ORIGINAL RESEARCH

Burnout and Commitment After 18 Months of the COVID-19 Pandemic: A Follow-Up Qualitative Study with Primary Care Teams

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Background: Primary care practice teams continue to grapple with the demands of the COVID-19 pandemic. Early in the pandemic, despite the increased demands and low levels of control, in practices where protective equipment were available and practice-level support was high, few team members reported burnout, and many described a greater sense of purpose. However, since those early days, burnout levels have increased and high rates of turnover have been reported across the health care system, and further qualitative studies are needed.

Objective: The present study is a follow-up to a qualitative study on the workplace stress during the pandemic.

Design, Participants, Approach: Fourteen primary care providers and staff completed 1-year follow-up semistructured interviews (approximately 1.5 years into the pandemic) about their workplace demands, control, social support, burnout, and commitment to primary care.

Primary Results: Primary care practice was characterized as high demand before the pandemic but the additional demands of the pandemic were leading participants to consider early retirement, quitting primary care or health care, and expressing a profound need for health care redesign. Short staffing extended medical leaves for COVID-19 and non-COVID-19 needs, increased management of patient mental health and aggressive behaviors, and frustration that practices were being held to prepandemic metrics all contributed to ever higher rates of burnout. Troublingly, while many described high-quality relationships at the practice level, the majority of participants described their organization-level support as largely unresponsive to their input and as offering little support or resources, though a few acknowledged that this could reflect that leadership is also under immense strain. Despite challenges, a number of participants expressed continued commitment to primary care.

Conclusion: Fundamental redesign of primary care is required to prevent further loss of health care personnel and to provide opportunities for these staff to recover during the grueling, ongoing crisis. (J Am Board Fam Med 2022;00:000–000.)

Keywords: COVID-19, Follow-Up Studies, Mental Health, Occupational Burnout, Pandemics, Primary Health Care, Qualitative Research, Workforce

Background and Objective

The COVID-19 pandemic strained the health care system, with several infection peaks within 2020, 2021, and 2022.[1–3] Pre-COVID-19, rates of burnout and turnover were high and increasing across the health care field.[1,2,4] Primary care clinicians' burnout is associated with suboptimal patient care, medical errors,[5] and

workforce turnover,[6] with nearly \$1 billion per year in turnover costs.[7] Since the pandemic's onset, primary care practice teams have faced continuous strain, with the need to ensure ongoing access to routine care while providing COVID-19 testing, follow-up care, vaccination, and reassurance for concerned patients.[8]

Despite these strains, qualitative research on the early impact of the pandemic on primary care teams found some positive effects, including shared purpose and commitment.[9] Similarly, our team conducted a qualitative study with 33 primary care practice team members to evaluate contributors to individual and team well-being, burnout, and commitment to primary care during the initial months of the pandemic. Consistent with the job demand–control (–support) model (JDCS),[10] the increased support within practices and a sense of purpose was able to offset some of the increased demands, and reported burnout was low.[11]

However, these prior qualitative studies occurred early in the pandemic, and some participants wondered if the sense of comradery and purpose would continue to counterbalance the stressors.[11] Indeed, less than 1 year into the pandemic a national survey found that 48% of physicians, 63% of nurses, 50.9% of other clinical roles, and over 1-third in nonclinical practice roles reported burnout.[2] In the COVID-19 pandemic's third year, it is important to conduct in-depth explorations of its continuing impact on practice teams' burnout and commitment to primary care.

The purpose of this study was to conduct a follow-up to our 2020 qualitative study of primary care team members' drivers of well-being, burnout, and commitment to primary care. Understanding how the chronic stressors of the pandemic are compounding the traditional demands of primary care is key to developing primary care well-being programs, improving primary care practice team retention and recruitment, and optimizing health care performance.

Method
Setting
Thomas Jefferson University is a large regional health system with over 90 primary care practices

affiliated with 4 campuses in southeastern Pennsylvania and southern New Jersey (see Figure 1 for the pandemic's regional patterns).

Sample
Previously, 33 participants completed semistructured interviews from May 11, 2020 to July 20, 2020 to capture the experiences of primary practice teams during the first 5 months of the COVID-19 pandemic. Using purposive sampling, a distribution of physicians, advanced practice providers, clinical care staff (medical assistants, nurses), administrative staff (schedulers, receptionists, office managers), and behavioral health consultants (BHCs) from small to large practices across the 4 campuses were targeted.[11]

One year later, all participants were contacted for follow-up interviews; 13 of those participants completed a follow-up interview, and in a small practice where the participating physician had left, the remaining physician completed the interview, for a total of 14 participants (41% response rate). Two individuals agreed to participate but then could not due to high work demands, and 2 were on extended medical leaves. It is unclear why other participants did not respond (eg, leaving the organization). Interviews were conducted from June 3, 2021 to August 6, 2021. The sample had a slightly higher percentage of physicians (35.7% 24.2% in the original study,), but otherwise had no significant differences from the original study (Table 1).

Procedures
Staff completed short (15 to 30 minute) semistructured interviews about practice changes since the prior interview, and how their workplace stress and burnout were affected by COVID-19. In the previous study, the results mapped onto the JDCS, burnout, and intentions to stay within primary care. The premise of this model is that workplace burnout and strain occur when there is a suboptimal balance of demand levels, control (to participate in decision making and to organize their work), and support (from coworkers, supervisors, and the larger organization). These domains formed the basis of the follow-up interview guide (see the Appendix), which was kept brief given ongoing practice demands.

Three PhDs and 1 MD faculty from a nonparticipating primary care department and a counseling department conducted the interviews (ELK, AC, JF, RS). Three (ELK, AC, RS) were interviewers in

views of, nor an endorsement, by HRSA, HHS, or the U.S. Government.

Conflicts of interest: None.

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Figure 1. COVID-19 Infection, Vaccination, and Testing Rates During the First 18 Months of the COVID-19 Pandemic.
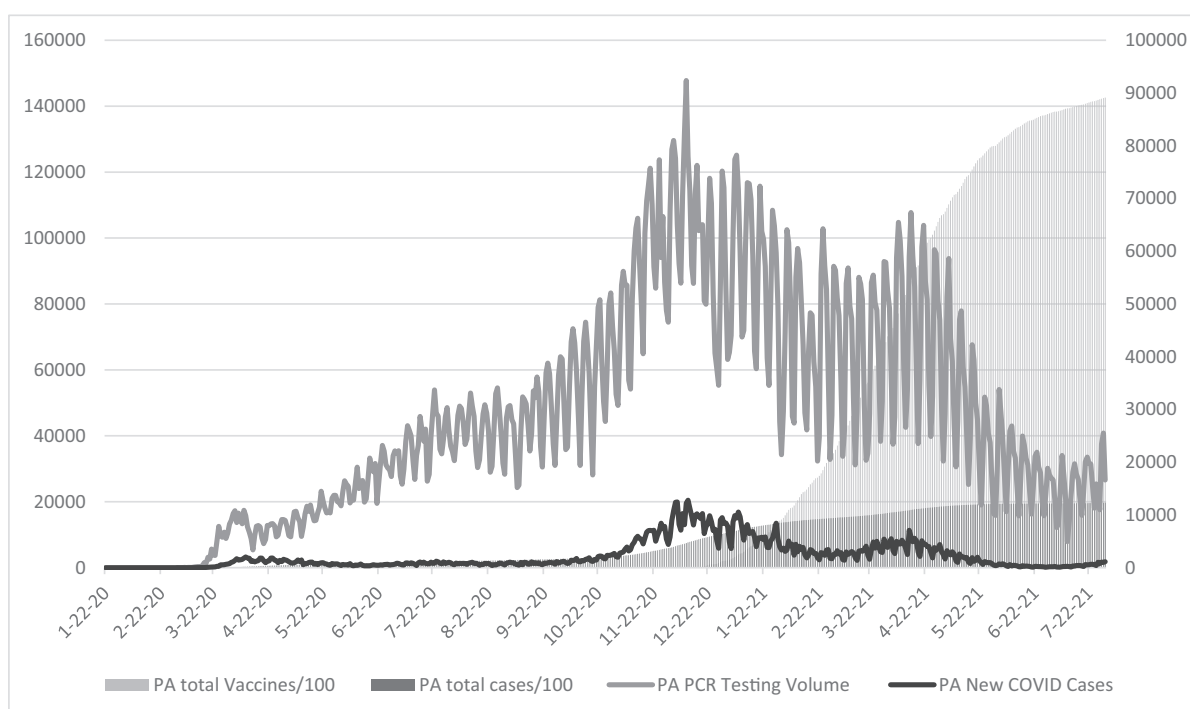
Note: Interviews for the first round of interviews were from May 11, 2020 to July 20, 2020. The follow-up interviews were conducted from June 3, 2021 to August 6, 2021 At the time of the follow-up interviews, rates of new cases were largely falling, rates of testing were rapidly growing, and vaccination were steadily increasing

the original study; all were experienced in qualitative methods. Participants completed a verbal informed consent and were interviewed individually via Zoom. Interviews were recorded and transcribed verbatim by a transcription agency. Data were collected until the pool of prior participants was exhausted. Participants were entered into a raffle to receive 1 of 3 $100 gift cards. The study received approval from the Thomas Jefferson Institutional Review Board.

Data Analysis

Interviews were coded and analyzed using a blend of conventional and directed content analysis. Following recommendations from Miles and Huberman,[12] 4 researchers (ELK, AC, KS, JF) reviewed all the transcripts, highlighting and making notes in the margins to identify themes), coded collaboratively in NVivo[13] and iteratively developed a codebook by collectively coding 1 interview. After coding 2 more interviews independently and reconciling all coding, 2 coders independently coded each transcript, and a third coder

reconciled all disagreements. Once the 4 coders agreed that thematic saturation was reached, the team composed thematic memos based on the JDCS model, burnout, and commitment to primary care.

Results

The primary themes emerging from the interviews fell under the themes of job demands, control, and social support, burnout and well-being, and commitment to primary care. These themes, subthemes, and illustrative quotes are further described below and in Tables 2 and 3.

Demands

There was a consensus that the volume of task demands had returned to or exceeded prepandemic levels. Clinicians consistently described their workload levels as high, with several calling it "overwhelming." Others described their workload changing over time with peaks around the implementation of a new electronic health record (EHR) system, when managing staff absences, and when rebuilding capacity

Table 1. Participant Demographic and Workplace Variables (N = 14)

Variable	Mean	S.D.
Age	44.33	12.22

	N	%
Gender		
Female	10	71.4%
Race/ethnicity		
White	12	85.7%
Black	1	7.1%
Asian	1	7.1%
Role		
Physician	5	35.7%
Physician assistant/nurse practitioner	1	7.1%
Medical assistant/nurse	3	21.3%
Office manager	2	14.2%
Administrative staff	1	7.1%
Behavioral health consultants	2	14.2%
Jefferson Health campus location		
Northeast	2	14.2%
Center City	5	35.7%
Abington	3	21.3%
New Jersey	2	14.2%

	Mean	S.D.
Years at practice	15.73	13.59
Years in field	18.65	13.64

Abbreviation: SD, standard deviation.

for in-person visits. Demands centered around short staffing, management of patient behaviors and mental health, the high levels of phone calls and messages, and a sense of pressure to meet quality measures. However, these were counterbalanced by fewer concerns about access to personal protective equipment (PPE) and COVID-19 infection.

Staffing Shortage
Nearly all participants discussed staffing shortages affecting practices, providers, staff and/or patients (N = 12). Participants offered different explanations for why there were shortages. Several physicians described it as an exacerbation of ongoing understaffing. However, all the physicians and office managers shared that COVID-19 likely served as a catalyst for greater staffing shortages and the resulting practice strains. They referenced Family and Medical Leave Act (FMLA) leave,

retirements, quitting, provider deployment to COVID-19 sites, and unemployment subsidies as contributors. Four physicians discussed how sudden departures of team members resulted in overburdening other staff and providers. Despite these challenges, another physician articulated a positive aspect: leadership was now paying more attention to primary care staffing challenges.

Patient Behaviors and Mental Health
Participants described a mixture of patient responses as patients returned to primary care, increases in mental health issues (eg, anxiety, stress) and difficult encounters with patients around mask compliance, vaccination, and questioning of medical providers' expertise.

Physicians felt that most patients were ready to come back for in-person visits while acknowledging that some preferred a telehealth appointment due to anxiety, time, or transportation. Most described having long-standing, positive relationships with their patients; at the same time, half acknowledged more patients being irritable and challenging their medical expertise. Office managers all described having to do much more intervention with stressed, anxious, or angry patients due to life stressors, care disruption, COVID-19 infection, and enforcement of mask policies. Staff in other roles, like nurses and receptionists, also noted that that managing patient outbursts had become a daily stressor.

Unchanged Metrics
A few participants described frustration that they were given contradictory messages: specifically, being told they are heroes while also being told that they were not meeting quality metrics. They felt that these metrics did not reflect that many patients avoided care during the pandemic and practices' capacity to address non-COVID-19 activities were diminished. One BHC and 1 office manager referenced the subtle and overt communications from leadership that they needed to do more. The office manager further described how the unchanging benchmarks while primary care teams absorbed ever-higher levels of demands adversely affected morale at their practice.

Completing Ongoing System Changes
Clinicians explained how their workloads were intensified with new initiatives (changing EHR systems) while still contending with the pandemic,

Table 2. Quotes Illustrating Main Themes and Subthemes Within the Job Demand–Control (–Support) Model Framework

Main theme	Subtheme	Illustrative quote
		Demand
Staffing shortage (N = 12)	COVID as catalyst (N = 4)	Max panel for a full-timer is 1900 so I'm way, way over panelized but I've been. I've been at the stage of my career and it's not for anything else but I answer my phone calls, do my work and please patients that there's more people come and want me. So it's been a problem that way and another… I'm going to mention this because it's an effect of COVID-19. Five local primary care docs were at or near the time of retiring, did retire and droves of patients… "Somebody couldn't stand it so bad they left. (5 – Physician)
	Pull extra weight (N = 4)	We're short two other MAs and one more is going to be leaving to go back to school. Now, mind you, we only have about eight to start, so we're going to be down half of our staff. That puts pressures on it. Most of the problem here is not COVID, most of the problem here is the software limiting our ability to see patients and the stress that we're putting on the staff. (34 – Physician)
Patient behaviors and mental health (N = 14)	Challenging behaviors (N = 7)	Sometimes there will be one person that just absolutely steamrolls you, and that's what we're dealing with. Patients are cursing at the staff, not only on the telephone but in person at the front desk. Insulting them, insulting their habitus. You know, "You're a F-A-T person and you're stupid." Like, this is not okay. I'm getting involved much more frequently and having to set boundaries for people. We have had to discharge patients for behavior. Those are the struggles. (3 – Office Manager)
	Heightened stress and anxiety (N = 5)	I think in the beginning, people were anxious and upset and worried about one thing. And I really thought it would kind of wane over time, but I think people are still worried about different things. (7 – Nurse)
Unchanged metrics (N = 3)	Quiet pressure to do more (N = 2)	Oh yeah it was bad. Any given day, we were working 10 to 12 hours a day and still feeling like we're not doing enough because your numbers are low. Right, because nobody wants to come in. Nobody wants to get their physical and all that will wait until next year. So, your numbers are low. So, admin in a sense is scolding you that you need to do new patients, your annual numbers need to be up. And you're, "What do you want me to do?" So, it's stressful. It was very stressful…I felt even though they acknowledged COVID-19 was an issue and it was across the board. It's almost, and I don't know if it was admin saying, basically, they didn't care or the payers, the insurance companies saying that it doesn't matter. We're still holding you accountable and it's a pandemic… (27 – Office Manager)
Competing ongoing system changes (N = 9)	Launching new EHR (N = 9)	And then of course throw Epic on top of it. Going live on Epic was a challenge. Yeah. Beginning of March. It's a huge undertaking. That's another whole … I wish they … well, they did. They did a survey on that too, because I think the go live launch just became more frustrating. We're already in it. We were already in a frustrating crunch of trying to deal with COVID. And do you bring them in or was it just an upper respiratory infection or sneaking patients in the back door because other people don't want to be exposed, and, oh and by the way, we're going to launch this whole new system and give you minimal at the elbow support. (9 – Receptionist)
Telehealth (N = 12)	Return to mostly in-person (N = 10)	I think there are a subset of patients who still like having that option of doing a follow-up from a telehealth standpoint. Especially, I think people who sometimes they have limited access to a car or to public transportation or their work schedule was really busy, or they have young children or they're a caretaker for someone older, too. I think those, they've asked to have telehealth visits as an option, but I think when given the option, if they can come in, they like to be seen in person. (4 – Physician)

Continued

Table 2. Continued

Main theme	Subtheme	Illustrative quote
Infection fears and PPE (N = 10)	Infection concerns and PPE use/fatigue (N = 7)	Better. We still have people who are a little nervous about the whole situation. We're still wearing the mask and the face shields. I'm looking forward to taking the face shields off. That's probably excessive, I think, but Jefferson's still telling us to wear them, so I keep it on. (2 – Physician)
	Control	
Working from home (N = 14)	Working from home and workload (N = 14)	The one good thing about not being in the office 5 days a week is because the work never ends when you're here. What's supposed to be an 8-hour day is a 10-, 11-hour day. At least when I'm home, I can stop. (11 – Nurse practitioner)
		For me personally, being back in the office 2 days a week has done wonders for my mood and productivity and ability to focus and delineate my various life roles. So that's been great. Before that had sort of waxed and waned in terms of periods of really intense burnout. (26 – Behavioral Health Consultant)
Decision latitude (N = 5)	Selected times for decision latitude (N = 5)	So, I think that at times in primary care can feel like things are always being asked of you and things that have to be done like right now or yesterday. It can be overwhelming. (4 – Physician)
Participation in decisions at the practice level (N = 9)	Opportunities for participation (N = 8)	So, we're very open with communication in here. We hold no bars. Because I feel like the more open and honest you are with your staff, the more open and honest they are with you. So, if they don't think something is going to work or whatever, they're more free, feel comfortable in telling you it's not going to work. You know what I mean? They're not going to be like, "Uh…" So whenever we are thinking about changing anything, we're saying, "Hey guys, what y'all think about this?" And they're like, "No, this won't work for this doctor." (25 – Office Manager)
Participation in decisions at the organization level (N = 8)	Low level of participation (N = 7)	The leadership, more so. They don't really know what's going on in the offices, so they dictate policy that doesn't work in the office setting. So, because they're so far removed from it. Some of the corporate leadership, they've been out of office for 20 years. (25 – Office Manager)
	Support	
Practice-level support (N = 13)	High support (N = 13)	I think as our offices go, we've always been very collaborative and support each other pretty well. That's not too much of a question. We have a pretty good core team that we lean on each other. (21– Physician)
		COVID actually caused a sense of togetherness [and] unity, honestly" (7 – Nurse)
	Low support (N = 1)	So no, I don't know that we were supportive, but I don't know that we were … For me personally, did the head of Jefferson walk through here and say thank you? Were the bigger people that were working from home coming out to the practices and saying, "We're here with you?" You're really not. You're, no offense, at your dining room table. You're at home in your kitchen, so to speak. So that's where it got frustrating. Or the snow days, when they're making decisions of whether or not to close offices because of snow. Well, yeah. It's easy for you to say stay open. You don't have to go anywhere because you got yourself all set up on remote when COVID hit. So, in that sense, it was, for the winter, it was frustrating. (9 – Reception)
Organization-level support (N = 13)	Perspective-taking (N = 4)	"Some of them are so overworked that things that they say they'll do they forget about because they've got way too many things to do when it just falls off the radar. And I understand that. Cases like with staffing, it's not that they're not trying. It's just that they can't get it done." (5 – Physician)

Continued

Table 2. Continued

Main theme	Subtheme	Illustrative quote
	Low support (N = 9)	There's just such a disconnect. It's just almost like there's just no understanding of what we're really doing on the ground, you know? Big organizational talk without a real connection to what's going on and what we're doing and what works for us, and our practices are all unique. And so you just kind of get used to that sometimes when you work for… I've worked for healthcare… large health healthcare organizations for 10 years, so I'm familiar with sort of what can get lost from the top to the bottom. And so no, it's been pretty awful from that standpoint, I would say. (24 – Behavioral Health Consultant)

Abbreviations: EHR, electronic health record; PPE; personal protective equipment.

which pushed their stress levels higher. EHR training gaps and lack of technical support meant additional work as they adapted to solve these problems or had to accept increased workloads because the system was not designed well for their needs.

Telehealth

Almost all participants reported that in-person patient visits had returned, and that telehealth had shrunk to a small subset of their appointments (estimated at around 15%). Primarily office managers and physicians discussed how telehealth led to some improvements in workflow and allowed for adjustment to patient preferences, particularly patients who had concerns about COVID-19 infection, had mental health visits, lived far away, or had transportation issues. However, 8 participants described how the increased phone calls during the pandemic were a significant stressor. Being understaffed was blamed by 2 participants for delays in call responses that led to patients being upset.

Infection Fears and PPE

Ten participants described how practices still kept patients distanced, wearing masks, and face-shields/goggles, and that nearly all staff were back in the office. Across roles, 3 people described how morale and sense of safety fluctuated over time but then increased significantly after they and the public became vaccinated. Ongoing concerns about infection were low. However, the demands of wearing PPE were more polarizing as some participants expressed fatigue over wearing face masks and shields for non-COVID-19 encounters. Three physicians discussed how rules around PPE were unclear or seemed disconnected from practice/science, particularly as the rules fluctuated without explanation.

Control

Participants reported continued changes in organizational policies and practice workflows. After the sudden switch to telehealth visits in spring 2020, most individuals had returned to primarily in-person work, although some had the option for some remote work.

Decision Latitude

Five respondents discussed having decision latitude in selected areas with some practice and system-level constraints that varied by role. One physician balanced administrative and clinical roles, and reported generally being able to manage their schedule, but frequently dealt with days where unexpected demands would throw their schedule into chaos. A BHC reported generally having latitude about how they approach patient visits and interact with practice colleagues but expressed frustration over the lack of input about the integrated behavioral health model's shorter visits, short-term patient relationships, and visit goals. A nurse practitioner felt they had some input into how their work was done; however, while they preferred working in the office, they could not always do so due to space constraints.

Working From Home

Fourteen participants discussed working from home (WFH). Providers and staff reported being mostly in the office, with 5 to 30% of their time devoted to telehealth. Some providers and staff had hybrid arrangements and a smaller number, particularly billing staff, were primarily WFH. WFH opportunities for providers have been driven by telehealth. However, demand for telehealth was sometimes low, which resulted in providers having fewer WFH days. Participants reported their in-person/WFH arrangements had varied effects on their workload and levels of control, with some finding WFH helpful and

Table 3. Quotes Illustrating Main Themes and Subthemes Within Burnout and Commitment to Primary Care

Main theme	Subtheme	Illustrative quote
Emotional exhaustion (N = 8)	Exhausted/poor work–life balance (N = 7)	I will say that there's a fair amount of burnout, just being over it...We're back to burnout. We're toast. We're toast... (5 – Physician) I just realized that there is absolutely no home-life work balance here, and that's not how I want to live. (11 – Nurse Practitioner)
	Critical mass of stress (N = 7)	The level of stress for everybody is the highest it's been since it all started. You see it every day... Sometimes there will be one person that just absolutely steamrolls you, and that's what we're dealing with. Patients are cursing at the staff, not only on the telephone but in person at the front desk. Insulting them, insulting their habitus. You know, "You're a F-A-T person and you're stupid." Like, this is not okay. I'm getting involved much more frequently and having to set boundaries for people. We have had to discharge patients for behavior. Those are the struggles. (3 – Office Manager)
Personal accomplishment (N = 4)	Made it through (N = 3)	It's made me feel grateful to be involved and to be able to help people, because it's just been a really horrible experience for a lot of people, and I'm glad that I've been able to have some part in all of this. When I look back in 20 years and think about this year and a half, I will be glad that I had some role in helping people. (24 – Behavioral Health Consultant)Well, I mean, now I feel like I've kind of made it through, happy to have made it through... (2 – Physician)
	Personal connections (N = 1)	"Yeah. I'm trying to think. I also think, in terms of looking back, in the past year, just also the importance of social connections. Not just with patients, but with other staff. I think I really missed seeing my nurses, my medical assistants and my colleagues in the clinic. And so I think that lesson, also, just reinforces the facts. No, I'm not a feeler person, but it hit home too, that, how important it is. We still like a balance of staying connected to one another. That interaction, I think, goes a long way." (4 – Physician)
Commitment to primary care (N = 14)	Deepened commitment and sense of purpose (N = 7)	I really like it. I really, really like it. I think I've come sort of full circle. This is where I'm meant to be." (7 – Nurse)
	Leaving primary care (N = 10)	"I'm either going to fix it in the next two years or I'm going to leave it unfixed but I can't take anymore. It's crazy." (5 – Physician) "I'm going to stay on for nursing, but I don't know that I would stay on in primary care or in this kind of a practice ... At this point, I was even thinking like a minute clinic or something. I just need to have something where you get in, you do your work, you give them 110%, you go home. You're done." (11 – Nurse Practitioner) "And we, our practice, never had turnover until all of this. I've been here 16 years. My manager's been here for 20. We have longevity in staff. So, this is all shocking to us that no one wants to really work." (25 – Office Manager)

others unhelpful. Two BHCs spoke about the benefits of being in-person, including more integration with the providers and easier handoffs.

Participation in Decisions at the Practice Level
Nine participants discussed participation in decision making at the practice level. The office managers spoke the most extensively about their participation in practice decisions and cited a high level of participation; they were frequently the coordinators of practice decisions and included other staff in decisions such as workflows and WFH. Providers, including a physician, a nurse practitioner (NP), and a BHC described some ability to decide on telehealth versus in-person appointments.

Participation in Decisions at the Organizational Level
Eight participants discussed this topic: 3 physicians, 2 office managers, 1 BHC, and 1 receptionist. Overall, they reported markedly less involvement in executive or leadership decision making than

practice-level decisions—only 2 (1 physician, 1 office manager) reported direct involvement, and only 1 felt that their feedback was heard and used. Two physicians described multiple areas of disagreement with leadership direction and did not have channels for providing input. One office manager explicitly stated that leaders needed to speak more with practice staff to understand their needs, change outdated policies, and obtain input on physician hiring. Other participants did not express wanting more control or participation, but rather more timely, consistent communication of leadership decisions around issues such as in-person staffing and masking policies.

Social Support
The theme of social support had 2 subthemes: practice-level support and organization-level support. Participants reported high levels of support within their practices, but more mixed experiences with the larger organizations.

Practice-Level Support
The overwhelming majority of participants reported feeling supported by their practice colleagues (N = 13). Participants described that faced with demands such as unchanged performance metrics and disruptive patient behaviors, practices adapted their workflows and communication styles to swiftly handle them. Collaborative patient de-escalation, open communication regarding workflows, and support for colleagues experiencing personal crises became common. In discussing these examples of reciprocal emotional and instrumental support, participants explained that this desire to help 1's colleagues had created a sense of comradery and a cohesive work environment. "COVID actually caused a sense of togetherness [and] unity, honestly," shared 1 nurse. Although many participants echoed this sentiment, describing their offices as a team or even as a family (N = 6), 1 respondent did express resentment toward her colleagues who were able to work from home, further emphasizing the role of shared experience in creating reciprocal support.

Organization-Level Support
In comparison, participants' feelings about support from leadership were not nearly as positive nor uniform. Of the 13 participants that discussed organization-level support, only 4 shared that they received the emotional and instrumental support

they needed from the institution to successfully handle increasing job demands. In contrast, the other 9 reported that the leadership's inability to maintain staffing and lack of understanding of policies' impact on daily workflows left them feeling disconnected and under supported. A few participants expressed empathy for leadership by engaging in perspective taking that they are also under strain.

Burnout and Well-Being
Table 3 shows themes, subthemes, and illustrative quotes related to burnout and well-being. Most participants reported that they were experiencing increased burnout since the onset of the pandemic, characterized by the subtheme of emotional exhaustion, while a few articulated more positive perspectives about the pandemic's impact on the well-being of primary care providers, staff and practices, characterized by feelings of personal accomplishment. There was a fairly equal divide between those who felt worsened emotional exhaustion, those who felt personal accomplishment, and those who had mixed reactions.

Emotional Exhaustion
Most participants reported that they or their teams were experiencing higher levels of burnout relative to 1 year earlier. Two office managers and 1 physician pointed to staffing shortages that forced others to carry larger loads and thus contributed to burnout. The physician shared, "I will say that there's a fair amount of burnout, just being over it…We're back to burnout. We're toast. We're toast." (Physician).

Half of the respondents shared feelings of exhaustion, anger, frustration, anxiety, fear, and despair, and referenced the threat of or actual transfer to hospital/urgent care work, staffing shortages, general job demands, and a lack of support from the administration as catalysts for this increased stress. Six participants, all clinicians, discussed work/life balance; 5 reported poor balance. They reported that many of these challenges existed before the pandemic but were exacerbated by staffing shortages and by large volumes of patient messages, with expectations of quick responses after hours.

Personal Accomplishment
Seven respondents expressed feelings of happiness, relief, pride, and resilience, with 6 explicitly reporting that they feel better now than they did a year

prior when first interviewed. Some of these feelings resulted from personal coping strategies that participants reported such as self-care, taking a vacation, and creating more balance in their lives. One physician noted, "Well, I mean, now I feel like I've kind of made it through, happy to have made it through…"

Commitment to Primary Care

The majority of participants (N = 11) discussed the impact of COVID on their commitment to primary care, with participants across roles (N = 7) indicating that the experience has reinforced their commitment to their work, while 3 providers spoke more about the strain. Two physicians indicated that they faced less risk through COVID-19 as compared with other specialty areas. One physician expressed a wavering commitment but reported a renewed contentment at the time of the interview due to their perception that the crisis has ended.

Deepened Commitment and Sense of Purpose

Seven participants representing various roles shared that their experience through COVID-19 served to deepen or reinforce their commitment to primary care (N = 7), referencing the love they have for helping and the gratitude they feel in their roles. Similarly, a nurse offered that the experience has helped her realize her calling, as "This is where I am meant to be."

Leaving Primary Care

The majority of participants (N = 10) referenced thoughts or plans for quitting or retiring (for themselves or others) during their interviews. Seven participants shared that team members left their practices, and 1 physician reported that their coworkers had left health care altogether because of the increased strain. Two physicians contemplated retirement during the hardest moments of the pandemic, and 2 physicians and 1 office manager referenced an increase in physician retirements). Finally, a physician spoke about the strain that COVID-19 placed on young doctors who consequently left their practices. The concurrent implementation of a new EHR, deployment primary care staff to COVID-19-specific sites, increased levels of exhaustion and a lack of work-life balance were referenced as catalysts for departures.

Discussion

The goals of the present study were to understand how workplace factors contributed to the well-being and retention of primary care practice teams over 1 year into the COVID-19 pandemic. The JDCS model provides a framework for understanding the stressors felt in primary care and for potential solutions. Job demands in the early phase of the pandemic were high and remained high in the subsequent year with peaks of demands around COVID-19 infection rates, availability of vaccination, and ongoing institutional improvement projects. However, the nature of the demands changed over time as participants contended with patients' increasing rates of mental health issues, irritability, impatience, and refusal to follow masking requirements. Overall, participants expressed more feelings of control than in the early pandemic, which had frequent workflow changes and the possibility of hospital deployment. However, overall control remained low, particularly for those in nonleadership positions. Participants felt more control and support within their practices than with systems leaders and decisions.

Our study adds to the existing qualitative literature on the early impact of the COVID-19 pandemic on primary care teams. Despite some improvement, burnout is particularly striking in primary care and is affecting all team members. Increasingly researchers are documenting high burnout seen in primary care, and in a February 2022 national survey of primary care providers, 1 in 5 respondents reported intending to leave primary care within 3 years.[8,14–17] There is also increasing recognition that the stressors felt by providers are often related to nonprovider team staffing challenges and dissatisfaction. A recent survey found that 70% of nonclinical primary care staff report burnout.[18]

Substantial evidence[1,14–18] is available that primary care team burnout is reaching critical levels. It is time for health care systems and primary care to reimagine and redesign processes that will support their sustained well-being. Evidence-based interventions are available that can be applied and evaluated in diverse primary care practices.[19–22] Important mitigating factors of primary care team burnout include decreasing workloads (particularly around responding to patient messages), increasing staffing levels, improving workplace efficiency, maximizing teamwork, and promoting a culture of wellness,[14] all which reinforce the need to decrease demand and increase control and support. A 2019 systematic review of organization-level interventions to reduce physician burnout found

that improving teamwork through communication and practice workflow support and reducing demand by adding additional staff members, such as scribes, could reduce physician burnout.[19]

Limitations

Interviews were completed within a single health system within the northeast US. The response rate was lower for the follow-up interviews compared with the prior study,[1] possibly reflecting the higher rates of burnout and demands and the loss of staff to medical leaves or departures. However, the participants' variability in reported well-being and distribution of roles suggests that we captured a good cross-section of primary care practice experiences.

Conclusions

Despite some team members' continued commitment to primary care, the future of the primary care workforce is in question. The pandemic has tested the resilience of health care organizations deeply and system-level reform is required if we are to preserve primary care and recruit future team members. Long-delayed reforms with significant input from clinical and administrative stakeholders need to occur or there could be an enduring loss of capacity for providing primary care and a permanent loss of talented members of primary care teams.

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Appendix: Interview Guide for Follow-Up Interviews

We are interested in hearing about how things have been going since we last spoke in May-July of 2020.

1. How are things going at your practice, now that we are 1 year into COVID?
   (PROBES: Are people still working from home? What is the balance of in-person vs. telehealth visits? How is morale at the practice?)
2. Since we last spoke, how is your workload compared to pre-COVID? compared to early COVID? (PROBES: Are you short staffed? Are visits down, the same or more compared to # of staff and providers?)
3. Are you satisfied with the social support from your coworkers or supervisor(s) that you are getting? Can you describe how you are/aren't being supported? (Probe about participation in decision making, teamwork)
4. What are the biggest challenges that you and your practice are facing after a year of managing COVID? How did the vaccination process work in your practice?
5. What will you take from this experience that will change your practice moving forward?
   (PROBE) How has COVID impacted your feelings about being a primary care provider? How is your level of burnout now? Has that been changing over time?
6. Is there anything else that we should know about your experiences?