


Patient Experience on a Hospital Oncology Service Before and After Implementation of a No-Visitor Policy During COVID-19

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Abstract

Hospital visitor restriction policies prompted by Coronavirus Disease 2019 (COVID-19) may lead to a less comfortable or informed inpatient experience for oncology patients admitted for non-COVID-19 conditions. We surveyed oncology inpatients before (n = 47) and after (n = 65) implementation of a no-visitor policy using a validated questionnaire to measure patient experience. Results revealed no significant difference in the percentage of patients reporting “no problems” ($P < .05$) in all questions. Patient experience was not adversely impacted by visitor restrictions enacted in response to COVID-19 on an oncology service, as measured by a questionnaire capturing common concerns among inpatients.

Keywords

COVID-19, patient experience, inpatient oncology, hospital communication, physician–patient communication, quality improvement

Introduction

The coronavirus disease 2019 (COVID-19) pandemic has prompted widespread hospital visitor restriction policies in an effort to reduce risk of severe acute respiratory syndrome coronavirus 2 transmission (1). The utility of these restrictions has been debated in light of their efficacy and their potential to inflict psychological duress and/or poor outcomes for patients and families (2–5). Strategies for implementing these restrictions in an ethical and compassionate way are institution-specific and inconsistent (6).

Among patients admitted for non-COVID-19 reasons, the literature on patient experience is limited and mixed (6–8). For instance, Zeh et al. have shown that visitor restrictions adversely impacted the postoperative experience among surgical patients with respect to psychosocial support and discharge planning, while Shannon et al. found that a majority of surgical patients in their sample reported that restrictions had no impact on their hospital stay (6,7). Recent evidence from the United Kingdom showed that while visitor

restrictions contributed to patient loneliness, patients still rated their quality of care as high (8). As hospitals continue to consider and implement limitations on visitors, there is little understanding of how this may affect the experience of patients hospitalized for non-COVID-19 conditions, especially among patients diagnosed with cancer.

The aim of this analysis was to compare the measures of patient experience before and after implementation of a no-visitor policy on an inpatient oncology service.

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Methods

This project was conceived as a survey-based quality improvement project regarding patient experience on an academic medical center's medical oncology service, although implementation of a hospital no-visitor policy during the data collection period allowed for comparison of patient responses before and after implementation of strict visitor restrictions.

In-person survey administration following a convenience sampling regime was incorporated into case management discharge planning during the data collection period, which spanned January 1, 2020, to June 24, 2020. Eligible patients for inclusion were those aged 18 years and older who were admitted to the inpatient oncology unit. Incorporation of the survey into discharge planning allowed for consistency in primary data collection. This was carried out by the unit case manager at the bedside, who assisted with survey completion as needed. On March 18, 2020, a hospital-wide no-visitor policy was implemented and remained in place until June 24, 2020, when the policy was loosened to allow one support person. Rare exceptions to the restriction were made on a case-by-case basis for patients on comfort-directed plans and for serious illness conversations. According to the policy defining activities which constitute research at the University of Vermont / University of Vermont Medical Center, the survey collection met criteria for operational improvement activities exempt from ethics review.

There are several patient experience surveys available for inpatient use (9–11). We integrated 2 previously validated questionnaires into a 14-question survey with categorical responses to capture both an overall measure of patient experience and more specific areas for evaluation. A “heard and understood” question was adapted from the palliative care literature showing its utility in assessing the “global interpersonal environment” for patients with serious illness in a health care setting (12). The remaining questions were adapted from the Picker Patient Experience Questionnaire, a widely used survey tool that has been applied to evaluate 8 dimensions of patient experience (13).

Categorical responses were coded into a dichotomous problem score for each question, which was reported as a percentage of respondents reporting “no problems.” Percentages were calculated with any missing responses excluded from the denominator. For each survey question, a Pearson chi-square test of independence (or Fisher exact test for questions with cell counts fewer than 5) was used to compare the dichotomous problem scores from before and after implementation of the no-visitor policy ($P < .05$ level of significance). Data management and analyses were carried out in Microsoft Excel (version 2016; Microsoft Corp) and Stata SE (version 16.0; StataCorp, LLC). Descriptive data were gathered from the electronic record (Epic Systems). The University of Vermont Committee on Human Research

in the Medical Sciences approved the electronic record review as exempt.

Results

A total of 134 surveys were administered. Due to COVID-19-related patient redistribution throughout the hospital, 18 of these were surveys administered to general medicine patients, which were thus excluded. An additional 4 surveys were excluded for incomplete identifying information. This resulted in a total sample size of 112 surveys, with 47 collected prior to the no-visitor policy enactment on March 18, 2020, and 65 surveys collected after that date. Of the final sample, 7 surveys were collected from readmitted patients.

Of the surveyed sample ($n = 112$), the median age was 69 years old, 40.2% was female, 95.5% self-identified as white, and 27.7% had Medicaid insurance. The survey was administered generally within 1 to 2 days before discharge at a median hospital day of 5 (Table 1).

Table 2 shows the percentage of respondents reporting “no problems” for each of the 14 survey questions, before and after visitor restrictions.

Discussion

This project compared the experience among hospitalized patients with cancer before and after implementation of no-visitor restrictions enacted in response to COVID-19 precautions. We found that participants did not report statistically significant differences across commonly measured realms in patient experience after visitor restrictions were put in place. These findings were consistent across survey prompts regarding specific experiences, as well as the “heard and understood” question (#1), which has been validated in the palliative literature as a broad measure of patient experience among patients with serious illness (12). The more specific prompts addressed experiences such as having questions or concerns answered adequately, engaging in discussion of anxieties and fear with staff, and being treated with respect and dignity while in the hospital.

For most of the questions, the percentage of respondents reporting “no problems” increased during the visitor-restriction period. Question 14 was a notable exception, which assessed whether staff gave family or a support person adequate information in order to recover. This should be interpreted in the context of missing responses, which were more heavily concentrated in the visitor-restriction period (4% prior to the restrictions vs 28% during restrictions), and thus may reflect an overrepresentation of “no problem” responses. Based on qualitative comments collected with the surveys, we surmise that many patients found this question difficult to answer in the setting of the no-visitor policy and thus left it blank, and it may infer that patient visitors were assisting in survey completion prior to the visitor restriction. It also may capture the increased complexity of discharging patients into support of family and caregivers when they are

Table 1. Descriptive Characteristics of the Sample.

Characteristic	Surveyed before no-visitor policy (n = 47)	Surveyed during no-visitor policy (n = 65)	Entire sample (n = 112)
Age—median (IQR)	65.0 (59.0-74.0)	71.0 (63.0-78.0)	69.0 (60.0-76.0)
Female sex—no. (%)	22 (46.8)	23 (35.4)	45 (40.2)
Self-identified white race—no. (%)	46 (98.9)	61 (93.9)	107 (95.5)
Medicaid insured—no. (%)	15 (31.9)	16 (24.6)	31 (27.7)
Hospital day of survey—median (IQR) ^a	5 (3.0-10.0)	5 (2-8.5)	5 (3.0-9.0)
Cancer site—no. (%)			
Gastrointestinal	20 (42.6)	19 (29.2)	39 (34.8)
Genitourinary	5 (10.6)	4 (6.2)	9 (8.0)
Lung	15 (31.9)	14 (21.5)	29 (25.9)
Other ^b	7 (14.9)	19 (29.2)	26 (23.2)
Unknown ^c	0 (0.0)	9 (13.9)	9 (8.0)
Cancer stage at admission—no. (%)			
Stage I-III	7 (14.9)	11 (16.9)	18 (16.1)
Stage IV	38 (80.9)	45 (69.2)	83 (74.1)
Unknown or n/a	2 (4.3)	9 (13.9)	11 (9.8)

Abbreviations: IQR, interquartile range; no., number.

^aExcludes one missing value.

^bOther includes fallopian, glioblastoma (4), breast (6), prostate (3), head and neck (4), hematologic (2), granulosa cell tumor, mesothelioma, osteosarcoma, endometrial (2), and neuroendocrine tumor.

^cUnknown diagnoses occurred in encounters for which tissue diagnosis was unknown at time of discharge.

Table 2. Results by Survey Question.^a

Survey questions	% Reporting no problems, before no-visitor policy (n = 47)	% Reporting no problems, during no-visitor policy (n = 65)	P value	% Missing ^b
1. Over the past 2 days, how much have you felt heard and understood by the doctors, nurses, and hospital staff?	70.2	81.3	.175	0.9
2. When you had important questions to ask a doctor, did you get answers that you could understand?	72.3	76.9	.580	0.0
3. When you had important questions to ask a nurse, did you get answers that you could understand?	87.2	90.8	.551	0.0
4. Sometimes in a hospital, one doctor or nurse will say one thing and another will say something quite different. Did this happen to you?	58.7	70.3	.206	1.8
5. If you had any anxieties or fears about your condition or treatment, did a doctor discuss them with you?	80.4	79.4	.891	2.7
6. Did doctors talk in front of you as if you weren't there?	87.2	88.9	.790	1.8
7. Did you want to more involved in the decisions made about your care and treatment?	67.4	75.8	.334	3.6
8. Overall, did you feel you were treated with respect and dignity while you were in the hospital?	91.5	90.5	1.000	1.8
9. If you had any anxieties or fears about your condition or treatment, did a nurse discuss them with you?	87.2	92.1	.404	1.8
10. Did you find someone on the hospital staff to talk to about your concerns?	89.4	93.7	.493	1.8
11. Were you ever in pain?	19.1	32.3	.125	2.7
12. If yes, do you think the hospital staff did everything they could to help control your pain?	92.9	87.2	.491	20.5
13. If your family or someone else close to you wanted to talk to a doctor, did they have enough opportunity to do so?	87.0	88.1	.856	6.3
14. Did the doctors or nurses give your family or someone close to you all the information they needed to help you recover?	91.1	78.7	.146	17.9

^aQuestion 1 was coded into a binary "problem/no-problem" value, whereby responses other than "Completely" were marked as "problem," in a variation on the "heard and understood" question proposed by Gramling et al (12). Responses to questions 2 to 14 were coded into a binary "problem/no-problem" value as described in Jenkinson et al (13).

^bMissing values were coded as such if left blank by the patient.

unable to directly participate in the pertinent discussions. Although our project was not designed to collect family and caregiver experience, these perspectives would be important in further research on the impact of no-visitor policies, especially with regard to patients who have a high reliance on caregiver support.

This project demonstrates that by certain measures, patient experience among those with cancer and non-COVID-19 diagnoses may not be adversely affected by no-visitor policies. These findings add to the mixed results reported on the subject (2,5–8), and we suspect that they are multifactorial. They corroborate evidence suggesting that patients may still rate their quality of care highly during visitor restrictions, notwithstanding their reported sense of loneliness (8). Within our institution during the no-visitor period, treatment teams increasingly arranged patient-inclusive televideo family meetings, and visitor restrictions were incorporated into care coordination during multidisciplinary case management rounds and discharge planning. These measures were similar to what has been recommended in the literature and systematically reported by other institutions (5,8,14). Preliminary results of our findings were presented at a hospital Quality Improvement forum and shared with treatment teams.

Strengths of this project included inpatient survey administration at the bedside, data collection over 6 months, incorporation of 2 validated survey instruments, a focus on patients with cancer, and initiation of the survey before COVID-19 was widely expected to drastically impact hospital operations. Limitations included its focus on one service at a single academic medical center, although this allowed for consistency in data collection on a unit-based service. Our sample was also quite homogenous in racial makeup, which reflected the regional demographics though may limit generalizability especially considering how structural racial disparities have been exacerbated by COVID-19 (15). Additionally, the use of a convenience sampling regime may under-represent the views of patients who opted out or were unable to complete the survey. The face-to-face nature of data collection may have added bias into patient responses, especially if family was not present. However, the survey design incorporated both broad and focused questions to minimize this potential for bias, and results were generally consistent across all questions.

Conclusion

We recognize that many clinicians can attest to examples of how hospitalized patients and their families may have suffered distress or poor outcomes secondary to COVID-19 era no-visitor policies, however this project demonstrates that patient experience was not adversely impacted by such a policy on a unit-based oncology service. Further quality improvement initiatives could be directed toward analysis of unit-specific adaptations that positively impacted patient experience during this difficult period.

Authors' Note

According to the policy defining activities which constitute research at the University of Vermont/University of Vermont Medical Center, the survey collection met criteria for operational improvement activities exempt from ethics review. All procedures in this study were conducted in accordance with the University of Vermont/University of Vermont Medical Center Institutional Review Board's approved protocols. Verbal informed consent was obtained from the patients or legally authorized representatives for their anonymized information to be published in this article.

Declaration of Conflicting Interests

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References

1. Hafner K. A heart-wrenching thing: hospital bans on visits devastate families. *the New York times*. Published March 29, 2020. Accessed July 15, 2021. <https://www.nytimes.com/2020/03/29/health/coronavirus-hospital-visit-ban.html>.
2. Wee LE, Conceicao EP, Sim JXY, Aung MK, Venkatachalam I. The impact of visitor restrictions on health care-associated respiratory viral infections during the COVID-19 pandemic: experience of a tertiary hospital in Singapore. *Am J Infect Control*. 2021;49:134-35. doi:10.1016/j.ajic.2020.11.006
3. Weiner HS, Firm JI, Hogikyan ND, Jaggi R, Laventhal N, Marks A, et al. Hospital visitation policies during the SARS-CoV-2 pandemic. *Am J Infect Control*. 2021;49:516-20. doi:10.1016/j.ajic.2020.09.007
4. Munshi L, Evans G, Razak F. The case for relaxing no-visitor policies in hospitals during the ongoing COVID-19 pandemic. *CMAJ*. 2021;193:E135-37. doi:10.1503/cmaj.202636.
5. Valley TS, Schutz A, Nagle MT, Miles LJ, Lipman K, Ketcham SW, et al. Changes to visitation policies and communication practices in Michigan ICUs during the COVID-19 pandemic. *Am J Respir Crit Care Med*. 2020;202:883-85. doi:10.1164/rccm.202005-1706LE
6. Zeh RD, Santry HP, Monsour C, Sumski AA, Bridges JFP, Tsung A, et al. Impact of visitor restriction rules on the post-operative experience of COVID-19 negative patients undergoing surgery. *Surgery*. 2020;168:770-76. doi:10.1016/j.surg.2020.08.010
7. Shannon AB, Roberson JL, Clapp JT, Vaughan C, Kleid M, Song Y, et al. What is the patient experience of surgical care during the coronavirus disease 2019 (COVID-19) pandemic? a mixed-methods study at a single institution. *Surgery*. 2020; S0039-6060:30894-1. doi:10.1016/j.surg.2020.12.031

8. Key T, Kulkarni A, Kandhari V, Jawad Z, Hughes A, Mohanty K. The patient experience of inpatient care during the COVID-19 pandemic: exploring patient perceptions, communication, and quality of care at a university teaching hospital in the United Kingdom. *J Patient Exp*. 2021;8:1-6.
9. Rubens FD, Rothwell DM, Al Zayadi A, Sundaresan S, Ramsay T, Forster A. Impact of patient characteristics on the Canadian patient experiences survey-inpatient care: survey analysis from an academic tertiary care centre. *BMJ Open*. 2018;8:e021575. doi:10.1136/bmjopen-2018-021575.
10. Giordano LA, Elliott MN, Goldstein E, Lehrman WG, Spencer PA. Development, implementation, and public reporting of the HCAHPS survey. *Med Care Res Rev*. 2010;67:27-37. doi:10.1177/1077558709341065
11. Beattie M, Murphy DJ, Atherton I, Lauder W. Instruments to measure patient experience of healthcare quality in hospitals: a systematic review. *Syst Rev*. 2015;4:97. doi:10.1186/s13643-015-0089-0.
12. Gramling R, Stanek S, Ladwig S, Gajary-Coots E, Cimino J, Anderson W, et al. Feeling heard and understood: a patient-reported quality measure for the inpatient palliative care setting. *J Pain Symptom Manage*. 2016;51:150-54. doi:10.1016/j.jpainsymman.2015.10.018
13. Jenkinson C, Coulter A, Bruster S. The picker patient experience questionnaire: development and validation using data from in-patient surveys in five countries. *Int J Qual Health Care*. 2002;14:353-58. doi:10.1093/intqhc/14.5.353
14. Houchens N, Tipirneni R. Compassionate communication amid the COVID-19 pandemic. *J Hosp Med*. 2020;15:437-39. doi:10.12788/jhm.3472
15. van Dorn A, Cooney RE, Sabin ML. COVID-19 exacerbating inequalities in the US. *Lancet*. 2020;395:1243-44. doi:10.1016/S0140-6736(20)30893-X