



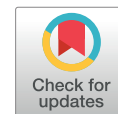
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INTRODUCTION

Imagining Our Lives Post-Pandemic

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Words are barely adequate to describe the COVID-19 pandemic: incredible, frightening, relentless, grim. The ease and speed of SARS-CoV-2 viral transmission from person to person, city to city, and then to every nation around the globe has upturned the most fundamental operations of our societies—in just months. The virus has exposed the world's interconnectedness and consequent deep vulnerability. All of medicine has had to adapt to these nearly unfathomable, rapidly mutating conditions. Until this year, it would have been inconceivable that medical practice, education, and research could exist if people were unable to be within several feet of each other.

Since March of this year when it was first declared, the experience of the pandemic has enlarged and matured. Perhaps we have passed an initial phase of shock. However, no vaccine has yet become widely available and is unlikely to for at least a few more seasons. A few medicines appear to be effective against SARS-CoV-2, but none guarantee a cure—nor certain recovery from the potentially long-term debilitating consequences of infection. Diagnoses and treatments of cancer may be delayed or compromised, with devastating effects on our patients; the full effects will only be seen years from now. It is obvious that patients have been harmed due to short-staffing, risk mitigation, and severe shortages slowing or closing multidisciplinary hospital services, but this leaves out the difficult-to-catalog deaths that will accrue from reporting to a doctor too late, missing a mammogram or lung screening, being unable to be transported from a home or group living facility, or simply sheltering in place and declining therapy.

At the time of this writing, the world is conclusively not in a “post-COVID” era; rather, we are collectively living

through and within the pandemic. Emergency measures have been enacted, rapid communications have been transmitted, shutdowns and reopenings and sudden reversals of reopenings have occurred. Adaptations have been implemented, attempting to make the best of challenging circumstances—and so, at this point, we endure. As the pandemic deepens, the psychological stress and burnout will mount.

One of the foremost changes to our everyday lives is the requirement for “social distancing.” Hence, telework, previously regarded dismissively and correspondingly slow to disseminate, is the new normal. Remote solutions have sprung up to enable continued medical practice and administration, meetings, teaching, credentialing, interviewing, and academic conferencing. Consultations, follow-up appointments, and tumor boards are now being conducted virtually. Are these interactions of a value equal to those of the past? It will be important to determine which aspects of the quality and effectiveness of our practice and education will be enhanced, and which will not.

Because of the need for social distancing, efficiency in all operations has become critical. Hypofractionation, thanks to its lower level of required in-person exposures, seems perfect for this bill. However, strong evidence proving the equivalence of the outcomes and toxicities of hypofractionated regimens to those of conventional treatment remains confined to a few privileged disease sites where the level of experience and confidence is high. In clinical situations in which radiation therapy is combined with interventions from other modalities such as chemotherapy or surgery, the multimodality team may have difficulty integrating these new approaches into their usual

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practices. There is no doubt that the pandemic has led to renewed consideration of hypofractionation at the moment, with a plethora of recommendations and opinions having been issued on the subject; whether this body of medical literature will exert a lasting influence remains to be seen.

Finally, of some great concern is the impact this pandemic will have on the future of scientific research. Many medical centers have closed some or all research activities at various points during the pandemic; others are allowing certain types of research under carefully specified conditions. A massive influx of funding and scientific effort has been diverted to COVID-19—related research activities. How local and national clinical research enterprises will sustain their proximate operations is one question, and whether radiation oncology's clinical and laboratory researchers can pivot to address questions of import in the COVID era is another. We present commentaries addressing these and other scientific concerns.

At the American Society for Radiation Oncology journals, like at all journals, we have received an enormous number of COVID-19—related submissions this year. Many have helpfully documented immediately relevant clinical experiences or attempted to provide practical guidance for maintaining critical medical and operational functions. Our sister journal, *Advances in Radiation*

Oncology, has provided rapid review and publication of many of these articles to meet these urgent needs—a service to the radiation oncology community that is described in this issue. However, here at the Red Journal, we wished to gather a compilation of articles reflecting upon the pandemic and what has happened thus far, with the aim of looking forward. In a sense, this special issue is about survivorship—the survivorship of our specialty—and includes a considerable amount of speculation and augury. We attempt, at this complicated moment, to envision the new realities and unfamiliar strategies we may confront as we continue to navigate these harsh, remotely mediated circumstances.

The myriad effects of the pandemic have broken apart many aspects of radiation oncology: our proud and comfortable sweep of progress (similar to the profound devastation of AIDS in the 1980s and 1990s), our operations, our practices, our work—life separation, our research, our education, our community. We selected these articles because, as a group, we hoped they would point some ways forward in these dispiriting times. We wanted to spotlight the creative initiatives that are taking place around the world in the fight to maintain the integrity of cancer care and our profession. In this collection, there is reflection, insight, resilience, and, most importantly, hope.