LIVING & WORKING IN PRIMARY CARE DURING COVID-19

A research study to understand how the primary care professional is personally affected during this crisis

Results: Thank you everyone for your participation and for sharing your experiences during this challenging time in history. This report summarizes the data collected during the first 26 weeks.

Methods: REDCap online survey was distributed starting May 18, 2020 to primary care professionals and organizations nationally. Recruitment efforts will continue throughout the COVID-19 crisis. Participants can choose to complete the survey once or several times. The survey occurs weekly and is dynamic in order to include pressing questions.

Participants: As of November 23, 2020, we have recruited 850* eligible participants from all 50 states: 38% physicians, 9% nurse practitioners and physician assistants, 16% nurses, 8% medical assistants, 17% behavioral health providers, 5% non-clinical, and 6% other clinical; 79% of participants are women, 89% white, and the average years working in their current role is 10 years (median; 0.1 to 70 years); professionals in this group work a median 40 hours a week (range 8-100) 26% report all work is clinical.

National Representation
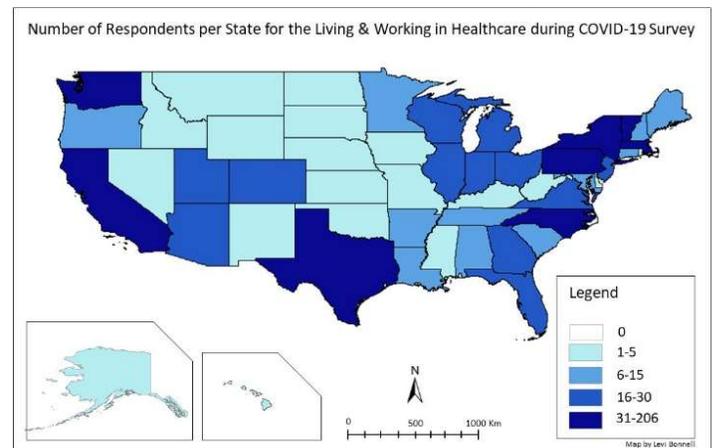
Number of Respondents per State for the Living & Working in Healthcare during COVID-19 Survey

Legend
0
1-5
6-15
16-30
31-206

Map by Levi Bonnell

*Note: Further data cleaning on 11/17 resulted in removal of potential duplicates, incomplete responses, and ineligible participants (sample size changed from n = 873 to 830). We have excluded international participants from the analyses for now given the small sample. Interpret preliminary results with caution. The small sample size for some of the questions make the current findings not generalizable. In other words, we cannot assume these data reflect all primary care professionals. The number of respondents may change based on the questions posed for the week/month. The aMBI (Riley, et al., 2017) was changed to assess acute (weekly) burnout (range of each subscale: 0-12). Scoring: Exhaustion 6+; Depersonalization 3+; Accomplishment <7. Therefore, the results cannot be compared across studies using the aMBI. Higher scores indicate more burnout (personal accomplishment was flipped for ease of interpretation). For tips/resources on coping with distress during a pandemic, click here.

Main Findings
- Over half of primary care professionals experiecing burnout.
- Nearly all professionals are feel emotionally drained and do not feel enthusiastic working with patient everday.
- Burnout is increasing slightly overtime.
- Professionals in the West and South reporting more severe burnout.
- Stress, unresponsive leadership, work overload, frequent organizational change, inadequate work-life balance, experiencing discrimination were indepdently related to increased burnout.

Burnout
We have focused on acute occupational burnout throughout the study. These have included the domains emotional exhaustion ("I feel emotionally drained"), depersonalization ("I've become more callous"), and personal accomplishment ("I feel I am positively influencing others lives"). 59% of participants were experiencing burnout in one or more domains at the time of their first survey. The most common burnout domain is emotional exhaustion followed by reduced feelings of professionally accomplishment, and depersonalization.

Burnout Items:
- Emotional Exhaustion (few days to every day)
90% Feel emotionally drained from my work
85% Feel fatigued when I get up in the morning
73% Working with people is really a strain
- Depersonalization (few days to every day)
27% Have become callous/cynical
58% Do not care what happens to some patients
31% Treat some as impersonal objects
- Personal Accomplishment (not every day)
76% Deal effectively with patient's problems
72% Positively influence others' lives
90% Feel exhilarated working with patients
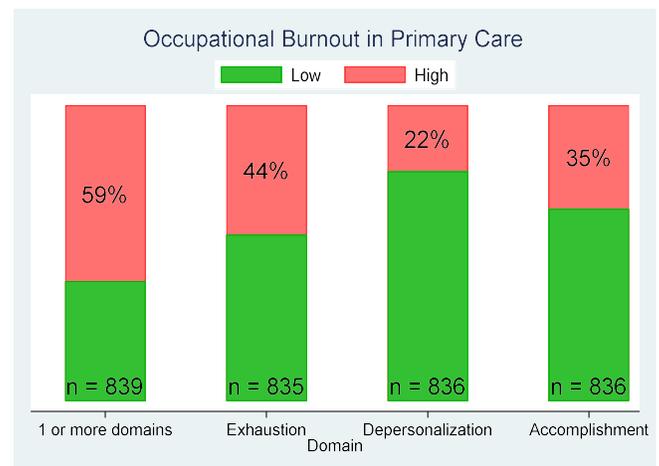
Burnout & Region: An initial look into U.S. regions and burnout revealed that primary care professionals working in the Midwest report less exhaustion than those in other regions. These differences were statistically significant when comparing the Midwest with the West ($P = 0.02$). Similarly, professionals in the Midwest experience significantly more personal acomplishment than those working in other regions ($P < 0.05$). Professionals working in the Northeast report feeling less depersonalized than other regions. This difference was statistically signficant when comparing the Northeast with the South ($P = 0.01$).
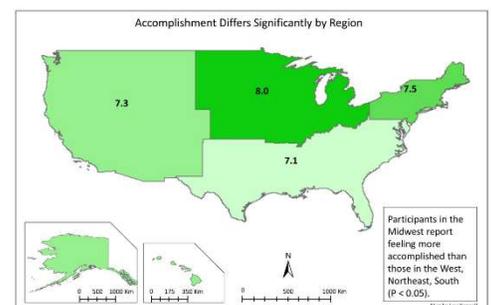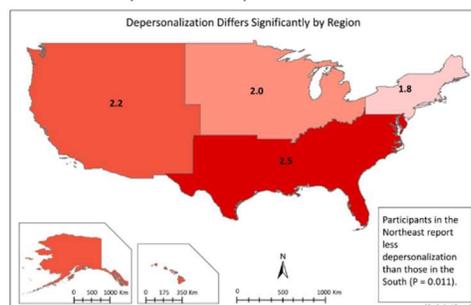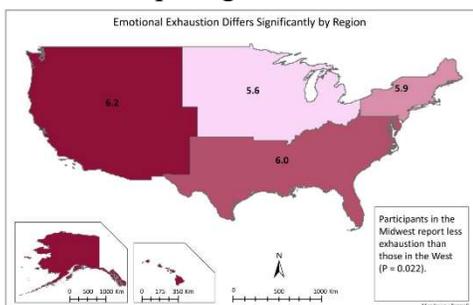
Burnout & Time: Based on a participant request, we examined burnout rates over the past 26 weeks. As a reminder, new professionals are recruited each week and burnout rates reported here are from their first survey responses. An initial look at first survey results revealed that burnout has been intensifying overtime. Linear regression results show up to a 0.02 to 0.03 point increase each week (see graphic). Unfortunately, this cross-sectional data cannot tell us causality. Multilevel modeling clustered on participants to account for the multiple burnout responses revealed similar results. Models that included the burnout domains exhaustion and accomplishment were statistically significant.

Telehealth

We explored reactions to the use of telehealth during this time ($n = 240$). Primary care professionals vary in their reactions to telehealth. Telehealth supplies easier access for some patients, reduces COVID-risk, and at its best can enhance efficiency. However, professionals and patients can face many technological problems and it can feel like inadequate care. Based on participant response, there appears to be several areas to improve the telehealth experience for professionals. Preliminary analyses revealed a weak and non-significant relationship between telehealth and burnout.
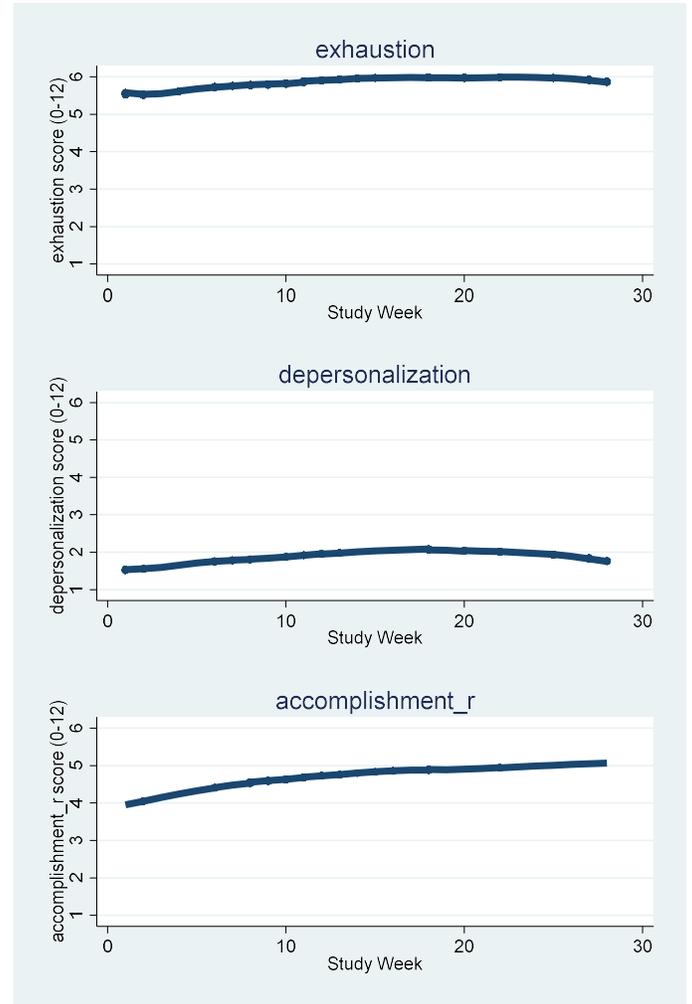
"Telehealth makes my job easier"

- Agree
  - better commute;
  - quicker appointments;
  - "time to decompress at the end of the day;"
  - "looking into [patients] worlds at home is sometimes helpful for perspective;"
  - "made services more accessible for patients;"
  - "gives patient peace of mind with safety as well as keep an efficient schedule;"
  - "gives me a moment to breathe and complete non direct patient care tasks."
- Neither agree/disagree
  - "In some instances, telehealth makes my job easier and it is a good option for many patients who can't get into the office or don't want to come in secondary to fears of COVID, transportation issues etc. In other cases it has also made my job harder trying to
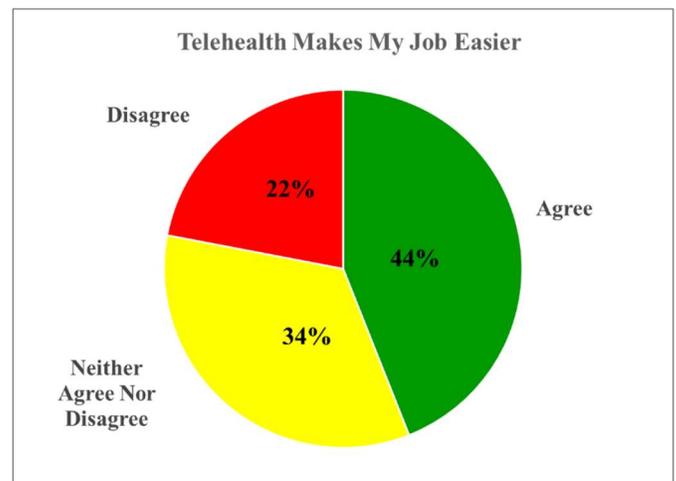
arrange for labs and follow up visits that would have all been done in the course of the visit, now having to be coordinated outside the visit time."

- "Scheduling issues remain a barrier. Switching between telehealth and in person visits multiple times over a 1/2-day session is inefficient."
- "…harder to determine exact cause of illness in someone who is sick without a physical exam, and there are sometimes technical difficulties. On the other hand, it can save time on visits that are just check ins with the patient on their chronic conditions."
- "I am much more efficient, and I can reach more patients with the phone or video visits. However, there is less information available so more room for error, and less interaction with coworkers, which I now realize is super important."

- Disagree
  - liability is great; not able to assess patients well; increased work;
  - "technical challenges are daunting;"
  - "With primary care we need to do a lot with patients in person. We can't do exams digitally. Also, we deal with the older population, so they don't always know how to use technology. A lot of my time is wasted explaining to patients how to log into zoom."
  - "…more draining for me as I find it very difficult to get a good assessment of an individual I am speaking to by phone. However, for the patient, it is more user friendly and patients seem more engaged. While it is not easier for myself as a clinician, it is easier for the patients."

Telehealth & Burnout: Preliminary regression results suggest a weak and non-significant relationship between telehealth and exhaustion (-0.46 to 0.31 points; $P = 0.69$), depersonalization (-0.49 to 0.01 points; $P = 0.06$); accomplishment (-0.45 to 0.08; $P = 0.19$).

Organizational Change
Participants have consistently commented about their feelings surrounding the frequent ("constant," "near weekly," "day to day") policy/organizational COVID-19 related changes that "everyone is experiencing." Based on this, we asked participants ($n = 246$) to rate what degree "the amount of change that takes place at their organization/practice is overwhelming:" (1- strongly disagree, 6% to 7-strongly agree, 20%). Linear regression results revealed that organizational change was significantly related to exhaustion (0.70 to 1.15 points; $P < 0.001$), depersonalizaiton (0.28 to 0.69 points; $P < 0.001$), and accomplishment (0.13 to 0.48 points; $P = 0.001$). In other words, frequent organizational change may result in burnout (especially emotional exhaustion).

Work-Life Balance
Less than half of respondents ($n = 316$) reported having enough time for their personal/family life. Women reported more difficulties. Work-life balance appears to be related to feelings of burnout. Linear regression analyses revealed a significant ($P < .01$) positive relationship between work-life balance and all three burnout domains (-0.38 to -1.40).

Work Overload
60% of respondents ($n = 185$) agreed that they "have too much work to do everything well." A subset of participants ($n = 44$) were asked if this feeling has increased since the start of the pandemic. Seventy percent indicated it had. Responses did not meaningfully vary regardless of role or hours worked. Not surprisingly, feeling as if you have too much work appears to be

related to feelings of burnout. Linear regression analyses revealed a positive and significant relationship between too much work and all three domains of burnout (0.72 to 1.37 points).

Discrimination
Participants were asked the following: "On your job, do YOU feel in any way discriminated against for any reason" and "On your job, have you WITNESSED discrimination against a coworker or patient for any reason*." A quarter of respondents (n = 331) have felt discriminated against on the job while over a third of respondents (*n* = 89) have witnessed discrimination at work. Multi-level regression analyses clustered at the participant level revealed that having experienced discrimination was significantly (*P* < 0.001) and positively related to feelings of exhaustion (1.55 to 3.12 points) and depersonalization (0.82 to 2.10 points).

The results from this survey are on the higher end compared to previous findings examining discrimination in the general workforce (11% to 25%; Fekedulegn et al., 2019), and lower when examining findings specific to healthcare professionals (21% to 78%; Syed et al., 2018; Nunez-Smith et al., 2009; Adesoye et al., 2017). Discrimination at work has been associated with turnover, job dissatisfaction/attitudes, health, burnout, etc. Discrimination in primary care appears to be under studied. Based on this, we will keep the experienced discrimination question for future surveys.

* Note: The question witnessed discrimination was later dropped from the surveys to reduce the number of survey items and burden to participants.

Leadership
Participants were asked if leadership at work listens and cares about them (*n* = 444).
- Disagree Strongly: 22%
- Disagree Slightly: 16%
- Neutral: 15%
- Agree Slightly: 21%
- Agree Strongly: 26%

Multilevel regression analyses clustered at the participant level revealed a signifcant (*P* < .001) negative relationship between leadership listening/caring and all three domains of burnout (-0.42 to -0.99 points). In other words, feeling that leadership doesn't listen/care appears to be related to more burnout.

Respondents (*n* = 50) were asked what change would make the biggest difference in their job satisfaction and if the change was likely. Only 18% of respondents indicated change was likely. The majority of changes were related to:
- more time off of work and support/appreciation/connection from leadership and the (fully-staffed) medical team as well as
- less administrative (i.e., paperwork/documentation) and operational stressors (i.e., workflows created by the medical team for the medical team).

Safety
COVID-related comments were primarily around PPE. PPE appears to be a double-edged sword where it's essential to have access to it yet wearing it all day can be distressing (i.e., heatstroke wearing PPE in hot weather; physically distracts from patient care; uncomfortable; time-consuming).

Participants were asked in July 2020:
- "I have access to the safety equipment to perform my role safely" ($n = 134$)
    - Disagree Strongly: 8%
    - Disagree Slightly: 10%
    - Neutral: 7%
    - Agree Slightly: 27%
    - Agree Strongly: 48%
- "My suggestions about safety would be acted upon if I expressed them to management/leadership" ($n = 101$)
    - Disagree Strongly: 24%
    - Disagree Slightly: 18%
    - Neutral: 9%
    - Agree Slightly: 21%
    - Agree Strongly: 28%
- "In the past week, I have been afraid to go to work because of the risk of COVID-19 exposure" ($n = 134$)*
    - Strongly disagree: 33%
    - Disagree: 22%
    - Neutral: 17%
    - Agree: 18%
    - Strongly agree: 10%

*Fear of COVID-19 exposure was included in July and December surveys. No differences emerged between these two time points.

Interestingly, fear of going to work was weakly related to access to safety equipment ($\rho = -0.35$; $P < 0.001$). In other words, fear of going to work at this time may be about more than having adequate safety equipment.

Linear regression analyses revealed that a significant ($P < 0.005$) negative relationship between burnout and access to safety equiptment (-0.42 to -0.95 points) as well as leadership acting on safety concerns (-0.40 to -0.83 points). Fear of going to work due to COVID-19 was positively related to feelings of emotioanl exhaustion (0.13 to 1.14 points; $P = 0.014$).

Stress

At different timepoints throughout the study participants were asked about their perceived stress:
- "In the last week, how often have you felt nervous and stressed?" ($n = 199$)
    - Never: 2%
    - Almost Never: 15%
    - Sometimes: 35%
    - Fairly Often: 26%
    - Very Often: 20%

- "Is the current status of COVID-19 in the United States putting an unusual strain on you?" ($n = 220$)
  - (1) No Impact: 3%
  - (2)   15%
  - (3)   29%
  - (4)   40%
  - (5) Severe Impact: 13%

Spearman rho analysis revealed a moderate relationship between perceived stress and COVID-19 strain ($\rho = 0.56$; $P < 0.001$). Multilevel regression analysis clustered at the participant level had similar results where a 1 point increase in COVID-strain resulted in a 0.29 to 0.53 point increase in perceived stress. Multilevel regression analyses investigating the relationship between between perceived stress and burnout including COVID-19 strain as a covariate and clustering at the participant level revealed a significant ($P < 0.005$) positive relationship (0.39 to 1.19 points).

Not surprisingly, stressors appear to be multifaceted (work-related, COVID-19, socio/political, personal):
- Work-Related: workload, number of patients, administrative duties, fulfilling multiple roles, pay and hours cut, furloughs, conflict and tension with team, communicating with patients and team remotely;
- COVID: patient uncertainties/distress, contradiction of health info/guidelines, numbers rising, not having adequate PPE or having to constantly wear and think about PPE, choosing to work despite being at risk, steep learning curve to maintain precautions, unknown status of patients, colleagues, and self.
- Social/Political: healthcare and precautions being politicized, addressing racism in healthcare.
- Personal: lack of childcare, relationship challenges, maintaining a healthy lifestyle, finding work, too few days off.

Based on participant feedback, organizations may consider the following to reduce strain:

- frequent updates via huddles, meetings, emails recognizing the strain, changes, longevity and abnormality of these multifaceted crises;
- providing and supporting PPE for all; everyday pep talks;
- not pushing RVUs; prioritize best practices vs. finances;
- reducing workload;
- providing wellness strategies, free counseling, peer support, designated relaxation room;
- praise for sharing safety concerns/feedback;
- standardizing effective and efficient safety measures (sanitization, testing, required mask-wearing, physical distancing).
- Leadership/management's capacity to help guide and encourage their workers.
- Seeing signs of hope in our nation
- Connecting with co-workers to reduce isolation
- Listening to music between patient calls
- Seeing patients in person and acknowledging their appreciation

Note: PPE/safety protocols may add to feelings of work safety; however, the extra burden (described as physically uncomfortable, making day-to-day tasks more challenging, and

distressing due to constant change) may add to strain and burnout. Unfortunately, pay cuts/furloughs are adding to strain and sometimes described as the only changes (positive/negative) that have been experienced during COVID-19.

Examples of what helped professionals to get through the week:
- Personal: long weekends, vacation, exercise (i.e., walking, yoga), gardening, time with loved ones, journaling. faith, adjusting expectations, appreciating the little things.
- Work-related: completing notes before being done for the day; focusing on needs of practice, learning on the job, seeing patients face-to-face, being grateful for being fully employed.

November 2-11, 2020: Many respondents during this time period expressed distress over the election and what the results will mean for the COVID-19 response and the country. Several are concerned that COVID-19 fatigue and inadequate PPE use will greatly increase the risk of their patients, colleagues, family, and self. Other stressors include reduced staffing, pay cuts, isolation, lack of childcare, constant change at work, IT/EHR failures, and the challenges with attempting to balance these work-life stressors. A few participants indicated that these stressors were prompting them to leave their job, field, or healthcare altogether.