Treatment Planning Like a Rockstar!

A practical playbook for efficient consultations and complex care

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An excellent treatment plan connects the patient's presenting concerns with a sound history, examination, diagnosis and a sequence of care that the patient can follow. In a busy practice, that process also needs to be rapid and efficient, not some shot-gun, basal, cookie-cutter approach that is implemented with everyone who walks through the door. My starting point is three big questions for every patient from their first visit to recare/recall appointments: Pain? Function? Esthetics? I then establish what the patient wants me to achieve and whether there is a budget we need to work within. The answers to these simple inquiries give the appointment and subsequent examination, records, and presentation a purpose.

The goal of the first consultation is a clear, clinically appropriate next decision. Sometimes that means proceeding with further planning; sometimes it means treating an immediate problem, arranging a referral, or developing a staged approach. Each step should move the patient toward an achievable goal. The following case shows how these questions guided an orthodontic, implant surgery and prosthodontic plan for a patient seeking a more esthetic smile.

Start with 3 QUESTIONS!

I introduce myself, confirm the patient's identity, and review the relevant medical and dental history. It is also valuable to ensure your team regularly confirms the patients address, phone number and email, as these change from time to time and there are also data entry errors which I find in 5% of my patients. Then I ask, "What brings you in today?" I organize the conversation around three priorities:

Pain: What hurts, when does it happen, and how is it affecting you, onset, location, duration, character, aggravating, radiating, prior history (the classic 7 history questions)?

Function: What are you having difficulty doing: eating, chewing, speaking, or managing your current prosthesis?

Esthetics: What would you like to change about the shade, shape, position, or appearance of your teeth? Do you want whiter, brighter or straighter teeth?

A patient may have concerns in all three areas. I want to know which matters most to that person. Clinical findings still determine urgency and treatment needs, including disease the patient has not noticed. The patient's priorities help us explain those findings in a meaningful way and involve the patient in choosing among appropriate options.[1]

Know the goal and discuss the budget

My next question is, "What would you like me to do for you?" An adult woman attended seeking a nicer smile. She reported no pain and was able to function; appearance was her principal concern. The initial photographs show anterior spacing and multiple missing teeth (Figure 1). Her reported ability to function gave us her perspective, while the examination established the clinical needs.

I also ask, "Do you have a budget you would like to work within?" This belongs early in the conversation, before extensive elective design work. I explain relevant options and realistic fee ranges as the findings allow, including what remains uncertain. We also discuss time away from work, healing, interim treatment, and maintenance commitments.

She wanted to use her available insurance benefits and was prepared to contribute an additional CAD $30,000. This gave us a financial framework for comparing appropriate options and staging care for her in what was anticipated to be a 18-24 month long treatment plan. Insurance eligibility still needed confirmation, and the proposed fees had to be explained before treatment was accepted.

My aim is to direct planning effort toward a solution the patient can realistically consider. Clinical need is established by the assessment; financial circumstances help shape the choice and staging of appropriate care. If the preferred treatment is beyond the current budget, we can discuss alternatives, priorities, and what can reasonably be deferred, without wasting valuable time.

Establish what is clinically possible

An efficient consultation needs a clinical foundation. I use an organized examination to identify disease, assess the teeth and supporting tissues, and establish what further information the proposed treatment requires. The extent of the examination and any additional testing follow the patient's findings and needs, and can be justified if there is a realistic probability that the patient will be able too afford the care and take the plan to fruition.

The early periodontal chart recorded probing depths of 1–4 mm, predominantly 1–3 mm, with localized recession of 1–3 mm. The accompanying hygiene narrative documented moderate bleeding and inflammation. Debridement, home-care instruction, and a three-month hygiene interval were recorded. These findings added a periodontal component to a consultation initiated for appearance.

The broader principle is to incorporate periodontal treatment, reassessment, and supportive care into the restorative plan. The EFP guideline describes a stepwise approach to periodontal therapy that includes biofilm and inflammation control and continuing maintenance.[2]

For an implant discussion, an early feasibility review includes restorative space, the proposed tooth position, neighboring teeth and roots, the soft tissues, and the ridge. Bone dimensions and the relationship to vital anatomy require appropriate 3D imaging. This review helps identify planning questions, additional treatment needs, and reasons for referral. Definitive dimensions and safety margins must be established for the individual anatomy, restoration, and implant system.

Give every record a job

My records framework includes the history and clinical examination, appropriate imaging, photographs, an intraoral scan or study models when needed, dynamic records in the form of a video capturing phonetics, smile line and speech pattern, and lastly documentation of the consent discussion. Medical investigations, including blood tests, are obtained when clinically indicated. I want the team to understand what each record will help us decide.

Imaging selection starts with the history, examination, and available images. The 2026 ADA/AAOMR recommendations support this individualized approach and recommend CBCT for

presurgical implant planning and placement, in conjunction with an iOS file, these can also be used for surgical guide fabrication.[3] At recall appointments, the need for new radiographs also depends on clinical findings, risk, and available images; elapsed time alone does not determine that need. If doing surgery, I generally like to have radiographs which are at least taken within the last 6 months.

For restorative planning, a consistent photographic series can include frontal and lateral intraoral views and both occlusal views, with facial and smile records added for the question being considered. Intraoral scans or conventional impressions provide further information when required. The practical question is straightforward: What will this record contribute to the diagnosis, design, discussion, or follow-up?

In this case, the diagnostic phase included review of the initial panoramic radiograph, photographs, a cephalometric image, and an intraoral scan for orthodontic and implant planning. The records helped us assess the diastema, tooth positions, available spaces, and possible replacement of missing teeth. CBCT planning views and subsequent radiographs illustrate the progression from a proposed implant plan to placed implants and scan components (Figure 2).

Plan the sequence and leave room to adapt

Clear aligners were used to improve tooth position and redistribute restorative space. Bonded brackets were also an option, however the patient wanted to use clear aligners as her friend had them in the past and she felt that it would be more discreet. Tracking difficulties required reassessment and additional scans for revised aligners. Implant treatment proceeded in stages as the plan evolved, with large cases there is always going to be the change of plan which needs to be anticipated in both the consent aspect and also the financial proposal, otherwise you may be completing the case using money out of your pocket. The interim photographs show the changed anterior arrangement with implant components already present (Figure 3A–D). Continued review allowed the restorative design to respond to the tooth positions achieved.

Evaluate midline position and inclination separately

Achieving exact dental-to-facial midline coincidence with clear aligners was challenging. We prioritized maintaining an upright maxillary interincisal line and assessed the remaining discrepancy in the context of the full face and proposed smile (Figure 7).

Perception studies distinguish horizontal midline displacement from axial inclination. Kokich and colleagues found different responses to lateral midline displacement and incisor angulation; Silva and colleagues emphasized vertical orientation when evaluating midlines in asymmetric faces.[4,5] Other research found that even small lateral discrepancies can reduce attractiveness ratings.[6]

Taken together, these findings support considering an upright midline with some residual lateral displacement as an esthetic compromise in selected patients. They provide a reason to assess the whole face and discuss the mock-up with the patient; they do not establish a universal acceptable offset or guarantee the final appearance.

Make the proposed smile visible

Once the patient's goals and the clinical direction are clear, digital smile design can make the proposal easier to discuss, pictures are worth 1000 words. Photographs, and video when useful, provide a visual starting point for considering tooth shape, length, position, and the relationship of the teeth to the lips and face.[7] The mock-up gives the patient something concrete to respond to. We can discuss the proposed shape, length, and arrangement of the teeth while reviewing appearance and phonetics. I ask, “Is this what you had in mind?” and “What would you change?” In this case, updated photographs and scans supported an exocad design, followed by a bis-acryl mock-up. Photographs and video helped us assess the proposal and compare it with the starting point. The proposed smile became something we could examine together before definitive preparation and fabrication.

This is where I see its value in case presentation. Showing the patient a proposed change creates a specific conversation: "Is this what you had in mind?" "What do you like about it?" "What would you change?" My aim is to support case acceptance by helping the patient understand what the treatment offers and connect it with the concern that brought them to the office.

For this patient, updated photographs and scans supported digital smile design, followed by a bis-acryl mock-up try-in using an EXOCAD smile design. Photographs and video were recorded for phonetic assessment and comparison to where we started. The mock-up made the proposed tooth arrangement and appearance tangible before definitive preparation and fabrication (Figure 3E–F).

A digital preview is a simulation. Its feasibility still depends on tooth structure, periodontal health, restorative space, occlusion, and the treatment needed to achieve the proposal. An intraoral mock-up, when appropriate, offers another opportunity to evaluate and refine the design. There are methods to print these using DLP SLA printers, however I am not into that technology quite yet.

Small patient studies have found digital previews and mock-ups useful, while also showing that patients may prefer a conventional design.[8,9] These findings support their use in discussion without establishing a general increase in treatment acceptance. I choose the approach that helps answer the patient's question and supports the clinical task. The consent discussion then addresses the proposed treatment, benefits, risks, alternatives, and the implications of deferring care.[10]

Test the design in provisionals

The retained maxillary teeth selected for crowns were prepared using vertical preparations also known as BOPT. Implant scan components and intraoral scanning recorded the restorative situation. Provisional restorations based on the proposed mock-up carried the design into the interval before definitive delivery, providing an opportunity to review contour, appearance, and function (Figure 4). The mock-up is the rehearsal!

The laboratory used Exocad for the CAD/CAM design based upon the diagnostic mock-up. The supplied design views show the proposed restorations in relation to the opposing arch and from facial, lateral, and palatal perspectives. The definitive units combined restorations for retained teeth with implant-supported restorations (Figure 5).

Give every digital tool a purpose

You can describe digital capability in six levels, beginning with photography and extending to fabrication (Table 1). A practice can start with photographs and 2D communication, then use laboratory support or additional tools as the clinical task requires. For each patient, the necessary records and treatment requirements determine which capabilities are used.

Table 1. Six levels of digital capability and their purpose

Level	Capability	Purpose
1	Photography	Record the starting condition and discuss the patient's concern.
2	2D smile design	Explore a proposed change and clarify expectations.
3	Scanning; CBCT when indicated	Capture the records required for the clinical task.
4	Computer design	Develop and refine the proposed restoration or appliance.
5	3D printing	Produce models or other appropriate planning and treatment aids.
6	Milling	Fabricate appropriate mock-ups, provisionals, or restorations.

Before adding another digital step, I ask what decision or task it will improve. The same question applies to time spent on design: it should serve a defined clinical purpose and a proposal the patient is willing to explore.

Finish with a clear next step

An efficient consultation ends with a documented next step. I summarize the problem, the relevant options, the reason for my recommendation, and what still needs to be established. I confirm that the patient understands the agreed next step. I then enter the recommendation and follow-up directly into the clinical record so the team can arrange the appropriate appointment, “At each review, ask: Are we on course, or does the plan need to change?”

The definitive maxillary restorations were delivered after the provisional phase (Figure 6). The delivery record documents assessment of contacts, margins, and occlusion, with screw retention and cementation used for the relevant units. The photographs show the appearance at delivery, and the panoramic comparison shows the combination of retained teeth and implants (Figure 8). Mandibular posterior spaces remained, so the images represent the maxillary restorative phase within the broader treatment plan. She plan to address the mandible later on, but we have to account for it in our plan from the beginning. Review continued after delivery. This is part of carrying out a plan through care: review comfort and contacts, respond to the patient, and continue maintenance.

At recalls, I begin by checking when the patient was last seen, what treatment has been completed, and which recommendations or appointments remain outstanding. I update the history, review the available radiographs, and conduct the examination. I also ask whether the patient's functional or esthetic priorities have changed. We discuss the rationale for any recommended care, record the decision, and agree on a maintenance interval based on individual need with the treating hygiene team. Whenever possible, the next visit is booked before the patient leaves.

Return to the patient who wanted a nicer smile.

This patient came to us wanting a nicer smile. Her priorities gave consultation direction, while the examination established the orthodontics, periodontal and restorative needs. Tooth movement, implant planning, the mock-up, and provisional restorations each helped answer a question as the plan developed. The maxillary rehabilitation was one phase of that continuing plan; mandibular treatment and maintenance remained part of the discussion.

That is what I mean by treatment planning like a rockstar: understanding what matters to the patient and giving every step a purpose. The patient should understand where we are going and what it will take to get there. **Every record needs a job. Every visit needs a next step.**

Author biography

Dr. Waji Khan is a general dentist, educator, and international lecturer based in Ontario, Canada. A 2001 graduate of the University of Toronto Faculty of Dentistry and former Canadian Armed Forces Dental Officer, he teaches oral surgery, implant dentistry, restorative workflows, and treatment planning.

Disclosure

Dr. Khan reports key opinion leader relationships with Crest Oral-B, Hu-Friedy, EMS Guided Biofilm Therapy (GBT), Bredent Medical and Hiossen Implants.

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Figure 1 Initial consultation photographs

Figure 1. Initial photographs supplied from the consultation phase. The patient sought a more esthetic smile, reported no pain, and felt able to function. The series documents the original anterior spacing, tooth arrangement, and missing teeth. These clinical findings informed the assessment alongside her stated priorities.

Figure 2 Radiographic and implant planning records

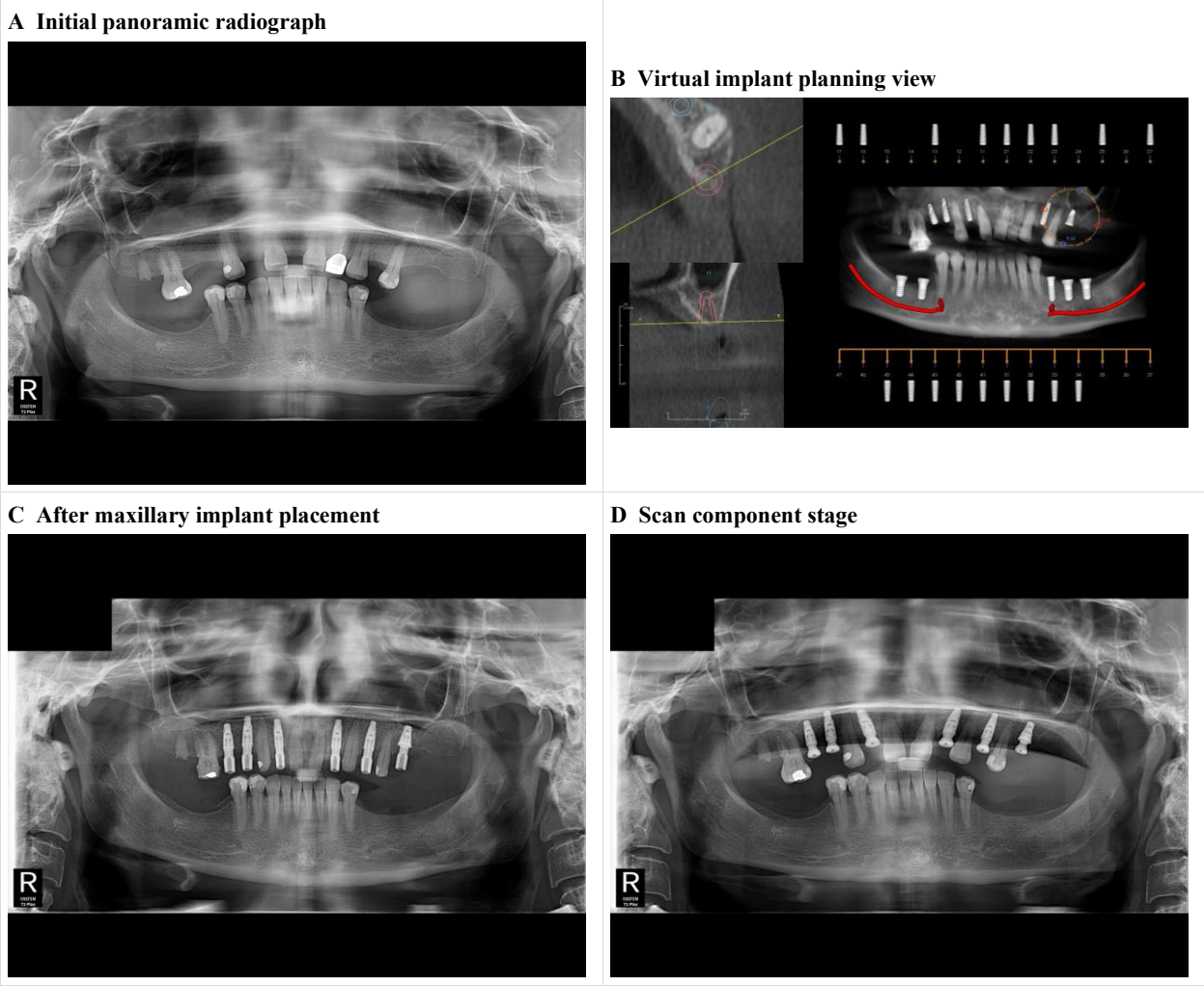


Figure 2. Representative records from different planning and treatment stages. A, initial panoramic image. B, CBCT software view with virtual implant proposals, including mandibular proposals; these overlays represent planning. C, maxillary implants after placement. D, radiograph with scan components during restorative preparation. Patient identifiers have been masked in C and D. The unaltered source images are retained separately.

Figure 3 Orthodontic reassessment and diagnostic mockup

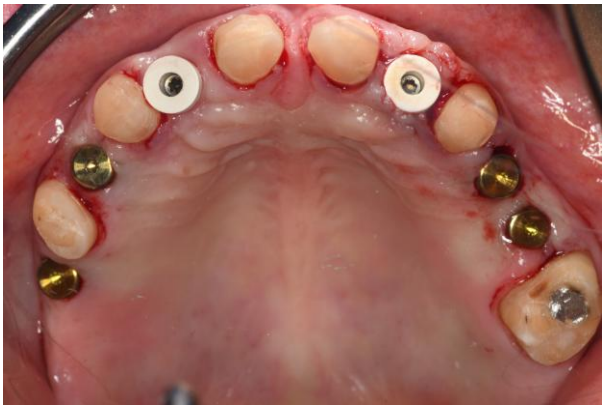
Figure 3. A–D, interim records after tooth movement, with implant treatment already in progress and implant components visible. These views helped reassess anterior arrangement and remaining restorative spaces. E–F, diagnostic mock-up of the proposed result. The mock-up was used to evaluate the design before definitive preparation and fabrication.

Figure 4 Preparation, scanning and provisional restorations

A Frontal preparation and scan view

B Maxillary preparation and scan view

C Prepared teeth and implant components



D Provisional frontal view

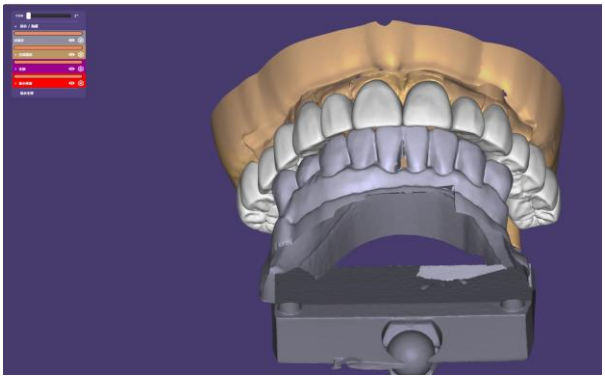
E Provisional palatal view

F Smile with provisional restorations

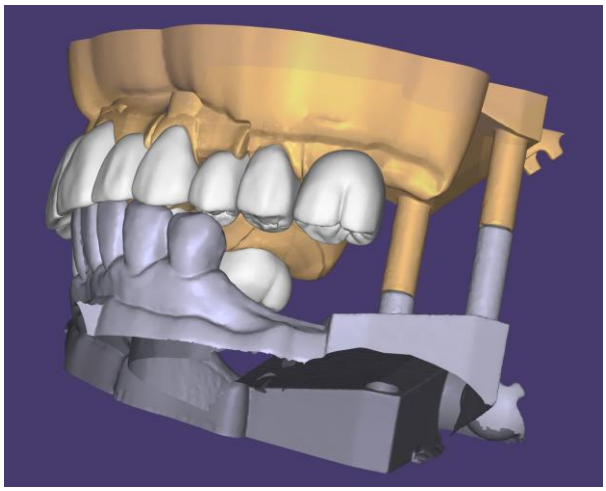
Figure 4. A–C, vertical crown preparations on retained teeth and the implant component/scanning stage. D–F, provisional restorations derived from the proposed mock-up. The provisional phase carried the planned appearance into the period before delivery of the definitive restorations.

Figure 5 Digital design and definitive restoration components

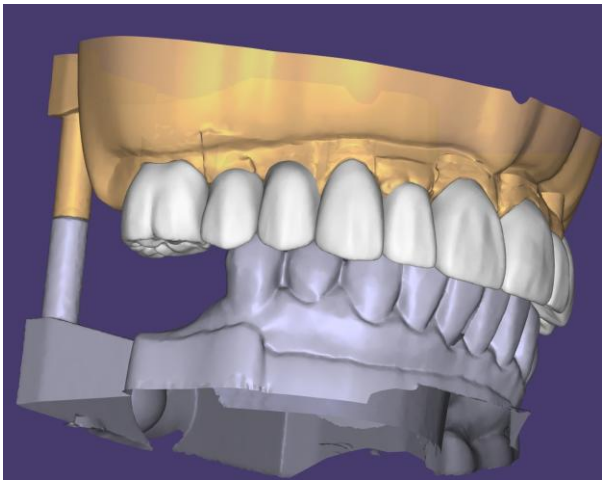
A Exocad frontal design



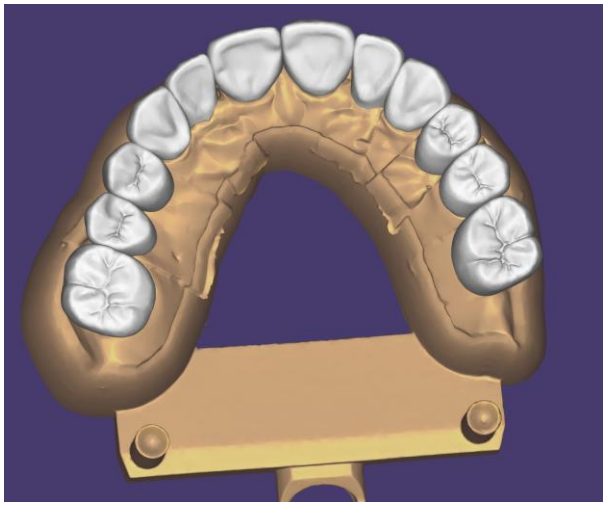
B Exocad lateral design



C Exocad opposite lateral design



D Exocad palatal design



E Definitive maxillary units

F Anterior restoration components

Figure 5. A–D, exocad CAD/CAM planning views supplied by the author, showing the proposed restorations and their relationship to the opposing arch. E–F, the definitive restoration units before insertion. The rehabilitation combined restorations for retained maxillary teeth with implant-supported units.

Figure 6 Clinical photographs at delivery

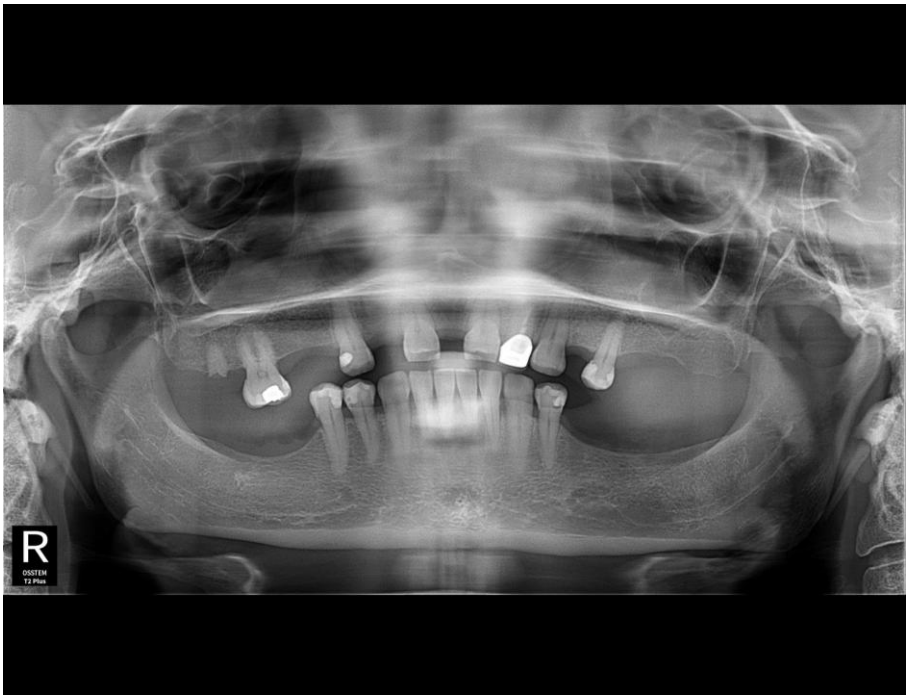
Figure 6. Appearance on the day of definitive maxillary restoration delivery. The mandibular posterior spaces remain visible in the lower occlusal view. These photographs document the delivery stage of the maxillary rehabilitation; subsequent clinical review and maintenance are described in the text.

Figure 7 Facial context and midline assessment

Figure 7. Initial and delivery facial views, with the author-supplied facial reference grids from interim planning and delivery. The grids support assessment of the dental arrangement within the face. They are visual references rather than calibrated measurements of midline displacement or inclination; head position and expression also differ between photographs.

Figure 8 Panoramic comparison

A Initial panoramic radiograph



B Panoramic radiograph at delivery

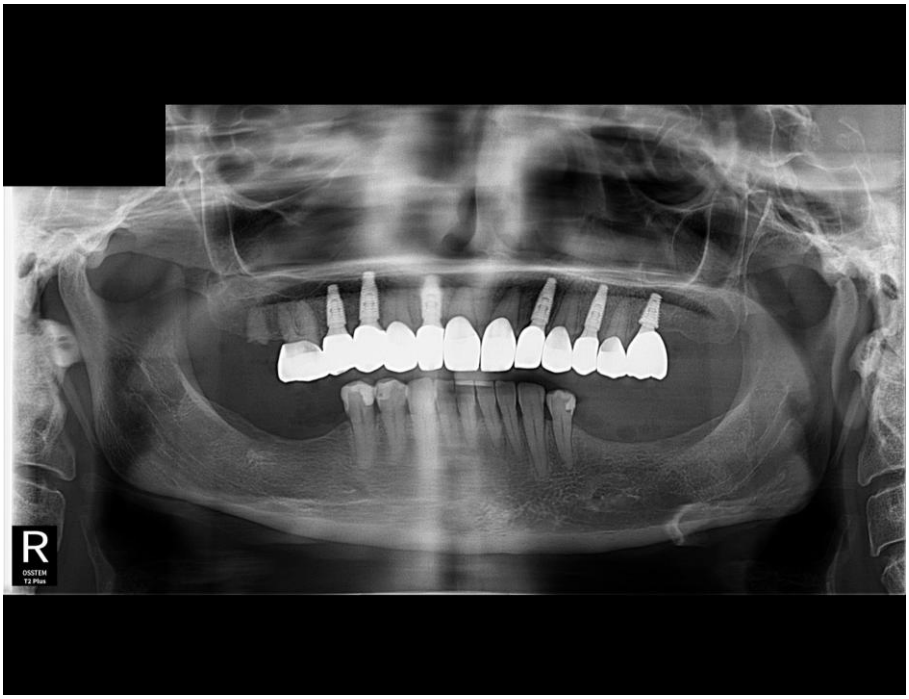


Figure 8. Initial and delivery panoramic views show the progression to a maxillary rehabilitation combining retained teeth and implant-supported restorations. The mandibular posterior spaces remain. These overview images document the treatment stages rather than a longitudinal peri-implant bone-level assessment. Patient identifiers have been masked in B.