Clinical Research and Trials—A "Nonessential" Victim of the COVID-19 Pandemic?

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Over the past 2 months, much attention, rightfully so, is focused on the care of patients with suspected or known coronavirus disease (COVID-19) caused by the SARS-CoV-2 virus (1–4). In an attempt to minimize healthcare-associated transmission (as well as to reduce risks to healthcare workers), many institutions have reduced or entirely ceased elective procedures and outpatient appointments. Although conversion to telehealth has preserved the continuity of care for many patients, one aspect of the disruption in care that may not be widespread in its prevalence but nevertheless still significant in its impact on the individual patient is the disruption this entails for clinical research, particularly therapeutic clinical trials. Clinical trials offer an important opportunity for patients, many of whom are refractory to other standard of care treatments and rely on these trials as a 'last resort.' Often, these are patients who have experienced prolonged disease-related morbidity in addition to potential treatment-related effects (such as with persistent corticosteroid use in patients with inflammatory bowel disease [IBD]). Indeed, this situation may be even more impactful for conditions associated with the risk of progression and death such as chemotherapy clinical trials for patients with cancer.

At the present time, many clinical trials require in-person visits for screening, consenting, and assessment of response as well as adverse events. For example, in our field of IBD, these may include colonoscopy for assessment at trial enrollment and completion. Eligibility to proceed with the clinical trial is often contingent on this evaluation. The necessary canceling of elective procedures makes this group of patients highly vulnerable to disruption in care. Patients who have been waiting for long periods of time for enrollment will no longer be able to complete the necessary screening procedures and receive the trial drug, whereas those in the trial may have challenges in following the prescribed trial protocol, affecting the quality and completeness of data. At the start of 2020, a total of 325,848 clinical trials were registered on clinicaltrials.gov. Although the trials may be able to withstand a disruption of 2–4 weeks, a longer interruption in standard care (which may be needed to keep the pandemic at bay) has the potential to lead to considerable harm to this patient population. Although black swan events such as the ongoing pandemic are hopefully rare, it may be important for investigators and industry to incorporate planning for such contingency in their clinical trials. Such solutions could include greater use of remote or teleconsenting of patients and secure digital platforms for conducting assessment and follow-up visits, which would be of enormous value not only in this particular situation but also aid in making participations in a trial more appealing to participants even at other times. Greater use of surrogate biomarkers (for example, serologic and fecal inflammatory markers, rather than colonoscopy in IBD) may allow for enrollment and assessment during even such disrupted periods, thereby ensuring fewer patients are denied what may be their only window to receive a novel treatment. Use of clinical research centers rather than hospital-based practices may minimize the need for contact with the healthcare system in the context of these clinical trials. Indeed, such tools, although developed for the pandemic, may confer the added bonus of increasing the portability of these trials, making them more accessible to deserving patients worldwide.

CONFLICTS OF INTEREST

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REFERENCES

1. Guan WJ, Ni ZY, Hu Y, et al. Clinical characteristics of coronavirus disease 2019 in China. N Engl J Med 2020.
2. Holshue ML, DeBolt C, Lindquist S, et al. First case of 2019 novel coronavirus in the United States. N Engl J Med 2020;382:929–36.
3. Zhu N, Zhang D, Wang W, et al. A novel coronavirus from patients with pneumonia in China, 2019. N Engl J Med 2020;382:727–33.
4. Gross SA, Robbins DH, Greenwald DA, et al. Preparation in the big apple: New York city, a new epicenter of the COVID-19 pandemic. Am J Gastroenterol 2020 [in press].

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