

Chair's Message



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As the severity of the COVID crisis recedes, we can begin to allow ourselves a glimpse into the next, reshaped chapter of radiology. Some adaptations formulated during the crisis like hybrid work scheduling will remain permanent. We will revisit and resume progress on previous trends. A societal observation is that crises can accelerate trends already underway. Teleradiology and artificial intelligence (AI) trends show this. COVID shined Klieg lights on urgent health disparities which will be more diligently measured and more directly corrected. Disparities in radiology appear in even common exams such as a differential use of prostate MR imaging in minority patients.

A salient trend in the economy, in healthcare and now in radiology, is consolidation, the merging of similar businesses. In crises, size does matter and many small radiology practices struggled to weather sudden, sometimes severe decreases in patient volume. To understand competitive environments, I find this quote from evolutionary biology illuminating, “Any organism’s success depends on the behavior of its contemporaries. For most traits or behaviors there is likely no optimal design or strategy, only contingent ones.”¹ Contemporaries have and continue to grow convincingly in size, but that needs to be accompanied by attaining economies of scale and scope. Future radiology practices will reside in large, non-profit and for-profit organizations and may either become an outside “supplier” or be integrated internally in a healthcare system. As suppliers there is possible exposure to the vicissitudes of that market position, although building a strong brand may mitigate some of that risk. Radiology practices embedded in a large healthcare system must become integral to the dominant system culture, provide service levels consonant with that culture, and augment the system’s brand name. “Supplier” radiology practices must still have a culture compatible with that of the larger system. In both scenarios, imaging services will ride the teleradiology trend.

Despite initiatives to limit overuse of imaging, its apparent value continues to fuel growth. Imaging is becoming a component of surgical procedures, especially when robots are incorporated. This trend has driven construction of “hybrid ORs” that have features similar to classic radiology suites. Imaging-based diagnostic procedures can achieve more accurate diagnosis as illustrated in this newsletter by MR-guided prostate biopsies. The imaging-robotics combination trend extends beyond radiology to pulmonologists for example. Wider

adoption of image-guided treatment (IgRx) means traditional interventional radiology (IR) needs to continue to innovate and differentiate from competition (see above quote). Many innovations are recombinations or cross-pollination of well-known IR techniques as in geniculate artery embolization for osteoarthritic knee pain, or prostate artery embolization for benign prostate hypertrophy. Some address non-exotic, common medical conditions like thyroid ablation.

Radiology cannot forget to improve basic imaging technology. Established CT imaging technology will experience a new learning curve as it acquires multi-energy imaging capability. Photon counting is one technology described in this newsletter that offers more precise discrimination of x-ray photons to generate “iodine” images, Zeffective imaging, low monoenergy images, and virtual non-contrast images. The potential value of these new CT features could be more accurate diagnosis, diagnostic time savings, and overall reduced patient radiation.

Charles Handy’s quote can be insightful, “The world keeps changing. It is one of the paradoxes of success that the things and the ways which got you where you are, are seldom those that keep you there.”² In a rapidly changing world of competing large healthcare networks and of the repositories of knowledge (think AI), radiology will need to find new ways to occupy a central medical communication role as well as expanding its treatment roles via IgRx. Uncomfortable change will be necessary, otherwise we may fall victim to Pablo Picasso’s admonition, “Success is dangerous. One begins to copy oneself, and to copy oneself is more dangerous than to copy others. It leads to sterility.” Radiology must innovate rather than rely on and copy historical strengths. 

¹ Chris Colby, *Introduction to Evolutionary Biology*

² Charles Handy, *The Age of Paradox*