ABOUT CAO

The California Association of Orthodontists (CAO) is the Californian component of the American Association of Orthodontists (AAO)—the largest and oldest dental specialty organization.

The CAO represents nearly 1,500 orthodontic members who practice in California. CAO members are specialists who have completed dental school and then successfully completed 2–3 years of additional training at an accredited orthodontic residency program. Our members are experts in diagnosing and treating all orthodontic problems in patients of all ages—from child to adult. CAO is engaged in legislative advocacy to protect patient health and improve access to care.

MISSION

CAO's mission is to:

- Support its members in their pursuit of excellence during their practice of orthodontics
- Promote the values of ethical practice as defined by the American Association of Orthodontists
- Advocate for its members in issues related to professional governance and regulation
- Provide continuing education opportunities for members
- Encourage the public to seek an orthodontic specialist when considering comprehensive orthodontic treatment

SUPPORTED LEGISLATION

1. **AB 280 (Aguiar-Curry)**: Health care coverage: provider directories.
2. **AB 341 (Arambula)**: Oral Health for People with Disabilities Technical Assistance Center Program.
3. **AB 350 (Bonta)**: Health care coverage: fluoride treatments.
4. **AB 371 (Haney)**: Dental coverage.
5. **AB 376 (Tangipa)**: Personal Income Tax Law: exclusions: insurance proceeds: wildfires.
6. **AB 489 (Bonta)**: Health care professions: deceptive terms or letters: artificial intelligence.
7. **AB 755 (Tangipa)**: Income tax: exclusion: disasters.
8. **AB 873 (Alanis)**: Dentistry: Dental assistants: infection control course.
9. **SB 351 (Cabaldon):** Health facilities.
10. **SB 386 (Limón)**: Dental providers: fee-based payments.

KEY CONTACTS

Mark Rashidi, D.D.S., M.S.D., President, mcrashidi@gmail.com
Jeff Kwong, D.D.S, M.S.D., Legislative Committee Chair, drjeff@jkortho.com
Caliph Assagai, Legislative Advocate, Caliph@californiapolicysolutions.com

GET TO KNOW

Orthodontists in the State of California

Who we are:

- Orthodontists rooted in and licensed to practice in the state of California.
- Dental specialists and health care providers who diagnose, prevent, intercept and treat dental and facial irregularities.
- **Small business owners and job creators with an economic impact on communities throughout California.**
- Civically engaged, working to make the communities we serve better.
- Dedicated to improving the health of the public by promoting quality orthodontic care, the importance of overall oral healthcare and ***advocating for patient health and safety***.

We support laws that:

Acknowledge the importance of an **in-person examination** and appropriate radiographic imaging prior to orthodontic treatment, based on reliable scientific evidence.

Require those dentists who are providing teledentistry services to **disclose their information to patients**, including their name, license number, telephone number, practice address and education credentials.

Support dental boards having **increased investigative and enforcement authority over non-licensees** involved in administering or providing teledentistry services to California patients.

Support efforts to utilize technology that provides **affordable treatment options** and broadens **access to care**, while keeping patient health and safety the priority.

CAO CALIFORNIA ASSOCIATION of ORTHODONTISTS

AAO American Association of Orthodontists

Fast Facts:

CAO is the California component of the American Association of Orthodontists.

Number of AAO members in California: **1912**

Average amount of post-secondary education per member: **10-11 years**

For any questions, contact:

Mel Assagai: mel@californiapolicysolutions.com
Caliph Assagai: caliph@californiapolicysolutions.com

More facts!

OrthoFacts.org

RADIOGRAPHIC IMAGING

Radiographic imaging (x-rays and other types) is an essential component of the evaluation and diagnosis that must occur prior to beginning orthodontic treatment.

CALIFORNIA ASSOCIATION of ORTHODONTISTS

American Association of Orthodontists®

orthofacts.org

For some companies offering orthodontic treatment "direct-to-consumer," or through clear aligners mailed directly to the patient, x-rays or other radiographic images of the patient's teeth are not taken by the company or the dentist/orthodontist providing treatment.

A 3D digital scan of the patient's teeth does not provide the same information as radiographic images, because digital scanners cannot view below the surface of the gums.

Radiographic images provide crucial information for the safety and success of the patient's treatment, and includes essential components that simply cannot be replicated by reviewing only digital scans or other photographs. Moreover, the minimal risks of taking x-rays are far outweighed by their clear value for orthodontic treatment.

In order to best protect patients, laws should require radiographic imaging (x-rays) before orthodontic treatment begins.

Moving teeth is a complex biological process. Teeth are moved by the pressure exerted by an orthodontic appliance, like clear aligners or braces.[1] This pressure causes necrosis (death) of the vascular tissue around the tooth, allowing the tooth to move within its alveolus (bone socket); and bone then reforms around the tooth.[2,3]

Moving teeth is not just a cosmetic procedure. The pressure from clear aligners or other orthodontic appliances causes "minor reversible injury" to the tooth-supporting structures.[4] Moving teeth must take into consideration not just the final appearance of the teeth, but also impact on tooth and jaw function.[5]

The complexity of the process of moving teeth **requires that a trained expert (dentist or orthodontist) have all necessary information** at their disposal (which can only be gained through an in-person examination) before starting treatment.

Radiographic images are an essential component of the evaluation and diagnosis that must occur prior to the start of orthodontic treatment.

It is "widely considered beneath the standard of care to initiate orthodontic care without first acquiring proper diagnostic information. A clinician who begins orthodontic treatment without appropriate radiographs necessary for creating an adequate and appropriate diagnosis and treatment plan **may be breaching the standard of care.**" [6]

"Diagnosis and treatment planning for the correction of misaligned teeth **should not be performed without a thorough review of baseline radiographs** by a skilled orthodontist or radiologist." [7]

Radiographic images are "**an important part of the clinical examination**" and a **require[d], ... integral part of treatment planning.**" [8]

Radiographic images are "an **essential part of the diagnostic process in orthodontics**" and "**a crucial step in the initial diagnostic process.**" [9]

[1] Wise, G.E. and King, G.J. (2008) Mechanisms of tooth eruption and orthodontic tooth movement. J Dent Res, 87, 414-434 at 414.
[2] Wise & King (2008) at 415.
[3] Antoun, J.S., Mei, L., Gibbs, K. and Farella, M. (2017) Effect of orthodontic treatment on the periodontal tissues. Periodontol 2000 74, 140-157 at 141.
[4] Wise & King (2008) at 414.
[5] Gkantidis, N., Christou, P. and Topouzelis, N. (2010) The orthodontic-periodontic interrelationship in integrated treatment challenges: a systematic review. J Oral Rehabil, 37, 377-390 at 377.
[6] Abdelkarim, Al. and Jerrold, L. (2018) Clinical considerations and potential liability associated with use of ionizing radiation in orthodontics. Am J Orthod Dentofacial Orthop, 154, 15-25 at 16 (emphasis added).
[7] Park, J.H. (2020) A licensed orthodontist versus do-it-yourself orthodontics. Am J Orthod Dentofacial Orthop, 157, 591-92 at 591 (emphasis added).
[8] Taylor, N.G. and Jones, A.G. (1995) Are anterior occlusal radiographs indicated to supplement panoramic radiography during an orthodontic assessment? British Dental Journal 179 at 10 (emphasis added).
[9] Sameshima, G.T. and Asgarifar, K.O. (2001) Assessment of root resorption and root shape: periapical vs. panoramic films. Angle Orthodontist 71, 185-89 at 185 (emphasis added).
[10] Witcher, P.T., Brand, S., Gwiliiam, J.R., and McDonald, F. (2010) Assessment of the anterior maxilla in orthodontic patients using upper anterior occlusal radiographs and dental panoramic tomography: a comparison. Oral Surg Oral Med Oral Pathol Oral Radiol Endod 109:765-74 at 765; Michelogiannakis, D., Vastardis, H., Malkopoulos, I., Papathanasopoulou, C., and Tosios, K.I. (2018) The challenge of managing patients with generalized short root anomaly: A case report. Quintessence Int, 49, 673-79 at 677.
[11] Witcher et al. (2010) at 770-71.
[12] Park (2020) at 592.
[13] McCollough, C.H., Bushberg, J.T., Fletcher, J.G., and Eckel, L.J. (2015) Answers to common questions about the use and safety of CT scans. Mayo Clin Proc, 90, 1380-92 at 1380 (emphasis added).
[14] Abdelkarim and Jerrold (2018) at 17-18.

RADIOGRAPHIC IMAGING

Radiographic imaging (x-rays and other types) is an essential component of the evaluation and diagnosis that must occur prior to beginning orthodontic treatment.

CALIFORNIA ASSOCIATION of ORTHODONTISTS

American Association of Orthodontists

Radiographic images are indispensable for evaluation of the patient's oral health prior to beginning orthodontic treatment.

Digital scanning (such as the iTero® scanners) create a 3D image that can be used in place of traditional alginate impressions. *They are not a substitute for radiographic imaging because they cannot view below the surface of the gums*—that is, they do not show the tooth roots, or anything else that cannot be seen with the naked eye.

Radiographs are required to assess short root anomaly (abnormally short tooth roots), which is a *significant risk factor for root resorption (the loss of tooth roots)* during orthodontic treatment.[10]

"Intraoral radiographs are likely to be needed if a full and reliable assessment is to be made, especially to assess root morphology."[11]

One researcher sums up the risks of failing to perform radiographic imaging succinctly in stating,

"What if there is a supernumerary tooth in the path of the tooth movement that might result in root resorption? What if there are other pathologic lesions or findings that need attention before the initiation of tooth movement such as dentigerous cysts, periapical disease, periodontal bone loss, interproximal or secondary caries [decay], or bony lesions such as ameloblastoma? Consider if the patient has an undiagnosed temporomandibular disorder, devitalization of teeth, or current crown or bridgework."[12]

There are countless conditions that can profoundly affect orthodontic treatment and can only be diagnosed through the use of radiographic images.

In nearly all orthodontic cases, the minimal risk associated with radiographic images is far outweighed by their clear value for orthodontic diagnosis and treatment.

Radiographic images used in the orthodontic context pose a minimal, nearly statistically insignificant risk to the patient, with technology continuously evolving to reduce the risk even further.

"Although there is a perception among some physicians and patients that the dose of ionizing radiation from medical imaging examinations, particularly CT, poses a substantial cancer risk to patients, **this perception is not consistent** with data from high-quality studies, nor with current consensus opinions of radiation protection organizations."[13]

The effective doses for some commonly-utilized orthodontic radiographic images (measured in microsieverts (μSv)) are as follows:

RADIOGRAPHIC IMAGING TECHNIQUE	EFFECTIVE DOSE OF RADIATION
• Digital panoramic radiography	• 6-38 μSv
• Digital cephalometric radiography	• 2-10 μSv
• CBCT	• 20-1025 μSv

For reference, the average effective dose of radiation in the United States from naturally occurring, ubiquitous background radiation (that is, unavoidable radiation exposures from sources such as radon gas and cosmic rays) is approximately 3000 μSv per year.[14]

In other words, the typical effective dose from the most common orthodontic radiographs (digital panoramic and cephalometric) is but a very small fraction of the dose of radiation most individuals are exposed to environmentally each year in the United States.

Statutes and regulations governing teledentistry should include that radiographic images (x-rays) be taken before any orthodontic treatment that will lead to irreversible changes to the dentition, in order to best protect the patient's health and well-being.

For more information, visit orthofacts.org

QUESTIONS TO ASK ABOUT THE SAFETY OF DTC ORTHODONTICS

CALIFORNIA ASSOCIATION of ORTHODONTISTS

Orthodontic treatment is a complex process which could lead to potentially irreversible and expensive damage such as tooth and gum loss, changed bites, and other issues if not done correctly. Patients' health and safety depend upon a proper assessment prior to beginning treatment and access to a trained professional during the course of treatment to address any issues that may arise.

Ask companies using the DTC model the following questions to help determine how safe the company's treatment model is.

1. **How many individuals purchased an aligner system from your company in California last year?**
2. **Of those, how many were seen in person for an exam prior to beginning treatment?**
3. **Were they seen in person by an orthodontist licensed to practice in California?**
4. **How many orthodontists licensed to practice in California do you employ?**
5. **Of those that weren't seen in person, how was it determined that they were a suitable candidate for aligner treatment?**
6. **How does an individual contact the treating orthodontist if they have a question or problem during treatment?**
7. **How many refund requests did you receive from patients in California last year?**
8. **How many patients were required to sign a non-disclosure agreement to receive a refund?**

Moving teeth is not a cosmetic process like teeth whitening. Marketing and selling an orthodontic appliance as a stand alone product without appropriate doctor involvement poses significant risk to patient health and safety.

DIY ORTHODONTICS LEGISLATOR FAQ

Things to consider when making policy decisions related to direct-to-consumer orthodontics

ACCESS TO CARE | COST OF TREATMENT

Q: DTC companies claim that they've helped patients save thousands of dollars. They say their service is about $2,000. Is their service cheaper than going to an orthodontist?

A: The direct-to-consumer models do not account for the range of treatment plans and options offered by traditional orthodontists. Their cost claims appear to be made using a "standard cost" for orthodontic treatment, however in reality treatment costs vary based on the unique needs of each patient. For simple cases like the ones DIY aligner treatment is designed to address, the cost of treatment from an orthodontist may be only marginally more, be covered by insurance and includes the oversight of an orthodontist who monitors treatment to ensure treatment progresses as intended.

Consider:

- The direct-to-consumer models do not offer access to care, so much as access to a product.
- DTC companies often charge exorbitant interest rates (up to 22.92% in CA) to finance treatment.
- Aligners are very common in an orthodontic office and offered as a treatment option to patients for whom such treatment is deemed safe and effective.
- Many orthodontists also utilize degrees of remote monitoring where they feel it is appropriate.
- Often the mild to moderate cases that can be treated with direct-to-consumer models would be a comparable cost at a traditional orthodontist.
- If someone has insurance, they can use that with an orthodontist.

PATIENT SAFETY | IN-PERSON VISITS

Q: DTC companies say that patients can go to one of their stores to get scans or do them at home with an impression kit to get a 3D image of their teeth. Isn't getting an in-person scan sufficient to ensure treatment is safe and effective?

A: Photos and a scan do not replace radiographs, a physical examination and probing depths completed by the orthodontist needed to safely diagnose the proper use of an aligner. Many direct-to-consumer orthodontic treatments are initiated using at-home impressions, taken by the customer. There is no value placed on pre-treatment X-rays, or diagnosis of gum disease, cavities and other factors that may make treatment unsafe for a patient.

Consider:

- Who are the people taking scans? Are they under the supervision of licensed orthodontist?
- Who is the dentist/orthodontist overseeing treatment? Are they licensed in California?
- Does the patient have a way to contact the doctor if they have questions or problems?
- An orthodontist completes 2-3 years of specialized training after completing dental school to fully understand the complexities involved with safely moving teeth.

COMPLAINTS

Q: If there are so many issues with this service, why do we not see complaints with the Dental Board?

A: Because direct-to-consumer orthodontic treatment is marketed as an aligner to address cosmetic concerns rather than a medical device that will affect not only tooth position but also facial structure, jaw position and bite composition, consumers often view their treatment as a commodity/product rather than a healthcare service. As a result, it is not commonly understood that complaints should be made to the Dental Board of California.

Consider:

- Aligners are a medical device requiring proper diagnosis to ensure safe use.
- There is no contact between the patient and the clinician who approved the case.
- Unlike orthodontists, who are required by law to make clear the process for filing a complaint if a patient is dissatisfied with their results, these emerging business models do not clearly disclose the process for making a complaint. Thousands of patients have filed complaints with the Better Business Bureau rather than the Dental Board.
- Unhappy customers are instead often required to sign nondisclosure agreements as a condition of receiving a refund.
- Patients seeking retreatment at a CAO member office are encouraged to file complaints with the Dental Board of California, however they may not follow through.
- While AB 1519 does provide basic patient safety parameters for companies utilizing telehealth models to provide orthodontic treatment, the language is not specific enough to hold companies accountable for failure to comply.

REFUNDS & RETREATMENT

Q: DTC orthodontics is a business. Can't customers contact them to have problems resolved or just get their money back if there's an issue?

A: If the patient is able to determine who the treating orthodontist is on their case, they generally do not have a way to contact them directly if they experience problems or have questions during treatment. There is not an orthodontist present in the physical locations that patients visit, and the person listed as the treating orthodontist may not even reside in the state. In some instances patients can get their money back, but there can be lasting damage to the teeth that results from improper diagnosis and/or unsupervised treatment.

Consider:

- Improper diagnosis/oversight can result in problems that are worse than the condition a patient sought treatment for in the first place.
- While a patient may be able to see a licensed orthodontist for retreatment to correct problems caused by direct-to-consumer providers, they can experience lasting/irreparable harm.

ABOUT CAO

CAO CALIFORNIA ASSOCIATION of ORTHODONTISTS

www.caortho.org

The California Association of Orthodontists (CAO) is the Californian component of the American Association of Orthodontists (AAO). The CAO represents nearly 1,500 member orthodontists who practice in California. CAO members are specialists who have completed dental school and then successfully completed 2–3 years of additional training at an accredited orthodontic residency program to fully understand the complexities involved with the safe movement of teeth. CAO is engaged in legislative advocacy to protect patient health and improve access to care.

THE TELEDENTISTRY CATCH-22 TRAP

CALIFORNIA ASSOCIATION of ORTHODONTISTS

American Association of Orthodontists

How Mail-Order Orthodontic Companies are Hoping to Play State Legislatures and Dental Boards to Avoid Meeting the Standard of Care for Teledentistry that will Help to Better Protect Patients

Dental boards and state legislatures throughout the United States have expressed concern that patients who elect to receive orthodontic treatment through mail-order are not being adequately protected.

The scientific evidence overwhelmingly demonstrates that an in-person examination and x-rays prior to orthodontic treatment are essential to the standard of care for safe and effective treatment.

Yet, mail-order orthodontic companies are using a catch-22 hoping to prevent legislators and dental boards from codifying, in statute or regulation, a standard of care that would protect these patients. How is this happening?

Mail-order Companies to Lawmakers:

"You can't legislate a standard of care. You can't include that in a statute; you have to leave standard of care to the dental board."

Mail-order Companies to Dental Boards:

"The statute doesn't mention a specific standard of care, so you have no authority to put it into regulation; and you'll get sued if you do."

A "catch-22" is defined as a **paradoxical situation from which an individual cannot escape because of contradictory rules or limitations**. This is precisely what mail-order orthodontic companies are doing to avoid meeting the standard of care that will help better protect patients.

Mail-order companies want legislators to believe that they must defer to dental board members on determining the standard of care; and **dental board members** are told by mail-order orthodontic companies they will be sued if they set the standard of care in a rule without specific language in a statute establishing that standard of care.

The AAO strongly supports the authority of both legislatures and dental boards to codify specific elements of a standard of care they reasonably believe necessary to protect patients. For more information on the scientific evidence that supports elements of the standard of care necessary to protect patients receiving mail-order orthodontic treatment, please visit www.orthofacts.org.

More facts!

OrthoFacts.org

CALIFORNIA ASSOCIATION of ORTHODONTISTS

STANDARD OF CARE: DIAGNOSTIC RECORDS FOR ORTHODONTIC TREATMENT

With the broad array of treatment options available, making orthodontic decisions for you and your family can be difficult. Adding to the confusion is direct advertising by appliance manufacturers as well as provider companies. CAO member orthodontists consider many factors to determine which treatment option(s) will be safe and effective for each patient, but the process begins with gathering basic but critical information about the patient's oral health.

In an effort to assist potential patients in knowing that they are being well assessed before treatment, this document outlines the information that should be obtained before any treatment is undertaken. This recommendation represents the bare minimum of records that are needed to protect the health and safety of patients and to uphold the most basic standard of care.

In many cases additional records are necessary before beginning treatment—such as a 3-D image or x-rays of individual teeth to more fully assess and address a patient's orthodontic needs. Additionally, and especially for adults, a periodontal evaluation by a dentist or periodontist may also be needed.

While these records can be gathered by a licensed technician at the direction of your treating doctor, the California Association of Orthodontists feels that an in-person examination by your treating doctor assures that you have been adequately evaluated before beginning treatment.

This standard of care recommendation for the baseline of records needed prior to beginning orthodontic treatment was developed in consultation with the heads of the University-based orthodontic departments in California and is consistent with the *Clinical Practice Guidelines for Orthodontic and Dental Facial Orthopedics* published by the American Association of Orthodontists and the AAO's position paper: *Legal, Ethical and Clinical Concerns with Common Components of a Direct-To-Consumer Orthodontic Treatment Model*.

RECORDS NEEDED FOR ORTHODONTIC TREATMENT

The California Association of Orthodontists recommends the following diagnostic records, at a minimum, be obtained before beginning orthodontic treatment:

Phase I Treatment
- Lateral Cephalometric radiograph*, Panorex*, 3 Facial and 5 intraoral photographs* (ABO Standard), Models (either physical or digital)

Single Phase or Phase II Treatment
- Lateral Cephalometric radiograph*, Panorex*, 3 Facial and 5 intraoral photographs* (ABO Standard), Models (either physical or digital)

Adult Treatment
- Lateral Cephalometric radiograph*, Panorex*, 3 Facial and 5 intraoral photographs* (ABO Standard), Models (either physical or digital)

Combined Orthodontic & Surgical Treatment
- Lateral Cephalometric radiograph*, Panorex*, 3 Facial and 5 intraoral photographs* (ABO Standard), Models (either physical or digital)

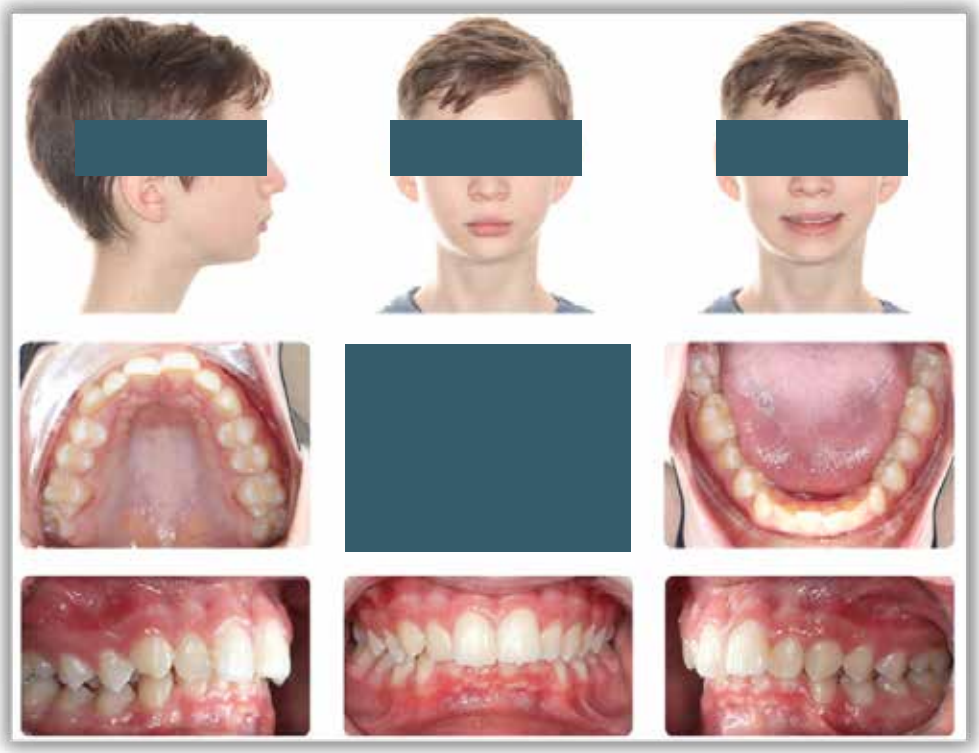
Limited Tooth Movement for Pre-prosthetic Reasons
(i.e. molar uprighting or single tooth extrusion etc.)
- Panorex*, 3 Facial and 5 intraoral photographs* (ABO Standard), Models (either physical or digital)

*CBCT Scan is acceptable instead of lateral cephalometric radiograph and panorex when the field is sufficient that these radiographs can be generated from it. Intraoral photo can be replaced with a full-color intraoral scan.

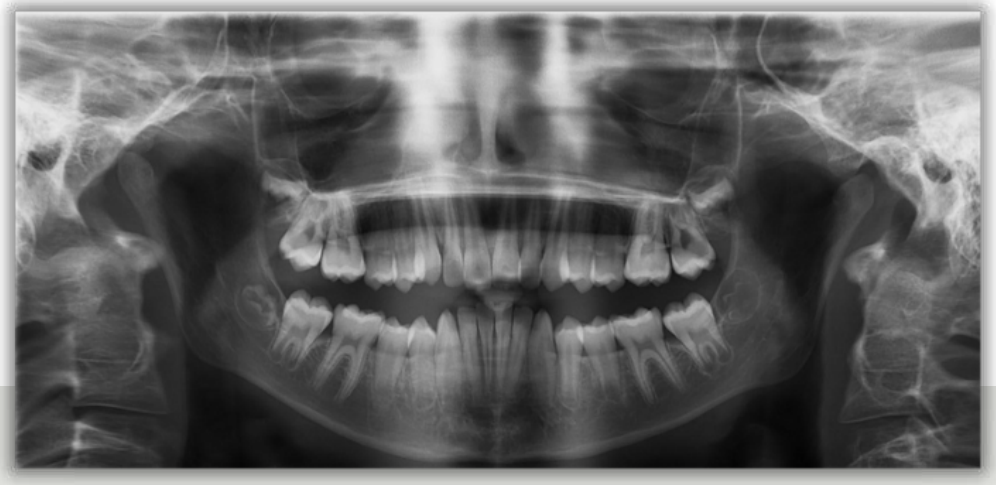
EXAMPLES OF RECOMMENDED RECORDS

To assist you in understanding if the appropriate records have been obtained, the following examples illustrate what each record looks like.

Frontal and Side Photos & Intraoral Photos

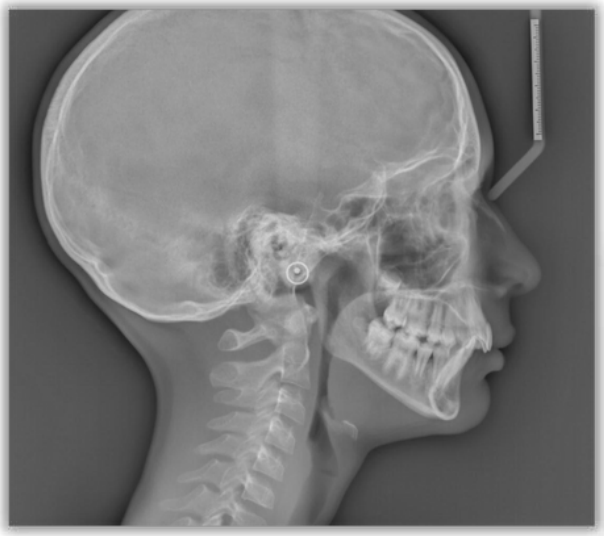


Panoramic Radiograph

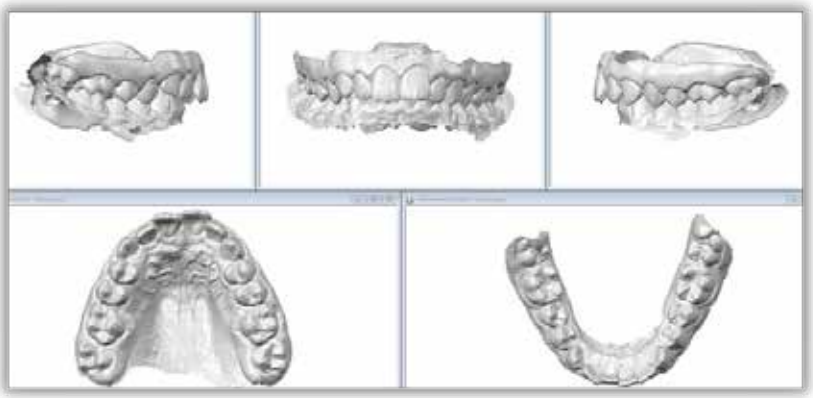


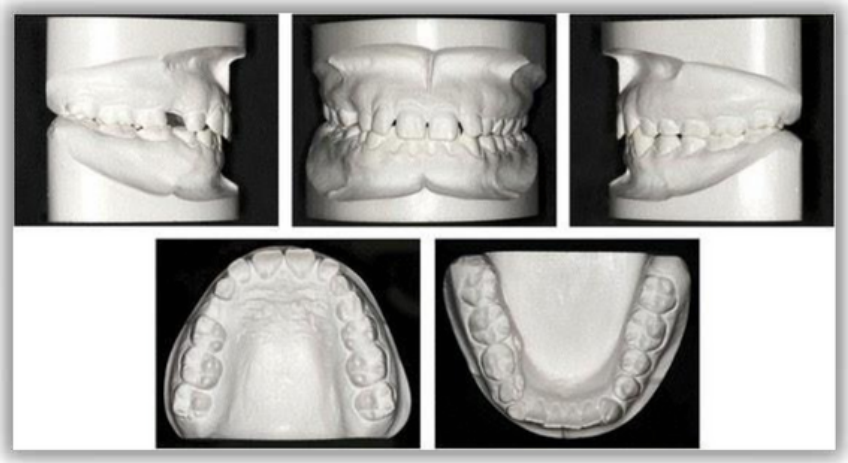
EXAMPLES OF RECOMMENDED RECORDS

Lateral Head Film commonly called a Cephalometric Radiograph



Digital or Physical Models of Your Teeth





This document is offered with the goal of providing guidance and facilitating increased access to care while ensuring that the minimum information needed for safe and effective treatment has been gathered prior to beginning orthodontic treatment.

CAO CALIFORNIA ASSOCIATION of ORTHODONTISTS

www.caortho.org