

Original Investigation

Reasons Why Physicians and Advanced Practice Clinicians Work While Sick

A Mixed-Methods Analysis

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IMPORTANCE When clinicians work with symptoms of infection, they can put patients and colleagues at risk. Little is known about the reasons why attending physicians and advanced practice clinicians (APCs) work while sick.

OBJECTIVE To identify a comprehensive understanding of the reasons why attending physicians and APCs work while sick.

DESIGN, SETTING, AND PARTICIPANTS We performed a mixed-methods analysis of a cross-sectional, anonymous survey administered from January 15 through March 20, 2014, in a large children's hospital in Philadelphia, Pennsylvania. Data were analyzed from April 1 through June 1, 2014. The survey was administered to 459 attending physicians and 470 APCs, including certified registered nurse practitioners, physician assistants, clinical nurse specialists, certified registered nurse anesthetists, and certified nurse midwives.

MAIN OUTCOMES AND MEASURES Self-reported frequency of working while experiencing symptoms of infection, perceived importance of various factors that encourage working while sick, and free-text comments written in response to open-ended questions.

RESULTS Of those surveyed, we received responses from 280 attending physicians (61.0%) and 256 APCs (54.5%). Most of the respondents (504 [95.3%]) believed that working while sick put patients at risk. Despite this belief, 446 respondents (83.1%) reported working sick at least 1 time in the past year, and 50 (9.3%) reported working while sick at least 5 times. Respondents would work with significant symptoms, including diarrhea (161 [30.0%]), fever (86 [16.0%]), and acute onset of significant respiratory symptoms (299 [55.6%]). Physicians were more likely to report working with each of these symptoms than APCs (109 [38.9%] vs 51 [19.9%], 61 [21.8%] vs 25 [9.8%], and 168 [60.0%] vs 130 [50.8%], respectively [$P < .05$]). Reasons deemed important in deciding to work while sick included not wanting to let colleagues down (521 [98.7%]), staffing concerns (505 [94.9%]), not wanting to let patients down (494 [92.5%]), fear of ostracism by colleagues (342 [64.0%]), and concern about continuity of care (337 [63.8%]). Systematic qualitative analysis of free-text comments from 316 respondents revealed additional reasons why attending physicians and APCs work while sick, including extreme difficulty finding coverage (205 [64.9%]), a strong cultural norm to come to work unless remarkably ill (193 [61.1%]), and ambiguity about what constitutes "too sick to work" (180 [57.0%]).

CONCLUSIONS AND RELEVANCE Attending physicians and APCs frequently work while sick despite recognizing that this choice puts patients at risk. The decision to work sick is shaped by systems-level and sociocultural factors. Multimodal interventions are needed to reduce the frequency of this behavior.

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When health care workers (HCWs) provide patient care while experiencing symptoms of infectious disease, they can put their patients and colleagues at risk. A symptomatic HCW can transmit pathogens directly to others¹; contaminate shared, high-touch surfaces^{2,3}; and experience impaired judgment based on the severity of their illness. The medical literature includes numerous reports of outbreaks for which symptomatic HCWs have been found to be the ultimate source of disease within health care facilities,⁴ such as influenza⁵⁻⁷ and infections with *Bordetella pertussis*,⁸ methicillin-resistant *Staphylococcus aureus*,⁹ and *Norovirus*.^{10,11} Health care-associated infections lead to substantial morbidity and mortality and excess costs.^{12,13} This outcome is especially true for immunocompromised patients and others at high risk for infection, such as neonates.¹⁴⁻¹⁷ Despite increased national emphasis and progress on developing strategies for prevention of health care-associated infections,¹⁸ little attention has been directed toward understanding and preventing pathogen transmission from ill HCWs to patients.

Numerous reports have documented that HCWs often provide patient care while symptomatic rather than staying home.^{11,19-21} Surveys of HCWs in different occupational roles find from 50% to 90% of respondents report that they have worked or would work while experiencing significant symptoms of infection.²²⁻³⁰ Reasons HCWs give for working while sick include not wanting to burden colleagues with an extra workload,^{22,24,26} not believing that they are sick enough to stay home,^{24,31} unsupportive supervisors and colleagues,^{32,33} and perceiving that one's work cannot be delegated to others.²⁶ Although these studies provide important insights, they primarily focus on physician trainees in the United States,^{22,25,27} nurses,^{32,33} and attending physicians outside the United States.^{23,26,29,31} A gap exists in knowledge about the reasons why attending physicians and advanced practice clinicians (APCs) (eg, nurse practitioners, physician assistants) in the United States work while sick.

To investigate this issue, we conducted a cross-sectional survey study of all attending physicians and APCs working at a large freestanding US children's hospital to (1) examine how frequently attending physicians and APCs report working while sick and with what types of symptoms, (2) determine whether respondents perceive that working while sick is a risk to patient safety, and (3) develop a comprehensive understanding of the reasons why attending physicians and APCs work while sick.

Methods

Study Design, Sample, and Recruitment

We conducted a cross-sectional survey of all physicians and APCs working at The Children's Hospital of Philadelphia from January 15 through March 20, 2014. The hospital has 521 beds and a mean of approximately 28 000 admissions per year and is located in a large urban area. Participants were selected for inclusion if they were attending physicians or APCs (including certified registered nurse practitioners, physician assistants, clinical nurse specialists, certified registered nurse anesthetists, and certified nurse midwives) working at the hospital.

At a Glance

- The purpose of this study was to understand how frequently and why attending physicians and advanced practice clinicians work while sick.
- Ninety-four percent of respondents believed that working while sick puts patients at risk.
- Despite recognizing the risk, 446 respondents (83.1%) worked sick at least once in the past year, with 50 (9.3%) reporting having worked sick more than 5 times in the past year.
- Primary reasons why respondents work sick included not wanting to let colleagues and patients down, extreme logistic challenges in finding coverage, a strong cultural norm to work through sickness, and ambiguity about what constitutes too sick to work.

The survey instrument was administered electronically using research electronic data capture.³⁴ The survey was voluntary and anonymous, and no incentives were offered for participation. A link to the survey instrument was distributed via email from physician and APC leaders. An introductory paragraph informed respondents that the survey was intended to help the Department of Infection Prevention better understand the reasons why staff may come to work sick with possibly infectious symptoms and that their responses would remain anonymous. Key contacts distributed reminder emails to their staff once during the study period. Our study was originally undertaken for quality improvement purposes, and no personally identifying information was gathered from respondents; therefore the study was exempt from institutional review board approval per the Children's Hospital of Philadelphia.

Survey Instrument

After reviewing the literature, the study team drafted survey items. The initial instrument was circulated to a convenience sample of 5 physicians at The Children's Hospital of Philadelphia in different specialties for review. These respondents provided feedback in an email about the clarity and appropriateness of the measures. Based on this feedback, the study team refined and shortened the items. The final instrument (eFigure in the Supplement) included 21 items covering the following topics: demographics, self-reported frequency of working while sick and with what symptoms, rating of the relative importance of a series of factors that influence working while sick, and belief whether working while sick puts patients at risk. The survey included 2 open-ended questions prompting respondents to reflect on reasons why they might come to work sick. Closed-ended questions on reasons why staff might work while sick were structured as statements to which the respondent indicated the level of importance of that particular factor on a 5-point scale, ranging from not important (1) to extremely important (5).

Data Analysis

Data analysis was performed from April 1 through June 1, 2014. We analyzed data from the closed-ended questions that consisted of descriptive statistics showing distributions. We compared the responses of attending physicians and APCs with the use of the χ^2 test of significance at the level of $P < .05$. We collapsed ratings

of “slightly important” with “important” and of “very important” with “extremely important” for ease of presentation. Quantitative analyses were completed using commercially available statistical software.³⁵ Analysis of free-text responses to the open-ended questions was completed using standardized methods of qualitative data analysis³⁶ with an additional software program (NVivo, version 10).³⁷ One of us (J.E.S.), a sociologist with extensive experience in qualitative data analysis, coded free-text comments in a 2-stage process. First, all comments were reviewed in a process of open coding, in which themes that emerged repeatedly in the data were defined and saved as codes in the NVivo software. Second, after the preliminary code list was developed, all free-text comments were reviewed line by line to determine which codes fit the concepts suggested by the data. We then cal-

culated the frequency with which common codes appeared in the data. During analysis, the coder (J.E.S.) frequently consulted with others of us to discuss code definitions and applications to ensure reliability.

Results

Of the 929 physicians and APCs administered the survey, 538 completed it, for an overall response rate of 57.9%. Response rates by profession included 280 of 459 attending physicians (61.0%) and 256 of 470 APCs (54.5%). **Table 1** summarizes the occupational demographics of the respondents (2 respondents did not select their occupational role). In respect to specific clinical areas, 84 respondents (15.7%) worked in critical care; 70 (13.1%), in surgery; and 67 (12.5%), in general pediatrics.

Table 1. Characteristics of Study Sample

Characteristic	No. (%) of Participants (N = 538) ^a
Occupational role	
Attending physician	280 (52.2)
APC ^b	256 (47.8)
Time worked at hospital, y	
0-1	28 (5.2)
2-5	107 (19.9)
6-10	165 (30.7)
11-20	152 (28.3)
21-30	54 (10.0)
≥31	32 (5.9)
Primary work setting	
Critical care/ICU	84 (15.7)
Surgery	70 (13.1)
Other procedural area ^c	18 (3.4)
Emergency department	30 (5.6)
General pediatrics	67 (12.5)
Oncology	27 (5.0)
Other pediatric subspecialty ^d	240 (44.8)

Abbreviations: APC, advanced practice clinician; ICU, intensive care unit.

^a Data were missing for some characteristics.

^b Includes certified nurse midwife, clinical nurse specialist, certified registered nurse anesthetist, certified registered nurse practitioner, and physician assistant.

^c Includes, for example, interventional radiology and sedation.

^d Includes, for example, dermatology and infectious diseases.

Closed-Ended Questions

Most of the respondents (504 of 529 who answered the question [95.3%]) believed that working while sick puts patients at risk. Despite this belief, working while sick was common. Respondents were asked: “In the past year, when providing patient care, how frequently did you come to work sick?” One hundred seventeen respondents (21.8%) reported working sick once in the past year; 279 respondents (52.0%), 2 to 4 times; and 50 respondents (9.3%), 5 or more times. Analysis of this item by occupational role showed no significant differences between attending physicians and APCs ($P = .52$). Working with significant symptoms was also common. In response to the question, “Would you come to work if you had symptoms in the following categories?” with a list of symptoms indicating possible infectious disease, 299 respondents (55.6%) reported they would work with the acute onset of significant respiratory symptoms, whereas 161 (30.0%) would work with diarrhea (**Table 2**). Attending physicians were more likely than APCs to say they would work with each of these symptoms; this difference was significant for all symptoms except acute onset of gastrointestinal tract illness.

A series of items examined reasons why respondents may come to work sick (**Table 3**). The reasons deemed important by most of the respondents in deciding to work while sick included not wanting to let colleagues down (521 [98.7%]), concern that not enough staff would be available to care for patients (505 [94.9%]), and not wanting to let patients down (494 [92.5%]). In addition, fear of ostracism by colleagues (342 re-

Table 2. Symptoms With Which Respondents Would Come to Work

Symptom	No. (%) of Respondents ^a			P Value ^b
	All (N = 538)	Attending Physicians (n = 280)	APCs (n = 256)	
Fever/chills and body aches	81 (15.1)	52 (18.6)	28 (10.9)	.01
Acute onset of significant respiratory tract symptoms ^c	299 (55.6)	168 (60.0)	130 (50.8)	.03
Acute onset of GI tract illness ^d	41 (7.6)	26 (9.3)	14 (5.5)	.09
Fever only	86 (16.0)	61 (21.8)	25 (9.8)	<.001
Diarrhea only	161 (30.0)	109 (38.9)	51 (19.9)	<.001
Vomiting only	28 (5.2)	21 (7.5)	7 (2.7)	.01
Cough and rhinorrhea only	401 (74.5)	223 (79.6)	177 (69.1)	.005

Abbreviations: APC, advanced practice clinician; GI, gastrointestinal.

^a Data were missing for some symptoms. Two respondents did not select their occupational role.

^b Calculated using the χ^2 test of significance.

^c Includes cough, congestion, rhinorrhea, and sore throat.

^d Includes vomiting and diarrhea.

Table 3. Responses of "Important" for Survey Question on Reasons Why Respondents Work Sick Overall and by Occupational Group^a

Reason	No. Responding to the Question	No. (%) Responding Yes			P Value ^b
		All	Attending Physicians	APCs	
I do not want to let my patients down	534	494 (92.5)	261 (94.6)	231 (90.2)	.06
I do not want to let my colleagues down	528	521 (98.7)	271 (98.5)	248 (98.8)	.80
I fear ostracism from my colleagues	534	342 (64.0)	160 (57.8)	181 (71.0)	.001
The leadership in the area where I work is not supportive of the sick leave policy	527	296 (56.2)	122 (45.0)	173 (68.1)	<.001
I worry about whether there will be enough staff to take care of patients	532	505 (94.9)	261 (94.9)	242 (94.9)	>.99
I have run out of sick leave, sick relief days, and/or coverage	527	113 (21.4)	33 (12.1)	79 (31.2)	<.001
I am the only person who can carry out a particular task	529	278 (52.6)	151 (54.9)	126 (50.0)	.26
I am worried about handing off my patients and continuity of care	528	337 (63.8)	190 (69.1)	145 (57.8)	.007
I come to work because my colleagues work while sick	525	341 (65.0)	183 (67.8)	157 (62.1)	.17

Abbreviation: APC, advanced practice clinician.

^a We collapsed ratings of "important" and "extremely important" for ease of presentation. Two respondents did not select their occupational role.

^b Calculated using the χ^2 test of significance.

spondents [64.0%]), working sick because others work sick (341 [65.0%]), concern about continuity of care (337 [63.8%]), unsupportive leadership (296 [56.2%]), and a perception that one cannot be easily replaced (278 [52.6%]) were also deemed important by most of the respondents. Advanced practice clinicians were more likely than physicians to report fearing ostracism from colleagues (181 of 255 respondents [71.0%] vs 160 of 277 [57.8%]; $P = .001$) and unsupportive leadership (173 of 254 [68.1%] vs 122 of 271 [45.0%]; $P < .001$) as reasons why they work sick. Physicians were more likely than APCs to report being worried about continuity of care (190 of 275 [69.1%] vs 145 of 251 [57.8%]; $P = .007$).

Open-Ended Questions

Three hundred sixteen of 538 respondents (58.7%) provided written responses to our free-text, open-ended question. Responses ranged in length from 2 sentences to 3 paragraphs. Analysis of these responses revealed the following 3 major insights as to why respondents work while sick: systems and logistics, cultural norms, and ambiguity about what symptoms justify taking sick leave. We found little variation in the content or the tone of themes between physicians and APCs. Table 4 summarizes these themes and provides exemplar verbatim quotations.

Systems and Logistics

Two hundred five of the 316 respondents (64.9%) stated that they work with symptoms of acute illness because of logistic challenges in identifying and arranging for someone to cover their work and the lack of system-level resources to accommodate sick leave. Some respondents described a complete absence of a sick relief system in their clinical area (quotation 1, Table 4), whereas others were aware that their area had a sick relief policy but reported it was not used in practice. Others suggested that their clinical work area lacked enough staff to make designing a sick relief system feasible. Respondents reported having extreme difficulty finding coverage when they suddenly become symptomatic (quo-

tation 2, Table 4). Many respondents, especially physicians, perceived that increasing production pressures pushed them to work while sick (quotation 3, Table 4). Those respondents working in procedural or ambulatory settings explained that the realities of clinic scheduling (appointments made months in advance; patients traveling from far away to receive care; needing to achieve volume quotas) made taking sick leave nearly impossible. Words used to describe the impact of taking sick leave in these clinical areas included "a disaster," "a nightmare," "impossible," "chaos," and "brutal." Numerous respondents suggested that, despite their belief that working while sick is risky, they found working was easier than staying home owing to the numerous logistic challenges associated with taking sick leave (quotations 1 and 2, Table 4).

Cultural Norm to Not Burden Others or Appear Weak

One hundred ninety-three of 316 respondents (61.1%) perceived a strong cultural norm in the hospital to come to work unless one is extremely ill (quotation 4, Table 4). Respondents recounted critical comments made by colleagues about those who take sick leave, stories of working (or seeing others work) while so ill that they needed intravenous hydration, and the general impression of an unspoken understanding that attending physicians and APCs should "buck up" and work while symptomatic. Some physicians described working while sick to be part of their professional identity (eg, 9 stated simply, "physicians do not take days off") and that calling out for illness is unprofessional. Echoing our closed-ended findings, respondents expressed a very strong desire to not burden their colleagues with additional work, extreme guilt about having to ask for coverage, and fear of stoking resentment in others for calling out sick (quotation 5, Table 4).

Ambiguity About What Symptoms Justify Sick Leave

One hundred eighty of 316 respondents (57.0%) stated that they perceive some ambiguity about what symptoms constitute being too sick to work. Respondents stated that degrees of sickness ex-

Table 4. Categories of Themes Identified in Free-Text Data With Illustrative Quotations

Theme	Comments Exhibiting Theme, No. (%) ^a	Subtheme	Illustrative Quotation (Source)
Systems and logistics	205 (64.9)	Absence of sick relief system	"Our division does not have any systems in place to support physicians calling out sick. So on the occasions where I have called out sick it was a disaster; patients were not called to reschedule, phone calls were not forwarded, etc. So if I were sick in the future I would have to make a decision about the risks of being contagious vs the certain knowledge that my division will not appropriately handle me being out." (attending physician, other pediatric subspecialty)
		Extreme difficulty finding coverage	"Symptom onset may occur without sufficient time to find coverage (like in the middle of the night). It is up to me to find my own coverage. I need to call someone at home, and this could be at a time that person is asleep. Of course, if I was too sick, I would have to do this, but if I think I can get through the day, I will come in with mild symptoms of illness. As an NP, it is not easy to find a person to work for you, so it's 'easier' just to come to work rather than deal with asking a coworker to work for me." (NP, other pediatric subspecialty)
		No flexibility or "slack" in the system owing to increase in production pressures	"Over the past few years, our hospital has increasingly become a place where everyone is expected to work at peak capacity at all times, and there is minimal redundancy or give to accommodate acute illness. With great challenge it can still accommodate planned illnesses/leave (eg, maternity leave), but the system is less flexible for acute unplanned problems. As such, we all feel pressured to deny our own needs (often giving up meals, bathroom breaks, and, yes, caring for our own illnesses) in order to continue to meet the high pressure/high demand/productivity expectations of the health care system. This is just 1 element of a more major problem—growing demands with reduced support/resources. It is clear why this is being done (costs of health care, etc), but as we all feel like we need to do our part, coming to work sick is just one example." (attending physician, general pediatrics)
Social and cultural norms	193 (61.1)	Expectation to work with everything but the most severe symptoms	"There is an unspoken understanding that you probably should be on your deathbed if you are calling in sick. It inconveniences my colleagues, is complicated to pay back shifts, and makes me look bad to do so (like I am weak or something). It is much, much less stressful to suck it up and come in sick than call out." (attending physician, ED)
		Very strong desire to not burden colleagues; guilt around asking others to work for you	"There is no reliable mechanism to have another person cross-cover on short notice. Everyone is busy. If a person is not on service, he/she is usually doing something else that is not easily disrupted. I feel extremely guilty about needing someone else to cover me due to an illness." (attending physician, ICU/critical care)
Ambiguity about symptoms and risk	180 (57.0)	There are "degrees" of sick, and not always clear what is "too sick" to work	"It is hard to know when to draw the line between a little sick but well enough to see most patients and sick enough that we present an unreasonable risk to patients." (attending physician, other pediatric subspecialty)
		Would be impractical to take sick leave for all infectious symptoms	"I don't believe there is a clear delineation between acceptable and nonacceptable symptoms for working. After all, it would probably not be acceptable to call out every time one has a bit of rhinorrhea. But when does 'a little bit' become 'too much?'" (NP, other pediatric subspecialty)

Abbreviations: ED, emergency department; ICU, intensive care unit; NP, nurse practitioner.

^a Three hundred sixteen respondents provided comments.

ist, and when one's symptoms represent a substantial risk to patients is not always clear (quotation 6, Table 4). Of those respondents who mentioned this theme, most agreed that fever, diarrhea, and vomiting are clear reasons to stay away from work, but largely because these symptoms impair performance. However, owing to the logistic and cultural factors previously reported, respondents perceived occasionally feeling pushed to work while experiencing severe symptoms. Respondents widely reported that working with symptoms of upper respiratory tract infections, while potentially risky for patients, is expected (quotation 7, Table 4). Many respondents suggested that expecting that staff will take sick leave until symptoms of upper respiratory tract infection resolve is unreasonable when resolution can take many days. Respondents suggested that this finding was particularly true on consideration of how many respiratory viral infections

one is exposed to by pediatric patients, increasing the episodes of these symptoms experienced annually. Finally, a smaller subset of respondents perceived that working while symptomatic is only risky if one works directly with immunocompromised patients.

Discussion

We investigated the frequency with which and reasons why attending physicians and APCs work while sick. Among respondents from a large US children's hospital, working while sick was common. More than 80% of respondents said they worked while sick at least once during the prior year and would work with symptoms of contagious illness, such as fever, diarrhea, and acute

respiratory tract symptoms. A combination of closed- and open-ended questions illustrated that the decision to work while sick was shaped by systems-level and sociocultural factors that interacted to cause our respondents to work while symptomatic despite recognizing that this choice may put patients and colleagues at risk.

This study contributes to the literature in several ways. First, we extend previous efforts to investigate this issue by using a mixed-methods approach to examine the multitude of reasons why attending physicians and APCs work while sick. Our findings are consistent with prior studies in demonstrating that HCWs of different occupational groups frequently work while sick^{11,20,22-24,27} because of a strong sense of obligation to colleagues and a desire not to add to another HCW's workload.^{22,24,26} In addition, we uncovered novel factors, such as absent or impracticable sick relief systems, perceived production pressure, and ambiguity about which symptoms constitute being too sick to work that interact with collegial norms to push physicians and APCs to work while sick. These systemic, logistic, and cultural factors combine to create a climate in which respondents perceived that they have no choice but to work while sick despite recognizing that this choice puts patients at risk.

The logistics of designing and implementing a practicable approach to sick relief have been noted by others to be challenging to operationalize, implement, and monitor.¹ The process requires resources that many health care systems do not have in abundance. In this study, we found that the challenges of providing sick leave for attending physicians and APCs varied by clinical location (eg, procedural, ambulatory, inpatient). This finding suggests that a single solution will not work and that sickness relief systems will need to be locally tailored even within a single organization.

Second, our study focused on attending physicians and APCs in the United States; both are occupational groups that have remained relatively unexamined until now. Although previous research has examined the perceptions of resident physicians^{22,27} and nurses^{32,33} in regard to this issue, attending physicians and APCs have been studied less frequently. Exploring the unique challenges that face these 2 occupational groups is particularly important because, unlike trainees and nursing staff, attending physicians and APCs typically have greater autonomy and less centralized administrative oversight through which a sickness relief system can be created and enforced. For example, the Accreditation Council for Graduate Medical Education requires that residency programs have a written institutional policy on trainee leaves of absence, including sick leave.³⁸ Many residency programs have jeopardy systems whereby residents are on call to be available to cover another resident who cannot work for unforeseen and emergent circumstances, but similar models have not been described for attending physicians. Compared with survey studies investigating residents,^{22,27} our respondents reported working sick more frequently, suggesting that formal backup systems may help to reduce this behavior. The impact of these systems needs further study. In addition, previous research has posited that physician trainees are concerned with not appearing weak in front of colleagues.^{22,28} Our study illustrates that this concern persists at the attending level. We found minimal differences

between physicians and APCs in response to our survey questions, suggesting that APCs have absorbed many of the same behaviors and social norms related to working sick, as have physicians, despite experiencing different professional socialization.

Third, our study highlights a tension surrounding this issue that has yet to be discussed in the literature. Namely, some ambiguity persists around what constitutes being too sick to work, and a perception exists that sick leave is impractical for all possibly infectious symptoms, especially viral infections of the respiratory tract. This finding suggests that future research is needed to define the spectrum and severity of symptoms that should preclude an HCW from working in a clinical setting. Given that frequent exposures to infectious diseases are a pervasive occupational hazard for HCWs, realistic and clearly defined sick leave policies and infection control measures must be developed to minimize the risk that infectious pathogens are transmitted between HCWs or from HCWs to patients. These policies must take into account the reality that many attending physicians and APCs may feel compelled to work with possibly infectious symptoms because of the factors identified in this study. Work duty reassignments, telework arrangements, and mask use for symptomatic HCWs are possible strategies that can be enacted to maintain productivity and continuity of care while reducing the risk for transmission. More research is needed in this area before recommendations can be made.

This study has several limitations. First, we were unable to assess response bias owing to the anonymous nature of our survey. Those physicians and APCs who chose to participate may have had opinions significantly different from those who chose not to participate. Second, this survey includes a single pediatric hospital, so the results may not be generalizable to other settings. Third, the number of respondents in different medical specialties was too small to permit meaningful comparisons between groups of physicians, which is an analysis that could provide valuable insight. Last, our survey instrument has not been validated. Despite these limitations, our relatively robust response rates, especially for attending physicians (>50%, which is the mean for physician surveys),³⁹ lead us to feel confident that we have captured a meaningful range of responses.

Conclusions

This descriptive survey investigates the frequency with which and reasons why attending physicians and APCs at a single hospital provide clinical care while sick. These HCWs work with possibly contagious symptoms despite recognizing that this choice puts patients at risk. The study illustrates the complex social and logistic factors that cause this behavior. These results may inform efforts to design systems at our hospital to provide support for attending physicians and APCs and help them make the right choice to keep their patients and colleagues safe while caring for themselves. In addition to reducing health care-associated infections, such systems help improve physician and APC health and wellness while reducing burnout.⁴⁰ Reducing HCW burnout is not only beneficial to the individual clinician but also increasingly recognized as vital to the provision of high-quality health care.⁴¹

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