

Digital Dentistry

Digital dentistry refers to the use of dental technologies or devices that incorporates digital or computer-controlled components to carry out dental procedures rather than using mechanical or electrical tools. The use of digital dentistry can make carrying out dental procedures more efficient than using mechanical tools, both for restorative as diagnostic purposes. Used as a way to facilitate dental treatments and propose new ways to meet rising patient demands.

Types of digital dentistry technology

In a dental practice, there are a variety of diagnostic and treatment techniques which require the use of computer-controlled technology. Some common types of dental technology used at Coastal Dental Care are:

Digital radiography

Digital radiography is the use of optical face scanners to produce a clear map of teeth and dental impressions. These scans can be viewed, printed or assessed by the dentist while you are in the chair. In addition, digital radiographs emit up to 70 percent less radiation than traditional X-rays and are more environmentally friendly. At Coastal Dental Care, our practices use several types of 3D intra-oral scanners including CEREC Omnicam, 3Shape TRIOS, and iTero.

Cone-beam computed tomography imaging (CBCT)

A Cone-beam CT is a rotating X-ray machine which provides a three-dimensional view of teeth and the oral anatomy. Additionally, this imaging technique identifies oral conditions which are not detectable by regular X-ray screenings. A CBCT can also determine the exact position of teeth and their roots.

Intra-oral cameras

Intra-oral cameras allow dental practitioners to see clear, accurate images of the mouth. Shaped like a wand, the camera can magnify images on a computer screen in real time. This enables patients to clearly see what the dentist is doing or referring to. In addition, the intra-oral camera can provide a detailed view of hard to see areas in the mouth. This helps to accurately identify problems such as a fractured tooth.

Computer aided design or computer aided manufacturing (CAD/CAM) and 3D printing

Computer aided design and 3D printing have made it more efficient for practitioners to design and manufacture dental restorations. Such restorations may include porcelain crowns, bridges, or veneers. Computer aided dentistry allows dentists to design, fabricate and insert dental restorations on the same day. Traditionally, a dental laboratory would make the restoration. This process could take up to 3 weeks. The new technology, however, means that the patient can receive the final restoration within a day.