Full Mouth Rehabilitation

Canonical:
https://directory.collinsstreetspecialistcentre.com.au/procedures/prosthodontics/full-mouth-rehabilitation/

Description:

Full mouth rehabilitation — also referred to as full arch reconstruction or comprehensive occlusal rehabilitation — is the systematic restoration of all or most of the teeth in both arches, addressing function, struct...

Details:

Collins Street Specialist Centre Full Mouth Rehabilitation

What Is Full Mouth Rehabilitation?

Collins Street Specialist Centre offers full mouth rehabilitation — also referred to as full arch reconstruction or comprehensive occlusal rehabilitation — the systematic restoration of all or most teeth in both arches, addressing function, structure, and aesthetics within a carefully coordinated treatment plan.

This is not a single procedure. It is a series of precisely sequenced clinical interventions, often spanning multiple dental specialties. The prosthodontist coordinates treatment throughout: assessing the existing bite relationship, planning the final restorative outcome, and directing the sequence of surgical, periodontal, endodontic, and orthodontic work that may be required before definitive restorations can be placed.

Full mouth rehabilitation is indicated when a patient's dental situation cannot be adequately addressed by treating individual teeth in isolation — when the underlying problems affect the bite, the jaw relationship, the bone level, or the structural integrity of the dentition as a whole. Understanding what this process involves, and why it is approached the way it is, helps patients make informed decisions about their care.

When Might You Need Full Mouth Rehabilitation?

The conditions that lead to full mouth rehabilitation are varied, but they share a common thread: cumulative damage or change across many or all teeth, such that piecemeal repair is no longer a viable long-term strategy. The following are among the most common presentations.

Severe Tooth Wear (Erosion, Attrition, Abrasion)

Tooth structure, once lost, cannot regenerate. When teeth have been progressively worn down through years of bruxism (grinding), acid erosion from gastric reflux or dietary causes, or abrasive habits, the vertical height of the bite decreases — the face effectively closes down — and the remaining tooth structure becomes increasingly fragile and vulnerable to further breakdown.

Restoring a worn dentition is among the most technically demanding challenges in prosthodontics. The bite must first be carefully reassessed and re-established at a new vertical dimension before definitive restorations can be placed. This requires detailed pre-treatment planning, a diagnostic wax-up, and a structured period of adaptation at the new bite height before any permanent restoration is cemented.

The planning phase is every bit as important as the restorative phase itself; there are no shortcuts here.

Advanced Periodontal Disease with Tooth Loss

Untreated or inadequately managed gum disease leads to progressive bone loss around the roots of teeth. By the time a patient presents for reconstruction, many teeth may already have been lost, remaining teeth may have significantly compromised bone support, and the bone ridges that would ordinarily support dental implants may have resorbed considerably.

Rehabilitation in this context is a genuinely multidisciplinary undertaking. The periodontist addresses active disease and performs bone and soft tissue grafting to create a stable biological environment. The oral and maxillofacial surgeon may be involved where complex bone reconstruction is required. The prosthodontist then designs and sequences the final restorative phase — which may combine implants, bridges, and crowns across both arches — to ensure the restored dentition is built on a foundation that will support it long-term.

Multiple Failed or Failing Restorations

Patients who have accumulated a significant history of dental work over many years — large fillings, ageing crowns, failed bridges, worn partial dentures — may reach a point where individual repairs are no longer the most predictable or efficient path forward. A comprehensive assessment and a coordinated full-arch rehabilitation plan often produce a more reliable and longer-lasting outcome than ongoing patch-by-patch management of a dentition that has been compromised incrementally over time.

Developmental or Congenital Tooth Anomalies

Some patients present from a relatively young age with conditions such as amelogenesis imperfecta (defective enamel formation), dentinogenesis imperfecta, or significant congenital absence of teeth. Full mouth rehabilitation in these cases may begin in adolescence and evolve across several planned stages as the patient's skeletal growth completes. The treatment timeline in these situations is longer and requires careful coordination between specialties.

Severe Dental Trauma

Major facial trauma — whether accident-related or otherwise — can result in the loss of multiple teeth along with associated bone and soft tissue. Reconstruction following significant trauma requires the coordinated involvement of multiple disciplines, including maxillofacial surgery, periodontics, and prosthodontics, with the prosthodontist planning the final functional and aesthetic outcome from the outset.

Functional Problems Related to the Bite and Jaw Joints

Patients with long-standing temporomandibular joint (TMJ) pain, chronic muscular jaw pain, or significant bite discrepancies may require full mouth rehabilitation as part of establishing a stable, comfortable, and physiologically sound bite position. In these cases, the rehabilitation addresses both restoration and function.

What to Expect: A Step-by-Step Overview

Full mouth rehabilitation is a phased process. The precise sequence depends entirely on the clinical situation; the following represents the general framework that guides most cases.

Phase 1 — Comprehensive Assessment

The assessment phase is thorough and is not rushed. It is the foundation upon which the entire treatment plan rests, and it receives the time and attention it deserves. This phase includes:

- A detailed clinical examination of every tooth, the gum tissue, bone levels, and the jaw joints - Digital intraoral scanning using the 3Shape TRIOS 3 scanner - Comprehensive photographic records, both intraoral and extraoral - Radiographic assessment — dental radiographs and, in more complex presentations, cone beam CT (CBCT) imaging through Collins Street Imaging at Level 9 - Bite and jaw function assessment — recording the position of the jaws in centric relation, measuring the vertical dimension of occlusion, and evaluating the range and quality of jaw movement - Articulated study models, which capture the three-dimensional bite relationship for detailed laboratory analysis

At the conclusion of this phase, the prosthodontist presents a comprehensive treatment plan that maps every tooth and the proposed restoration or intervention at each site, along with a sequenced treatment timeline. Patients leave the assessment with a clear understanding of what is proposed, why, and in what order.

Phase 2 — Preparatory Treatment

Before any definitive restoration begins, the clinical foundation must be stable and secure. Preparatory treatment typically encompasses:

- **Periodontal treatment** — active gum disease must be thoroughly treated and controlled before restorations are placed. The specialist periodontists at Collins Street Specialist Centre manage this component, providing the stable gum and bone environment that underpins long-term restoration success. - **Endodontic treatment** — any teeth requiring root canal therapy are treated by the specialist endodontists before being crowned or incorporated as bridge abutments. - **Surgical preparation** — bone grafting, sinus lifts, implant placement, or gum recontouring as clinically indicated. - **Orthodontics** — in selected cases, repositioning teeth orthodontically before restorations are placed can reduce the number of crowns required and improve the precision of the final occlusal relationship.

Each of these preparatory steps is sequenced deliberately. The order matters, and the prosthodontist coordinates the overall sequence to ensure that later stages are not compromised by decisions made earlier.

Phase 3 — Occlusal Stabilisation and the Provisional Phase

Before permanent restorations are cemented, the new bite position is established using provisional restorations — temporary crowns and bridges that reproduce the planned final outcome. The patient wears these for a period of weeks to months, allowing confirmation that the new bite position is comfortable, functional, and stable under real-world conditions.

This provisional phase is a critical component of full mouth rehabilitation, not an optional step. It functions as the clinical safety net — an opportunity to identify and resolve any issues before irreversible permanent restorations are fabricated and cemented. Patients are encouraged to provide honest feedback during this phase; their experience wearing the provisionals directly informs the final result.

Phase 4 — Definitive Restoration

Once the provisional phase has been confirmed as successful, the definitive restorations are fabricated — in many cases using the in-house dental laboratory at Collins Street Specialist Centre. Depending on the clinical requirements, this may involve:

- All-ceramic or zirconia crowns across multiple teeth - Fixed bridges, whether tooth-supported or implant-supported - Porcelain veneers in the aesthetic zone where sufficient tooth structure is preserved - Implant crowns and custom abutments - Full-arch implant prostheses, including [All-on-4 Rehabilitation](/procedures/prosthodontics/all-on-4-full-arch-implant-rehabilitation/) or similar approaches

Restorations are seated in a coordinated sequence that maintains the established occlusal relationships throughout. The CEREC CAD/CAM system (Primescan scanner + Primemill) can be used to mill certain restorations in-house, and the broader laboratory workflow incorporates Exocad DentalCAD for digital restoration design.

Phase 5 — Maintenance and Long-Term Review

Completion of the restorative phase is not the end of the treatment relationship — it is the beginning of a long-term maintenance programme. Full mouth rehabilitation represents a significant clinical investment, and protecting that investment requires:

- Regular professional review and cleaning appointments - Monitoring of bone levels around implants and at teeth with a prior history of periodontal compromise - Occlusal splint use at night for patients with bruxism - Periodic photographic and bite assessments to detect any changes early

Patients who maintain a consistent review schedule consistently achieve better long-term outcomes.

Recovery and Aftercare

Recovery from full mouth rehabilitation is specific to each phase of treatment. The surgical, periodontal, and endodontic phases each carry their own recovery requirements, which are detailed on the respective procedure pages. The prosthodontic stages themselves — crown preparation, fitting appointments, and cementation — are generally well-tolerated and not significantly uncomfortable for most patients.

The overall treatment timeline varies considerably depending on the complexity of the case. A more straightforward full-arch reconstruction may take 6–12 months from initial assessment to final cementation. A complex case involving extensive bone grafting, multiple implant placements and their integration period, and a full-arch provisional phase may span 18–24 months.

What patients consistently report at the conclusion of treatment is that the investment in time and process has been worthwhile. The ability to eat without discomfort, to speak clearly and confidently, and to engage in social and professional life without self-consciousness about their teeth represents a meaningful and lasting improvement in quality of life — one that goes well beyond the purely dental.

Why See a Specialist Prosthodontist?

Full mouth rehabilitation sits at the most complex end of the dental spectrum. It requires a clinician with the specific knowledge, clinical judgement, and procedural experience to:

- Assess and establish the correct jaw position from first principles — a skill that requires years of specialist training to develop and refine - Coordinate treatment across multiple specialties without losing sight of the overall clinical plan - Design a treatment sequence that is logical, efficient, and minimises the risk of having to revisit or redo earlier work - Communicate the restorative vision to the laboratory with the precision necessary to produce restorations that fit, function, and look as intended - Guide patients through a lengthy treatment process with consistent clinical standards across every appointment

A specialist prosthodontist has completed a three-year, Dental Board-registered postgraduate clinical degree in which full mouth reconstruction is a core area of competency. This is not general dental practice supplemented by additional courses; it is a recognised dental specialty with a defined scope and specific registration requirements.

The multidisciplinary structure at Collins Street Specialist Centre means that every component of a full mouth rehabilitation plan can be coordinated internally — from periodontics to endodontics to oral and maxillofacial surgery — with specialists who know one another, share digital records, and work as collaborative colleagues rather than in isolation across unconnected practices. For patients undertaking complex, multi-stage treatment, this integration is a practical and clinical advantage.

Our Specialists

Prof Vasileios Chronopoulos DDS, MS, PhD (Pros) Specialist Prosthodontist with over 30 years of experience in aesthetic and functional full-mouth reconstructions. Internationally recognised for his work in smile rehabilitation, worn dentition, and complex implant reconstruction. National and international lecturer.

Dr Fotios Angelis BDS (Hons)(Melb), DClinDent (Melb) Specialist Prosthodontist with expertise in complex reconstructive dental care, including multidisciplinary full-arch rehabilitation.

Dr Jamie Foong BDSc (Melb), DClinDent (Melb) Specialist Prosthodontist with experience in occlusal rehabilitation and restorative reconstruction, and a clinical supervisor at the University of Melbourne.

Dr Simon Hinckfuss BDSc, DCD (Pros), Cert.Perio MS (Minn) The only clinician registered in Australia as both a Specialist Prosthodontist and a Specialist Periodontist. This dual expertise is particularly valuable in complex full-mouth cases where periodontal health is foundational to the restorative outcome.

All specialists hold current registration with the Dental Board of Australia. AHPRA specialist registration can be independently verified online.

Related Treatments

Full mouth rehabilitation draws on components from across the full range of dental specialties available at Collins Street Specialist Centre. Depending on the clinical requirements of each case, the following treatments may form part of the rehabilitation plan:

Prosthodontics: - [Dental Crowns](/procedures/prosthodontics/dental-crowns/) — the core restorative unit in most full-arch plans - [Dental Bridges](/procedures/prosthodontics/dental-bridges/) — fixed bridges to span gaps within the arch - [Porcelain Veneers](/procedures/prosthodontics/porcelain-veneers/) — aesthetic facings for the front teeth where tooth structure is preserved - [All-on-4 Rehabilitation](/procedures/prosthodontics/all-on-4-full-arch-implant-rehabilitation/) — full-arch implant solution for edentulous or near-edentulous arches - [Dental Implants (Prosthodontic Restoration)](/procedures/prosthodontics/dental-implants-prosthetic-restoration/) — individual implant crowns and bridges as part of the reconstructive plan - [Dentures](/procedures/prosthodontics/dentures/) — removable options within a broader rehabilitation plan

Supporting specialties: - [Periodontal Treatment](/procedures/periodontics/gum-disease-treatment-gingivitis-periodontitis/) — foundation gum and bone management before reconstruction - [Bone Grafting (Periodontics)](/procedures/periodontics/bone-grafting-guided-bone-regeneration/) — rebuilding bone support for implants - [Dental Implant Surgery (Periodontics)](/procedures/periodontics/dental-implants-periodontal-specialist-placement/) — surgical placement by the specialist periodontist - [Root Canal

Treatment](/procedures/endodontics/root-canal-treatment/) — treating compromised teeth before they are restored with crowns - [Orthognathic Surgery](/procedures/oral-maxillofacial-surgery/orthognathic-surgery-corrective-jaw-surgery/) — jaw repositioning in cases where a skeletal discrepancy underlies the bite problem - [Bone Grafting (OMS)](/procedures/oral-maxillofacial-surgery/bone-grafting-oral-maxillofacial-surgery/) — major bone reconstruction for severely deficient sites

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