

# Primary Care Research Is Hard to Do During COVID-19: Challenges and Solutions

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**ABSTRACT**

Conducting research in primary care during the COVID-19 pandemic is hard, due to baseline stresses on primary care, which have been compounded by the pandemic. We acknowledge and validate primary care researchers' frustrations. Using our experience on over 15 individual projects during the pandemic we identify 3 key challenges to conducting primary care research: (1) practice delivery trickle-down effects, (2) limited/changing resources and procedures for research, and (3) a generally tense milieu in US society during the pandemic. We present strategies, informed by a set of questions, to help researchers decide how to address these challenges observed during our studies. In order to overcome and grow from these challenging times we encourage normalization and self-compassion, and encourage researchers and funders to embrace pragmatic and adaptive research designs as the circumstances with COVID-19 evolve over time.

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**INTRODUCTION**

Research has been difficult during the COVID-19 pandemic and may continue to be hard for quite a while. As researchers who are focused on studying primary care, we wrote this commentary to surface common challenges and present solutions for researchers working in and with primary care practices. Our goal is to normalize what you might be feeling as a researcher: isolated, at odds with reality, overwhelmed at the Sisyphean tasks ahead, and experiencing a sense of failure. Below, we share 3 key challenges that have emerged in our work during COVID-19 and then present observed solutions for coping with this new reality. We pose related questions to help inform how you might advance your work while not burning through your own capacity or your relationships with primary care partners during COVID-19 and beyond. We end with a call to normalize these challenges, practice self-compassion, and embrace pragmatic designs and adaptive solutions moving forward.

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**COVID-19 AMPLIFIED CHALLENGES**

High quality primary care is the bedrock of our health care system and, when available, the result is better health and more equitable outcomes.<sup>1</sup> Yet even prior to COVID-19, primary care was not adequately resourced to meet population needs.<sup>2-4</sup> These structural factors contribute to high levels of burnout (20%-53%) and turnover (30%-50%) in both clinicians and staff members.<sup>4-7</sup> Conducting research in primary care is challenging based on the broad scope of practice, low (and frequently contested) funding to the Agency for Healthcare Research and Quality (AHRQ), and the small percentage of funding from the National Institutes of Health to primary care researchers.<sup>8</sup>

The COVID-19 pandemic illuminated both the critical role and the fragility of the primary care system.<sup>9,10</sup> It has also illustrated the resolve of primary care clinicians and staff who continued to show up each day despite uncertainty and stressors.<sup>11,12</sup> For researchers who engaged in applied, participatory research in these settings, the ongoing environment for primary care during the pandemic has raised questions about what and how to approach practices during this dramatic time of stress and change.

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## CHALLENGES DURING COVID-19

Based on our individual experiences leading or supporting more than 15 projects engaging primary care clinics during the pandemic, we identified 3 categories of challenge in conducting research during the pandemic.

### (1) Practice Delivery Trickle-Down Effects

Primary care practices are busy, and it is hard for them to do anything but keep up with the volume of need and pace of change exacerbated by COVID-19. They are dealing with increased electronic patient encounters (ie, communicating via patient portals or “in baskets”) and sick visits, juggling in-person and telehealth visits (ie, via telephone or video chat), having less staffing (people not working, leaving, reducing hours, furloughs, clinic outbreaks, and COVID-19 quarantines), and childcare issues. They are also responding to new workflows and protocols related to vaccine administration, testing, and care delivery (eg, telehealth vs in person).<sup>11</sup> Clinics have had to cope with additional pressures resulting from interpersonal tensions that individual preferences toward vaccination and vaccine mandates have created.

Like us, many researchers paused to question if they should be reaching out to practices during this trying time. Perhaps they even wondered if they could pivot to providing support and help for the COVID-19 response, rather than what their research awards funded them to do. In our many projects, we worked and reworked project plans and protocols in response to the varied COVID-19 waves. To cope during this time, many researcher teams engaged in multiple pauses over the past 2 years, anticipating that the situation would get better and “go back to normal” if they just waited a few more weeks.

### (2) Limited and Changing Resources and Procedures

Many research teams have also found that there was and continues to be less staffing for research efforts. Our teams found it challenging to hire statisticians, data analysts, qualitative analysts, research assistants, and other members of the study team. For those who did find new staff, training and onboarding presented challenges due to remote procedures. In some cases, existing team members had to do more work with less resources because of the additional work caused by changing direction, protocol changes, covering for other employees having childcare challenges or illnesses, etc. For those able to continue their work, new skills and protocols were required, including how to prep and deliver implementation support via online interfaces, as well as developing new procedures to prepare for site visits (like approvals to go into practices and acquisition/donning personal protective equipment). This also resulted in multiple administrative adjustments such as the need to notify the institutional review board (IRB) and secure additional approvals for altered or contingency plans. These administrative challenges can be compounded when conducting research across multiple sites and/or health systems.

This is all to say, if primary care researchers feel like project work has been harder than normal, they are not alone. While teams with established trust may have more easily weathered these additional challenges, we experienced amplified challenges due in part to the added uncertainty for staff and as leaders who are used to doubling down (ie, increasing their work effort and output) to get the work done. Doubling down led to additional stressors and additional decisions to be made and remade as the context continued to shift.

### (3) A Generally Tense Milieu in US Society

Outside of our jobs in primary care research, life is generally challenging. Life during COVID-19 has been hard and exhausting for many—particularly for those who are providing caregiving activities or for those who have long experienced racism and White supremacy culture. For those with kids, they’ve had to juggle the lack of childcare, stressors related to kids in school, kids getting exposed and then needing to stay home, as well as figuring out ways to get tested or vaccinated. Potentially, there may be the added frustration of addressing others in society who have not been vaccinated but are expecting health care and patients who have chosen not to mask or social distance throughout the pandemic. Advocates for social justice or those who represent lower-resourced communities note the way that the pandemic has amplified challenges for those already facing inequities in health care delivery and life.<sup>13</sup>

While managing stress and work-life balance is frequently a challenge for researchers, the pandemic made many of our normal avenues to destress, such as social events with friends or working out in a group exercise facility, no longer available. The management of such stressful issues is not limited to faculty, and we have also had to consider how pandemic-imposed changes to everyday life are impacting our team. As such, some primary care researchers have embraced our more introverted sides as a way to cope. This might look like less social contact with others to recharge and (because we’ve been asked to) reduced travel and recreation. Others among us may have become more consistent with our meditation practice or restarted physical activity routines and some have taken on new activist and advocacy roles to try to address structural inequities that abound in academic health centers, primary care, and society at large.<sup>14-16</sup>

## RECOMMENDATIONS FOR RESEARCH AND ACTION

Given all of this, what is the primary care researcher to do within the current world situation? After all, we do have obligations to our funders, employers, and our fields of discipline to complete the research. In Table 1, we provide options and when these options might be the best choice for a situation. These strategies relate to adjusting project timing, the regions engaged, sample size targets, methods for

**Table 1. Observed Strategies and Considerations for Responding to COVID-19 Challenges in Completing Primary Care Research**

Observed Strategies	Example(s)	Considerations/When This Might be a Good Choice
Hit pause and stop the work temporarily	<ul style="list-style-type: none"> <li>Stop recruiting patients for a weight management study temporarily because wellness visits are paused due to needing improved access for sick visits</li> <li>Stop recruiting clinics for an implementation study because clinics are trying to implement new telehealth workflows and to stay afloat with income reductions</li> </ul>	<ul style="list-style-type: none"> <li>The project period can be reasonably stretched</li> <li>There is just no way the settings or personnel can complete the work at the time</li> <li>There is reason to believe the challenges will resolve and the research can resume</li> <li>Can spend time working on “offline” activities during the pause such as literature review, analysis of data already collected, etc</li> </ul>
Expand the region served	<ul style="list-style-type: none"> <li>Regional outreach to support clinic recruitment expanded from a single state to a tri-state region</li> </ul>	<ul style="list-style-type: none"> <li>The topic is relevant and if you expand the opportunity, new sites may benefit</li> <li>This provides opportunities to compare how uptake of the program varies based on regional variation in COVID-19 surges</li> </ul>
Reduce expectations for the research processes or outcomes	<ul style="list-style-type: none"> <li>Reduce the sample size of practice participants</li> <li>Reduce data collection for various aspects of a study (such as eliminating mid-point interviews and surveys)</li> <li>Complete fewer research results papers</li> </ul>	<ul style="list-style-type: none"> <li>Funders accept changes</li> <li>Changes in sample size will not significantly alter study power</li> <li>Changes in data collection will not critically reduce the understandings produced from the study</li> <li>Study staff is stressed with increased demands and there are not enough of them/enough time to complete additional analysis or collect more data</li> </ul>
Alter how the research is conducted	<ul style="list-style-type: none"> <li>Complete qualitative interviews and/or deliver intervention activities via Zoom or Webex and telephone instead of in person</li> <li>Change instruments or procedures (such as moving from focus groups to 1:1 interviews)</li> <li>Alter the personnel such as have research team members conduct screening assessment procedures, vs integrate into existing clinic workflows</li> </ul>	<ul style="list-style-type: none"> <li>The alternative method allows for the research to continue without undue reductions in the quality of the data collection or intervention effectiveness</li> <li>There is simply no other way to conduct the activities without risk or harm of exposure</li> <li>There is added value by conducting activities remotely, such as by adding additional clinic or research staff to meetings</li> <li>The new methods or designs can maintain the integrity of the core project but offer the opportunity to look at new questions</li> </ul>
Alter the scope of the intervention to include a COVID-19 response	<ul style="list-style-type: none"> <li>Adjust intervention length to accommodate delays resulting from paused recruitment during various COVID-19 waves (eg, 12 months to 15 months) or to better align with clinic capacity (9 months to 6 months)</li> <li>Expand the intervention focus to include attention to COVID-19–related consequences (eg, vaccine hesitancy, behavioral health)</li> <li>Study implementation and adaptations: the context for them, their characteristics and impact</li> </ul>	<ul style="list-style-type: none"> <li>The funder has flexibility and willingness to acknowledge the pressures on primary care. Being part of a multi-site collaborative where all partners are experiencing challenges can help</li> <li>Projects focused on individual conditions like HPV vaccination or unhealthy alcohol use can become “more relevant” if they add content related to general vaccine hesitancy or addressing behavioral health needs broadly (eg, screening for depression too)</li> <li>Depending on the goal of your project, you may be able to alter the mode of gathering data and still achieve your primary outcomes</li> </ul>
Pivot to a new research effort within the overall scope of the project goals	<ul style="list-style-type: none"> <li>Pivot to providing instruction and resources for completing medical visits using telehealth</li> <li>Add learning collaboratives or Extension for Community Health Outcomes (ECHO) program services to help deliver education on COVID-19 protocols</li> </ul>	<ul style="list-style-type: none"> <li>The program and funder accommodate alterations in the goals and outcomes for the project. This may be more possible with quality improvement and contractual work than investigator-initiated research</li> <li>An opportunity to strengthen research partnerships with state public health, to provide just in time support to complement the longer scale research timeframe</li> </ul>

data collection, and/or project scope. For example, in several of our projects it was reasonable and prudent to hit pause and stop the work temporarily. This included stopping both clinic and patient recruitment for studies as primary care partners worked to respond to the initial outbreak or later

surges. This option was helpful for longer study periods, when partners lacked capacity to respond, and when the research team could focus on refining intervention materials or start analyzing existing data. We also saw several studies alter how research is conducted (eg, conducting interviews

or the intervention visits by telephone or web conferencing) and expand the scope or realign the intervention to include resources to help with the COVID-19 response (eg, addressing vaccine hesitancy, focusing on emerging behavioral health needs). The examples provided in Table 1 are not meant to be an exhaustive list, rather, one that is pragmatic and useful as considerations.

In these challenges, there are opportunities. For example, one of the strengths of doing primary care research has always been that it can bring funding to practices to do needed work, such as to support population outreach for screening or to support patient navigation to services to address unmet social needs. A key question for primary care research is "How can my work align with these amplified needs during COVID-19?"

There are also some silver linings from the pandemic. For example, telehealth and video conferencing are now widely accepted, which may enable research to be more efficient and less expensive—particularly for rural areas which may require a day's travel for a 1-hour research meeting. Additionally, COVID-19 vaccine rollout—and the shock of policy makers and health care leaders regarding the challenges with uptake—have drawn greater attention to the need for attending to social and behavioral factors in research.<sup>17</sup> COVID-19 may also serve as a call to remind ourselves of what health care topics and issues we are passionate about and to increase recognition of—and ideally motivate policy makers and funders to address—the structural factors that make primary care delivery and research hard.

Notably, many of the challenges of conducting research in primary care during the pandemic will not end when life "goes back to normal" as COVID-19 infection rates subside.<sup>18</sup> Indeed, we are now starting to witness the ongoing backlash of pandemic stress as primary care clinics, staff, and others working in adjacent roles retire early or opt out as part of the "great resignation" that is being observed nationally.<sup>19</sup> Work is needed to shift policies and invest resources to ensure primary care clinicians and researchers have the bandwidth to meet patient and organizational needs as we recover from the pandemic and face additional regional and global health challenges in the future.

### Normalization, Self-Compassion, and Pragmatic Designs/Adaptive Solutions Needed

One of the most important things a researcher in primary care can do right now is to display self-compassion, something that may be hard for the traditional researcher phenotype. On Twitter and in "safe circles," faculty doing work in primary care have reflected on the challenges noted in this paper and on how we've responded during multiple COVID-19 waves. Given increased predictions for subsequent pandemics and natural disasters resulting from climate change, we believe that project flexibility and attention to context will become more common, important, and necessary in subsequent years. As such, it will be important to advocate for

more funder focus on the topics addressed here and acceptance of pragmatic designs and adaptations.

We hope this essay serves to normalize some of the causes of additional grey hairs and sleepless nights. Those who have struggled to conduct primary care research during COVID-19 are not alone. It is our hope that this article encourages all of us to share our lessons and to grow stronger together.



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