PG Cert in Implant Dentistry

Learning Objectives and GDC Development Outcomes

M1 Non-Implant Assessment Module

Learning objectives

- Be able to assess individual tooth prognosis and whether it should be saved or extracted in clinical practice
- Be able to assess the suitability of a tooth as a potential bridge abutment in clinical practice
- Appreciate the indications and benefits of implants and how to communicate this to patients
- Appreciate success rates for endodontic treatment in clinical practice
- Understand implant survival vs success and mechanical and biological complications in clinical practice
- Appreciate reasons for failures of implants in clinical practice and patient communication of risk factors
- Appreciate to role of tooth hemisection/root re-section as an alternative to tooth extraction in clinical practice
- Appreciate the role of adhesive bridgework as an alternative to implant treatment in clinical practice
- Appreciate the role of partial dentures as an alternative to implant treatment and use of precision crowns, magnets, and locator abutments in clinical practice
- Appreciate the role of sub coping bridges as an alternative to full arch implant bridgework and the 'all on 4' concept in clinical practice

GDC Development Outcomes: A,C,D

M2 Implant Planning Module

Learning objectives

- Be able to understand the design features of implants and the abutment interface
- Understand the possible role of implant design features and the abutment interface features in long term functional and aesthetic stability
- Appreciate the factors that need to be assessed when predicting possible implant aesthetic outcomes in clinical practice
- Understand Seiberts classification and its clinical applications
- Understand the pink aesthetic score and its clinical implications
- Understand the Lekholm and Zarb classification and its clinical relevance
- Understand the applications of CBCT in implant dentistry, oral surgery, endodontics and facial pain in clinical practice
- Appreciate the importance of periodontal diagnosis and risk assessment in implant cases
- Understand the nature of periodontal disease, mucositis and peri-implantitis in clinical practice
- Be able to undertake a comprehensive risk based periodontal examination in clinical practice
- Understand periodontal treatment therapies and barriers to successful clinical treatment
- Be able to periodontally risk assess individual teeth in clinical practice
- Understand periodontal stability and its importance prior to implant therapy in clinical practice

GDC Development Outcomes: A,C,D

M3 Implant Occlusion Module

Learning objectives

- Appreciate the relevance of occlusion in implant dentistry
- Appreciate implant occlusally related complications that can occur in clinical practice
- Understand the concept of the "protected occlusion" in clinical practice
- Be able to identify the features of the ideal occlusion in clinical practice and occlusal disorders
- Understand the envelope of function and clinical treatment of the restricted envelope
- Appreciate how to avoid encroaching on the envelope of function with dental restorations and the role of the custom incisal guidance table
- Understand the role of the articulator in implant dentistry in clinical practice
- Appreciate the features and importance of the functional aesthetic diagnostic wax up in clinical practice
- Understand the features of the semi-adjustable articulator and hinge axis ear bow
- Appreciate occlusal issues specific to implant clinical practice
- Understand the role of bruxism in influencing implant clinical protocols
- Be able to undertake a face bow record
- Be able to mount models on the articulator
- Be able to undertake a comprehensive, risk based occlusal and TMD examination
- Understand the range of splints available in restorative and implant dentistry

GDC Development Outcomes: A, C, D

M4 Implant Restorative Module

Learning objectives

- Be able to select the appropriate abutment material for a predictable long term aesthetic and functional result in clinical practice
- Be able to risk assess implant treatment in the aesthetic zone
- Appreciate possible techniques for increasing the aesthetic predictability of implant treatment in the aesthetic zone
- Understand the ovate pontic technique in the aesthetic zone in clinical practice
- Understand the principles and materials including limitations of the ridge preservation technique
- Appreciate aesthetic restorative implant led treatment planning including the role of CBCT and software planning techniques
- Appreciate the restorative phases in the aesthetic screw retained bridge case
- Understand the limitations of full dentures and how implant assisted dentures may improve this in clinical practice
- Appreciate the range of implant assisted attachments available and their advantages and disadvantages
- Understand the Locator and Novaloc attachment systems in clinical practice
- Appreciate the restorative and surgical phases in the implant assisted denture case
- Understand the hybrid bar design implant assisted denture
- Appreciate the use of one piece mini implants and considerations/limitations in clinical practice

GDC Development Outcomes: A,C,D

M5 Implant Surgical Module

Learning objectives

Students should:

- Be able to recognise the significant anatomical structures in the mandible and maxilla that impact on implant surgery and implications for violation
- Recognise variations in surgical anatomy that may implant on implant surgery
- Understand anatomical variations in bone quality and how this may influence surgical technique/protocols
- Appreciate the microbiology of successful and failing implants and its influence on implant techniques/protocols
- Understand the principles of wound healing and how to reduce bacterial load in clinical practice
- Appreciate clean versus sterile surgical technique and how to undertake this in clinical practice
- Understand and appreciate the role of antibiotics and antimicrobials in implant surgery
- Understand the role of pain management in implant surgery including I.V. sedation, long acting anaesthetic and analgesia
- Appreciate the role of restorative: aesthetic planning in guiding implant surgery
- Understand the role of CBCT in surgical planning and the digital workflow
- Appreciate the factors in aesthetic risk based assessment in implant dentistry
- Appreciate the classification and treatment of alveolar ridge defects in clinical practice
- Understand the timing of implant placement in relation to stability and wound healing
- Appreciate the importance of 3 – D implant positioning and the role of surgical guide stents
- Understand the choice of implant width and length in different anatomical locations and clinical situations
- Appreciate the various systemic conditions that may impact in implant or contraindicate implant treatment
- Understand the stages in implant wound healing
- Understand how implant surfaces have been modified to influence wound healing and possible long term success
- Appreciate primary and secondary implant stability and its influence on clinical techniques/protocols
- Understand the role of alveolar ridge preservation including limitations and complications

GDC Development Outcomes: A, C, D

M6 Advanced Implant Restorative Module

Learning objectives

- Be able to identify risk factors that can effect implant integration and long term success and be able to discuss this with patients
- Be aware of what constitutes “dentally fit “is for consideration for implant treatment
- Be aware of long term maintenance issues in implant dentistry in relation to individual risk factors
- Understand the advantages and limitations of the screw retained implant restoration
- Be able to understand tailored personalised oral hygiene regimes and co-ordination with other members of the dental team
- Appreciate treatment options for mucositis and peri-implantitis in clinical practice
- Appreciate the importance of the periodontal implant interface and the importance of periodontal stability in implant long term success
- Understand have care regimes for implant associated dentures
- Appreciate monitoring regimes for dental implants in clinical practice
- Understand the features of orthodontic implants
- Appreciate the clinical benefits of the use of orthodontic implants in clinical practice
- Understand the rationale and limitations of linking teeth and dental implants
- Appreciate clinical procedures for linking teeth and implants in clinical practice
- Understand the clinical stages in the multi-disciplinary implant case in clinical practice
- Be able to undertake odontogenic, occlusal, periodontal and aesthetic risk based assessment and treatment planning in clinical cases
- Be able to understand the restorative procedures in the multi-disciplinary implant case and appreciate long term maintenance and prognosis in clinical practice

GDC Development Outcomes: A,B,C,D

M7 Advanced Implant Surgical Module

Learning objectives

- Understand the complications that can arise during implant surgery and how these can be avoided and managed in clinical practice
- Understand post-operative complications and their avoidance/management
- Appreciate how to avoid surgical malpositioning of implants
- Understand the range of sutures available and suturing techniques in clinical practice
- Appreciate flap design for implant surgery and exposure
- Understand the indications and varying techniques for connective tissue grafting
- Appreciate the principles of guided bone regeneration
- Understand resorbable and non resorbable membranes and their usage
- Understand the range of graft materials available and material selection
- Appreciate the limitations of guided bone regeneration and complications that may arise
- Understand the role and limitations and clinical technique of immediate implants
- Appreciate the role of short implants versus grafting
- Understand the indications, clinical techniques and complications of maxillary sinus grafting
- Be able to define the criteria for implant survival and success
- Appreciate the factors involved in early and late implant failure and how this can be minimised in clinical practice
- Appreciatre failure rate with short mini implants
- Understand marginal bone loss and peri-implant disease
- Be able to risk assess for peri-implant disease
- Understand the treatments available for peri-implantitis and mucositis

GDC Development Outcomes: A C D