Much has changed in the practice of medicine over the past decade. Today, we have data-generating wearables, immunotherapy, genomics, nanotechnology, and uniquely tailored therapies based on three-dimensional imaging and molecular testing. Entirely new fields have been born, and others are undergoing dramatic transformation.

Although great strides are being made in many fields, improvements in dialysis access creation and maintenance during this time have been comparatively incremental. Arteriovenous (AV) access creation remains a surgical procedure. Plain old balloon angioplasty remains the cornerstone of AV access maintenance; however, many recent studies show that angioplasty results are not particularly durable. Judicious and appropriate use of stent grafts has extended dialysis access patency post-angioplasty, and the recent introduction of drug-coated balloons for AV access shows benefit in extending treatment site patency. But, in general, these advances have been slow to gain traction.

Furthermore, practical decision-making has become more complicated in a field where costs weigh heavily in a population that is expensive to treat. The only certainty is that there will be ongoing fluctuation in reimbursement, and therefore, a balance must be found between adoption of new technologies that improve care and the bottom line. Can we continue to put our patients first while ensuring that we won’t go out of business? The future of who, when, where, and how dialysis access care will be provided is not easily divined.

With these advancements and challenges in mind, the modern dialysis access specialist must continue to study the nuances of available advances and carefully scrutinize the designs and results of their respective clinical trials. We must also seek to separate marketing from data and ask for proof not only of concept in controlled clinical trials, but of performance in the real world.

To help better inform your decisions, we have asked leading experts from around the world to describe their experiences with the latest technologic advancements, both from their perspective as clinical trialists as well as “real-world” practitioners. We have also invited candid discussion of optimal care delivery with respect to financial constraints, adoption of new reporting standards, and diverse clinical approaches to challenging scenarios.

We hope you find this discussion both timely and stimulating, and we welcome your feedback.

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Dialysis Access: Boldly Entering a New Era in Decision-Making