

## EDITORIAL

## Cybersecurity, workflow and quality



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Editor-in-Chief

**H**acking, phishing, spoofing – these and other types of cyberattacks are often one click away from potentially disastrous consequences. Damage can include crippling computer viruses, extortion, personal privacy violations, and cancelled treatments – and it can happen to anyone. Unfortunately, such breaches in cybersecurity are on the rise in radiation oncology and healthcare overall.

Exploring this topic, University of Maryland's Elizabeth Nichols, MD, and colleagues, present the eye-opening review article, *The impact of cybersecurity in radiation oncology: Logistics and challenges*. Presented as part of this month's focus on quality and safety, the SA-CME-approved article describes experiences and unique considerations in radiation oncology that can help prevent and overcome a costly, exhausting cyber disaster. Strategies focus on radiation oncology IT infrastructure, electronic medical records, automatic time outs, treatment planning and delivery, plan verification, screen locking and more.

Also part of our safety theme is *A review of strategies for optimizing workflow, quality improvement, and patient safety within radiation oncology departments* by Cleveland Clinic's Bindu V. Manyam, MD, and colleagues. This well-written, comprehensive article identifies initiatives to mitigate errors related to workflow changes, misinformation transfers, heavier workloads, greater treatment complexity and other causes. Also outlined are specific efforts for incorporating quality improvement and patient safety into resident education.

We are also pleased to feature the review, *Quality and safety education in medical school* by Nadia Saeed, BA, Yale School of Medicine. This thoughtful article targets an important topic that, happily, is gaining much-needed attention. Key dimensions of quality and safety training in medical education are discussed, including quality and safety training specific to radiation oncology.

Rounding out this issue is *Enhancing quality, safety and efficiency in treatment planning with health information technology (HIT) and artificial intelligence (AI)*. Industry experts share advice in this Technology Trends installment on how to best leverage medical error reporting systems, patient safety databases, machine learning, human factor engineering, and related AI and HIT efforts to underscore quality and safety measures.

Please also enjoy this issue's novel case reports; research article on intensity-modulated radiation therapy (IMRT) usage in lung cancer; and Resident Voice editorial, which showcases an inspired way to meet information overload head on.

Finally, stay tuned for announcements of the 2018 winners for best case report (\$500 prize), review article (\$1,000 prize) and research article (\$1,000 prize). Votes are underway, and we are excited to share news on these top ARO papers soon.

As we enter the new year, we wish to thank you for your continuous support of the journal and its many online offerings. Your input and contributions have fueled our growth and helped to shape our goals of continuous improvement and innovation. Our very best wishes to you for a joyous holiday season and peaceful, bright, and memorable 2019!

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