Although more people are keeping their teeth longer, the need for removable prosthodontic care continues to increase as people are living extended, more active lives and access to dental care is anticipated to decline. Despite seeking dental care more frequently by age 50, Americans have lost an average of 12.1 teeth. According to the World Health Organization, people with fewer than 20 of their own or replacement teeth may be considered disabled because they are unable to eat and speak effectively.

Restorative diagnosis and treatment is becoming more challenging as active individuals of all ages seek dental care with more complex medical problems. Aging patients are taking multiple medications, many of which cause xerostomia, with resultant increases in complex caries (especially on the roots). The compromised condition of the remaining dentition complicates our ability to restore the partially dentulous patient.

As we are striving to provide more economical, longer lasting care in fewer visits, advances in dental materials and technology are giving us more diverse and sophisticated treatment alternatives. Basic concepts of contemporary dental rehabilitation founded upon classic removable prosthodontic theories and sound biomechanical principles should be considered as we select the best treatment for our patients.

Classic paradigms of care are challenged daily. For example, a flexible denture base material that does not provide rigidity of the major and minor connectors and clasp assemblies compromises support and stability of the restoration. Use of metallic restorations on principle abutment teeth may be discouraged due to fears of amalgam or costs of metal alloys. Before selecting alternative techniques or materials such as tooth colored composites or ceramics to support removable prostheses, we should carefully weigh the advantages and disadvantages.

As we adopt “modern” expedited techniques, such as the one-visit final impression, we need to acknowledge their benefits and limitations. Our diagnostic skills must be outstanding as the lack of a primary cast restricts our diagnostic evaluation of the complex edentulous patient. Efficiency should improve — not jeopardize — the quality of care.

New technology is often beyond the resources of patients most in need. The placement of implants, often guided by sophisticated imaging is becoming the standard of care to replace missing teeth. Ironically, the indigent living near or below the poverty level, are most likely to lose teeth and least able to afford replacements. Conventional removable prostheses are frequently the most practical solution for many.

The challenge of selecting the most appropriate care for the diverse and growing edentulous population is becoming more complex, as the selection of materials and treatment alternatives for each patient increases. The choice of techniques and materials should be based upon sound biomechanical principles and substantiated by laboratory and clinical evidence, as well as patient needs, desires, health, and finances.