). The type of staff (hospital leaders versus pediatric/nursing directors) that responded to the surveys during the 2 periods did not differ significantly. We used Welch's 2-sample *t* test to compare means and chi-square tests to compare respondent characteristics between the 2 time periods. The institution's Human Subjects Protection Committee approved the study (IRB_Assurance_No: FWA00003425; IRB Number: IRB00000051).

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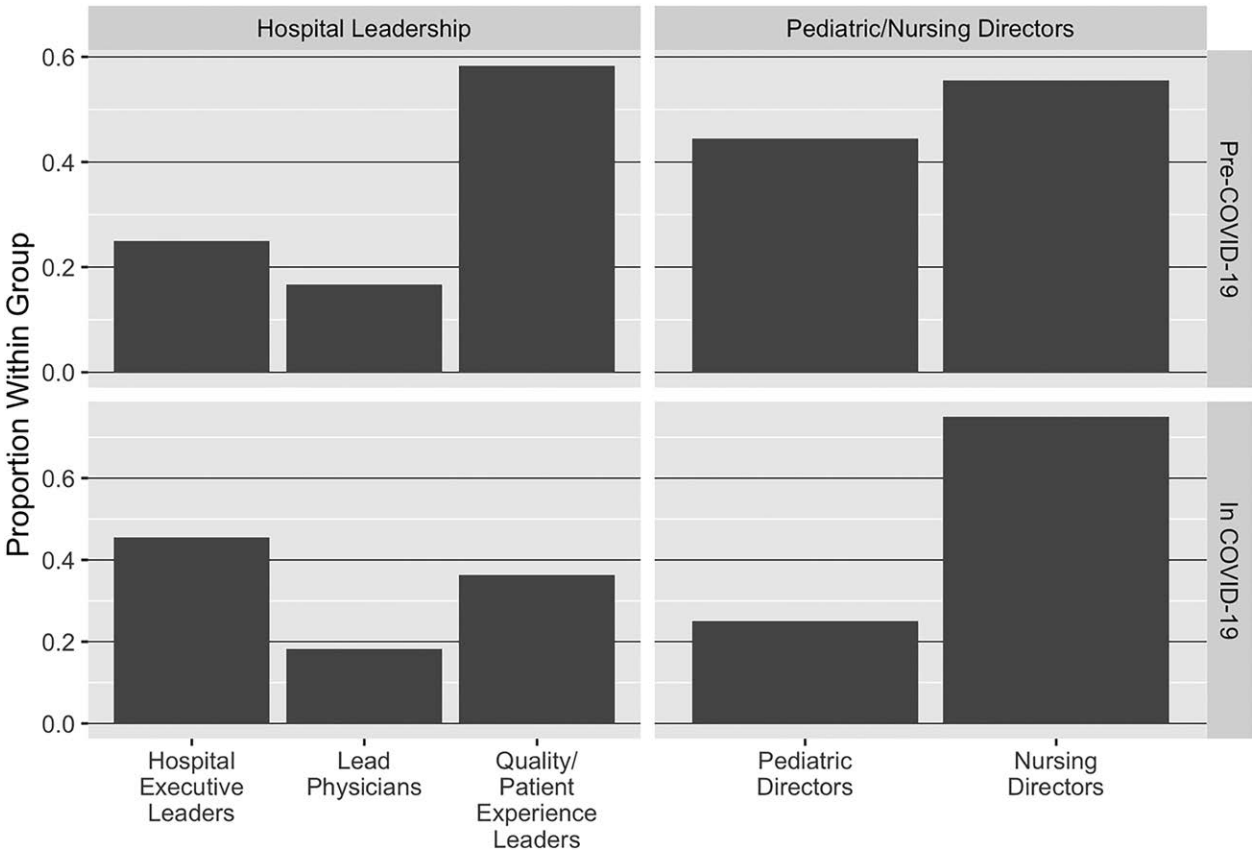

Fig. 1. Comparison of Role of Survey Respondents by COVID-19 Period.

We found 2 key changes comparing the leadership perceptions before and during COVID-19. First, we found a significant decrease in the leaders' perceptions that the *Hospital Worked to Improve Child HCAHPS Domains in the Last 12 Months* (from 0.75 (SD 0.26) to 0.60 (SD 0.30)) in the COVID-19 period ($P = 0.04$; average of 1 = Yes/0 = No scale). For example, on average, leaders indicated working on improving 75% of the care experience domains measured in the Child HCAHPS survey before COVID but significantly less, only 60%, during COVID-19. Perceptions about the hospital working on improving 5 (of the 12) specific aspects of care decreased significantly from before COVID-19: *Communication between You and Your Child's Doctors, Keeping You Informed About Your Child's Care in the ER, How Well Doctors Communicate with your Child, Quietness of Hospital Room*, and *Overall Rating of the Hospital (*Table 1).

Second, there was an increase in the leaders' feeling that *Our Child HCAHPS sample size is large enough to meet [Named Children's Hospital's] need* from 1.88 (SD 1.11) in the pre-COVID-19 period to 2.57 (SD 1.29) in the COVID-19 period ($P = 0.04$; 5-point agreement scale from 1 = strongly disagree to 5 = strongly agree). Importantly, there were no significant changes in leaders' hospital priorities regarding the importance of patient experience, perceptions of the importance of patient experience relative to other goals (patient safety, clinical quality, financial performance), or agreement on approaches to improve Child HCAHPS scores.

MAIN TAKEAWAY

During COVID-19, quality leaders' confidence in the administration and validity of Child HCAHPS remained high. Still, they reported the hospital worked less on improving several aspects of care experiences, suggesting that QI efforts engaged before COVID-19 were paused due to the more pressing demands of providing COVID-19 care. Quality leaders reported that the hospital worked less on improving communication, keeping families/parents informed about care in the ER, quietness of the hospital room and the overall rating. This decrease in QI activity most likely reflects the shift in workload demands within the hospital during COVID-19 based on limited staff and the need to redirect clinician and staff time to more direct patient care for COVID-19.

Efforts to address concerns with patient care experiences waned during COVID-19 may not be surprising. Still, it needs to be addressed by hospital leaders who can re-engage and restart efforts to improve patient and family inpatient care experiences. Also, our findings may not be generalizable because we studied only 1 children's hospital experience using Child HCAHPS data. Still, they are instructive, given limited research on pediatric QI efforts

Table 1. Perceptions of Children's Hospital Quality Leaders, By COVID-19 Period for Composite and Single-item Measures

Measures	Mean (SD) Overall, N = 68	Pre- COVID-19 (2018-2019), N = 32	During COVID-19 (2020-2021), N = 36	*P*
Perception of hospital priorities (5-point Agreement scale* with α= 0.69; 3 items)+	4.35 (0.72)	4.28 (0.85)	4.42 (0.59)	0.437
Importance of patient experience relative to other goals (3-point Less/Same/More Importance scale with α = 0.44; 3 items)+	1.94 (0.35)	1.95 (0.35)	1.94 (0.35)	0.882
Agreement on validity of HCAHPS scores (5-point Agreement scale* with α= 0.92; 7 items) +	3.59 (0.58)	3.62 (0.58)	3.57 (0.59)	0.733
Agreement on approaches to improve HCAHPS scores (5-point Agreement scale* with α= 0.91; 12 items)+	4.23 (0.56)	4.17 (0.72)	4.28 (0.37)	0.431
Frequency received reports about patient experience (Single item; 4-point frequency scale**)	3.29 (0.96)	3.31 (1.00)	3.28 (0.94)	0.884
Inclusion of Child HCAHPS global ratings in reports received (Single item; Yes/No scale)	0.90 (0.20)	0.88 (0.24)	0.92 (0.17)	0.486
Inclusion of specific domains of Child HCAHPS patient experience in reports received (Single item; Yes/No scale)	0.95 (0.23)	0.93 (0.27)	0.97 (0.18)	0.509
Inclusion of patient comments from Child HCAHPS survey in reports received (Single item; Yes/No scale)	0.80 (0.40)	0.75 (0.44)	0.84 (0.37)	0.380
Child HCAHPS results are provided in a timely manner by our vendor (Single item; 5-point Agreement scale*)+	3.33 (1.06)	3.50 (1.07)	3.18 (1.06)	0.272
Our Child HCAHPS sample size is large enough to meet [Children's Hospital]'s needs (Single item; 5-point Agreement scale*)+	2.24 (1.24)	1.88 (1.11)	2.57 (1.29)	**0.040**
Child HCAHPS domains hospital worked to improve in last 12 months With 5 significant items out of 18 (Yes/No scale with α= 0.94) +:	0.67 (0.29)	0.75 (0.26)	0.60 (0.30)	**0.040**
Worked to Improve Communication between You and Your Child's Doctors	0.57 (0.50)	0.76 (0.44)	0.39 (0.50)	**0.003**
Worked to Improve Keeping You Informed About Your Child's Care in the ER	0.26 (0.44)	0.41 (0.50)	0.13 (0.35)	**0.022**
Worked to Improve How Well Doctors Communicate with your Child	0.52 (0.50)	0.67 (0.48)	0.39 (0.50)	**0.035**
Worked to Improve Quietness of Hospital Room	0.74 (0.44)	0.89 (0.31)	0.60 (0.50)	**0.010**
Worked to Improve Overall Rating of Hospital	0.78 (0.42)	0.90 (0.31)	0.68 (0.48)	**0.038**

Note: SD stands for standard deviation. HCAHPS stands for Hospital Consumer Assessment of Healthcare Providers and Systems. ER stands for emergency room. **Bold text** indicates statistically significant differences ($P<0.05$) from *t* tests comparing means.
*The five-point agreement scale is: strongly disagree/somewhat disagree/neither agree or disagree/somewhat agree/strongly agree.
**The 4-point frequency scale is: never/annually/quarterly/monthly or more frequently.
+Indicates that the measure is based on the national survey of hospital quality leaders (SHQL).

during COVID-19 in general[14] and the almost nonexistent research specific to QI using patient experience of care data or Child HCAHPS data during COVID-19. *Importantly, our results reinforce the potential negative impact of dealing with COVID-19 on efforts to enhance patient experiences with pediatric inpatient care.*

Hospitals use evidence-based approaches[15] to provide patient experience information to frontline staff and quality leaders.[2,16] They also use these data for QI.[1–3,12,15–18] The National Quality Forum endorsed and field-tested the Child HCAHPS survey nationally, but it is not mandated for national public reporting or pay-for-performance. Still, hospital leaders can use it to examine inpatient pediatric and neonatal care domains and benchmark performance internally and nationally.[12,13] Our study captures the perspectives of quality leaders' use of Child HCAHPS during the COVID-19 pandemic. It highlights that their confidence in the measurement remains high, whereas the use of the data for QI lagged due to the patient care demands of COVID-19. Our findings contribute to the wider literature by highlighting an important area of need when rebooting and recovering from the pandemic.

Also, our findings imply that to recover from the COVID-19 pandemic, leaders must focus on and return to QI efforts to improve the patient care experience. Returning to the old processes and methods with the same resources may not be enough. That is, significantly more investments in patient experience may be needed to get back to the hospital's pre-COVID-19 trajectory of quality pediatric patient care. Hospitals may have lost ground with respect to quality care - hospital executives and quality leaders may need to increase investments to catch up. This QI reboot is possible, given that hospital executives and quality leaders maintain that patient experience measurement tools are useful and valid for measuring inpatient pediatric care experiences.

CONCLUSIONS

QI efforts before COVID-19 were suspended to the more pressing demands of providing COVID-19 care. This decrease in QI activity likely reflects the shift in workload demands based on limited hospital staff and the need to redirect clinicians to more direct patient care. Recovering from the pandemic should include refocusing on and returning to efforts to improve care experiences. This recovery may require significantly more investment in improving the patient experience to re-establish high-quality pediatric patient care. Future studies must assess patient experience with hospital care for children before and during the pandemic.

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DISCLOSURE

The authors have no financial interest to declare in relation to the content of this article.

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